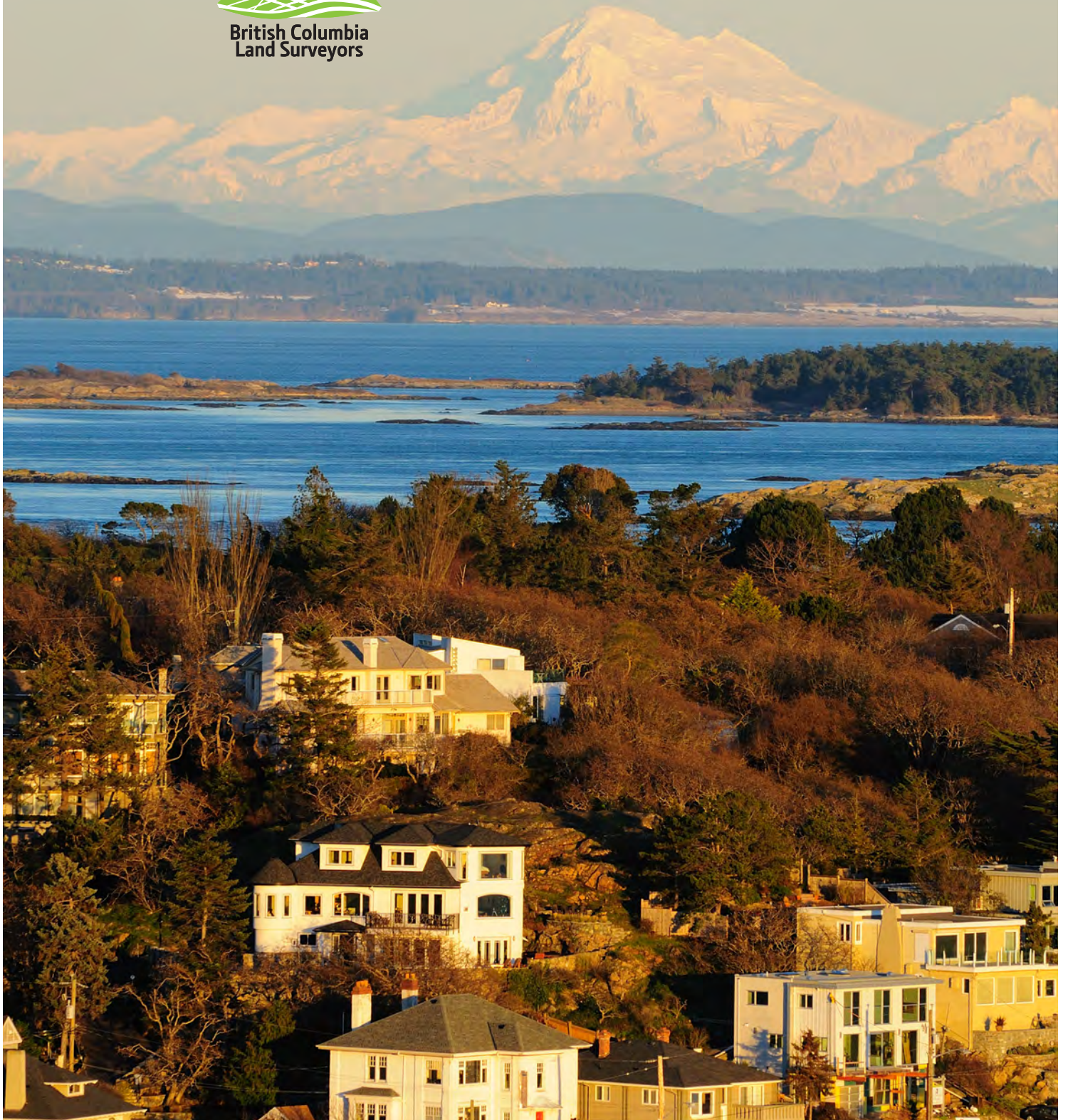



VOLUME 39 | NUMBER 3 | DECEMBER 2016

the Link MAGAZINE





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Message from the **President**

Maintaining Professionalism

by Ron Johns
BCLS, CLS, President

This year the fall board trip was a particularly enjoyable experience for me. Not only was it an opportunity to reacquaint myself with the members and students, but to accompany Chuck Salmon on his final trip as Secretary of our association. Chuck's familiarity with the membership, knowledge and organizational skills have been a definite asset on these trips over the last fourteen years. I have the utmost respect for Chuck and consider myself lucky to have served with him on the board. Formal recognition of Chuck's achievements will be celebrated at the awards luncheon at the 112th AGM in April.

On behalf of the Board of Management and all members of the Association of British Columbia Land Surveyors, I am very pleased to welcome Kelly Stofer, BCLS, CLS, to his new position as Secretary of the ABCLS. Kelly lives in the Sidney area with his family, and comes to us with over twenty years of related experience. He has previously worked as a sole practitioner and with McElhanney Consulting Services, Focus Corporation and was a Land Surveyor in Training with J.E. Anderson & Associates. Kelly spent

One common trait I have noticed is how passionate land surveyors are about their noble profession. I also have become aware that how the public views us as a profession is of paramount importance.

four years with the Land Title and Survey Authority as Deputy Surveyor General.

I have learned and observed many things while attending meetings at our sister associations across Canada in the last year. One common trait I have noticed is how passionate land surveyors are about their noble profession. I also have become aware that how the public views us as a profession is of paramount importance. We have a duty to be accountable and to meet the standards set. When we exceed the expectations of clients and stakeholders it will reflect well on our profession and fellow members. Our duty is first to our profession and second to our businesses. We enjoy our ability to self-govern, however with this privilege comes responsibilities. Your board continually monitors its actions and decisions to ensure the public interest is considered and protected. By following the values we have established, we will ensure this profession continues to be one

we can be proud of. Our mission statement, vision and values can be found and reviewed on the welcome page of our website.

I look forward to the opportunity of seeing everyone at the AGM in the spring and to share in the history, culture and natural beauty Victoria has to offer. The meetings, CPD, partners and social events will provide opportunities for all participants to deliberate, share knowledge and to sample the west coast experience during your stay. As some CPD and social events will have a maximum number of tickets, be sure to sign up early to avoid disappointment.

Wishing you all the best over the holiday season. ❖



Secretary's Letter

Entering Private Property

by Kelly Stofer
BCLS, Secretary

In the April and August 2016 editions of the Link, Richard Redfern, BCLS and John Motherwell, BCLS provided views on whether there are any limitations to a land surveyor's entitlement under Section 59.1 of the Land Surveyors Act to enter land. Both authors make compelling arguments around the land surveyor's position when an owner refuses his or her request for access based on a belief that the survey work being carried out on their property may adversely affect their rights, such as the survey of a disputed easement.

I will not attempt to weigh in on this specific question, but I would like to point out that the basis for these articles was Mr. Redfern's request for consent to access the property for his survey. I trust that all land surveyors seek to gain consent or provide notice in advance of entering any property for a survey. However, in my short time at the Association office I've seen several inquiries and even a formal complaint which suggested members or their staff had entered properties without notice.

The Land Surveyors Act is silent on any requirement to gain consent or provide notice. Of course, it is this silence which makes possible my colleagues' interesting articles. As long as the activity being performed

involves the practice of land surveying, a land surveyor is allowed entry over all land, subject only to showing identification when asked. In fact, section 59.2 of the Act goes on to provide a penalty for anyone refusing access to a land surveyor or staff in the course of their duties.

However, this is where we as professionals need to be aware of the material in Chapter 5, Part 4 of the Professional Reference Manual. Among other things, this Part tells us that it shall be considered good practice for land surveyors and their staff to use reasonable effort to advise property owners when entering onto private property. It indicates that while the Act appears to provide surveyors with great powers, it does not relieve the surveyor from attempting to communicate clearly with the public. In fact, the Professional Reference Manual highlights the burden for land surveyors to act in a professional and courteous manner when dealing with the public, while still respecting client confidentiality.

To assist members in notifying owners who are not home at the time of a survey, the Practice Advisory Department has developed a calling card or door knocker template based on some examples provided by our

members. The idea is that members can download and customize the card according to their own circumstances. When an owner arrives home and finds evidence of a survey, the card will provide the owner with information such as:

- name and contact details for the land surveyor or land surveying company;
- an indication of the type of survey being performed;
- the role of the professional land surveyor in society;
- the purpose of the Association of BC Land Surveyors; and
- excerpts from the Land Surveyors Act.

Contact with land owners is one of the most fundamental ways our profession interacts with the public, and therefore an important development point for public opinion of the profession. If we can look at land owner contact as an opportunity to deliver information pertaining to the role and value of the land surveyor, I think we have identified a key component in a public awareness strategy. ❖



Chief Administrative Officer

The Link Magazine – A New Beginning

By Chad Rintoul,
Chief Administrative Officer

This edition of the Link marks a new beginning for our magazine.

For 19 years, Dave Morton served as the contract editor of the Link. Without a doubt this was a labour of love for Dave, and the profession owes Dave much gratitude for the time and effort he spent making the Link such an interesting read. On behalf of all of us with the Association of British Columbia Land Surveyors, my appreciation goes out to Dave for his commitment.

Following an open call for proposals to secure a new contract editor of the Link, the torch has now been passed. While I was disappointed and somewhat concerned that no active or retired members of the Association expressed interest in this opportunity, I am certainly pleased to welcome Holy Cow Communication Design Inc. of Sidney, British Columbia into the role. Erin Brocklebank and Julie Coward will take the lead on our magazine. Both of these women have some strong familiarity with the Association of British Columbia Land Surveyors. Holy Cow has designed various informational brochures and public awareness campaigns over a number of years working primarily with our Career and Public Awareness Committee.

We would like for the Link to be a tool to help raise the profile of the profession, as well as to continue to serve as a networking vehicle to keep British Columbia Land Surveyors feeling like well-informed members of the land surveying community.

As always, the success of the Link depends on you. Articles in the Link are largely reprints from other sources or contributions from members. Articles of interest from ABCLS Committees and individual members are always welcome at any time of year. Please forward your contributions to Denise Brethour in the ABCLS office by email to dbrethour@abcls.ca.

You will no doubt notice that the Link has undergone some cosmetic changes. I hope to have a magazine with a shelf life that captures interest beyond our membership to include stakeholders and advertisers. We would like for the Link to be a tool to help raise the profile of the profession, as well as to continue to serve as a networking vehicle to keep British Columbia Land Surveyors feeling like well-informed members of the land surveying community.

As the profession has evolved, so will the Link. Electronic versions of the Link are already available on the ABCLS web site, and can also be found online at Issuu.com, a free hosting site for magazines. Through these mediums we have exposed the Link to a broader audience, and we will look for additional opportunities to increase the exposure of our magazine while being mindful of providing a cost effective and informative product.

We hope you will continue to enjoy and support the Link. ❖

Association of Nova Scotia Land Surveyors' Annual General Meeting



By Bronwyn Denton, *BCLS*

The Association of Nova Scotia Land Surveyors' 66th Annual General Meeting was held October 13-15, 2016 at White Point Beach Resort near Liverpool, Nova Scotia. The meeting started with the President's Forum and a lobster dinner for the visiting delegates. Every provincial association was represented, with the exception of Quebec and PSC which held a director's meeting during the same weekend, bringing additional delegates to enjoy the beautiful (post-hurricane) fall weather.

The business meeting was held on Friday with over 80% of the membership in attendance. Nova Scotia adopted mandatory continuing professional development several

years ago and has benefitted from strong membership turn out at annual meetings as a result.

There were several updates and guest presenters at the meeting providing a broad range of information. As you may be aware from past articles, last year there was serious concern expressed by the ANSLS surrounding a possible sale of Nova Scotia's Land Registry system to a private enterprise. To the relief of the land surveyors in the province, the government has decided not to move forward with the privatization. There was a detailed presentation about the high precision network densification initiative, with currently 800 points forming part of the network, and a presentation by the Registrar General outlining some thoughts on future filing of PDF plans.

Throughout the meeting there were several comments about the lack of consultation by government departments and municipalities who do not consider the ANSLS a valued stakeholder, resulting in the creation of bylaws or regulations that do not meet an intended goal or directly minimize the land surveyor's role in defining boundaries. The Association has a number of active committees and plans to focus more effort on outreach and engagement with stakeholders in the year ahead.

There are currently 6 active complaints under investigation. There are 27 students working towards becoming a land surveyor, with 4 candidates commissioned since the last AGM. 7 of the 20 newest candidates are labor mobility candidates.

Four notices of motion were reviewed and voted upon at the AGM. The first involved the PSC “All-In” model which was approved. Wilson Philipps had provided a PSC update earlier in the meeting and was on hand to answer questions from the membership. Instead of opting for a 2 year or 3 year commitment, the motion was worded as an ongoing commitment that can be terminated with 12 months’ notice. The second motion was the approval of the budget, which was accepted without modification. The third motion involved the appointment of a task force to prepare a report detailing the regulations necessary for the establishment of a process for resolving boundary line uncertainties in accordance a section of their act. The fourth motion provoked a lot of discussion and involved making the

necessary changes to the standards manual to reflect NAD83 CSRS as the reference system for Nova Scotia, with changes to be effective December 31 2017. They will also adopt CVGD 2013 at this time. Nova Scotia has utilized ATS77 for over 30 years, making this is a significant transition for the membership. The Association has been working towards this change for several years, and although the motion passed unanimously, there had been concern prior to the meeting that the motion could be defeated by the members.

The meeting continued on Saturday with several interesting CPD sessions including a case study of a dispute where two surveyors presented very different opinions as to the location of a boundary. A geomatics engineer and NSLS also provided a

very detailed presentation on “The Big Lift”, explaining his role in the MacDonald Bridge restoration project, which is the sister bridge to the Lion’s Gate. It was very interesting to hear how he utilized a combination of technologies and thoughtful methodology to set control, certify bridge components and manage the impacts of surveying the ever-moving components of a suspension bridge.

Mark and I would like to thank Jim and Roberta for their hospitality and friendship over this past year, and congratulate them on a successful AGM. We look forward to welcoming incoming President Kevin Brown and his wife Denise to BC when they join us at the AGM in Victoria in April! ❖

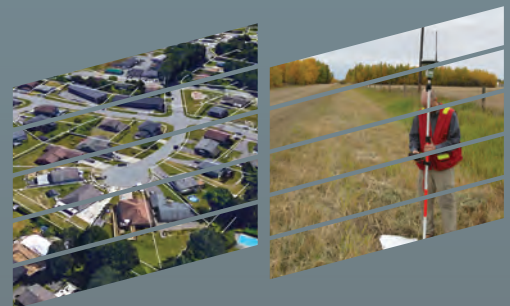
CANADIAN COUNCIL ON GEOMATICS



CANADIAN GENERALLY ACCEPTED LAND PRINCIPLES

PRINCIPLES FOR LAND SURVEYORS

- Owners of land create boundaries. The **role of the surveyor** is to mark, describe and represent these boundaries.
- The character and physical location of some boundaries, such as water boundaries, can **change over time**.
- The establishment of a new boundary is not conclusive until the **landowner consents** to the survey and authorities **sanction** the survey.
- A land surveyor's opinion in re-establishing an existing boundary must withstand the **scrutiny** of fellow land surveyors, boundary tribunals and the courts.
- Land surveyors use the **best available evidence** to re-establish a boundary.
- Land surveyors are cautious not to disturb **settled possession**.
- Land surveyors **do not render conflicting opinions**, simply because they have conducted the new survey with more precise methods.
- Land surveyors must be **unbiased** and provide assistance independent of and **uninfluenced** by the interests of a client.
- Land surveyors contribute **foundational** land management **knowledge** and provide **leadership** in the development/maintenance of property boundary data.



Association of Manitoba Land Surveyors' Annual General Meeting

By Ron Johns, *ABCLS President*

The 136th Annual General Meeting of the AMLS was held in Winnipeg on September 14th to 16th, 2016. The President's Forum was held on the morning of the 14th. Topics included Federal funding for the Foreign Credential Recognition Project spearheaded by the ACLS, a review of survey practice review programs in each province and CPD reporting. Several provinces do not have practice review and it would appear that BC has one of the more robust programs. New Brunswick and Saskatchewan are pursuing the use of the CPD reporting tool currently being used by BC and Canada Land Surveyors. Professional Surveyors Canada's current advertising initiative was also discussed. The need for PSC to have a financial plan, including costs for upcoming activities, was identified. It was felt that increasing PSC dues without an overall plan to show where monies will be spent would be a "tough sell" for some.

The Ordre des Arpentiers-géomètres du Québec (Quebec Land Surveyors Assn) is asking the Quebec Government to support and fund a project to add easements and rights of way to previously registered survey plans. The cost of this project is estimated at over \$500 million! It is hoped that a funding model, similar to that used for their cadastral reform project, will be used whereby \$50 was added to each land transaction.

Two CPD sessions were held the next morning. The first presenter was Gabriel Arancibia. His topic "From Cadastre Plans to Seamless Digital Cadastre", dealt with the societal benefits in having a graphic representation of all parcels. We are very fortunate in BC to be ahead of the curve with the recent rollout of PMBC. The second presenter was Izaakde Rijcke with "Water Boundaries in a Flooded and Controlled Water Context". As the title suggests, the subject matter detailed riparian rights, boundary definition and complex ownership of various interests where water boundaries are altered or created by structures such as dams or dykes.

The business session started in the afternoon. After the opening address, the Public Awareness Committee delivered a lengthy report touching on such topics as fabric deterioration, risk, relevance, infringement, changing roles and the lack of inclusion in RFPs. They spoke of a planned approach to engage members and the public, re-claim roles, and get clear about changes that will affect the practice of land surveying in the foreseeable future.

Two nominees were presented for vacant council seats. There were no additional nominations from the floor and both Tricia Christie and Jim Bailie were elected by acclamation. Similarly, with no additional nominations for Vice President, Kelly Mantik was elected by acclamation. The new President will be Gary Fraser. Due to

a provision of the new Land Surveyors Act that states the Presidential term shall end on December 31st, Mike Paré will remain as President until that date.

The business meeting continued on Friday. Over 32 motions were presented dealing with Bylaw changes as a result of the recent Proclamation of the new Land Surveyors Act. Many of the motions were "housekeeping" in nature, however a number sparked vigorous debate. Several member motions were also presented, in which the deliberations were lively and respectful. Three new Manitoba Land Surveyors registrations were presented.

Prior to the closing of the meeting, forms were distributed, where those interested in volunteering could place a mark beside a committee or workgroup.

I would like to thank Mike and Heather Paré for the hospitality they extended to Marna and I during our stay. Winnipeg is rich in history and culture. The abundance of trees in the city core and residential neighbourhoods was surprising to us. The city was very enjoyable (at this time of year!). ❖



Left to Right: Bill Chapman, Dick Mak and Ralph Turner

OIP LUNCHEON

September 12, 2016

By Wayne Griffith,
BCLS (Ret), CLS (Ret)

The retired land surveyors or OIP Group, met at the ABC Country Restaurant in Surrey on September 12, 2016. This was a new location for the luncheon and the ABC provided a private dining room along with a great menu and excellent service. Dick Mak suggested this new location and we can thank him for the referral.

There were 16 land surveyor's present for the luncheon. They were: Bill Chapman, Chris James, Clare Hobbs, Dai Yates, Dick Mak, George Fenning, George Robertson, Henry Aldridge, John Nash, Larry Achtemichuk, Martin Schulze, Ralph Turner, Ron Scobbie, Stan Nickel, Wayne Griffith and Helge Jacobsen. It was nice to see Helge returning after a long absence.

The luncheon was very informal and the fellows concentrated mostly on eating and renewing old friendships. We missed the joke and reminiscing session but we did find time for reports from two members.

Henry Aldridge reported on his visit to the Revelstoke Railway Museum with John Whittaker earlier this spring. Henry and John helped position and mount a stainless steel transit on three large granite boulders. Along



Left to Right: Henry Aldridge and Larry Achtemichuk

with a plaque, the mounted transit formed a unique sculpture designed to commemorate Walter Moberly.

Walter Moberly was an English born engineer and surveyor who became the Assistant Surveyor General of The Colony of British Columbia in 1865. Moberly played an important role in the exploration and development of early British Columbia. John Whittaker, BCLS spearheaded the initiative to create the monument that honoured Moberly's many achievements. The official dedication of the memorial was on Friday, May 27, 2016 so if you are in the area, drop by and visit this unique monument.

Bill Chapman spoke briefly about Ed Richardson, BCLS 259 who was turning 107 the following day. Bill reports that Ed Richardson still has all his faculties at 107 and a valid driver's licence to boot. Good genetics and Ed's career choice probably contributed to his longevity. The OIP Group sends Ed a big Happy Birthday and wishes him many more to come.

The table conversation shifted to who was the oldest land surveyor at the luncheon. This distinction fell to Henry Aldridge, BCLS 459 at 84 with Clare Hobbs, BCLS 462 following at 80. Henry could possibly be replaced as the group elder if Don Watson, BCLS 364 or Doug Meredith, BCLS 368 make the next luncheon. Both Henry and Clare were commissioned in 1969 while Don was commissioned in 1956 with Doug following in 1957. What is really amazing is Ed Richardson, who was commissioned BCLS 259 in 1935. He makes us all look like spring chickens and it would be great to see Ed at one of our luncheons.



Left to Right: Stan Nickel, Jon Nash and George Fenning



Left to Right: Ron Scobbie with Helge Jacobsen

Our next luncheon will be on Monday January 9, 2017 at the ABC Country Restaurant again.

If you would like to get on the OIP email list for luncheon notifications send your email address to wmgriffith@shaw.ca and you will be included. ❖

2016 BCLS Golf Tournament



By Marissa Moore, *BCLS*

We had another successful year at the annual BCLS Golf Tournament.

The event was held on September 16th at Talking Rock Resort and Quaaout Lodge in Chase, BC. The 47 participants all raved over the course and the venue. We'll be back again that's for sure!

The First Place Trophy was awarded to Marissa Moore, Peter Moore, Walt Singer and Ben Pregent. Various other awards went to Steven Cheek, Susan O'Neill, Shirley Fritsch, Corey Doherty, Don Goodrich, Parker Adams, Tyler Fox and Mike Waberski.

Our generous sponsors this year included; Robertson Manufacturing Ltd., Spatial Technologies, Harrington Industries, Cansel, The LTSA, Ecopave, GeoLink Land Surveying, CG & B Group, and Grahams Eye-Tech Optical. We also received various donations from Vector Geomatics, McIlvaney Riley Land Surveying, Doug Dodge, Joe Johnson, Peter Mueller and Linden Fritsch.

With a prize table worth over \$2000, it meant that nobody left empty-handed. More importantly, we were able to raise \$4835 in donations for the BCLS Foundation and Make a Wish Foundation, bringing our total donations in 3 years to over \$14,000!

Thank you again to all the participants, sponsors, donors and the Association

Office staff for supporting both me, and this fun event! It's wonderful to see the same people show their support year after year.

The 2017 Tournament will be held on September 22nd at Mayfair Lakes G&CC in Richmond, BC. I'm looking forward to seeing you there! ❖



Left to Right: Ben Pregent, Walt Singer, Marissa Moore, Peter Moore



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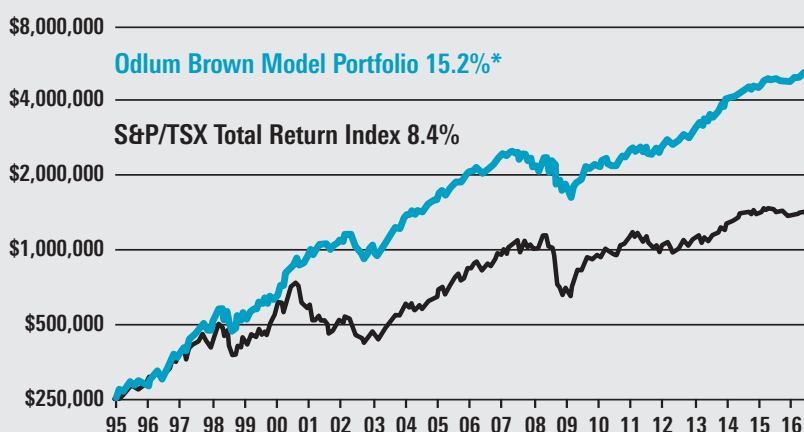
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CONTINUING PROFESSIONAL DEVELOPMENT

COMMITTEE UPDATE

GeoEd – Upcoming Changes

By Reid Egger, BCLS, ALS

At the risk of this becoming a regular habit, I am writing another CPD article for The Link. Again, the topic is GeoEd and this time it is to let everyone know about some exciting upcoming changes to the CPD tracking tool. The Joint ABCLS-ACLS CPD Tracking System has attracted attention across the country. The Association of Ontario Land Surveyors has been working with the ACLS and the developer to migrate their CPD tracking to our system. That Ontario is coming on board after having invested in a parallel but separate tool only a few years ago is evidence that we have a pretty good system. Other jurisdictions are also taking a close look at it. It is on the way to becoming the national tool it was envisioned to be.

At the same time, your CPD Committee has been looking at the recommendation brought forward from the membership at the last AGM. The concern was that any member

who was presenting at a CPD event would only receive credit for half his or her time preparing and presenting the material, whereas members attending that event would receive full credit for their time. That didn't seem equitable, so we looked at how we could fix that. A report was prepared for the Board on how to implement the motion. The Board has approved the change effective January 1, 2016.

The Association of Ontario Land Surveyors has been working with the ACLS and the developer to migrate their CPD tracking to our system. That Ontario is coming on board after having invested in a parallel but separate tool only a few years ago is evidence that we have a pretty good system.

Please note that there is a minor difference between how the categories appear on GeoEd and in the ABCLS CPD Users Guide. GeoEd splits up “category b” into “participation” and “presentations, papers and research”; I will use the GeoEd terminology for this explanation. Our initial idea was to take presentations out of this category and put it with “courses and

seminars”. It sounds simple but it did present some technical issues. As luck will have it, the AOLS handed us a solution right when we were trying to figure it out. Their system, which is imbedded in regulation, requires them to have a “self-study” category. The ACLS was planning on adding this category for Ontario's benefit. Instead of migrating “presentations”, we decided to take “research” out

and put it with “self-study”, calling it “professional practice research”. This category would have a 1:2 time credit ratio, whereas the “presentations and papers” category would change to 1:1.

The other proposed change for Ontario's benefit was to split, and separate “meeting attendance” from “courses and seminars”. This should

be a welcome change for all users as it was previously a little confusing. Both those categories will remain with a 1:1 time credit ratio.

To summarize, there will be 5 categories, all of which both ABCLS and ACLS members can be credited for. Changes are to take effect at the start of the new year. A revised CPD Program Users Guide will be

published on the website. For those of you, including myself, who read tabulated information better than paragraphs of explanation I have provided that below. ❖

New CPD Categories			
Name	Description	Credit ratio	Associations
Courses and Seminars	Courses, seminars, workshops and other training provided by academic institutions, the governing organization or other surveying or related professional associations or bodies, vendors or any other educator, providing the content is related to the member's professional practice	1:1	ACLS ABCLS AOLS
Meeting Attendance	Attendance at annual general meetings or regional meetings of the governing organization or other surveying or related professional associations	1:1	ACLS ABCLS AOLS
Participation	Participation on Council, Board of Management, committees or task forces of the governing organization or other surveying or related professional associations or bodies	1:2	ACLS ABCLS AOLS
Presentations and Papers	Presentations and related preparation and authored papers and related research	1:1	ACLS ABCLS AOLS
Self-Study and Professional Practice Research	Text for AOLS to be determined Other professional activities including research related to a member's professional practice	1:2	ACLS ABCLS AOLS



Surveyor General's Datum

Land Title and Survey Authority of British Columbia (LTSA) Update

By Mike Thomson,
Surveyor General

This article is based on information shared with those in attendance at the Regional Group Meetings as part of the annual ABCLS Traveling Board trip September 26-30, 2016. Information is updated where available to October 21, 2016.

Introduction

It was my pleasure to be part of my 10th traveling Board trip, to provide the ABCLS Membership with an update on activities of the Land Title and Survey Authority and in particular the Surveyor General Division.

I was able to provide a PowerPoint presentation detailing our progress on ParcelMap BC and introduce Project ACE, our new technology improvement project. ACE stands for Advanced Customer Enhancements – so as suggested the focus is on the ‘user’ and in particular improved user experience and efficiencies for professional, business and government filers.

The LTSA, in particular the land title division, has had a very busy year. We have seen increasing registration activity from a low in February 2015 to very recent busy months. However, while there is clear indication of slowing real estate sales in the lower mainland as of early October, 2016, the busy times need to be put in perspective, as we note that even

the recent activity does not approach the busy summer months of 2006 and 2007.

In fact two stretches, May 2006 – September 2006, so 5 months and May 2007 – October 2007, with the exception of September 2007, so five of those six months were all busier than June 2016. June 2016 was the busiest month in a very long time; however, it was only the 14th busiest month, measured as the number of registrations, at the LTSA since inception in January 2005.

Media reports throughout the summer, particularly in the Lower Mainland focused on high Real Estate activity, but the higher activity level was being measured against a quieter period between November 2009 and a February 2015 low.

We do note that set against this is a number of other further contrasts. July 29, 2016 represented the busiest day on record at the land title office with some 9,270 applications received. The system handled over 54,000 searches that day. This level of activity was being driven by the pending introduction, in the GVRD, of the additional 15% foreign buyers Property Transfer Tax (PTT).

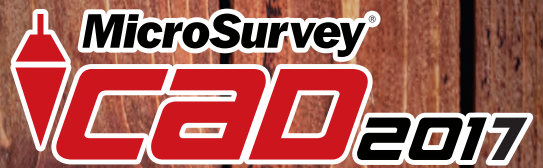
In the Surveyor General Division we are have not been as busy as our land title colleagues are, however business activity in fiscal 2016/17 is certainly reasonable.

To the end of September, 2016 we have received 690 Crown land survey plans, a significant decrease (26.2%) from the 936 in the same 6 months last year. This includes all plans over Crown land – Land Act, Mineral Tenure Act, well-sites and Land Title Act plans over Crown land, including Statutory Rights of Way. We issued 37 Crown grant documents, down 6 from the 43 in the same period last year. We also processed 192 statutory applications, below the 204 from the first 6 months of fiscal 2015/16.

The LTSA conducted our bi-annual Stakeholder Survey, during the month of September. Results are not expected until after the LTSA Board meeting in mid-November. The survey is done every two years and is an important barometer for the LTSA Executive and the LTSA Board in setting priorities and addressing service gaps.

I would like to thank the land surveyors and their staff that participated. The number of land surveyors participating was down significantly from two years ago, but we did receive some valuable comments.

At the LTSA, we remain focused on our mission to deliver responsive and trusted expertise and reliable land title and survey systems, which are essential to BC's economic and social foundation.



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Organizational Changes

Certainly, in any organization of 165 or so employees change is a constant. We are, however, and certainly since the ABCLS Spring round of regional meetings, in a fairly stable state within the two business units that customers have the most connection to – the Surveyor General Division and the Land Title Division.

In May of this year our Team Lead for Crown Grant Services retired and we made an organizational change to consolidate Crown Grant Services and Surveyor General Services into one unit with the Technologists being trained in the processing of all applications, plans and Crown grants. The Team Lead for the unit is Terry McDonald and she is doing a great job overseeing the cross training and ensuring that our customers are not impacted by this change. However, you may notice a couple of new names in correspondence from our Division as Jeff Spilsbury and Carolyn van Huizen transition into their new roles.

Also in the Surveyor General Division, a very welcome change for us was the addition of Katie Hannah, as a Deputy Surveyor General. We had been recruiting for a while and we were happy to have Katie join us on September 12, 2016. I know you will all offer Katie your support as she becomes familiar with our business and undertakes the learning necessary to provide you with service on behalf of the Surveyor General Division and the LTSA.

The purpose of adding Katie is to allow us to transition towards retirement for Jeff Beddoes. We have no particular time frame, we would obviously like to keep Jeff involved for some time to come, but all good things must come

to an end. Jeff will work approximately 65% over the next year or so and we will re-evaluate as we go. No time frame for Jeff's formal retirement has been set, but we should have more information by the ABCLS AGM in April 2017.

We note that Bert Hol and O'Brian Blackall continue as the ABCLS nominees on the LTSA Board of Directors. With Chuck's pending retirement, Chad Rintoul has taken the reigns as the ABCLS representative to the LTSA Stakeholder Advisory Committee. Chad participated in a September 14, 2016 Stakeholder Advisory Committee meeting.

Highlights and Achievements

Our 2015/2016 annual report, for the period ending March 31, 2016 published on June 14, 2016, in advance of the LTSA AGM on June 29, 2016. The AGM was preceded on June 28, 2016 by an all-day Strategic Planning Session with the Board and the LTSA Executive Team. The annual report can be found on the LTSA website at: <https://ltsa.ca/about-ltsa/annual-and-quarterly-reports>

Some quick numerical highlights from the 2015/16 annual report, numbers I had included in my Spring Regional Group meetings update:

- The land title offices processed 811,000 land title registration applications, a 14.2% increase from the 710,000 in the previous year;
- There were 10,671 plans filed in the land title office, 372 (3.6%) ahead of the 10,299 in fiscal 2014/15. All but 26 were filed electronically;
- We note that in the first 6 months of the current fiscal year the total number of plans (5,542) is marginally (1.2%) below the 5,608 plans in the same six months in calendar 2015.

- In August and September 2016, all 1,853 land title plans were submitted electronically well ahead of the 1,732 total plans in August and September 2015.

In the Surveyor General Division in fiscal 2015/16:

- 90 Crown grant requests were received 24.3% below the 119 in the 2014/15 fiscal year;
- 323 Statutory applications have been processed, 9 (or 2.7%) less than the 332 in the 2014/15 fiscal year;
- 1,596 Survey plans over Crown land were received for examination, 38 (or 2.4%) above the 1,558 in the 2014/15 fiscal year.

ParcelMap BC

Our ParcelMap BC project continues to occupy significant amounts of effort around the LTSA. I am pleased with our progress and provide the following update:

The primary objective of the ParcelMap BC project is to deliver a **single, complete, trusted, and sustainable map of all titled and surveyed provincial Crown land parcels.**

As at October 21, 2016 9 increments, representing 14 of the 29 regional districts were available in the published fabric. This includes:

- Increment No. 1 (Nanaimo Regional District [RD]);
- Increment No. 2 (Cowichan Valley RD);
- Increment No. 3 (Capital RD);
- Increments No. 5 and No. 6 (Fraser Fort George and Bulkley-Nechacko RD's);

- Increments No. 7 and 9 (Kitimat-Stikine, Skeena Queen Charlotte, Central Coast and Cariboo RD's);
- Increments No. 11 and 12, (Columbia-Shuswap, East Kootenay, North Okanagan, Central Kootenay and Kootenay Boundary RD's.)

Each of these 14 regional districts, beyond being available in the published fabric available to land surveyors, is in active maintenance by the ParcelMap BC Operations Team.

As you know, we released the Surveyor Search and Download tool on April 22, 2016. Since that time the submission of Survey Plan Datasets has become mandatory, first on June 15, 2016 for all plans with an electronic checklist date of May 23, 2016 or earlier, and then on September 2, 2016 for (nearly) all plans regardless of the electronic checklist date.

I want to express my appreciation to the land surveying community for your cooperation in adapting to the requirement to submit survey plan datasets. We have a few challenges that we are addressing in this regard – but as a whole the land surveying community has done a wonderful job adapting to the new requirement.

On August 25, 2016, we announced the availability of Parcel Information Search for myLTSA customers. This functionality means all my LTSA Enterprise and myLTSA Explorer account holders have access to the published fabric for research. The myLTSA functionality is not as rich as the functionality available to land surveyors through Surveyor Search and Download, but is nonetheless, a very robust tool that supports parcel research.

Here is some specific information about the timing and details for the balance of the project:

- Increment No. 4, the Alberni-Clayoquot, Comox Valley, Strathcona and Mount Waddington RD's was accepted by the LTSA on October 12, 2016, and has been appended to the production fabric. Catch-up plan work is well underway and the increment should be available in the published fabric in the first week of November.
- Increment No. 8, the Peace River and Northern Rockies RD's and Stikine Region was accepted by the LTSA on October 12, 2016, and has been appended to the production fabric. Catch-up plan work is well underway and the increment should be available in the published fabric in the first week of November.
- The project to map the missing SRW's over Crown Land in the Northern Rockies and Peace River RD's will start the process of integrating some 4,381 SRW plans into the published fabric as soon as Increment No. 8 is released in the published fabric.
- As of October 17, 2016 Increments No. 10 and 13, the Thompson-Nicola, Okanagan-Similkameen and Central Okanagan RD's, compilation work is complete and factory testing is underway. LTSA acceptance is on target for November 28, 2016.
- As of October 17, 2016 Increments No. 14 and 15 the Fraser Valley, Powell River, Squamish-Lillooet and Sunshine Coast RD's compilation is approximately 90% complete. Acceptance is targeted for February 3, 2017.
- As of October 17, 2016 Increment A, covering Surrey, Delta, White Rock, Langley Township, Langley City and Tsawwassen First Nation is now in compilation. Missing parcel processing is approximately 95% complete. Acceptance is targeted for March 3, 2017.
- As of October 17, 2016 Increment B, covering Richmond, Coquitlam, Port Coquitlam, Port Moody, Maple Ridge, Pitt Meadows, North Vancouver District, North Vancouver City, West Vancouver, Bowen Island, Lions Bay, Belcarra, Anmore and Electoral Area A, except UBC has completed source data assessment and missing parcel processing is now underway. Acceptance is targeted for April 30, 2017.
- As of October 17, 2016, the final increment, Increment C, covering New Westminster, Burnaby, Vancouver and UBC has made the call for source data. Acceptance is tentatively targeted for May 31, 2017.
- The overall compilation remains on target to reach full operational capacity – in the production fabric - by May 31, 2017. The published fabric should be complete in June, 2017.
- The Land Surveyors Advisory Task Force (LSATF) met October 12, 2016 and will next meet on December 15, 2016. The October 12, 2016 meeting identified some key ParcelMap BC (Surveyor Search and Download) improvements being sought by the LSATF. This work will be actioned by the LTSA, with no identified timelines at present.
- A training session for the Surveyor Search and Download tools was held October 4, 2016. The next

training sessions are scheduled for February 15 and March 22, 2017.

- Brian Greening, John Hay and Peter Haas are doing a wonderful job on the project and I cannot thank them enough for all their tremendous work. This is not to discount the other members of the team who also deliver great value including our now 7 member strong PMBC Operations team, all the staff in the Surveyor General Division, the land title division staff who have assisted in so many ways, scanning plans and documents and who have worked on the Absolute Fee Parcels Book conversion project, and the LandSure technical team and customer support staff, including our communications team, that are supporting the Project. We live it every day, but we are starting to see all the effort show results in how citizens conduct land related research.

The LTSA greatly appreciates the support of the Land Surveyors Advisory Task Force. Their input has indeed been very valuable.

Project ACE – Advanced Customer Enhancements

Project ACE, or Advanced Customer Enhancements is the LTSA's next major technology upgrade.

Project ACE has three primary objectives:

- Replace the ageing Electronic Filing System;
- Improve services to stakeholders and customers using modern technology
- Develop and implement a “people plan” for the future

The basic electronic filing system (EFS) infrastructure is now 14 years old. In terms of technology 14 years makes it a grandparent, and in need of replacement and upgrade. Additionally, stakeholder feedback has noted that some of the .PDF forms are too technical and contain non-intuitive requirements. Customers have asked for a ‘wizard’ type of process that guides the applicant step-by-step, with helpful hints at each stage. Customers have suggested that access to real time guides as to how to complete forms would be helpful.

Project ACE is about making improvements such as those that directly benefit the customer. The changes the LTSA made through our 2009-2012 Business Transformation Initiative focused on internal systems and electronic filing that created many benefits for the LTSA.

Project ACE looks to provide benefits to customers. As an example the intent is to see the creation of smart forms will allow an applicant to select information, a legal description, etc. directly from the land title register and should reduce the number of errors that occur from having to ‘copy’ or transcribe information from the land title register.

Initiatives within Project Ace include:

- Build next generation e-filing
- Close online service gaps
- Modernize legislation for signing of electronic filings and submissions
- Increase land title automation
- Create people plan to support future business model

It is extremely early days in the development of the project plan – but I felt it important to provide land surveyors with some knowledge of the project. At present, we have the vision, defined in a detailed Project Charter, but it is early days and it is not clear exactly what the end of the road looks like. Beyond the high level information above it is too early to be certain of the details.

That being said, while land surveyors will see some benefits, it is our legal professional customers, lawyers and notaries that will see the greatest change in their work, all for the good, I believe. Project ACE will also ‘set the table’, so to speak, to allow and support future initiatives around capitalizing on the ParcelMap BC groundwork.

Enhancements, of a significant nature, to ParcelMap BC will follow on the heels of Project ACE. I anticipate providing more detail on Project ACE at the 2017 ABCLS AGM.

myLTSA System Update & Land Title Matters

As a reminder, I would like to encourage all land surveyors to become subscribers to both myLTSA System Update and Land Title Matters. These are the two vehicles in which the LTSA can communicate with customers of the land title system and remain CASL compliant. If you only subscribe to one letter or are uncertain as to how to subscribe, please contact the LTSA Help Desk and they can get you set-up for both newsletters. myLTSA System Updates is the e-communication notice to subscribers of all things myLTSA centric. Land Title Matters is official communication channel for land title practice and policy matters.

CGVD28 vs CGVD 2013 or GeoBC and the Move to a New Vertical Datum CGVD2013

As many of you are aware, GeoBC has been working with Natural Resources Canada and other parties to prepare for an eventual move of the vertical datum to CGVD2013 from the current CGVD28.

The Surveyor General has hosted a productive set of meetings with GeoBC on the plans for the conversion from CGVD28 to CGVD2013. Mike Taylor, Ryan Hourston and Peter Goodier participated for the ABCLS, with Dan Parker and Scott Netherton representing local governments. GeoBC presented a plan, including a detailed communication plan, with a target for province wide implementation set for January 1, 2018. GeoBC is to prepare an article for the winter edition of the LINK.

We are hopeful the article will lay out what land surveyors can expect from the transition from CGVD28 to CGVD2013. This should be a specific topic during the 2017 ABCLS Board trip.

Stakeholder Advisory Committee Meeting

The LTSA met with its Stakeholder Advisory Committee on September 14, 2016. Chad Rintoul is the ABCLS representative to that committee. The meeting was conducted by video with participants in both the LTSA Headquarters in Victoria and in the LandSure offices in downtown Vancouver.

Topics for discussion were very similar to that discussed here in including ParcelMap BC, Project ACE and updates on various LTSA regulatory

compliance matters. In addition, the Committee was asked to consider revised terms of reference to revitalize the committee and make it a more active advisory voice to the LTSA.

Approving Officers Workshop

On June 21, 2016, there was an Approving Officer's Workshop held in Nanaimo. These sessions are sponsored by the Local Government Management Association (LGMA) and supported by the LTSA and ABCLS. This year I presented on our ParcelMap BC project and I also participated in the balance of the Approving Officer's Workshop. It is really valuable to be able to listen to some of the challenges local government approving officer's face on a daily basis.

Enhanced Scan on Demand

An element of Project ACE is an Enhanced Scan on Demand service. The service, hopefully ready for release in November, 2016 as part of what we refer to as FR15.4 (or Feature Release 15.4) forms part of the 'Close online services gaps' initiative. We will release the details shortly, you will be able to order records through the Scan on Demand Service that (a) go beyond the land title records now available, including documents only available in microfiche, and (b) in the case of the Surveyor Generals vault, we will provide you with an estimate of costs for all records to be provided and upon approval payment will be made through your myLTSA account.

In closing, I would encourage anyone who is interested in knowing more about the LTSA to take a tour through our website at www.ltsa.ca. ❖

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CGVD2013 – Provincial Adoption January 2018

By Brad Hlasny,
P.Eng, Manager, Base Mapping, GeoBC

This brief column is to remind the Association of BC Land Surveyors members about the Province of British Columbia's plans for adopting CGVD2013 – the new vertical datum for Canada. The Province is targeting January 2018 for adoption. Technical details are available at GeoBC website http://geobc.gov.bc.ca/base-mapping/atlas/gsr/vertical_modernization.html

British Columbia is adopting a new vertical datum / height system on January 1, 2018. The vertical datum (and associated elevations) will now be different and it is critical that this be identified on existing and new business data.

1. Overview

The federal government (NRCan) nationally released the Canadian Geodetic Vertical Datum of 2013 (CGVD2013) in November 2013 which is realized by a geoid model (CGG2013) compatible with GNSS positioning techniques. This new vertical datum will provide accurate coverage nationally. CGVD28 will continue to co-exist during an indeterminate transition period and CGVD28 and CGVD2013 elevations will be available to users through the MASCOT website.

In some areas of the province the shifts between CGVD28 and CGVD2013 are only a few centimetres so are typically not a huge issue. However, in others the shifts are 50cm or greater, so must be accounted for. In all cases it will be important to clearly indicate which

datum elevations are referred to, thus ensuring that there is no confusion if there are discrepancies going into the future.

This brief article is the first in a series of columns that are written to remind the ABCLS membership of the upcoming change. Future articles will include a status of the ongoing adjustments by the province, methods of accessing CGVD2013, tools available to members and some best practises.

2. Adoption January 2018

The Province has decided through collaborative discussions with critical stakeholders and partners, including

the LTSA, Association of British Columbia Land Surveyors and local and regional governments, that adoption of the new datum will be targeted for January 2018.

3. Transitioning from CGVD28 to CGVD2013

3.1. GNSS and Geoid Models

Rather than spirit levelling, CGVD2013 relies on the use of GNSS with a geoid model, CGG2013, to establish elevations at unknown points. Users can determine ellipsoidal heights with an accuracy of a few centimetres using survey grade GNSS positioning techniques and equipment. However, an ellipsoidal height is referenced to a mathematical surface thus has no physical meaning. For practical applications the GNSS ellipsoidal heights must be converted to orthometric heights by applying values derived from a geoid model that gives the separation between the ellipsoid and geoid, as shown in Figure 1.

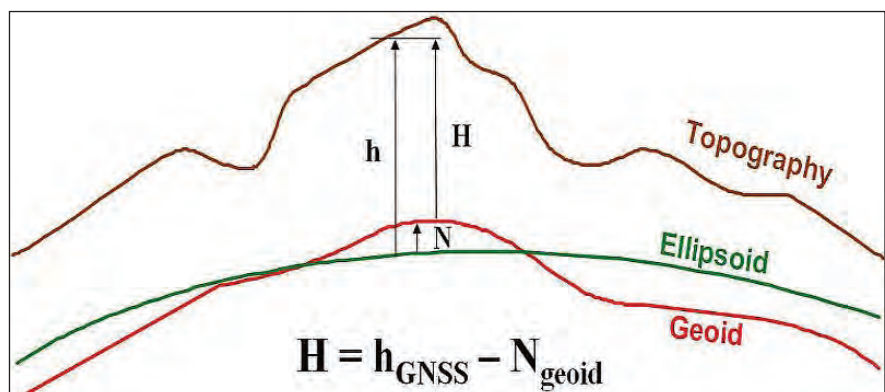


Figure 1: Height Relationship

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The published geoid model, Canadian Gravimetric Geoid model of 2013 (CGG2013), has an absolute accuracy of 2 cm for most regions across the country outside the Western Cordillera, at one sigma (67% confidence interval). In rough terrain (i.e. in the Rocky Mountains) the absolute accuracy approaches 10 centimetres. However, the relative precision of the geoid model (between two points) is generally 1 to 2 cm for baselines as long as 100km, even in the Rocky Mountains. The current precision and accuracy of the geoid model can support most regional height referencing requirements. GeoBC has compared levelled heights with GNSS-derived heights and the accuracy comparison meets levelling specifications for Integrated Survey Areas.

3.2. Monumented Height Network in CGVD2013

CGVD28 will continue to co-exist with CGVD2013. But neither NRCan nor GeoBC will maintain the network of first-order benchmarks which have deteriorated over the last 20 years. The national monumented network for heights, at the highest level, now comprises the stations forming the Canadian Active Control System (CACS) and the Canadian Base Network (CBN). Densification is provided by the provincial High Precision Networks (HPN) located in the Capital Regional District and Metro Vancouver, and Real Time Networks (RTN) from public and some private providers.

3.3. Magnitude of Elevation Shifts CGVD28 – CGVD2013

The implementation of CGVD2013 corrects for the distortions in CGVD28 that range from -50cm to -4cm across British Columbia. The following table

illustrates the difference between CGVD2013 and CGVD28 and is derived from a random sample of first-order benchmarks in each area with associated CGVD28 & CGVD2013 elevations.

The impact of these differences on users will depend on the required accuracy, location and size of their project. There are three main categories of users:

- Applications requiring CGVD28 heights with a few metres of accuracy (e.g. provincial digital elevation model) can disregard the difference between CGVD28 and CGVD2013 and move to using CGVD2013 with no real impact or need to translate legacy data.
- Projects requiring precision of less than 10 centimetres along corridors of tens of kilometres (e.g. LiDAR survey) must account for the difference between CGVD28 and CGVD2013.
- The third category represents applications where heights are transferred with precision of less than 2 cm over small regions (e.g. municipal infrastructure). In this case the difference between CGVD28 and CGVD2013 must be considered, but generally applying a constant offset suitable to the local area will suffice.

Professional engineers and land surveyors will play a substantial role in mitigating the impact of the new vertical datum by providing appropriate advice and expertise to their clients and stakeholders. When the elevation difference between CGVD28 and CGVD2013 has been accounted for, it is important to

identify the datum used on Air Space plans, wellsite plans, construction and engineering drawings, bylaws and regulations, and other documents referencing elevations. This will be visited further in a future article.✦

Location	Shift (m) CGVD28-CGVD2013
West Vancouver	-0.18
Langley	-0.17
Hope	-0.15
South Vancouver Island (CRD)	-0.13
Central Vancouver Island (Nanaimo)	-0.15
North Vancouver Island	-0.21
Central Coast (Prince Rupert)	-0.23
Northwest BC (Dease Lake)	-0.26
Northeast BC (Fort Nelson)	-0.04
East Central BC (Fort St. John)	-0.04
Prince George	-0.50
Revelstoke	-0.40
North Okanagan (Kamloops)	-0.18
South Okanagan	-0.20
Cranbrook	-0.18

Table 1 – CGVD28-CGVD2013 at Selected Locations across BC

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112th Annual General Meeting and Continuing Professional Development Days



On behalf of President Ron Johns, we would like to invite you to attend the ABCLS Continuing Professional Development Days (April 5 and 6) and the 112th AGM (April 6 and 7) at the Delta Ocean Pointe Resort, situated on the beautiful Inner Harbour in downtown Victoria. The theme this year is “Westcoast: Nature, Culture, History”. This is an excellent opportunity to attend interesting CPD sessions, participate in decision making at the annual general meeting, and stay apprised of the current items impacting the Association. Join us at the President’s Dinner and new commission presentations on Friday evening as we welcome the new professionals. As well, we will celebrate the accomplishments of our honored colleagues at the Awards Luncheon held on Thursday.

Delta Ocean Pointe Resort — Accommodatons

A block of rooms has been reserved at the Delta Ocean Pointe Resort. Please call their Reservations Team at 1-800-268-1133 and identify yourselves as being with the Association of BC Land Surveyors, in order to qualify for our group rate of \$149.00 per night, plus applicable taxes. You can also book your room online using the online group booking tool available on the News and Annoucements/Upcoming Events page of our website www.abcls.ca. Please ensure you are familiar with the hotel’s cancellation policy listed under “Rate Details”. Parking for overnight guests is complimentary. The room block will be held until March 3, 2017. Reservations received after March 3, 2017 are subject to availability.

In addition to the business and education component of the AGM, work is underway on an exciting social and partner event schedule. As a preview, the North-South Shinny Hockey Game will once again take place on Tuesday evening and late Thursday afternoon will offer a harbour cruise. Friday night will be the President’s/New Commissions Dinner with amazing food followed by a night of dancing to the sounds of “Consenting Adults”. More details to follow in the coming weeks!

Continuing Professional Development Topics

The CPD Committee is hard at work planning seminars/presentations which will include the keynote address delivered by Bruce Kirkby, an adventurer, photographer and writer. Other seminar topics include Case Law, Understanding Certificates of Title, Vertical Datum, Culture and the Predictability of Your Business Journey, and a jointly presented seminar by the Practice Advisory Department and the Surveyor General’s Office.

Registration information will be forwarded to members in January 2017 and will also be posted on our website <http://www.abcls.ca/>. ❖

Continuing Professional Development Days April 5 and 6, 2017

These seminars are designed for the benefit of all ABCLS members, including LST's, LSA's, Survey Students, Partners/Spouses.



Bruce Kirkby

Wednesday – 8:00am to 9:00am

In a wide-ranging, adventure-filled presentation with the ABCLS, Bruce will explore strategies for managing risks, maintaining clarity in an ever-more distracting world, and employing uncertainty, change and discomfort to expand performance and productivity.

Presenter: Bruce Kirkby, a wilderness writer and adventure photographer, has crossed Arabia's Empty Quarter by camel, descended Ethiopia's Blue Nile Gorge by raft, completed a sea-kayak

traverse of Borneo's northern coast, and a coast-to-coast Icelandic trek.

A columnist for The Globe and Mail, Bruce is the author of two bestselling books. His writing appears regularly in The New York Times, EnRoute, Canadian Geographic, and Outside Magazine.



New Case Law in BC for Land Surveyors: Easements, Adverse Possession, Encroachment and More!

Wednesday – 9:00am to 12:00pm

Boundaries define the spatial extent of rights in land – rights that are usually understood to be outright “title” or some lesser interest such as an easement or right of way. As land surveyors, we understand the importance of property rights to our clients, their neighbours and the general public. Surveying boundaries is guided by the principles which have been part of case law and are part of a legacy going back in the common law for many centuries.

In this presentation, the overall principles will be reviewed, but in particular, there will be an emphasis on recent decisions from the courts in British Columbia. Are

some long held principles used by land surveyors in the retracement of boundaries being revised? Are these principles still the same, but now being applied in novel ways? Answers to these questions will be explored in relation to the subject areas of easements, adverse possession and encroachments – as well as other topics. Both timely and practical, new developments and trends will be discussed.

This half day seminar will feature an in-person learning experience in a seminar format with references and a copy of the slide presentation made available for attendees.

Presenter: Izaak de Rijcke qualified as an Ontario Land Surveyor in 1978. He was called to the Bar in Ontario in 1983, and became a Certified Specialist in Real Estate Law in 2010. That year he also obtained the LL.M. degree from Osgoode Hall Law School. His private practices in law and cadastral surveying have focused on land title and boundary issues for land owners, municipalities, conservation authorities and government. He has taught the survey law courses at University of Toronto and is

presently an Adjunct Professor in the School of Graduate Studies at York University's Lassonde School of Engineering, where he continues to teach survey law courses using a blend of classroom and distance education methods.

He served as Adjunct Professor at Osgoode Hall Law School where he taught first year Property, and continued with the delivery of a joint Osgoode / Lassonde graduate course called Legal Issues and Governance for Engineers.

He was editor of the journal *Geomatica* for the last 5 years, and the free monthly e-newsletter called *The Boundary Point*. Izaak is a regular presenter of CPD for surveyors, lawyers and geomatics professionals through Four Point Learning across Canada. Most recently, he is the author of *Principles of Boundary Law in Canada*.



Understanding Certificates of Title

Wednesday – 1:30pm to 3:00pm

Have you ever wondered what the different sections shown on a certificate of title mean? Have you ever spent your waking hours pondering the effect of a specific charge or notation on title? Have you ever asked why it is that Gazette notices are shown in so many different ways? Are you perplexed by the mysteries of the Miscellaneous Notes, or the Related Plans function in MyLTSA? This seminar will explain this, that, some other things, and a few common reasons why your survey packages might see the wrong side of a defect notice.

Presenter: Rajiv K. Gandhi is the Association of British Columbia's legal counsel. He was called to the Bar of British Columbia in 1998 and represents clients throughout British Columbia and beyond, with a focus on corporate, commercial and residential financing (including foreclosures), wealth planning, high technology transactions and land development, including the determination of ownership rights and the acquisition of easements and rights of way. He also advises a number of institutional, commercial and academic

organizations in the areas of intellectual property (including copyright and trademark registration and enforcement, technology acquisitions, cooperation agreements and technology transfers), employment law, restructuring, governance, financing and cross border transactions.

Presenter: Valerie Cole is the Deputy Registrar, Land Title Division with the Land Title and Survey Authority of BC. Val worked as a registry agent for 5 years before joining the New Westminster Land Title office in 2008, moving to Victoria in 2011. Val has experience working with the New Westminster, Prince George, Prince Rupert, Vancouver, and Victoria land title records.

Surveyor General Division /Practice Advisory Department- Various Topics

Wednesday – 3:30pm to 5:00pm

In the course of their day to day operations, the Surveyor General's Division and the Practice Advisory Department often come across surveying topics which are interesting and instructional, yet may not warrant a full seminar or article on their own. In this panel presentation, the SGD and PAD will discuss six of these short topics-and in doing so they hope to confirm the veracity of the expression "Variety is the spice of life".

The topics to be covered in this presentation are:

- The Role of Occupational Evidence in Boundary Resolution – Gord Gamble BCLS, Practice Advisory Department
- How Many Ties to Survey Evidence in Place Need be Shown on a Plan (Board Advisory 2013-1)? – Peter Goodier BCLS, Practice Advisory Department
- How to Make an Application for an Exemption from the Full Posting Requirements of the GSIR, -Katie Hannah BCLS, Deputy Surveyor General
- "Dummy Titles" and SRW's Over Untitled Crown Land, - Cristin Schlossberger BCLS, Deputy Surveyor General
- Ambulatory Natural Boundaries and Artificial High Water Marks (Circular Letter 470) : Effects on the Extent of Ownership, - Dave Swaile BCLS, Deputy Surveyor General
- Reference Plans Versus Posting Plans : When is a Posting Plan Insufficient? - Peter Haas, Deputy Surveyor General



Provincial Adoption of Canada's New Vertical Datum (CGVD2013)

Thursday – 2:15pm to 3:30pm

Height modernization is the introduction of a new vertical datum for Canada which reduces systematic errors in the levelling network, reduce distortions in the datum, and will be compatible with modern positioning technologies, particularly GNSS techniques.

In November 2013, the Geodetic Survey Division of Natural Resources Canada released the Canadian Geodetic Vertical Datum of 2013 (CGVD2013). This new vertical datum will progressively replace Canadian Geodetic Vertical Datum of 1928 (CGVD28) in use since 1935. The elevation differences between CGVD28 and CGVD2013 range from +15cm on the SW Coast to +55cm in the Rockies in eastern BC.

The Province plans to adopt the new vertical datum officially in January 2018 and this presentation will discuss the new datum; its' benefits; the effects of the new datum for surveyors and local governments and provide some guidelines/best practises for those with elevation data holdings.

Presenter: Brad Hlasny is a Geomatics Engineer, managing the Base and Parcel Mapping group within GeoBC with the Government

of British Columbia. Previously Mr. Hlasny worked as an Operations Manager and Surveying Engineer with McElhannay Geomatics. Active in his community, he is a board member on Integrated Cadastral Initiative Society (ICI Society); is president of a local youth/senior soccer club (Gorge Soccer Association); and was past board member and committee members for the Canada-Wide DGPS Services; the Parks Master Planning Committee for the Capital Regional District, and the View Royal Community Development Planning Committee. Mr. Hlasny holds his Technical Diploma in Surveying from British Columbia Institute of Technology (BCIT), and his Bachelor of Science in Geomatics from the University of Calgary.



Office Culture – How to Create a Rewarding Work Environment

Thursday – 2:15pm to 3:30pm

This presentation includes an interactive discussion around the business journey and will leverage one of Shirlaws core and popular frameworks that acts as a high level strategic planning model / predictive tool related to business growth. There will be a culture conversation embedded throughout the presentation / discussion.

Presenter: Chris Cook is a Global Partner in Shirlaws Group and is Co-Founder & CEO of Shirlaws Canada. He is known for his

authentic and relatable approach and for helping his clients to create shifts – from fearful to fearless – so that they can confidently lead and invest in the strategic assets required for sustainable and profitable growth and a proud legacy.

Chris's leadership skills and perspective were forged over a successful 20 year corporate career.

2017 AGM CPD SCHEDULE

These seminars are designed for the benefit of all ABCLS members, including LSTs, LSAs, Survey Students and Partners/Spouses

Wednesday - April 5, 2017	Thursday - April 6, 2017	
8:00am - 9:00am Keynote Address - Seminar 1 Speaker: Bruce Kirkby	8:30am - 10:00am AGM Business Session	
9:00am - 10:00am Seminar 2 New Case Law in BC for Land Surveyors: Easements, Adverse Possession, Encroachments and More! Speaker: Izaak de Rijcke		
10:00am - 10:30am - Coffee Break	10:00am - 10:30am - Coffee Break	
10:30am - 12:00pm Seminar 2 (con't)	10:30am - 11:30am AGM Business Session (con't)	
12:00pm - 1:15pm - Lunch	12:00pm - 2:00pm - Awards Lunch	
1:30pm - 3:00pm Seminar 3 Understanding Certificates of Title Speakers: Ray Gandhi & Valerie Cole	2:15pm - 3:30pm Seminar 5 Provincial Adoption of Canada's New Vertical Datum (CGVD2013) Speaker: Brad Hlasny	2:15pm - 3:30pm Seminar 6 Culture and the Predictability of Your Business Journey Speaker: Chris Cook
3:00pm - 3:30pm - Coffee Break	4:00pm - 6:00pm - Mixed Partners Event	
3:30pm - 5:00pm Seminar 4 PAD/Surveyor General's Office - Various Topics Speakers: Gord Gamble & Peter Goodier, Katie Hannah, Cristin Schlossberger, Dave Swaile & Peter Hass		
Icebreaker (7:00pm start)		

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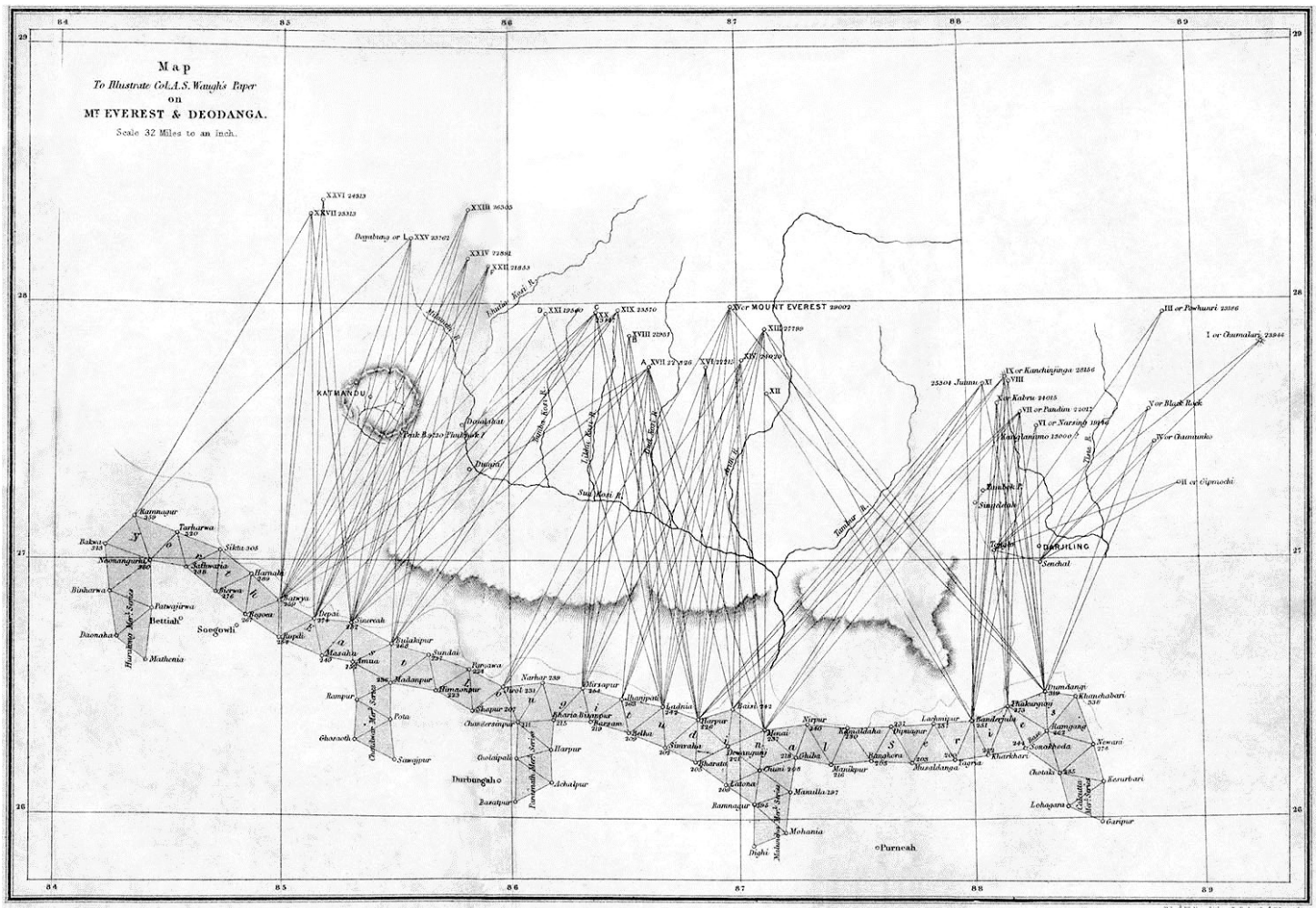
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Trig Network and Rays to Himalayan Peaks

Submitted by: Larry Marshik, *BCLS (Ret'd)*

This map shows the Trig Network and Rays to Himalayan Peaks done as part of the Great Trigonometrical Survey of India. This map accompanied a paper by A.S. Waugh (Surveyor General of India 1843-1861) - presented to the Royal Geographical Society of London in 1858. This paper squashed a persistent claim by a Mr Hodgson that a "Mt Deodanga" was either the same

as Everest or was higher. And this squabble, I believe, was really about what name to give the mountain.

Interesting to try and imagine the field work & field conditions - vertical & horizontal angles to snowy summits 100 plus miles away. Doing the plotting and calculations - the number of pencils (and erasers) used must have been staggering!

For the Waugh paper see:

https://www.jstor.org/stable/1799335?seq=1#page_scan_tab_contents

And for a 1902 paper discussing the Great Trigonometrical Survey of India see:

<https://archive.org/stream/professionalpape28grea/page/146/mode/2up>



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Digital Field Notes

During the course of our practice reviews, the Practice Advisory Department has met with members who are using tablet computers in the field to create electronic field notes. Some of the results are very impressive, and it is clear that digital field notes can effectively replace traditional paper field notes. The Practice Advisory Department would like to thank Jerry Mullin, BCLS of Midwest surveys for allowing us to use electronic field notes from his office for the purpose of this article.

The field notes showcased in this article were created using an Adobe Acrobat form. The blank .pdf form is stored on a field tablet and is opened and renamed in the field by the survey crew chief. The file is digitally signed at the end of the survey.

The process of creating a field note form using Adobe Acrobat is relatively straight forward. Adobe Acrobat has

an excellent help tool- just search for 'Creating and distributing PDF forms' using the Adobe help function. In creating a form, you are essentially creating a field note template document with fillable fields.

Sketches can be created in the field using the Adobe Acrobat 'Annotations' and 'Drawing Markup' tools. Some members like to use paper copies of registered plans as the basis for field sketch mark ups- this can be achieved in the digital environment by attaching a .pdf of the registered plan to the field note template and marking up the registered plan using a distinguishing colour.

Digital field notes offer the following benefits;

- There are no paper documents to scan or store
- The template format will ensure that no information is accidentally unrecorded

- If a crew is working remotely, the field note file can be emailed to the office
- Copies of registered plans can be readily attached to the field note file to form the basis of the sketch, and photos can be attached to the field note .pdf.

The following pages are a sampling from two complete sets of field notes recorded during a legal and topographic survey.

Finally, a reminder that field notes and sketches need to be completed in the field at the time of survey. A minor "brushing up" of a field sketch in the office or hotel room may be reasonable- but material components (e.g. monument descriptions, posting checks, etc) need to be recorded in the field at the time of the survey. ❖

FIELD NOTES - TITLE PAGE	
Job No.: FB-0063-15	
Client: Air Liquide Canada	
Job Description: Legal sketch plan for Powerline R/W in 21-78-15-W6	
Crew: Ryan Dick / Adrian Creamer	
Date(s): Begin: Dec 2, 2015	End: Dec 4, 2015
Weather: 5°C, Clear	
Instruments Used: TRIMBLE R10 RTK	
Abbreviations: Fd - Found FCP - Fence Corner P - Standard Post Pl - Placed Post (Brass Cap) I - Statutory Iron C.S. - Counter Sunk M - Mound Post ASCM - Alberta Survey Tr - Trench I.B. - Iron Bar Control Marker Wit - Witness I.S. - Iron Spike CKM - Check Ref - Reference MP - Marker Post Measured	
Job File(s): FB-0063-15-DEC2	

MWS 02-06 (A) MIDWEST SURVEYS

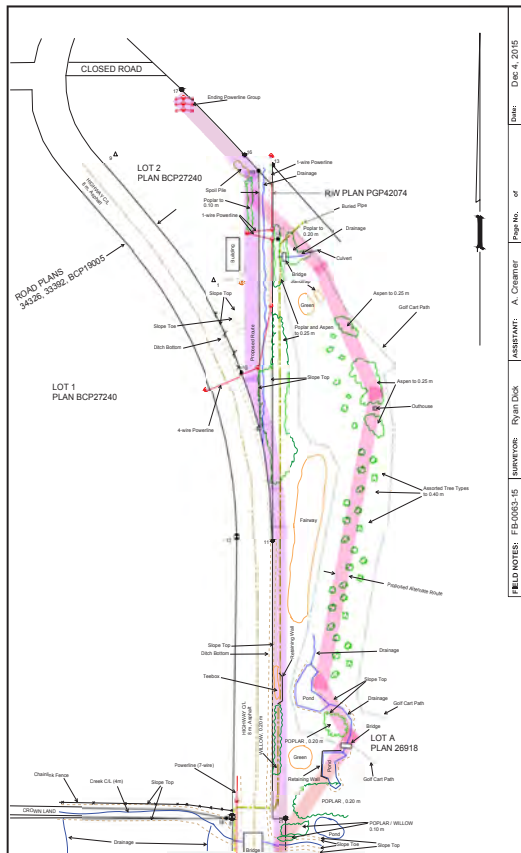
Client Contacts: Stephane B. (514) 260-0999
Field: (Name & Phone No.)
Office: Jerry Mullin (250) 261-8164
Landowner: (Notes) Walked route with Stephane, confirmed general layout of R/W and what topography should be included in field return See Photos for CP details

FIELD NOTES - CHECKLIST	
	Y N N/A COMMENTS/REF. JOB
Title Page	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> _____
GPS Observation Sheet	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> _____
Rover Chronicle of Points	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> _____
Evidence Report Sheets	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> _____
Field Sketch	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> _____
Residence Sketch	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> _____
Water Well Sketch	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> _____
Powerline Data Sheet	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> _____
Checklist	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> _____
Other Comments:	

MIDWEST SURVEYS

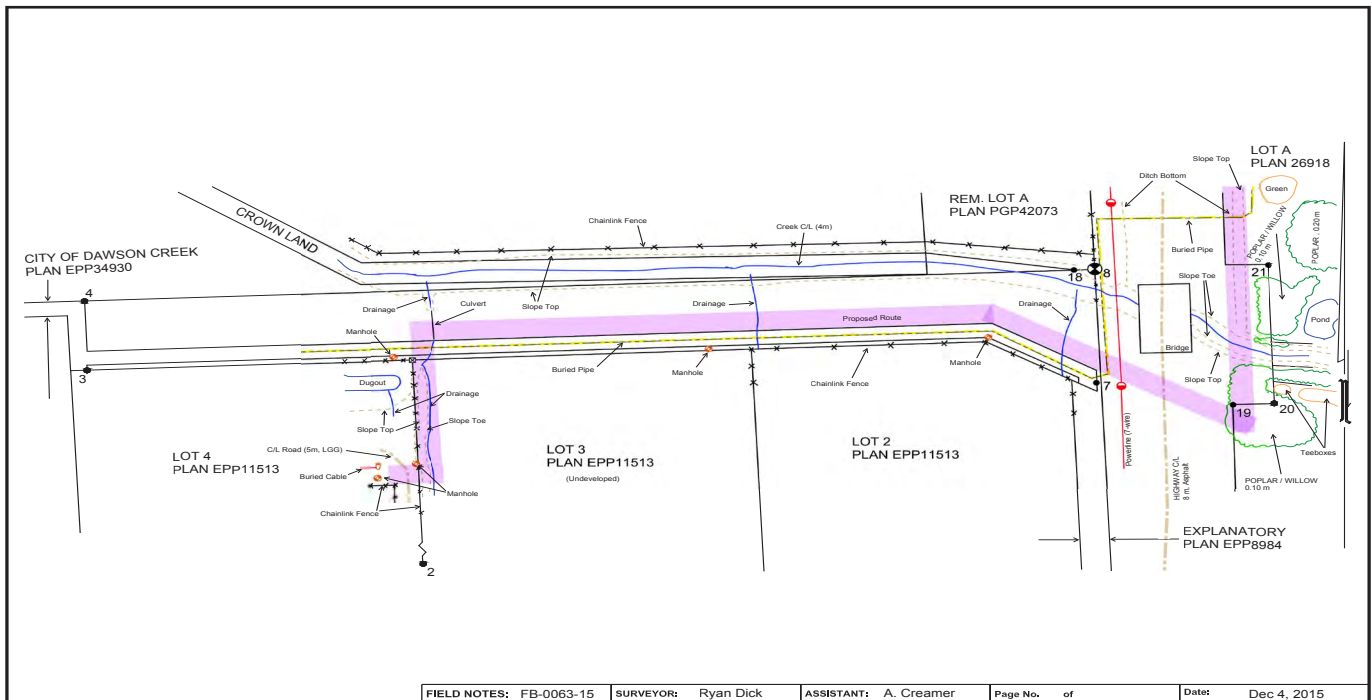
INSTRUMENT	MAKE/MODEL	FA NUMBER
GPS (Base)	TRIMBLE R10	_____
GPS (Rover)	TRIMBLE R10	_____
Total Station	N/A	_____
Data Collector	TSC3	_____
Pipe Locator	FUJI TECOM	_____

SET #2



Job No.	FB-0063-15	Surveyor	Ryan Dick
Page No.	of	Assistant	A. Creamer
Date	Dec 2, 2015	District	
L.S.	Sec. 21	Twp. 78	Rge. 15 W. 6
RTK BASE SET-UP			
DAY 1: Job File Name: FB-0063-15-DEC2			
Static File Name:			
Base Point # 1	Desc.: PL IS		
H.I. START (m): 1.760	L.O.R.	(feet): 5' 9 1/4"	L.O.R.
H.I. END (m): 1.760	L.O.R.	(feet): 5' 9 1/4"	L.O.R.
Start Time: 10:45	am	End Time: 4:30	pm
COORDINATE INFORMATION:			
Northings: 6184851.119	Source (check one):		
Eastings: 670764.574	<input checked="" type="checkbox"/> Autonomous		
Elevation: 662.736	<input type="checkbox"/> Imported Control Coordinate		
Project Height: 650	<input type="checkbox"/> RTK from Another Base		
	<input type="checkbox"/> Keyed in		
	Coordinate System: <input type="checkbox"/> Zone: 10		
CALIBRATION & CHECK SHOTS:			
GNSS Point		Calibration: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
Point #	North	East	Elevation
Grid Point	Point #	North	East
Point #	Distance	Elevation	Time
2	0.009	0.001	11:10
2	0.011	0.001	2:40
2	0.004	0.022	4:25
COMMENTS:			

Job No.	FB-0063-15	Surveyor	Ryan Dick
Page No.	of	Assistant	A. Creamer
Date	Dec 2, 2015	District	
L.S.	Sec. 21	Twp. 78	Rge. 15 W. 6
SKETCH:			
Day 2: Static File Name:			
Base Point # 1	Desc.: PL IS		
H.I. START (m): 1.77	L.O.R.	(feet): 5' 9 1/2"	L.O.R.
H.I. END (m): 1.77	L.O.R.	(feet): 5' 9 1/2"	L.O.R.
Start Time: 8:35	am	End Time: 4:45	pm
CHECK SHOTS AND ERRORS:			
Point #	Distance	Elevation	Time
9	0.015	0.005	8:40
9	0.009	0.003	4:40
Day 3: Static File Name:			
Base Point # 1	Desc.: PL IS		
H.I. START (m): 1.67	L.O.R.	(feet): 5' 5 3/4"	L.O.R.
H.I. END (m): 1.67	L.O.R.	(feet): 5' 5 3/4"	L.O.R.
Start Time: 8:40	am	End Time: 3:10	pm
CHECK SHOTS AND ERRORS:			
Point #	Distance	Elevation	Time
9	0.007	0.007	8:50
9	0.011	0.004	3:00



Tampering with Survey Evidence

It has come to the attention of the Practice Advisory Department that some members and their field staff have adopted the practice of physically moving found survey monuments by small amounts, so that the monuments conform to the member's cadastral resolution. This practice can take several forms, examples of which are:

- Moving a found iron post by a small amount so that it is, in theory, collinear with other survey monuments.
- Moving a found iron post by a small amount so that a road, lane or lot width conforms exactly to the plan dimension (at least in theory).

The Practice Advisory Department strongly condemns this type of tampering with survey evidence. Doing so is unprofessional and in contravention of statute law. We ask members to consider the following:

- The hierarchy of evidence places more importance on posts in the ground than dimensions on plans; so dimensions are subservient to posts in place, not vice versa.
- It follows that the first question a member should be asking about found evidence is whether it is disturbed from the location where it was originally placed. If it is not disturbed, then you simply need to show it in its location relative to your survey.

- Keep in mind that your survey has its own inaccuracies, so thinking that your survey is more accurate than previous surveys by these small amounts has no technical merit.

“At a fundamental level, remember that survey monuments are evidence. Evidence is information which can be used to support an assertion. In our profession this will take the form of a surveyor’s opinion of the location of a property corner/boundary.”

- This type of tampering with found evidence is not officially documented, so there will be no public record of the movement of the monument.
- In regards to the practice of moving posts set on road boundaries so that the road width exactly reflects the plan distance, the Land Survey Act, Section 5(3)(b) prescribes giving the exact road width when setting new posts. The Land Survey Act does not direct surveyors to give preferential treatment to road widths when dealing with undisturbed posts found in place.
- A post that you may be tempted to “adjust” was placed by another land surveyor. A BC Land Surveyor does not have the right to unilaterally change the work of another land surveyor.

At a fundamental level, remember that survey monuments are evidence. Evidence is information which can be

used to support an assertion. In our profession this will take the form of a surveyor’s opinion of the location of a property corner/boundary. Surveyors may decide, in certain instances, against using a particular found

monument in forming an opinion of the location of a property corner/boundary. However, when evaluating found evidence, a surveyor should never tamper with that evidence to conform to their opinion of the boundary location. If you disagree with the location of a monument, the monument should be left in position so the next surveyor can use the unadulterated monument to form their own opinion of the location of the boundary.

Disagreeing with survey evidence set by others by small distances

On a related theme, the Practice Advisory Department notes that some surveyors are in the habit of disagreeing with the work of other surveyors, and will show survey monuments set by others “off” the supposed “true” property corner by small distances.

The topic of when to accept or not accept the work of another land surveyor is a nuanced one. The June 2003 Link article "Accepting the Work of Other Land Surveyors" by Dave Dediluke, BCLS, is a comprehensive examination of this subject, and is recommended reading. The article makes several excellent points in arguing that it is the obligation of the surveyor to accept the previous work of his colleagues if the work was done to the standards and regulations of the day. The main points may be summarized as follows:

- Showing monuments a small distance off the property corner is not in keeping with statute; Section 1 of the Land Survey Act instructs us that all boundaries established in compliance with

the Act are "true and unalterable". It follows that if the survey which set the monument in question was done to the standard of the day, if the survey is blunder-free, and if the monument has not been disturbed, then the work should be accepted.

- Disagreeing with survey monuments by small amounts can have undesirable consequences, including creating uncertainty for land owners. Occasionally it can result in several monuments marking a single corner.
- Surveyors need to consider the accuracy of their own work before disagreeing with another surveyor's work by a small amount. Before calling an iron post set by another surveyor

"off" the property corner by a small distance, the surveyor must be able to answer the following questions in the affirmative: Has their instrumentation been recently calibrated and standardized? Is redundancy built into their survey? Has a closed traverse and adjustment been performed?

There will be instances where it may be reasonable to show existing survey evidence "off" the property corner or offline by some amount. Before doing so, surveyors and their field staff need to carefully consider the hierarchy of evidence, statute law, the accuracy of their own measurements, and the effect of such a decision on the cadastre. ❖



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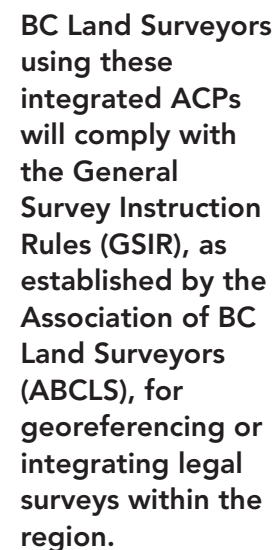
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Survey Letters: WHAT ARE THEY AND HOW ARE THEY FILED?

A survey letter is a letter which explains the rationale behind a survey decision by a land surveyor on a statutory survey plan. Such a survey letter might explain, for example, acceptance of certain evidence or a boundary resolution where there are significant differences from the underlying plan. Although it's advisable to ensure, whenever possible, that the information shown on your plan allows it to stand on its own, it is a good idea to file a survey letter if you believe Land Title staff or others using your plan will have a difficult time understanding boundary resolution issues shown on your plan. It is generally advisable to be proactive in filing survey letters. Chapter 8 of the Professional Reference Manual discusses this topic in more detail.

In the past, the fact that a survey letter had been filed was not noted on the plan itself and in many cases such a letter might only be discovered through exhaustive research.

In an effort to improve access to survey letters, the LTSA Liaison

Committee discussed this matter at their meeting of January 15, 2015. The method by which a survey letter can be filed with the Land Title Office is explained in the following excerpt of the relevant item from the January 15, 2015 meeting minutes (meeting minutes are posted to the ABCLS website):

Item 2013-14: The ongoing discussion of where and how to file and record a surveyor's ancillary letter provided to the plan examiner in support of a complex plan solution. Tim Jowett and Dave Swaile offered the following guidance in this regard:

A letter of explanation regarding a survey inconsistency must be attached to the plan application, not the plan. However, in order to help allow future land surveyors to determine that a survey letter was submitted, the LTSA has recommended that the notation shown below be added to the face of the plan.

If the letter is included at the time of plan submission, the land surveyor will:

- Add the letter of explanation appended to the plan Application to Deposit (DSPL) (not to the Plan Certification)
- Amend the plan to add the following statement; "See survey letter signed by (SG or name of land surveyor) filed with the plan application regarding a survey related clarification".

If the letter comes after submission (i.e., it is provided in response to a title examiner's request for additional information) it can be added by:

- Adding the letter to the plan Application to Deposit (DSPL) by submitting a corrective declaration, and
- Amending the plan to add the following statement; "See survey letter signed by (SG or name of land surveyor) filed with Plan Application Number [application filing number –always begins with a "CA"] regarding a survey related clarification".

The decision as to whether the plan must be re-signed by the parties if such a plan amendment is made is left to the applicant and the surveyor and would be the same as in the past; i.e. because the change is insignificant in this circumstance (it's simply the addition of the aforementioned plan statement), re-signing by all parties to the plan would not be expected by the Land Title Office. ❖



Can a Land Surveyor File a Lien in British Columbia?

by Karen Martin

Introduction:

At the ABCLS AGM in February, 2002, Karen Martin delivered a presentation centered around Engineering and Construction litigation. Her seminar was well received, and Karen wrote a brief article for the Link that year to document her points on the topic of land surveyors and builder's liens.

The article has been reviewed by the ABCLS legal council, and it is deemed to still be relevant to land surveyors in 2016. Karen Martin's complete article is copied below. Following this is an update on the topic by Rajiv K. Gandhi, legal council for the ABCLS.

Can a land surveyor secure payment for his fees by filing a lien against the land?

A lien is a creation of legislation which gives the claimant a right against property until payment is received. The purpose is to prevent an owner from receiving the benefit of improvements made to his land without paying for them.

In British Columbia, the only legislation potentially available for a surveyor's lien is the Builders Lien Act. That Act does not specifically mention surveyors, but it creates a right to lien for contractors and subcontractors as defined in the Act. A surveyor can fall within the definitions,



“A Nova Scotia case, decided in 1977, held that a surveyor’s work to resolve a boundary dispute, where no construction was in contemplation, was not lienable.”

but no lien can be filed unless the surveyor provides work in relation to an improvement to the land.

“Improvement” is defined as including: anything made, constructed, erected, built, altered, repaired or added to, in, on or under land, and attached to it or intended to become a part of it, and also includes any clearing, excavating, digging, drilling, tunnelling, filling, grading or ditching of, in, on or under land.

Court cases have decided that if proposed construction does not proceed, there has been no improvement to land.

Work is defined in the Act broadly as work, labour or services, skilled or unskilled. It is interesting to note that the Washington State builders lien legislation specifically includes “surveying” and “establishing or marking the boundaries of the improvement” in its definition of lienable work.

“Under the current legislation, a surveyor who provides construction layout services can file a builders lien, but a surveyor providing services at earlier stages in land development may not be entitled to a lien.”

Not many court cases in Canada have considered whether a builder’s lien may be filed for surveying services, and unfortunately the decided cases have involved different statutory language than that of British Columbia’s current Builders Lien Act.

A Nova Scotia case, decided in 1977, held that a surveyor’s work to resolve a boundary dispute, where no construction was in contemplation, was not lienable.

In 1994, an Ontario court decided that surveying services to ensure construction plans properly located buildings within the lot boundaries were lienable because they were a necessary element to the construction of improvements on the properties. However, the Ontario court also commented that determination of a boundary between properties would not constitute a lienable service.

In 1999, the BC Court of Appeal decided that services provided by a land use consultant, including surveying to assist in achieving final reading of a zoning bylaw, were not lienable. The Court confirmed that the test is not whether the service added value to the land contributed in some way to the total project, but rather whether the services were in relation to a physical change in, on or under land.

Note that this case deals with the old BC Builders Lien Act, which required the work to be “on” an improvement. As mentioned above, the current Act requires only that the work be “in relation to” an improvement. A 2002 BC Court of Appeal case dealing with

non-surveying services tells us that this phrase means “in direct relation to” or “directly connected to” the improvement.

Based on the decided cases, whether surveying services are lienable in BC will depend upon whether the services can be shown to be directly related

to a physical change in, on or under land. Under the current legislation, a surveyor who provides construction layout services can file a builders lien, but a surveyor providing services at earlier stages in land development may not be entitled to a lien. Each case will depend on its own facts.

Update, by Rajiv K. Gandhi Cox, Taylor - Barristers, Solicitors, Notaries

The issue of a surveyor’s entitlement to lien still does not appear to have been directly litigated (nobody wants to take the risk, I suppose, of being proved wrong).

One newer case is *Tuscany Village Holdings Ltd. v. Conquest Development Corp.* 2005 BCSC 1392. In that decision, not dealing with surveyors or the work of surveyors, the Court held that:

“...it is now the case that services need not have been done on the particular property to give rise to a lien. Rather, in order to support a lien, the work or services must have been an “integral and necessary part of the actual physical construction of the project”.

This seems to follow the language of *Kettle Valley and Chaston* where the Court of Appeal held that:“(a) the work must be an integral and necessary part of the actual physical construction of the project; and (b) the work must contribute in a direct and material way to the construction of the improvement.”

It seems to me that there is an argument to say that if the surveyor’s work is an “integral and necessary part of the actual physical construction of the project” it may be lienable. However, for the surveyor I suggest that “may be lienable” provides little comfort and, even then, it potentially allows a lien for only a fraction of the work which surveyors do, day to day.

In my humble opinion, surveyors should not hold out hope that a lien claim will save them. Instead, surveyors should ensure that retainer letters or agreements are comprehensive, and allow for security to protect fees, where appropriate. Surveyors should reserve discretion to withhold final plans in the absence of payment or proper security for payment, and retainer agreements should make this clear to clients.

Mandatory BC One Call:

ITS POTENTIAL IMPACT ON THE LAND SURVEYING PROFESSION

Submitted November 15, 2016 by the Buried Facilities Working Group of the External Relations Committee.

Most of you have seen the television commercials ‘Call or Click before you Dig’ but few may be aware there is a big push to have this become mandatory in BC by enacting provincial legislation. That is, mandatory for any person disturbing the ground to a depth of 30 cm or more. With the amount of survey monuments being set every day, the majority being 75cm long type 5 iron posts, a lot of you will have the reaction “this is unworkable; we will have to get an exemption for land surveyors”!

When Scott Netherton was first asked to represent the interests of the ABCLS as a board member of the BCCGA (BC Common Ground Alliance) in 2014, the process towards mandatory one call legislation was already well under way. After attending numerous meetings, he realized just how much effort has been put into this and how important it is to the numerous stakeholders involved.

What is the BCCGA?

The British Columbia Common Ground Alliance is a non-profit organization established to lead development of consistent practices and coordination of activities to ensure the highest possible standards of worker safety, public safety and damage prevention in connection with underground infrastructure.

The BC Common Ground Alliance is affiliated with the Common Ground Alliance in the United States and with other similar partner groups in Quebec, Ontario, Saskatchewan and Alberta.

The BCCGA works to reduce damages to underground infrastructure by promoting damage prevention practices. They also promote the provincial interests of the CCGA (Canadian Common Ground Alliance).

One of their immediate goals is a call for the mandatory membership and registration at the BC One Call Centre for buried infrastructure owners and operators and a mandatory “Call or Click before you Dig” system (BC One Call). The BCCGA Board of Directors has a diverse representation. Some of the main stakeholders include WorkSafe BC, BC Hydro, Fortis BC, Telus, BC Roadbuilders & Heavy Construction, TransCanada Pipeline, Kinder Morgan Canada and BC One Call. Scott Netherton represents the ABCLS as the Engineering and Land Surveying industry representative on the Board of the BCCGA.

The BCCGA meets regularly to consider issues related to buried infrastructure protection and safety and advocate these issues to industry and government. The following is a brief review of legislation and programs that have been considered over the last 2 years.

May 26, 2015 - CSA Z247 Standard (Damage Prevention for the Protection of Underground Infrastructure) is published. It is the

first damage prevention standard in Canada. References to this Standard are being encouraged for inclusion in any future provincial or federal legislation. The definition of ‘Ground Disturbance’ includes ***driving fence posts, bars, rods, pins, anchors or pilings.***

June 18, 2015 - Pipeline Safety Act (Bill C-46) becomes law. Amends the National Energy Board Act and the Canada Oil & Gas Operations Act. Applies to all federally regulated pipelines and infrastructure. It establishes definitions for “*ground disturbance*”.... *any activity which disturbs the ground to a depth exceeding 30cm and ‘prescribed area’... any activity causing ground disturbance within 30m of a pipeline.* Regulations to accompany acts affected by this act came into effect last summer.

March/April, 2016 - Professional Surveyors Canada sends two position papers to the National Energy Board which express the concerns Land Surveyors have with the existing (Bill C-46) & proposed legislation (Bill S-233), now Bill S-229. All members are encouraged to review these position papers at the following link: <https://www.psc-gpc.ca/news-and-connect/initiatives/position-papers/>

October, 2016 - Senate Bill S-229 Underground Infrastructure Safety Enhancement Act. Senator Grant Mitchell attends a board meeting of the BCCGA in Vancouver to promote Bill S-229, which he introduced, and give an update on the status. It is

expected to receive third reading in the Senate by the end of this year and receive approval from the House of Commons by fall, 2017. Following Royal Assent, it will become law by the end of 2017. This bill applies to federal underground infrastructure with an exemption for reserves and surrendered lands. Senator Grant Mitchell met with MLA Peter Fassbender at the end of this meeting.

It is the position of the CCGA and the BCCGA that these bills will serve as a template for future provincial legislation.

Damage Prevention Governance in Canada

Federal: National Energy Board Act, Pipeline Safety Act, NEB Damage Prevention Regulations.

Provincial: Ontario – Bill 8: Underground Infrastructure Notification System Act, 2012
Alberta Energy Regulator
BC Oil & Gas Commission

Although the Safety Standards Act (Gas Safety Regulation) became BC provincial law on April 1, 2004, it is not commonly known. Section 39 (procedures for excavations) requires the gas utility company (Fortis BC) to be notified and confirmation of the gas installation location must be done prior to excavation.

There is no definition for ‘excavation’ or ‘ground disturbance’ within the Act. Therefore, it could be argued that, under this act, placing survey monumentation does not constitute excavation.

Underground Locates

The ASTTBC (Applied Science Technologists & Technicians of BC)

has launched a Registered Utility Locator Technician (RULT) program. This certification would be required in order to carry out underground locates.

Kwantlen Polytechnic University is currently offering a 3 day utility Locator Specialist course. After successful completion of this course, RULT designation from ASTTBC would be given after 2 years’ experience and a minimum of 20 complex underground service locates have been completed.

Land Surveying firms should consider having some of their employees obtain this certification. It is not only good practice, it could reduce delays resulting from BC One Call lag times.

For the majority of cases, the response time for locate requests is currently 3 to 5 days. This will probably increase dramatically when notification to BC One Call becomes mandatory. One of the major concerns is the ability of their staff to handle the anticipated volume of locate requests within a reasonable timeframe.

Future Discussion and Solutions

The Association, through the Buried Facilities Working Group, is monitoring developments and will propose solutions to the issues surrounding mandatory one call. Professional Surveyors Canada is also monitoring developments.

Future discussion will include the adoption of alternate monumentation, the training and recognition of employees skilled in the location of buried facilities, improving one call reporting, locate requirements and response times. In addition, streamlining request procedures, advocating for the development of robust as-built mapping and the delineation of underground infrastructure by registration of Legal Survey Plans will need to be addressed.

We encourage members to visit the BCCGA website, the PSC website and e-mail your comments to the Buried Facilities Working Group Chair, Greg. Calvert@vectorgeomatics.com ❖



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Jon Michael Magwood BCLS #504

1936 – 2016

by Robert Allen
BCLS (Life Member), CLS

Jon was born in Saskatoon, Saskatchewan, on February 23, 1936 and at that time was the longest baby born in that city and probably in that province! His parents were teachers and moved around Saskatchewan to wherever they could find work. When Jon was 10, the family moved to Robson, BC, which is across the Columbia River from downtown Castlegar and once Jon had his first drink of British Columbia water, he swore he would never return to Saskatchewan. His father was a principal in one of the schools there but spent his summer holidays in the Forestry lookout tower on nearby Sentinel Mountain. Jon's first job, at age 14, was to carry supplies up to the lookout tower and thus began his fondness of climbing mountains.

The summer he was 15, Jon worked as a coal passer on the SS Minto, a sister ship to the SS Moyie – the sternwheeler that is now part of the museum in Kaslo. The Minto plied

the Arrow Lakes whereas the Moyie worked on Kootenay Lake. When the Chief Engineer found out that Jon was underage, he threatened to throw him off at the next port of call but quickly changed his mind when he realized that Jon was quite happy throwing 13 shovels full of coal into the firebox every 15 minutes and no

He applied for the job to Ernie McMinn, BCLS #325, and the first thing Ernie did was to punch him in the stomach and said "Are you tough enough?" Jon said "Yes" and Ernie said "You're hired". The next summer, Jon applied for the same job and the same interview process took place. In the third summer when Jon applied for the same job, he punched Ernie in the stomach before he said "Yes" and Ernie laughed and hired him again.

one else was willing to do that. The summer he was 16, he worked on a fire suppression crew and the summer he was 17 (1953), he worked at a local lumber mill that also provided room and board. The cook house provided meals for all three ethnic groups that worked there: Doukabour, Japanese, and second generation Canadians. Jon ate with each group and usually had a piece of pie in each hand as he dashed

back to his work site. Little wonder he grew so tall. Jon graduated from Esquimalt High School in June 1955.

Jon worked on his first survey crew during the summer when he was 18, building survey towers for the large triangulation project in north eastern British Columbia. He applied for the

job to Ernie McMinn, BCLS #325, and the first thing Ernie did was to punch him in the stomach and said "Are you tough enough?" Jon said "Yes" and Ernie said "You're hired". The next summer, Jon applied for the same job and the same interview process took place. In the third summer when Jon applied for the same job, he punched Ernie in the stomach before he said

“Yes” and Ernie laughed and hired him again. One might have more than a little difficulty with that type of hiring practice nowadays. In that third year (the summer of 1956) after a one-month training program as an instrument man using a Wild T2 theodolite, Jon was sent up the Finlay River with W.H. Stilwell, BCLS #362 to an area across from what is now Ingenika Arm on what is now Williston Lake. They were to set out a surveyed base line for triangulation and to tie into the triangulation net in the area. In the autumn, he worked on triangulation towers and mountain stations south of Dawson Creek.

In September/October 1987, I made my first moose hunting trip up to the Ingenika River and a few months later at our Annual General Meeting I was telling Jon about my trip and he told me about his time very close to where I had been, albeit 31 years earlier and long before Williston Lake had been created and flooded the area. A few weeks after the AGM and out of the blue, a package arrived in the mail from Jon with numerous maps of the area, one of which shows his surveyed base line and also the “Trail of 1898” up the east side of the Finlay River. The base line crossed the old trail.



The remains of the forestry lookout tower on Mount Hallowell on the Sechelt Peninsula
Robert Allen photo.

From September 1956 to May 1957, Jon worked as an instrument man for the Location Branch of the Department of Highways working on part of Highway 16 west of Burns Lake. During the summers of 1957, 1958, and 1959, Jon worked with Art Swannell, BCLS #288, on the resurvey of the British Columbia/Yukon border west from Windy Arm of Tagish Lake to the Alsek River. During the winters of those years, he furthered his education at Victoria College and the University of British Columbia. In early 1960, Jon worked for the federal Department of Public

Works on flood control projects in the Chilliwack area and he also studied for the BCLS preliminary exams which he wrote and passed that spring. From May to November 1960, he worked for the Topographic Division of the Surveys and Mapping Branch of the British Columbia Department of Lands surveying ties between the Alaska Highway and the Geodetic Survey of Canada triangulation network from Mile 350 (not too far north of Fort Nelson) to the community of Lower Post. His salary had risen from \$160 per month in 1954 to the princely sum of \$350 per month in 1960 and perhaps for that reason that autumn and winter he tried something different. He learned to fly and he obtained his private pilot's licence, something I did not know about Jon. Jon was passionate about planes and about flying and he was a founding member of the

Looking east out the Ingenika Arm towards Williston Lake
October 1, 1987. Robert Allen photo.



Jon attending to his snow drops in his garden.

Valley Aviation Club in Chilliwack and was checked out on 17 different airplanes. He and Faith attended the Experimental Aircraft Association fly-in in Oshkosh, Wisconsin, on three different occasions and he joined the pilots of the 10,000 airplanes parked there for the week. He had a great time chatting with the owner/pilots, watching the airshows, and attending some of the seminars. That fly-in is the largest gathering of airplanes in the world for a one week show.

In the spring of 1961, he was hired on as a field assistant by the Legal Surveys Division of the Surveys and Mapping Branch and spent the

rest of his surveying career with them working on various projects under different staff land surveyors throughout the Province. During that time, he articulated to Art Swannell, BCLS #288 and on May 16, 1974, Jon was sworn in as BCLS #504. In 1981, Jon was promoted to Senior Surveyor in the Legal Surveys Branch (Office of the Surveyor General) and after privatization of legal surveys, his field survey function was reduced and he then spent his time on investigation of disputes and anomalies in the survey fabric as well as in record research and adjudication of the work done for the Office of the Surveyor General by the private sector.

Jon was active in the Professional Employees Association as the Surveyors' representative for 21 years and he sat on its Board of Directors for three terms from 1989 to 1992. He also sat on the Negotiating Committee, working the way through five contracts.

For eight years from 1987 to 1995, he served as the editor of *The Link*, the then quarterly magazine of our Association. In 1992, Jon was presented with the G.K. Burnett Award which is "presented to a member who has provided distinguished service to the profession or the survey community in a previous

year or recent years". Prior to Jon taking over at the helm of The Link, it had floundered a bit and Jon brought it back to life. When I made the nomination of Jon for the Award, I recall saying that Jon had "found the missing link" and that he was someone we literally "all looked up to". Jon was a tall man, in fact, I think the tallest BCLS we have ever had – it must have had something to do with that water in Saskatchewan that he didn't like.

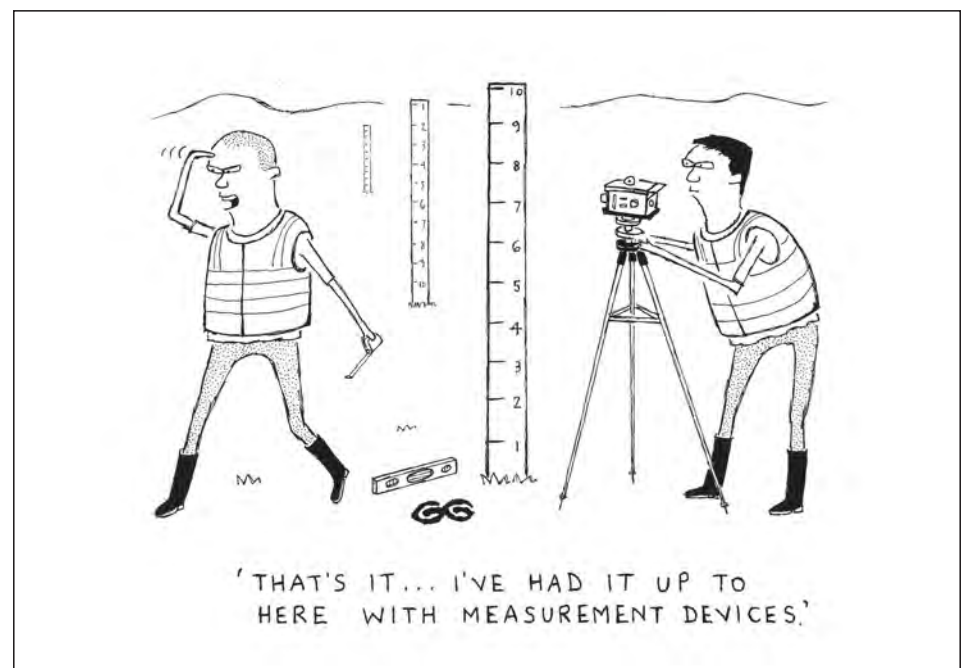
In 1993, Jon was elected to the Board of Management of the then Corporation of Land Surveyors of the Province of British Columbia and was successfully elected again each year until 1997 when he was elected president of the Board. He served his last year as past president of the Board in 1998.

Jon served on numerous BCLS Committees, including the Complaint Inquiry Committee and the Historical and Biographical Committee, both of which Bill Chapman, BCLS #526, and I were also members at the same time as Jon. Jon and his wife, Faith, put in yeoman service at McVittie House and Land Surveying Office in Fort Steele over a five year period doing some of the early dirty work such as scraping, cleaning, painting, extracting rubble, and removing wheel barrows full of rubbish. On one the trips to Fort Steele, Jon and Faith met Bill and Sandy along the way to look at a survey that was under complaint at the time and at our next Complaint Inquiry Committee meeting, they were able to provide a first-hand account of the situation.

With all the travels that Jon did throughout the province, there were many stories he could tell of his exploits: about bears, horses, survey camps, playing for the Kispiox soccer team, climbing a different mountain each day to get survey measurements, living on boiled beans for numerous days because their helicopter food drop got hung up in a tree, and one about Frank Speed's 'pet skunk'. Of his stories, Faith says "Some I could try to recount but they are never as interesting as when Jon told them. I used to love to stand aside and listen to Jon and his fellow surveyors of that era swap stories of their adventures in the wilderness." Jon loved his life in the world of land surveying, both before and after he got his commission as a professional land surveyor. His career spanned the era of pack horses and cook tents to the beginning of the electronic era. His stories of climbing a mountain a day in the northern BC Rockies, of the BC/Yukon boundary survey, of encounters with bears, and of his friendship with his Tlingit assistant became legends.

He was a physically active man who loved skiing, gardening, and lawn bowling and his active mind absorbed information from his voracious reading on many different subjects.

Jon passed away on March 21, 2016 in Victoria, BC, and a memorial service was held for him at Christ Church Cathedral in Victoria on Saturday, April 23, 2016. Jon is survived by his loving wife, Faith; two step-children, six grandchildren, and thirteen great grandchildren. ❖





BC Land Surveyors Foundation

Richard J Wey, *BCLS, Chairman*

2016 has been another banner year for the Foundation. British Columbia Land Surveyors should be proud of the generosity and philanthropic spirit of its members. At the BCIT Awards ceremony, Geomatics students are consistently awarded an overwhelming share of bursaries and scholarships. These are provided by not only the BCLS Foundation but also regional groups, surveying firms and individuals.

For 2016, the members of the Foundation include:

Richard Wey, Chairman along with Hans Troelsen, Robert Allen, Mike Taylor, Laurie Salvador and Chad Rintoul representing management.

The majority of our annual fund-raising happens at the Annual General Meeting. This year over \$21,000 was raised at the annual gathering in Kimberley.

This past year two significant scholarship awards have been added by the kindness and generosity of Kenneth K. Wong. These are:

BCLS Foundation Kenneth K Wong Memorial Land Surveying Scholarship - awarded annually to a BCIT student.

BCLS Foundation Kenneth K Wong Memorial Land Surveying Scholarship - awarded annually to a University of Calgary student.

We are working with BCIT and U of C with respect to the details of both of these scholarships.

I would just like to take this opportunity to thank the Wong family for the incredible generosity of the Estate. Ken Wong has been a fixture at our AGMs for as long as I can remember. He was very proud of his heritage and his profession. His biography is contained in the April,

2016 copy of the Link and I would like to remember a few poignant passages. Thanks to Robert Allen and George Wong.

“Ken was so determined to become a land surveyor that he went to several land surveying companies to ask if he could article with them. Ken article to F.C. Underhill.”

“Ken injured his hand and was not able to handle a transit. While his hand was healing, he wrote the exams to become a Dominion Land Surveyor.”

“Ken was invited by his American peers to join them in China and Ken gave a talk on how the Torrens System of Land Division was applied in British Columbia.”

“One of Ken’s signature poses at any meeting was to have his head down on the table. I don’t know if his eyes were open or whether he was sleeping but I’m sure his ears were always open”

I can assure everyone that he was very definitely listening. After my convention in Victoria, he questioned me on a couple of statements that I had made to the membership. Kenneth Kew Wong, BCLS #334, Life Member #48 and DLS #821 passed away on June 21, 2015 in Burnaby BC. Thank you again for your contributions to our wonderful profession.

I would like to close by including a summary of the Foundation scholarships and bursaries. All of these are now \$2500 annually. These amounts are realized by a combination of endowments with the Victoria Foundation and BCIT Foundation with annual top-ups from the BCLS Foundation.

W.N. Papove Sr. Memorial Award

This was established in 2007 for a student registered in the BCIT Geomatics Diploma program. It is a First Year achievement award.

Gerry Andrews Memorial Award

This was established in 1996 and provides an award for a student enrolled in the second year of Geomatics at BCIT. The criteria for this award are based on the student's achievement in the first year of their studies.

Ray Chapman Memorial Award

This was established in 2007 for a student in the BCIT, Bachelor of Geomatics degree program.

Gordon M. Thomson Memorial Citizenship Achievement Award

This was established in 2013 and is awarded annually to a BCIT student in the Geomatics program who provides strong student leadership and displays exemplary character traits.

BCLS Foundation Bursary

This is awarded to a student in the BCIT Geomatics program who demonstrates a financial need.

University of Calgary, BCLS Foundation H.R. Goldfinch Award

This is awarded annually to a student entering the fourth year of Geomatics at the University of Calgary. Roy Goldfinch was a fixture at the Land Title Office in Victoria and many of us were able to call upon his expertise with plan and title issues.

University of New Brunswick, BCLS Foundation Scholarship Award

This was established in 2007 and is awarded annually to a UNB student who has completed their first year of studies.

In closing, this is my final year with the BCLS Foundation and I would like to personally thank all of the members past and present that I have served with. We have always maintained a vibrant mix of BCLS members complemented by members from allied professions. I like to think that I have been able to keep everyone

pointed in the right direction during my nine year term as Chairman. We were originally established as the administrators of the Anna Papove Memorial Library, a trust established in 1989. The library is a vital component of our commitment and is available for research and to showcase the accomplishments of our membership and profession. Thanks everyone, it has been a great journey. ❖

*The BCLS Foundation
would like to thank
the following Regional
Groups for their generous
contributions*

Lower Mainland Regional Group

Northern Regional Group

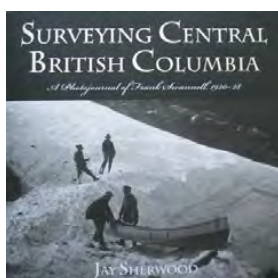
Vancouver Island Regional Group

FINANCIAL CONTRIBUTIONS TO THE BC LAND SURVEYORS FOUNDATION

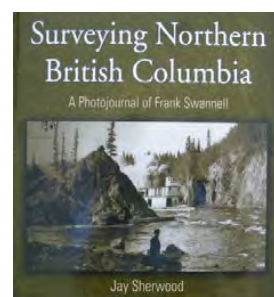
The two primary objectives of the BC Land Surveyors Foundation are to:

- create and maintain a library that houses historical and current reference material related to the surveying industry in British Columbia; and
- financially assist students who wish to pursue careers in surveying by providing scholarships and bursaries.

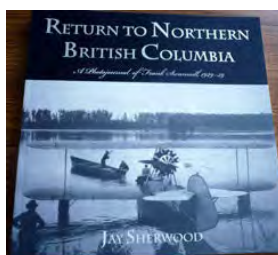
The Foundation has a number of books for sale - consider purchasing them for members of your staff, local schools, or libraries. They will make a wonderful gift and at the same time, your contributions will help support the Foundation. The following books are available from the ABCLS office:



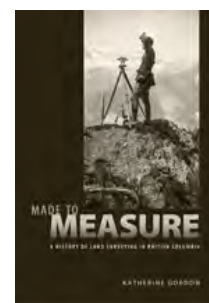
Surveying Central Canada
\$42.00 (taxes included, shipping extra)
Author: Jay Sherwood



Surveying Northern British Columbia
\$30.00 (taxes included, shipping extra)
Author: Jay Sherwood



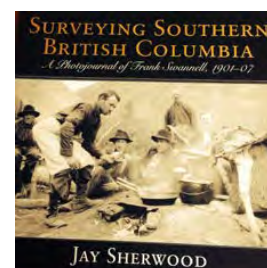
Return to Northern British Columbia
\$42.00 (taxes included, shipping extra)
Author: Jay Sherwood



Made to Measure
\$32.00 (taxes included, shipping extra)
Author: Katherine Gordon



Furrows in the Sky
The Adventures of Gerry Andrews
\$21.00 (taxes included, shipping extra)
Author: Jay Sherwood



Surveying Southern British Columbia
\$42.00 (taxes included, shipping extra)
Author: Jay Sherwood

Additional information on these books can be found on the [Foundation/Books for Sale](#) page of the ABCLS website.

The BCLS Foundation Trustees would like to invite all land surveyors to help support these worthy causes through financial contributions. If you are interested and willing to donate, you may contribute by cheque or credit card. You might also like to consider leaving a **Legacy Donation** through your will to contribute to existing scholarships - or to establish a new scholarship in your name. You can do this by stating in your will that the bequest should be made to: *The BC Land Surveyors Foundation, Suite 301-2400 Bevan Avenue, Sidney, BC V8L 1W1*

Donations by credit card can be given by calling our Association office: 250-655-7222.

All cheques should be made payable to the BC Land Surveyors Foundation and mailed to the Association office. Please provide your name(s) and mailing address so a receipt can be forwarded to you.

***Our thanks to you for helping to ensure the future of the
land surveying profession.***



BC LAND SURVEYORS FOUNDATION AWARDS BCIT — 2016

GERRY ANDREWS MEMORIAL AWARD

Awarded to Jason Noort — \$2,000 + plaque

RAY CHAPMAN MEMORIAL AWARD

Awarded to Navdeep Saran — \$2,000 + plaque

W.N. PAPOVE SR. MEMORIAL AWARD

Awarded to Mirel Aradau — \$2,000 + plaque

G.M. THOMSON CITIZENSHIP AWARD

Awarded to Olivia Sabo — \$2,000 + plaque

KENNETH K. WONG MEMORIAL

LAND SURVEYING SCHOLARSHIP

Awarded to Cody Danyluk — \$2,000 + plaque

BC LAND SURVEYORS VANCOUVER ISLAND REGIONAL GROUP AND ASSOCIATION OF BC LAND SURVEYORS AWARDS

Awarded to Jordan Huppee and Daniel Benyamini-Lamb — \$1,500 each

BC LAND SURVEYORS FOUNDATION AWARD UNIVERSITY OF NEW BRUNSWICK — 2016

THE BC LAND SURVEYORS FOUNDATION — SCHOLARSHIP

Awarded to Matthew C. McDermand — \$1,900

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British Columbia Land Surveyors

*The Association of BC Land
Surveyors is sponsoring a
"Meet the Students Night at BCIT"
for all BC Land Surveyors.*

*BC Land Surveyors are asked to
come out, join the fun, have some
food and meet the students.*

*This is a great opportunity
to promote the profession of
land surveying as a career!*

*Tell them about the
Career Entry page on our website:
www.abcls.ca*

MEET THE STUDENTS

When:
**Friday,
January 27, 2017**
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Where:
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Burnaby Main Campus
3700 Willingdon Ave. -
Town Square A & B,
(SE 2 Building)

No Charge Menu:
Beef on a Bun
by Chartwell's
Catering
No host bar



Latitude: **N49° 15' 4.9478"** | Longitude: **W123° 0' 4.3478"**





**Only a land surveyor knows
where to draw the line.**



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