Know What You Are Buying

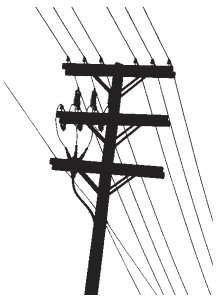
In September, Sun Media newspapers took up the cause of a landowner who had been informed by Hydro One that, much to his surprise, he was the owner of two hydro poles and a transformer on his four-acre property near Pembroke. Even worse, this equipment was over 50 years old and in need of replacement to bring it up to current standards. The total cost of the upgrade was to be $8,500.

The landowner had purchased the property two years ago. At the time of the deal, he did not realize that Hydro One only provides equipment and service up to 30 metres from the main line. Beyond that point the poles, wires and equipment were his responsibility as the property owner.

Officials at the utility have informed the gentleman that the equipment was in need of an upgrade and that his electricity would be disconnected if the equipment were not brought up to standard. The columnist argued that the problem is a result of normal wear and tear and that Hydro One should pay for the repairs. According to a Hydro One spokesman, there are thousands of customers in the province who are in a similar situation and they are unwilling to make an exception.

In the hands of the Sun Media columnist, the story certainly arouses sympathy for the landowner. However, the sad fact is that it did not have to happen this way. A Surveyor's Real Property Report, prepared as part of a legal boundary survey, would have identified the existence and location of the hydro poles. This information would then have served as an alert to legal counsel to conduct an unregistered easement search identifying the liability for the hydro transmission equipment. Armed with this knowledge, the purchaser could have factored the potential issue into the purchase negotiation.

For most people, their house and property is the single largest purchase they will ever make. A legal survey is a key component of this purchase. It provides essential information on boundaries, easements, setbacks, encroachments and other potential ownership issues. It can be critical in preventing surprises such as the landowner in this story received.



Once again, this year AGM Surveying and Engineering is proud to make a donation to the Salvation Army in lieu of sending Christmas cards.

Please note that in order to give our staff a much needed rest and time to spend with their family over the holiday season, AGM's offices will be closed from 1:00 p.m. on December 22, 2006 until 8:00 a.m. on January 2, 2007.

The partners and employees of AGM send all of our clients and friends best wishes for a warm and wonderful Holiday Season.

AGM SURVEYING • ENGINEERING

Site Lines

Fall 2006

AGM Joins the Leica GPS Reference Network

AGM has established the first South Western Ontario location to join Leica Geosystems' network of permanent GPS reference stations. The AGM base station is the westernmost station of a network that ranges from Barrie to Niagara and includes several stations in the Toronto area. It represents a significant step forward in AGM's Differential Global Positioning System (DGPF) technology and provides accurate corrections to rovers in the field without the need for additional mobile base stations.

DGPS provides precise GPS calculations by using two GPS receivers. One receiver, the rover, is the instrument the survey technician moves around the survey site to measure positions. The mobile base station is a stationary receiver that is located on known coordinates, generally an established horizontal control monument. AGM has been using DGPS for high precision surveys for over 10 years.

While the physics and mathematics of this process are complex, the underlying theory is fairly straightforward. The base station monitors the incoming information from the GPS satellite network and calculates the difference in readings (differential) between the known position and the position based on the GPS signal. This difference can arise from a variety of sources including slight variations in the satellites' orbits and interference with the satellites' signals as they traverse the ionosphere and atmosphere. The mobile base then transmits the corrections via radio to the survey technician's GPS rover. The rover uses this information to correct any errors and calculate the actual coordinates where it is located.

In February, AGM installed a permanent base station at our offices on Southdale Road. The antenna, securely anchored to the structural roof members, projects 3 feet above the roof line giving our crews access within a range of up to 30 kilometres. Signals from the antenna are sent to a receiver inside the building for processing and routing via the Internet to the Leica Geosystems network headquarters in Toronto.

The base station provides the same differential calculations as would a mobile base station. Survey technicians in the field use a wireless modem to connect to the Internet to download the correction data for the rover.

As the new permanent base station was not located on a known control point, it was necessary to make a precise calculation of its location. To do this, AGM technicians calculated its uncorrected position relative to all established horizontal control points in the City of London several times and performed a least squares adjustment to refine the definition of the base's location. A similar analysis was performed using other stations in the Leica network, both in Ontario and bordering US states. The result is a base station located to the precision of a second order horizontal control monument.

AGM's survey technicians are now able to perform precise measurements within the city of London and surrounding areas without the need of a mobile base station or of locating control markers in the local area of the survey. Our membership in the Leica Geosystems network also allows our technicians to use several other base stations in the network for surveys outside of the London area. With this addition to our technical capability, we reinforce our commitment to advanced precision surveying technology.

Inside

AGM Welcomes New Partner Jason Wilband

This year, Jason Wilband, O.L.S., P.Eng., became a partner at AGM Surveyors and Engineers.

"We feel very fortunate to have Jason as part of our leadership team at AGM," said AGM's President, Drew Annable. "The technical knowledge and training that Jason possesses as a graduate of the highly esteemed survey engineering program at the University of New Brunswick will help to ensure that AGM will be able to maintain its reputation as a technical leader in the surveying industry. Going back almost 40 years to when I first started, AGM has always been one of the first to use new technologies as a means of providing our clients with better and more efficient service. As technology advances in leaps and bounds Jason's background will ensure that AGM's clients will continue to benefit."

For Jason, this is the next major step in a career with AGM that began in 1996 when he criss-crossed Essex, Kent and Lambton counties as part of a project to update the 1:50000 National Topographic maps for Natural Resources Canada. "We were driving every road in the three counties with a GPS unit mounted on the roof of our vehicle, a computer in the back and a heater at our feet," Jason recalls. "It was quite an introduction to working with AGM."

Since then, Jason's career at AGM has been studded with accomplishments. He earned his P.Eng. designation in 2002. He is a Project Manager of Engineering and Topgraphic Survey Projects. He has successfully completed projects of every size from lot surveys up to a major survey as part of the 401 restructuring project of the Ministry of Transportation and Communications. In 2003, Jason fulfilled the articling requirements and passed the required examination for registration as an Ontario Land Surveyor. He is presently a candidate for the designation of Canada Lands Surveyor (CLS) which will qualify him to conduct surveys on federal lands.

For Jason, this is the realization of a life goal. "I have always loved history," he remarked. "That is the lure of surveying. It is the concrete application of knowledge of history in the here and now. Being an integral part of a company like AGM has been a major objective for me."

Our newest partner has been received with enthusiasm by our the staff.

Jim Moon, Certified Survey Technician, who works very closely with Jason, said, "Jason is a smart surveyor. His calm, collected, diplomatic work style helps keep us moving in the right direction. He will be a valuable addition to the partnership."

Joanne Cadick, is AGM's Office Manager. She has known Jason since his first day. "Jason is great to work with," Joanne says. "He has made a great contribution to our company since he came. I am looking forward to working for him in his new role of partner."

Jason graduated in 1995 from the University of New Brunswick with a BSc in Survey Engineering (subsequently renamed Geodesy and Geomatics Engineering). In addition to his duties with AGM, Jason is a member of the Underground Utilities Committee of the Association of Ontario Land Surveyors and a member of the Professional Engineers of Ontario.

9th Annual Golf Classic Supports The Heart and Stroke Foundation

On Tuesday September 5, the partners of AGM Surveying and Engineering had the pleasure of presenting a cheque for $2, 632 to Lori Pallen of the Heart and Stroke Foundation. The presentation of the cheque was the culmination of a summer of planning and some generous contributions from AGM, its staff and customers.

All was not drudgery, however, because the fundraising venue was the 9th Annual AGM Golf Classic a tournament held two weeks earlier at the Maple Ridge Golf Club in London. Friends, clients and staff gathered at 11:15 for a pre-game barbecue and then dispersed in their power carts to attack the course.

The tournament featured several skill competitions.

The overall tournament winners were the team of Mike Fayad, Allen Fayad, James Fayad and Gord Vandervorn who needed only 58 strokes – a score of 14 under par – to complete the eighteen holes. Doug Purssglove and Robin Deccico won the men's and women's closest to the pin competitions. Jim McNeil had the men's longest drive of 291.2 yards and Robin Deccico's 190.4 yard tee shot was the longest drive among the women. Grant Hall had the most accurate tee shot in our "closest to the rope" competition.

There were also a number of fun competitions and draws throughout the day.

While no one managed a hole-in-one to win the 2007 Chevrolet HHR provided by Stevenson and Hunt and Huron Motor Products, everyone was a winner with Mr. Tee – a survey tripod wearing a hard hat and holding a canister of tees on hole number 7. Marilyn Green won the prize for landing her tee shot closest to Mr Tee, and everyone won AGM tees. Mike Beaumont won the distance estimating contest. He called the length of his tee shot within 22 inches (as measured by our precision survey instrument). And finally, Steve Brown won our skee-ball putting competition with a total score of 40 points out of a possible 60.

Fun was a big part of the day, but this was more than just a day on the links. Part of the purpose of the tournament together has always been the charitable donation. Our sponsors provided draw prizes as well as gifts for our tournament prize table. Our players raised $1316 through the various draws and competitions. AGM matched this amount. On behalf of our sponsors, employees and players, we donated the proceeds to the London, Middlesex and Elgin County branch of the Heart and Stroke Foundation.

A big thanks to everyone who came out to join us and help out in this project.

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