Exploring International Quantity Surveying Synergies

- Limited Liability (Michael Baigel)
- Regulation vs Association (Jermaine Chin)
- CIQS Marketing Initiatives (Michael Gabert)
- Quantity Surveying Expertise (Ian Duncan)
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CONSTRUCTION ECONOMIST

SUMMER 2018

The Journal of the Canadian Institute of Quantity Surveyors
Le Journal de l’Institut canadien des économistes en construction

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FPO
The National Board will be rotating one of its quarterly meetings across the country to provide opportunities for designation holders across Canada to personally interact with the leaders of their institute.

The first two podcasts available for members are: *Eye in the Sky – Using Drones for Surveying*; and *Caring about Client Care – The Building Blocks of Excellent Client Relations*.

**New CIQS Committees**
To achieve greater results as an association, we need the active support of our designation holders. One of the best ways to do this is through the formation of committees. Most of the current CIQS Committees comprise the volunteers on the Board of Directors; while progress is being made, it is limited and slow. Through the collaboration of Committees, the CIQS can work with volunteers from our group of designation holders and industry partners to identify goals, develop action plans, and implement those plans.

We have an amazing group of professionals possessing many skills and hidden talents. In development of our Committees, it should be our goal to find volunteers to create a team with balance of experience, commitment, and passion for their goals. Currently, we are looking for members interested in working with us to re-establish the Education Committee, YQS Committee, Lobbying & Marketing Committee, Congress Committee, and ICMS Committee (to mention a few). Sheila Lennon, our Executive Director, is working to develop terms of reference for each Committee so that volunteers are provided the necessary guidelines, limitations and resources available to them. Those who volunteer will be identified as Committee members in publications and through our website. Those committing the time to be involved with their Committees are eligible to earn CPD points. If you are interested in participating on these and future Committees, or if you have suggestions for the formation of other Committees and/or goals for current Committees, we hope you will let us know.
Les points saillants de la réunion du conseil d'administration du mois de mai 2018

Perfectionnement professionnel continu (PPC)
La baladodiffusion de l’ICÉC - Comptes des connaissances - Perfectionnement professionnel en construction en cours englobe une diversité de sujets d’intérêts destinés aux métreurs professionnels, aux estimateurs en construction qualifiés et à une grande variété d’autres professionnels en construction. Ce programme comprend des entrevues individuelles, des présentations et des discussions instructives auxquelles prennent part des spécialistes de l’économie industrielle, des influenceurs et des experts.


Nouveaux comités de l’ICÉC
Afin d’obtenir de meilleurs résultats en tant qu’association, il est nécessaire d’obtenir le concours actif de nos titulaires d’une désignation. Pour y parvenir, il suffit de constituer des comités. La plupart des comités actuels de l’ICÉC comptent des bénévoles au sein du Conseil d’administration; malgré certains progrès, on ne peut que déplorer la lenteur et les limites de cette initiative. Grâce à la collaboration des comités, l’ICÉC peut travailler avec des bénévoles relevant de notre groupe de titulaires d’une désignation et des partenaires de l’industrie pour déterminer les objectifs, élaborer des plans d’action et les mettre en œuvre.

Nous disposons d’un groupe de professionnels incroyables qui possèdent de nombreuses compétences et des talents cachés. Dans le cadre de la mise en place de nos comités, nous devrions avoir pour but de trouver des bénévoles en vue de former une équipe qui conjugue harmonieusement à la fois l’expérience, l’engagement et la passion à l’égard de ses objectifs. Actuellement, nous recherchons des membres intéressés à travailler avec nous pour rétablir le comité de l’éducation, le comité des jeunes, le comité du lobbyisme et du marketing, le comité du congrès et le comité ICMS (entre autres). Sheila Lennon, notre directrice administrative, travaille à l’élaboration du mandat pour chacun des comités afin que les bénévoles puissent avoir à leur disposition les lignes directrices nécessaires, les restrictions et les ressources. Les personnes qui s’engageront à titre de bénévoles seront considérées comme membres du comité dans les publications et dans notre site Web. Les personnes consacrant le temps nécessaire pour participer activement au sein de leurs comités auront droit d’obtenir des points PPC. Si participer à ces futurs comités vous intéresse ou si vous avez des suggestions à faire concernant la constitution d’autres comités et/ou à propos d’objectifs pour les comités actuels, veuillez nous en faire part.
Cross border economic activity
Canada & U.S. Trade

Specific to construction, ongoing economic indicators in the United States, based on management and investment consultancy FMI Corporation, are predicting that total engineering and construction spending in 2018 will increase 7%, nearly double the 4% rise seen in 2017.

This increase in the 2018 spending growth is being primarily driven by residential improvements, single-family residential and office construction, accompanied by healthcare, education, transportation and communication projects.

Whilst many have been looking forward to benefitting from a strong increase in infrastructure improvements, a pre-election priority of President Trump, changing interest rates could discourage public-private-partnerships and lead to a decline in the spending predicted for this sector.

Further, new tariffs and international cross border trade could affect spending growth in manufacturing and power, although the industry expects the resulting increase in steel and aluminum prices to affect any construction project using those materials.

Beyond construction, there is no doubt that the trade between the United States and Canada is deep-rooted with relationships spanning many decades. The infographic (courtesy of Mr. Jeff Desjardins, Editor-in-Chief of Visual Capitalist) below shows some very interesting statistics around the following:

1. Power & Energy Exchange
2. Integration in Aerospace
3. Exports between each other and others
4. Close Ties
5. Synergies & History
6. Export by Commodity
7. Trade Examples and Integration

“\[ \text{There is no doubt that the trade between the United States and Canada is deep-rooted with relationships spanning many decades.} \]”
Integration in Aerospace

Like automobile manufacturing, aerospace is another industry with heavy integration between U.S. and Canadian suppliers.

80% of Canada’s aerospace sales are exports, and the majority of these go to the U.S.

The bulk of these exports are supply-chain related. Aircraft parts are often bought by U.S. companies like Cessna, Boeing, or Lockheed Martin.

But trade goes both ways. Canadian company Bombardier, the third-largest aerospace company in the world, buys from over 2,000 U.S. suppliers, including:

Aviation

Aerospace Exports

2015

54% Supply Chain
50% Engines
16% Avionics
13% Landing Gear
21% Other

3% Simulators
43% Airplanes/Rotorcraft

Bombardier builds Learjets in Wichita, Kansas, and the company also has 3,700 of their aircraft being used by major U.S. airlines for regional routes around the country.

(Bombardier is not a competitor in the regional market)

Exports between each other and others

USA’s biggest customer is Canada 18%

Canada’s biggest customer is USA 76%

USA Exports

2016

USA Exports

Mexico 16%
Belgium 2%
Hong Kong 3%
Netherlands 3%
S. Korea 3%
Germany 3%
UK 4%
Japan 4%
China 8%

Canada Exports

2016

Belgium 1%
France 1%
India 1%
Germany 1%
S. Korea 1%
Mexico 1%
Japan 2%
UK 3%
China 4%
Close Ties

The U.S. exports more to Canada than any other country, and vice versa.

Much of the time, the U.S. is buying raw materials and intermediate goods, which get used in final products destined for domestic and global markets.

Many of those even get sold directly back to Canada.

Few countries in the world have this kind of economic interdependence and history.

Synergies & History

Close Cooperation in National Security

Geographical Proximity

Share the Longest International Border

Similar Levels of Wealth and Standards of Living

Shared Language and Culture

Shared Historical and Cultural Heritage

On top of that, the nations have been a part of NAFTA since 1994, which has reduced tariffs to zero for most goods.

In 2016, $1.7 billion in goods or services made their way across the border each day.

Canada is the top customer for 36 states:
Canada is the top customer for 36 states:

On top of that, the nations have been a part of NAFTA since 1994, which has reduced tariffs to zero for most goods. In 2016, $1.7 billion in goods or services made their way across the border each day.

### Top 10 Canada Exports To The USA

The USA buys more raw materials from Canada...

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vehicles / Auto Parts</td>
<td>$60.1 billion</td>
</tr>
<tr>
<td>Mineral Fuels (including oil)</td>
<td>$57.6 billion</td>
</tr>
<tr>
<td>Machinery</td>
<td>$22.3 billion</td>
</tr>
<tr>
<td>Other Commodities</td>
<td>$18.9 billion</td>
</tr>
<tr>
<td>Plastics</td>
<td>$10.9 billion</td>
</tr>
<tr>
<td>Wood</td>
<td>$10.1 billion</td>
</tr>
<tr>
<td>Electronic Equipment</td>
<td>$9.4 billion</td>
</tr>
<tr>
<td>Gems / Precious Metals</td>
<td>$7.3 billion</td>
</tr>
<tr>
<td>Aluminum</td>
<td>$7 billion</td>
</tr>
<tr>
<td>Paper</td>
<td>$6.1 billion</td>
</tr>
</tbody>
</table>

78% of Canadian exports to the USA are raw materials, parts and components, and services used to create other goods in the USA.

### Top 10 Canada Exports To The USA

...and Canada buys more value-added manufactured goods from the USA.

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Furniture / Lighting / Signs</td>
<td>$4.9 billion</td>
</tr>
<tr>
<td>Iron / Steel Products</td>
<td>$5.5 billion</td>
</tr>
<tr>
<td>Aircraft / Spacecraft</td>
<td>$7.4 billion</td>
</tr>
<tr>
<td>Medical / Tech Equipment</td>
<td>$8.1 billion</td>
</tr>
<tr>
<td>Other Commodities</td>
<td>$9 billion</td>
</tr>
<tr>
<td>Plastics</td>
<td>$12.3 billion</td>
</tr>
<tr>
<td>Mineral Fuels (including oil)</td>
<td>$15.5 billion</td>
</tr>
<tr>
<td>Electronic Equipment</td>
<td>$23.9 billion</td>
</tr>
<tr>
<td>Machinery</td>
<td>$40 billion</td>
</tr>
<tr>
<td>Vehicles / Auto Parts</td>
<td>$48.1 billion</td>
</tr>
</tbody>
</table>

The USA buys more raw materials from Canada and Canada buys more value-added manufactured goods from the USA.
Trade Examples and Integration

Tangible Examples

But what are some tangible examples of trade between the two nations? How are the countries’ supply chains integrated?

Ford-150: Leading the Shift to Aluminum

In 2015, Ford indicated the body and key components of the new F-150 truck would be made with “military grade” aluminum.

Aluminum is light, strong and corrosion resistant. Utilizing aluminum reduces the weight of each truck by 700 lbs. This improves fuel efficiency and reduces CO₂ emissions.

A Greener Metal

The use of 1 lb of aluminum (to replace heavier materials) in a car or light truck can save a net 20 lbs of carbon dioxide over the life of a vehicle.

Who does the globally competitive USA auto sector turn to for aluminum? Canada, for a few reasons...

70%

Canada currently has 70% of North American aluminum smelting capacity.

5x

Renewable hydro-powered Canadian smelters have supplied North American manufacturers with cost-competitive aluminum for over 100 years.

90%

Canadian aluminum made with hydro is also greener - the carbon footprint of aluminum made with coal is 5x higher!

A close geographic proximity means aluminum supply can arrive on a “just-in-time” basis.

In other words, Canadian aluminum gives the USA auto sector a competitive advantage. It’s cheaper, greener, in stable supply, and in close proximity. This makes the end product cheaper for buyers, and generates less CO₂ emissions.

Cheaper Energy, Less Reliance on OPEC

Canadian electricity helps keep the lights on in Manhattan.

The United States and Canada share an extremely close energy relationship. They have integrated grids, pipeline systems, and have been electricity trading partners for over 100 years.
I thank you for your support and contribution to the Construction Economist, and sincerely wish that you and your families have a wonderful summer. If you have feedback, suggestions and, of course, any articles that you would like to be considered for publication, please email: editor@ciqs.org.

**VISUAL CAPITALIST**

Infographics reprinted courtesy of VISUAL CAPITALIST. Sources for the infographic can be found at www.visualcapitalist.com/closest-trade-relationship-usa-canada

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No agreement no problem
Quantum meruit to the rescue

Most construction lawyers include a pro forma paragraph in their standard construction lien and breach of trust claims seeking payment on the basis of quantum meruit. Given the limited information one sometimes has when issuing a claim, most lawyers reasonably subscribe to the principle that it is better to have and not need, than it is to need and not have. Accordingly, claims for payment on a quantum meruit basis are often essentially ignored throughout most of the litigation, which may be detrimental to the parties if the argument is finally pursued at trial.

This article provides a brief overview of a few examples where Canadian courts have found that a contractor is entitled to payment on a quantum meruit basis as well as some criteria for substantiating such a claim.

For those of us who did not have the privilege of studying Latin in high school, quantum meruit means “as much as he has deserved” and is a legal maxim that has been applied by Canadian courts to award damages in an amount considered reasonable to compensate a party who has rendered services in a quasi-contractual relationship.

Under Ontario’s Construction Lien Act, the definition of the term ‘price’ is broad enough to permit the price of services and materials to be determined on a quantum meruit basis, typically where no specific price has been agreed to, and it is possible for a trade/supplier to register a lien based on the reasonable value of the work.

Given the sophisticated contractual relationships on most construction projects, at first glance one could surmise that quantum meruit would have a very limited application in today’s construction industry.

However, Canadian courts have found contractors to be entitled to payment on a quantum meruit basis where:
1. The contractor performed work for an owner in respect of which there never was an agreement as to the amount of payment (e.g., extras where the parties have not agreed to the value of same);  
2. The work has been performed even though circumstances have changed so fundamentally that the original payment provisions are no longer applicable;  
3. A contractor’s estimate is not binding because it was based on insufficient information provided by the owner;  
4. The contract does not contain express or implied payment terms or price, or the terms are confusing and/or contradictory; and  
5. The contract is abandoned by both parties, and only a portion of the work is completed.  

With respect to point 5 above, where the terms of a contract are substantially complied with, payment on the basis of quantum meruit is typically limited to the price agreed to under the contract. This means that, if a trade under bid a project, its quantum meruit claim would be limited to a percentage of the total contract value for the work done even though the value of the work under normal circumstances would be greater.

In all of the above circumstances, it is important to note that the onus is on the contractor seeking payment on a quantum meruit basis to prove costs and expenses incurred and the reasonableness of same, which may be problematic at trial.

As quantum meruit is sometimes treated as an afterthought throughout litigation, contractors and trades do not always put forth the necessary evidence to prove the value of their work and, to their detriment, leave the court in the unenviable position of having little evidence to with which to work and/or internal records that are unreliable.

Accordingly, although quantum meruit may assist in allowing a contractor to receive fair compensation, in order to effectively use same, contractors and suppliers need to ensure that they put forth sufficient credible evidence to substantiate the reasonableness of their claim and, possibly, retain an expert in order to review their records and prepare a valuation.

Similarly, an owner or contractor defending such a claim should also ensure that they have requested all of the trade records, reports, quotes, et cetera, so they may prepare their own responding valuation.

In short, when it becomes apparent that the method of valuing the work will be at issue and quantum meruit will be more than a pro forma paragraph in a standard claim, the parties must not simply rely on the pleadings, but take pro-active steps to give the court the necessary evidence to determine “as much as he has deserved”.

These comments are of a general nature and not intended to provide legal advice as individual situations will differ and should be discussed with a lawyer.

About the author
Paul is a lawyer practising with the construction practice group at Goldman Sloan Nash & Haber (GSNH) LLP. He has acted for owners, general contractors, subcontractors, architects, and material suppliers in complex construction lien matters, contractual claims, and breach of trust actions. Paul offers timely and pragmatic advise to his clients to reach cost-efficient and successful resolutions of legal disputes.

1 For example, see JV Mechanical Ltd. v. Brewers’ Warehousing Stores Ltd., 2006 O.J. No. 1038, para. 78, and Landmark II Inc. v. 1535709 Ontario Ltd., 2011 ONCA 567, para. 19.
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Improving Employee Engagement in your organization

recently had the pleasure of attending an HR Conference in Atlanta. I was there to speak on a number of leadership topics, but the general theme of the event was Succession Planning. A lot of the discussion centered around Employee Engagement. In fact, it appeared that Employee Engagement has become the ‘Holy Grail’ in the world of HR. The discussions around how to achieve it, maintain it and define it were intriguing to me. Maybe this article is going to oversimplify this topic, but I do not believe it needs to be as difficult as we are making it.

What difference can an engaged employee make to your organization? Well, it is the engaged employees who go the extra mile, promote your organization and grow your business. The disengaged employees are doing the exact opposite and, in some organizations, they outnumber the engaged employees 8:1. Based on this, surely the most effective growth strategy that you can implement in your organization this year is one of increasing employee engagement.

The general consensus around how to create a culture of engagement in a large corporation reads like a 5-step plan:

- Step 1 - Create a survey and distribute to all employees
- Step 2 - Chase employees to obtain 100% completion of the survey
- Step 3 - Analyze results and communicate ‘you spoke and we heard you’ to employees
- Step 4 - Create some small change initiatives, often around communication
- Step 5 - Repeat steps 1 - 4 every two years

These initiatives, while well intentioned, do little to increase employee engagement and can, in certain situations, actually have the opposite effect. Developing new tag lines, posters and cascades from the leadership can be part of the strategy, but it cannot stop there. It is my belief that in order to truly engage with our employees, we need to do just that, engage with them on an ongoing basis, not because it is part of ‘Engagement August’ but because it is how we build trusting relationships.

I am a firm believer in looking for ‘Bright Spots’: teams, people, strategies that are working well and achieving results, then seeing what makes them different and how can we replicate that. With that in mind, I look at our family units as an example of where engagement can be seen to be succeeding (hopefully). Imagine that you have decided that you would like to be more engaged with your seven year-old child, maybe you have been busy at work and feel you have been a bit less present in the last few months. In order to re-engage and improve the relationship, would you:

A) Send them a 27-question survey then, six weeks later announce a new family motto and poster or
B) Talk to them about both meaningful and trivial things, spend time with them, find out what their interests are and what is important in their lives right now

Being engaged with your employees is no different; it does not need to be a special project. The best leaders would not even consider it a task or initiative; it is just what they do every day. In my experience, we find it very easy to engage with, and give timely feedback to, two distinct groups of people. The first group are the people we care most about, our children, spouse, family and close friends. We do not hesitate to provide feedback, both positive and negative, to these individuals, and as a result we have a high level of engagement with them. The second group to which we give timely feedback are the people that we do not know at all. Think about the person that cut you off on the highway this morning, or the waiter providing poor service in the restaurant last night. So we give feedback to people we either love or do not know. Unfortunately, our employees are neither. We have some familiarity with them but certainly do not love them unconditionally. This is best represented in Fig 1, you can see that our employees sit between the two previously mentioned groups and as a result we are cautious about giving feedback in case it is taken the wrong way.

Figure 1

It is the reason that we conduct performance reviews annually, it feels safer and less uncomfortable. Without regular and timely feedback we cannot build a level of trust that allows the relationship to develop to a point where we feel engaged.
“It is my belief that in order to truly engage with our employees, we need to do just that, engage with them on an ongoing basis, not because it is part of ‘Engagement August’ but because it is how we build trusting relationships.”

Our goal as leaders has to be to move ourselves and our people up the curve to the right, getting more familiar, understanding what motivates them, understanding how they achieve the balance in their lives that allow them to come to work and perform to the best of their abilities.

There are many ways to move up the curve, here are a few suggestions to get you started:

1) Walk – get out of your office, from behind your desk, or wherever you usually hide. Get out and walk around the office or site. Your mere presence lets everyone know that you are interested in what they are doing.

2) Talk – it does not have to be from a scripted cascade of corporate information that rarely comes across as genuine. Talk about the small things, about yourself, about them.

3) Listen – practice active listening, the art of really paying attention. Listen to understand not just to respond.

4) Coach – whenever there is an opportunity to provide some words of wisdom take it, in the moment, do not wait for formal reviews or meetings.

5) Vulnerable – being vulnerable and open, as a leader, should be one of your most important traits. Nothing builds trust faster than a leader who openly admits mistakes and shares their challenges.

I use the term ‘Leader’ throughout this article. Do not be under the illusion that leaders are the people above you in the organization. We are all leaders, even if it is just of ourselves. Your ability to influence the people around you is what makes you a leader, not your position on an organization chart. So, with that in mind, I encourage you all to go out and get engaged with the people around you, set aside 15 minutes per day to practice your engagement skills, you will be amazed what you learn and the impact it can have on your teams and organizations.

About the author
Craig Woodall is the President and Owner of Byng Leadership Inc. He has over 25 years of experience leading teams, projects, organizations and individuals. His passion is Leadership Development, helping people and organizations grow by maximizing their leadership potential.
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Preliminary Program

THURSDAY, JULY 19TH – ARRIVAL
CIQS NATIONAL BOARD MEETINGS
YOUNG QS MEETING / EVENING OUT

FRIDAY, JULY 20TH – CONGRESS DAY 1

<table>
<thead>
<tr>
<th>START</th>
<th>ACTIVITY</th>
<th>TOPIC / COMMENTS</th>
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</thead>
<tbody>
<tr>
<td>8:00 AM</td>
<td>Registration</td>
<td></td>
</tr>
<tr>
<td>8:15 AM</td>
<td>Breakfast</td>
<td></td>
</tr>
<tr>
<td>8:45 AM</td>
<td>Opening Remarks</td>
<td>Morning Theme: Innovation</td>
</tr>
<tr>
<td>9:00 AM</td>
<td>Technical Session One</td>
<td>TBD</td>
</tr>
<tr>
<td>9:45 AM</td>
<td>Refreshment Break</td>
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<tr>
<td>10:00 AM</td>
<td>Technical Session Two</td>
<td>3D Scanning / Drone Tech.</td>
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<tr>
<td>10:45 AM</td>
<td>Refreshment Break</td>
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<td>11:00 AM</td>
<td>Technical Session Three</td>
<td>Integrated Project Delivery</td>
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<td>12:00 PM</td>
<td>Networking Lunch</td>
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<tr>
<td>1:15 PM</td>
<td>Intro of Afternoon Panel</td>
<td>Afternoon Theme: Tradition</td>
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<tr>
<td>1:30 PM</td>
<td>Panel Discussion</td>
<td>Growing Halifax</td>
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<tr>
<td>2:45 PM</td>
<td>Refreshment Break</td>
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<tr>
<td>3:00 PM</td>
<td>Technical Session Four</td>
<td>Introduction to ICMS</td>
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<tr>
<td>3:45 PM</td>
<td>Closing Remarks</td>
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<tr>
<td>4:00 PM</td>
<td>CIQS Information Session</td>
<td>Designation Holders Only</td>
</tr>
<tr>
<td>6:00 PM</td>
<td>Cocktail Reception</td>
<td>No cost to attend</td>
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FULL REGISTRATION ($225)
Includes: Breakfast, Technical Sessions, Refreshment Breaks, Networking Lunch & CIQS Information Session.

NETWORKING LUNCH ONLY ($35)
All Welcome

CIQS INFORMATION SESSION (FREE REGISTRATION)
Designation Holders Only

CIQS CONGRESS COCKTAIL RECEPTION (FREE REGISTRATION)

SUNDAY, JULY 21ST – CONGRESS DAY 2

<table>
<thead>
<tr>
<th>START</th>
<th>ACTIVITY</th>
<th>PRICE</th>
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<tr>
<td>9:00 AM</td>
<td>Clive Evans Living Golf Tournament (Brunello Golf Course)</td>
<td>$175*</td>
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<tr>
<td>10:00 AM</td>
<td>Wine Tour of the Annapolis Valley (Luckett’s, Gaspereau, Annapolis Cider, incl. lunch)</td>
<td>$125*</td>
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<tr>
<td>4:00 PM</td>
<td>Chair’s Dinner (Bluenose Room at Delta Halifax)</td>
<td>$50*</td>
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* These items are not included in the full registration price and must be purchased separately

SUNDA Y, JUL Y 22ND
FAREWELL BREAKFAST AT THE HOTEL (FREE)
Drop in and enjoy a hot buffet breakfast between 7am – 10am

Congress Venue

DELTA HOTELS HALIFAX
SQUARE SCOTIA
1990 Barrington St.
Halifax, NS B3J 1P2

Reservation Link:
ciqs.org/halifax2018
Phone Reservations:
1-888-236-2427

HOTEL GROUP RATES
Guest Room, 2 Double | $169
Guest Room, 1 King or 1 Queen, Sofa Bed | $169
Guest Room, 1 King, Sofa Bed, Harbor View | $184

For sponsorship information, please contact Sheila Lennon at info@ciqs.org

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Complimentary Tickets to President’s Dinner

For sponsorship information, please contact Sheila Lennon at info@ciqs.org

Register Online at:
ciqs.org/congress
Registration Deadline: June 26, 2018
CB Ross Partners have job opportunities in our Project Monitoring department for Assistant Cost Consultants, Cost Consultants and Senior Cost Consultants.

Candidates must have:-

- 2-5 years of Relevant Experience in the construction industry
- Strong communications skills
- Time management skills
- Be working towards (or have interest in) RICS and CIQS memberships

We offer an extensive employee package commensurate with expertise, qualifications, skills and potential for growth.

If you are interested, please submit your resume:-

- By email: mail@cbross.ca
- By fax: 416-487-3017

Only select candidates whose resumes best match our requirements will be contacted.
LEADERSHIP INTERVIEW

Will van Niekerk, PQS
President, Tamkali Limited

When was your first introduction to construction?
I can remember my first introduction to construction with fondness and rather well. It was late 1983. My mother had a dream to remodel and add to our home by extending the kitchen and reconfiguring the bathrooms and rooms. We knew a local contractor who was in fact a part-time builder as his day job was phys-ed teacher at our local primary school. He introduced, and connected, us with an architect he had worked with previously.

I must make a long, but colourful, story short however so imagine, if you can, working with a part-time builder on a home reno job. From the first meeting with the architect, which I attended with wide-eyed fascination, I was hooked. During construction, I did daily ‘inspections’ when I arrived home from school and asked about the construction work at every opportunity I could. My primary interest during the project remained with the architecture and the drawings they produced. I loved to be able to see the building layouts in plan form with all the elevation views representing the project vision.

When did you begin your Quantity Surveying career?
Becoming a QS was never really on the table for me as I had never been exposed to Quantity Surveying as a career. My interest in architecture and construction remained with me throughout high school and I eventually managed to secure acceptance to the architecture program at university. Soon after arriving at university, I realized my math and technical talents greatly exceeded my creative talents and I soon managed to transfer into the QS / Construction Management program which suited me much better. I worked as a construction manager for a property developer, building townhouses during my final two years of studying and I graduated with a BSc (QS) degree at the end of 1994. My QS career truly started with Turner & Townsend in January 1995 where I joined their Engineering team and was immediately immersed in the world of mining. I started out as a junior QS on two shaft sinking projects and the rest is history.

On what types of projects have you worked?
The vast majority of project studies and construction projects involved the development and construction of new mines or the expansion of existing, operating mines. These projects were normally comprised of any combination of the mine itself (open pit or underground), the mineral processing facilities, the on-mine infrastructure and, in most cases, a variety of off-site infrastructure. My involvement on the projects varied and included anything from early cost estimating and study project controls, to being responsible for a QS team managing the overall project cost and contracts including the more traditional pre and post contract QS functions, to being appointed to independently peer review and audit the project management and execution of the project on behalf of key stakeholders or financiers. The major difference in working in the mining industry is that, more often than not, it takes you on the road-less-travelled to get to remote site locations. During my career, I have visited and worked on projects as far afield as Alaska, Eastern Russia, Canada (north of the Arctic Circle), Chile, Ecuador, West Africa, Eastern Europe, the Amazon jungle, and even a project situated 4500m above sea level in Argentina.

Is there a particular project you would like to relate to us?
I have always managed to learn something new and unique from each of my projects, mainly because each project has had its own uniqueness and challenges. Thus, it would be very difficult to highlight one project as better or more enjoyable to work on than another. However, the projects that stand out are the ones in which I was given the challenge to lead a team or fulfill a new role and the ones where the entire project team connected, collaborated and all worked towards a single purpose.

The one particular project that I will always look back at with fond memories would be a shaft sinking project for a platinum producer in South Africa. The project consisted of a twin-shaft complex that included a 1,350m deep, 8.5m diameter main shaft and a 1,170m deep, 6m diameter ventilation shaft. I have always managed to learn something new and unique from each of my projects, mainly because each project has had its own uniqueness and challenges.
offering a joint service that lead to us securing a long-term project including both the feasibility study and construction phases of the project.

Our services were integrated into the overall EPCM team, but we were appointed directly by the Client as the independent Quantity Surveyors and Project Cost Management team. This direct appointment was made as it increased the level of governance associated with the project cost and contract management functions, and both the Client organization and EPCM firm benefited from the independent approach, as it increased transparency and freed up their project personnel to focus on the core functions of engineering, project management and operational readiness.

During the feasibility, we were responsible for the development of the project cost estimate and we played a leading role in the development and negotiation of the shaft sinking Target Cost Contract. This contracting approach was unique and one of the first to be used in the industry in South Africa.

The main shaft accesses two ore bodies bearing platinum-group metals. In addition to hoisting ore, this main shaft serves as the primary means of egress for all personnel while the ventilation shaft is equipped with a smaller hoist to serve as a secondary outlet in case of emergency. The design capacity of the shaft system was 230 ktpm of ore and 35 ktpm of waste rock. In addition, the shaft complex included the related infrastructure such as an access haul road, offices, workshops, stores and personnel facilities to support a full operation.

What made this one special was that I was involved on the project from before the start to very near completion and it ticked the ‘must have’ boxes I mentioned earlier. As an Associate Partner at T&T, I was approached by the Managing Director of a local mining engineering and project management firm to work with them on securing a new project. This was as a result of my previous role with them on another project and due to the a long-standing relationship between our firms. They wanted me to be part of the bid and execution team and together we worked through the process of proposing and

“I see the CIQS as a very important organization for us all, with the potential for continued success that comes directly from within its professional membership of likeminded individuals.”
With our adept abilities and professional skills, we should all position ourselves to align with our professional institutes and associations (CIQS, RICS and CACQS) to increase our exposure in to the construction industry in Canada.

A pre-qualification, it involved and incorporated the selected shaft sinking contractor early in the project life cycle. They contributed to the engineering, design, constructability and cost estimating of the specialist underground work and this approach increased the accuracy of the scope definition, project schedule and cost estimate as it became the basis of the target cost contract. Secondly, it secured the contractor’s primary team members and key equipment required for the project at a time of extreme skills shortages and high demand on supply and long lead times of equipment.

During execution, we were responsible for the overall project budget and cost management as well as the quantity surveying and contract administration of all the major construction contracts. This service was provided with a full-time, site-based senior quantity surveyor supported by an office based team which attended weekly site visits.

This project started with feasibility in 1999 and I remained involved as the responsible Partner, commission manager and lead QS until just before project completion when I moved to Toronto in 2007.

How do you see the CIQS as being the advocate for our profession?
I see the CIQS as a very important organization for us all, with the potential for continued success that comes directly from within its professional membership of likeminded individuals. The success in achieving the mission of the association, to both promote the QS profession and to set and regulate standards that are aligned with global best practice, can only be continued if we as a membership continually contribute and support it. In today’s economic climate, we, as Professional Quantity Surveyors and Construction Estimator Certified professionals, must leverage the benefits of professional collaboration which can be realized through our professional association. This will continue increasing the value we bring as an integral part of the building and construction process.

What notable changes have you seen in our industry and profession over the last few years and how do you see our profession changing in the future? How should we position ourselves for this particularly in Canada?

The most notable change I have seen in our profession is the way professional Quantity Surveyors adapt their skillset to offer and provide an ever-increasing range value added services, and to fill of a large spectrum of roles. The broad-based business and construction knowledge gained from our field of study gives a PQS the ability to adapt in any market or to any industry by identifying how to improve and contribute to the successful development of projects. The majority of QSs I know are industrious and entrepreneurial individuals with inherent leadership skills that make them suited for many roles, and will, in the future, continue to influence the various industries in which we work.

Do you have any concluding thoughts?
With our adept abilities and professional skills, we should all position ourselves to align with our professional institutes and associations (CIQS, RICS and CACQS) to increase our exposure in to the construction industry in Canada. We can do this by ensuring we continue to expand our independence and services offerings to cement our role as trusted advisors, increasing the value we bring as an integral part of the building and construction process.

Will van Niekerk is a PQS experienced in consulting and operational management of project development and control services including estimating, cost and change management, procurement, and contract administration, on mining and process, and infrastructure projects across the globe. His 23-year career includes Turner & Townsend in Johannesburg, as Equity Partner with responsibility for mining services in South Africa; VP of Turner & Townsend in Toronto, responsible for mining services in North America; Kinross Gold Corp, Director of Capital Project Controls, responsible for project governance and controls; and currently, President of Tamkali Limited, specializing in independent project development and controls services to the built environment.

About the author
Interview conducted by Arif Ghaffur, PQS, Editor of Construction Economist.
In March 2018, representatives from the Quantity Surveying profession in Canada met with Dries Du Plessis, a Director of Basson and Close, a quantity surveying firm in South Africa that delivers projects in Africa and other parts of the world, including Australia, Europe, Asia and South America.

Lory Paterson, Director of Professional Products, RICS Americas, hosted the meeting at the RICS Canadian office in Toronto as Arif Ghaffur, Editor of the Construction Economist, welcomed Mr. Du Plessis who was part of a trade delegation attending a major natural resources/mining conference in Toronto.

The meeting also included Azhar Cajee, Manager of Projects with NewGold who facilitated the South African trade delegation to exchange thoughts on Quantity Surveying in Canada and Africa with a particular focus on major project cost and time delivery in the mining sector. South Africa is one of the world leaders in the development of mining projects.

There was a healthy exchange of thoughts between the attendees on the regulation of the quantity surveying profession, trade practices and professional approaches with a particular focus on ongoing opportunities for quantity surveying excellence in the delivery of major projects.

As the dialogue ensued, the attendees agreed that the process of networking between professionals and professional bodies was of benefit as quantity surveying continues to impart itself to the broader international engineering and construction industries.

During a frank exchange, the group touched on areas including standardized methods of measurement, costing, full cycle quantity surveying services, forms of contract and the increase in the need for third-party/independent reviews on projects during the full project life cycle.

Quotes from the Attendees:
“…Cost escalation on major projects is impacting the appetite of potential funders to finance major project investments…”
Azhar Cajee, Manager, Projects, NewGold Inc.

“…A silo approach to delivering projects means that there is not the single point accountability on cost performance that Quantity Surveyors bring to the table.”
Sorina Du Toit, President, SDT Cost Management Inc.

“…We are focussed on developing the training for professionals and working with the CIQS and other professional bodies to expound the profession of Quantity Surveyors.”
Lory Patterson, Director of Professional Products, RICS Americas

“…Meeting those practicing Quantity Surveying in Canada and having a passion for delivering projects to schedule and cost expectations was refreshing as we exchanged best practices.”
Dries Du Plessis, Director, Basson and Close

“…We are working with all stakeholders to address the issues faced by projects not achieving expectations – the involvement of professional bodies and firms is key to provide Quantity Surveyors the recognition that they deserve.”
Arif Ghaffur, President, Lakeland Consulting Inc. and Editor of the Construction Economist

L to R: Arif Ghaffur, Lory Paterson, Dries Du Plessis, Sorina Du Toit, Azhar Cajee
There are many occupations whose members declare themselves as professionals versus those occupations who do not claim to be professionals. Not all professions within Canada are governed by Law and Legislation. The most common definition of ‘regulated profession’ is that the profession has a governing or regulatory body that is sanctioned by law to govern or regulate a profession. Being recognized by the province as a regulated profession is seen by many as the demarcation line between being just another self-declared profession and a ‘real’ profession. For established professions, professional regulation is taken for granted; for emerging professions, however, becoming a regulated profession is often an important goal.

What does it mean to be a regulated profession?
The Government of Canada possesses a range of tools on hand to influence or control business activities. There is a high expectancy from the public that the government is best suited to regulate activities between professionals and the public, thus ensuring their protection. Through government regulations, professionals are expected to perform according to rules which limit their behaviour, ultimately creating a system of fairness and competency. One of the most common approaches used by government to regulate the practice of professionals is through a system of professional self-regulation.

What is professional self-regulation?
The professional self-regulation model enables government to have some power over the practice of a profession and the member services. This model is based on the concept of an occupational group entering into an agreement with the government to formally regulate the activities of its members.

The agreement can take the form of the government granting self-regulatory status. This can be achieved through legislation which provides a framework for the regulation of a specified profession and identifies the extent of the legal authority that can be delegated to the profession’s regulatory body.

The specific legal authority transferred from government to the profession’s regulatory body varies with different regulatory models. In exchange for the benefits of professional status, the regulatory body of a profession is expected to develop, implement, and enforce various rules. These rules are designed to protect the public by ensuring that services from members of the profession are provided in a competent and ethical manner. This legal authority often includes: the right to set standards for who may enter the profession; the right to set standards of practice for those working in the profession; and the right to create rules for when and how members may be removed from the profession.

The self-regulatory model usually requires that a regulatory body has a system in place for complaints and/or discipline of professionals who fail to meet professional standards of practice. The primary purpose behind all regulatory body decisions is to protect the public from incompetent or unethical practitioners. Governments’ approaches to choose a regulatory process can vary.

The extent to which a government will impose professional self-regulation varies and can be based on the nature of the activities performed by professionals, and/or the potential of harm the public could suffer at the hands of incompetent professionals. Professional self-regulation could take the form of licensure, certification or registration.

Why have self-regulation?
Despite the drive to make self-regulating professions more responsive and accountable to the public, there are many professional groups that continue to seek government support to become self-regulated professions. This raises the questions: why is self-regulatory status so desirable and what exactly does a profession gain from this exercise? The reality is that when an occupational group is granted the privilege of self-regulation, it gains a great deal. This includes greater autonomy and control, professional prestige and, in many cases, financial rewards.
The regulatory body of a profession has significant autonomy from government in regulating its profession. As a regulatory body's legal authority is delegated from government, there needs to be some mechanism to ensure public accountability. This accountability of a profession is often facilitated through a reporting requirement to the government, usually through the Minister from the department which sponsored the legislation giving the group self-regulatory status. While the government generally has an arms-length relationship with the self-regulating profession – it is not expected to interfere directly with the regulatory bodies decision making process – it often retains some ability to direct the regulatory body to do as it wishes under threat of removal of the profession’s self-regulatory status.

One such profession that could benefit from additional government regulation is the Professional Quantity Surveyors (PQS) group. This group of professionals are regulated by an established professional body - the Canadian Institute of Quantity Surveyor (CIQS), whose mandate states that its members are guided by a Code of Ethics, which must be followed to maintain the integrity of the profession to the public. This type of regulation can also be seen as a protection of a profession that seeks to build reputation and recognition. Whereby CIQS is a self-governing body with the right to title for its members, it does not fall under provincial governance.

Past consequences of inadequate regulations
In the fifties, John Nash, supported by studies of John von Neumann and Oskar Morgenstern, came to interesting conclusions about human behavior. Nash said there are specific cases in which economic agents in the pursuit of better results for themselves, end up generating worse results for not only others, but also themselves.

The 2008 financial crisis is a clear example of this phenomenon. Some players, in pursuit of their own interests, eventually caused a serious financial and economic disaster, which left governments no choice but to step in and regulate. The financial crisis of 2008 proved that financial companies could not regulate themselves sufficiently to prevent financial disasters – the powers of government regulation were needed to enforce the necessary laws to minimize future financial disasters.

Conclusion
It is imperative that Canada realizes the expertise of construction economists, particularly quantity surveyors, as they hold the key to unravelling the mystery behind high project costs.

"It is imperative that Canada realizes the expertise of construction economists, particularly quantity surveyors, as they hold the key to unravelling the mystery behind high project costs."

perform in this role. This is an area that could benefit highly from government regulation, to prevent untrained professionals from working in areas that they are not trained in and to mandate that Professional Quantity Surveyors are included in all building projects.

Cost Auditing should be recognized as a critical leg in the public sector procurement value chain, and this should apply to national as well as regional governments. I believe the government should urgently establish Project Cost Auditing and Monitoring departments, staffed by registered quantity surveyors as construction cost management experts, to stamp out possible corruption and rampant building costs.

Too often the inclusion of a Professional Quantity Surveyor in a project’s professional team is seen as a dispensable, additional cost; however, competent Professional Quantity Surveyors – such as the members of CIQS – will provide the certainty and control a project needs, while also helping to reduce costs. Major building projects tend to be complex undertakings right from the outset, and can get even more complicated when design changes are introduced without the client and professional team realizing the cost factors involved. This is when the skills of a Professional Quantity Surveyor are particularly essential. Professional Quantity Surveyors can handle many unforeseen procurements and project management revisions so architects and other professional members can concentrate on their own tasks.

About the author
Jermaine Chin, PQS is a Professional Quantity Surveyor, with a background in Construction Engineering, having over 15+ years of extensive senior-level experience in project development and implementation ranging in; size, scope, complexity and technical specialty, from small private clients to full scale multi-million dollar construction projects for, Government and Corporate Organizations this includes; Residential, Commercial, Industrial, Institutional, Electrical Substation, Transmission and Distribution lines System projects. Jermaine currently works with the City of Toronto, he has worked in several diverse roles namely; Project management, Cost Management, Cost Estimating, Facilities Management, Construction Management, Quality Assurance and Compliance Management.
Estimating process in infrastructure projects

APPROACH AND COMPONENTS

Amir Kia, Director of Estimating from York Group of Companies, and Mo Sabouti, Senior Cost Consultant from Turner and Townsend, delivered an insightful presentation on the process, components, challenges and opportunities of estimating infrastructure projects.

Held at the Centennial College Event Centre in Toronto, this sold out dinner event was moderated by the Senior Project Manager from SNC Lavalin and was attended by key CIQS members at the national, provincial and local levels.

The presentations were followed by a question and answer period as the attendees exchanged thoughts and perspectives. Challenges were identified as being the items such as geotechnical conditions and the identification pricing of risks and contingencies.

Aaron Brannigan, Chair of CIQS Ontario, said, “It is very pleasing that estimating professionals are contributing during the start of infrastructure projects right across Canada – getting the estimate is so critical particularly in the backdrop of infrastructure projects that have historically cost substantially more than expected.”

“It is very pleasing that estimating professionals are contributing during the start of infrastructure projects right across Canada.”

CIQS Examinations

The next session of CIQS examinations is November 2018. The early bird deadline to register ends June 30, 2018. No registrations will be accepted after September 1, 2018 (no exceptions). Designation Holders should register online in the member’s only section.
We have a great story to tell at CIQS, but even the best stories have to reach the widest possible audience to be winners. That is why we are moving fast on many fronts to let the wider world know about the value of our profession to the industry, government, private professionals and students. ‘We’ are the team working on the marketing portfolio for CIQS National: Sheila Lennon, Patrice Beaulieu, Arif Ghaffur, our suppliers and me. Huge thanks to Sheila for her expert assistance and overall guidance; to Patrice for managing our social media platforms, constant idea generation and making all our marketing efforts work better together; and to Arif for his tireless efforts to provide relevant and best in class articles and discussions in our premiere publication the Construction Economist. While marketing tasks are by nature endless, we are currently focused on the four main areas highlighted below. As these initiatives are completed, new ones will take their place.

1. **Redeveloping the marketing kit and renewing the marketing plan.** We have been talking with different graphic design firms about updating and expanding our current brochures, fact sheets, newsletter templates, infographics, stock PowerPoint presentations and other visual assets. If we promise leadership in the profession, we have to look the part with first-in-class marketing material as we advocate for our members and profession in general. We will also start work on a new marketing plan in fall 2018.

2. **Integrating Social Media Platforms.** We are integrating and streamlining platforms to make the most of social media. New tools will allow us to post across the various platforms as well as automate part of the process. They will also let us track performance of our content, which enables us to better understand what resonates most with our different audiences.

   Part of this process includes further integrating the efforts of managers and content creators to make sure we are getting the greatest value from our marketing. Increasing the collaboration between our social media and the Construction Economist is a key. Sharing our articles across social media platforms will let us reach a wider audience and increase our viewership. We want to ensure we are not only reaching – and growing – but also sharing our profession’s story, as well as the service offerings our members can provide.

3. **Launching our latest video series.** We recently launched our latest video series – 14 short videos ranging from individual interviews of leading members of our profession to featured speakers at last year’s PAQS conference. Producing, editing and preparing these videos are enormous tasks. Kudos to our consultants for their remarkable effort on the series. Visit the website – or one of our social media platforms – to watch the videos, and share them with your network. Videos will be released periodically for the rest of the year.

4. **Launching bi-monthly e-newsletter.** You may have already seen the newly launched monthly e-newsletter in your inbox. It keeps members up-to-date on time-sensitive information such as CIQS or related construction community events or board news between issues of the Construction Economist. We expect this to be a useful tool for keeping everyone up to speed.

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**About the author**

Michael Gabert is the current President of the CIQS Board of Directors for the Prairies and Northwest Territories Chapter. Also, as the Regional Director of BTY’s practices across the Prairies, he leads the firm’s professional teams on mandates for Cost Management, Project Monitoring, Technical Advisory, Independent Certification, Payment Certification and Project Delivery services. Mike has extensive experience of working on projects across Canada, the United States and more recently, in Europe, the Middle East and North Africa, as part of BTY’s global consultancy for property and infrastructure development.
Canadian companies are usually limited liability corporations, which can sound like the liability for debts of a corporation are limited to the corporation, and that directors are not responsible for company debts. However, that is not the case. Directors are often amazed when they find out the full extent of Canadian federal and provincial laws that can impose numerous personal liabilities on directors in the event of insolvency.

When directors come to see me, their companies are usually struggling to make a profit. There can be many operational reasons why this is so, which can all be addressed on a practical restructuring basis. But on an emotional basis, it does not matter what are the underlying causes of the business challenges. The directors are scared of many real issues, primarily the loss of their business and income, and they often carry an unfair sense of failure.

In my practice, I do not just carry my own stresses, worries, concerns and fears, but I have to be able to bear those of the people who walk in my office door. Times will be difficult for every company at some point in time, and when a director is in a position when he/she may not be able to provide for his/her family and feel ashamed, the last thing a director needs is the government adding a web of personal liabilities to the loss.

**Knowledge is power:** The most important questions for directors to answer is whether or not the company can survive, and whether they will be exposed to personal liability, notwithstanding the assumed protective limited liability of a corporation. This is where directors need to understand from where the risk arises, and that knowledge will give them the power to protect themselves even if the company is beyond salvation. Acquiring this knowledge is not easy because Canada has a complex corporate and tax regime with overlapping and interplaying federal and provincial legislation.

**Directors’ potential liabilities in insolvency**

The first thing to learn is that there are always potential personal obligations for the directors. These come into play if the assets of the company are insufficient to pay its liabilities, or if the liabilities cannot be compromised enough to eliminate the director’s potential liabilities.

The directors of a corporation may face employee-related, excise tax and provincial sales tax liabilities under various federal and provincial statutes. Directors are personally liable for failure to deduct, withhold, or remit amounts required pursuant to the *Income Tax Act* (ITA), *Excise Tax Act* (ETA), and provincial *Retail Sales Tax Acts* (RSTA). To list a few of the main risks, these potential personal liabilities include, but are not limited to:

- Unpaid payroll source withholdings such as employee payroll deductions [personal income tax, Canada Pension Plan (CPP), and Employment Insurance (EI)];
- Unpaid wages and vacation pay
- Unremitted harmonized services tax (HST);
- Unremitted goods and services tax (GST);
- Unremitted non-resident withholding tax;
- Withholdings related to expired share purchase taxes;
- Withholdings related to scientific research tax credits;
- Unremitted retail sales tax; and
- Environmental pollution.
Obviously, directors are responsible for any personal guarantees that they have signed. In the absence of fraud or negligence, it is unlikely that directors would be held personally liable for any other corporate liability.

**The usual suspects**

If a company is insolvent, it does not necessarily mean that a bankruptcy is at the end of the road. It is possible to construct a proposal or plan where management stays in place and either the corporate debt is reduced or an extended period of time is given to pay back the creditors, or both. If a restructuring plan or proposal is accepted by the creditors and put in place for the distressed company, then no personal liabilities should fall on directors. The risks should all be dealt within the proposal. Directors need only worry about hitting the targets in the proposal, which generally must include paying any employee arrears upon court approval of the proposal, and paying government creditors within six months.

If a bankruptcy has to occur though, then we tend to see the same government creditors. As noted above, unpaid payroll source deductions will be personal liabilities of a director. Without getting too complex, source deduction arrears are considered to be a deemed trust in relation to company assets and have a super priority over all security interests (except for a few special debts). This means that such arrears should get paid first, even ahead of a Trustee dealing with the affairs of the company. However, if arrears still exist even after payment of the super-priority creditors from the realization of assets, then directors will be personally jointly and severally liable.

If there are unpaid wages, then these debts take security over any current assets of a bankrupt company to an effective maximum of $2,000 per employee, not including expenses incurred on behalf of the company. If more than that is owed, provincial employment standards statutes in Ontario hold directors of a corporation jointly and severally liable to the employees for up to six months’ wages that became payable while they were directors of the corporation. A director may also be responsible for 12 months of unpaid vacation pay.

The situation can be further complicated by the *Wage Earners Protection Program Act*, but its interaction with the *Bankruptcy and Insolvency Act* is too complex to discuss further in this article. Suffice it to say, the government will currently pay approximately $4,000 of arrears to an employee, and then claim this amount instead of the employee.

In a bankruptcy, harmonized sales taxes (HST) or provincial sales tax and federal goods and services taxes, do not have any priority or security over the bankrupt company’s assets in normal circumstances. However, directors are personally liable for these taxes because they are supposed to be sales taxes collected on behalf of governments.

Given that bankrupt companies will usually have assets, the payroll source deductions and arrears will tend to be paid some amount, thereby reducing if not eliminating a director’s potential liability. However, HST or other sales taxes only rank as general unsecured creditors and get paid at the same rate as every other creditor. Thus, after a Trustee realizes the assets and distributes the funds to the creditors, an HST personal liability may crystallize for a director. This can be some time after the bankruptcy occurs, and therefore comes as a late shock to many.

Thus, a huge warning sign for a business is if it falls behind with its taxes, which is not only a threat to the company, but to a director’s personal finances. The government does not want to be an involuntary banker, so not only is it good practice for a company to ensure that taxes are paid, it is good for directors too.

**The cavalry**

A Trustee is not someone who just grabs and sells assets, or collects accounts receivable and distributes funds to people who are owed money; it is someone who brings to bear both accounting and legal knowledge. Both skills are vital as we chase down the various routes to obtain information, interpret it, and protect the stakeholders in any business, whether it is the directors, creditors, employees or shareholders.

A director once described coming to see me for help as feeling like she was putting her head in a lion’s mouth. She had held off coming to see me for a couple of years as her business had worsened. Yet here she was, opening up about her company’s losses to a person she did not know, who would tell her at the end of the meeting whether or not she would have a business in three months’ time and if she would not have a business, whether or not she would be hit with a bill due to its losses. However, once she was given the various options for both the company and her personal position, she felt that the cavalry had arrived. She got the support of her major trade creditors, and brought the taxes up date, so that even if the worst happened in the future, she would not have personal liabilities too. As always, the cavalry was late, but at least she now had a fighting chance.

**Conclusion**

Full knowledge of the company’s situation will allow directors or their advisors to make an estimate of the potential liability to which a director may be personally exposed, if he/she has to consider a shut-down of a business. This consideration needs to play a part in the whole decision that a director will make for the future of their business, and for themselves.

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**About the author**

Michael Baigel is the President of Baigel Corp. in Toronto. Michael provides creative corporate recovery expertise gained from his experience of rescuing hundreds of businesses over three decades in both Canada and the UK. Saving businesses, jobs and families drives him on. Michael is a federally Licensed Insolvency Trustee in Canada; a Chartered Insolvency and Restructuring Professional, Canada; a Fellow of the Chartered Accountants in England & Wales; a Fellow of the Insolvency Practitioners Association (UK) and has a BA (Honours) degree in Economics. Outside of work, Michael’s passion is soccer, and particularly Manchester United.
Embracing change – Leading yourself and others through it

“Direct the Rider, Motivate the Elephant, Shape the Path”

On Thursday, April 26, RICS and CIQS held a joint seminar on Leadership at Humber College in Etobicoke. The hour-long event, titled Embracing Change; Leading Yourself and Others Through It, was presented by guest speaker Craig Woodall, President of Byng Leadership, and frequent contributor of the Construction Economist.

Craig’s presentation detailed types of change, difficulties and stumbling blocks of change, and methods to overcome those challenges to deliver long lasting and beneficial improvement in both our professional and personal lives. Craig shared numerous stories, learned during his 25 years of industry experience as an engineer and through countless hours researching the topic of Leadership, to help clarify his message. Craig highlighted the book Switch, which he considers to be the best written on the topic of change, describing the book’s primary visual of a rider on the back of an elephant trying to motivate the 13,000 pound animal to change its current path. Read the book and that will make perfect sense!

This topic clearly resonated with our members and was sold out well in advance. Due to the positive response, this seminar will act as the first in an annual series on the topic of Leadership to be held on the third Thursday each April. Thank you for your support to all those that attended and, as always, our sincere gratitude goes to our sponsors for their generosity and involvement. I look forward to seeing you all again next year.

This topic clearly resonated with our members and was sold out well in advance. Due to the positive response, this seminar will act as the first in an annual series...

Did you know the CIQS is on Twitter and LinkedIn? If you want to stay connected and contribute to discussions across Canada, follow us on Twitter or join our LinkedIn Group. We look forward to hearing from you.
In previous editions of *Estate Planning – Regular Check-Ups Required*, we discussed how changes in your assets and changes in your family life and relationships may require that you review and revise your estate planning documents.

As a general rule of thumb, we suggested that if your estate planning documents are more than three to five years old, it is time to review and update them.

Another reason to review your estate planning on a regular basis is that the legal landscape changes over time and may result in unintended consequences if your estate planning is not revisited and revised.

A number of changes in estate law and the probate process have resulted in new planning techniques which may not have been available when you last made your Will.

Some of these changes include the following:

1) As of January 1, 2015, estate trustees are required to file an Information Return with the Ontario Minister of Finance in connection with the requirement to pay Estate Administration Tax. The Return sets out the nature of the assets in the estate. The filing must be made by the estate trustee within 90 days of the issuance of a Certificate of Appointment of Estate Trustee (‘probate’) by the Court. The Ministry of Finance has the authority to audit and reassess tax, and is in fact doing that.

While for many years estate planners were using dual Wills to save on probate fees on the value of shares in privately held corporations because those shares can be transferred without a probated Will, the onerous reporting and audit requirements and potential valuation issues has now made this strategy attractive for other assets as well, such as art, jewelry, collectibles, and motor vehicles and boats, all of which can generally be transferred without a probated Will. In addition, Wills are being revised to include an indemnity of the executor from any personal liability arising as result of penalties under the *Estate Administration Tax Act*.

2) Over the past few years, executor’s insurance has been introduced to the marketplace by a new insurance provider. In many instances, the testator (the person making the Will) will want to ensure that the estate trustee can purchase and pay for this insurance from the estate funds and Wills are being updated to include this provision.

3) To reduce probate fees, many people have transferred assets such as a bank account, investment account or real estate title into the joint names of themselves and another family member. This is usually with certain expectations of how the asset will be dealt with after death. The Supreme Court of Canada in the 2007 case of *Pecore v. Pecore* essentially confirmed that holdings of this sort between a parent and an adult child are presumed to be trusts for the estate beneficiaries, unless the contrary intention can be evidenced. Further cases since then have made their way through the Courts. The uncertainty and costs of litigation in determining how these assets are to be dealt with has lead estate planners to carefully consider the advisability of this strategy and if determined appropriate, ensure that the intention of the testator is very clearly documented either in the Will or in a stand-alone document setting out the intention.

Furthermore, if intention is that it be held in trust, planners will use dual Wills to capture this trust interest and reduce the probate fees that would otherwise be payable on this asset.

4) More recently, the *All Families Are Equal Act (Parentage and Related Registrations Statute Law Amendment)*, 2016. S.O. 2016, c.23 - Bill 28 came into force. Among other things, this statute provides that up to four intended parents of a child born to a surrogate will be recognized without a court order if certain conditions are met, and that a posthumously conceived child will be able to inherit and seek support from their deceased parent's estate, if the child is born within three years of their deceased parent's death. This changed landscape requires consideration of each testator's family circumstances in order to address these potential issues in the Will.

Stay tuned for the final instalment of reasons to update your Estate Planning.

A number of changes in estate law and the probate process have resulted in new planning techniques which may not have been available when you last made your Will.

## About the author

Mary Wahbi, JD, TEP is a partner at Fogler Rubinoff LLP and a member of the Advisory Committee of Wellspring. Her practice focuses on estate planning, estate administration, corporate reorganizations and business succession planning.
Background
When I am asked, “What is a Quantity Surveyor?,” my immediate response is that we are Construction Economists. We are key players in the construction industry and our expertise is related to aspects of the cost of construction projects. This includes providing expertise, not only in the form of capital cost of construction, but all cost-related matters.

To attain the designation of Professional Quantity Surveyor (PQS) with the Canadian Institute of Quantity Surveyors (CIQS) requires passing 25 specialized subjects of post-secondary education plus a minimum of two years detailed, diarized work experience and a Test of Professional Experience including an Ethics Examination. This certification process takes a minimum of five years of hard work, dedication and expertise.

This university or college education, combined with supervised experience in specific areas of pre-determined expertise has been designed to produce a well-rounded Professional Quantity Surveyor worthy of the designation of PQS – a designation that is respected and increasingly recognized internationally.

Expertise
The expertise of a Quantity Survey can be summarised as providing the following:
• Estimates and Cost Plans at all stages of the development of a construction project from Schematic Design through the various stages of the Design Development up to what gets referred to as the Contact Value or Contract Price.
• Feasibility Studies and Cash Flow Projections.
• Cost advice related to value analysis.
• Guidance with decisions surrounding Contract Documents and tender procedures.
• Change Order Management.
• Property Condition Reports.
• Life Cycle Costing and Reserve Fund Studies.
• Independent Payment Certification and Loan Monitoring.
• Risk Assessment and Analysis.
• Dispute Resolution, ranging full cycle from Mediation to Arbitration.
• Expert Witness and support in the process of litigation.
• Support and opinions (on subject matter expertise) to other professionals.
When a client considers engaging a Professional Quantity Surveyor as part of the Consulting Team, whether working as a sub-consultant to the Architect or Engineer for a project, or directly for the Client or owner, it is best that s/he be engaged at conceptual stage of the project. This ensures that economic analysis and expertise is provided at every stage of the project development cycle.

This specialist expertise includes providing feasibility studies for each alternative design option being considered and thus guiding the design process in the most cost effective direction. This will include such items as establishing the optimum development/construction schedule, maximizing return on investment, life cycle costing, value management through design development, procurement strategies, preparation of contacts and administering the tender process.

After a contract has been awarded, the Professional Quantity Surveyor has the expertise to provide cost control services, change order management and to evaluate claims with respect to changes in the contract conditions, including analysis of the cost of delays.

Many Prime Consultants in construction contracts think that they have the required proficiency in construction economics to manage the costs but, in my experience, more often than not they do not. Professional Quantity Surveyors have specific skill sets as do Architects and Engineers and other Professionals.

For an Owner to omit the Professional Quantity Surveyor from the construction project team is, in my view, a gross error. After all controlling the cost of a project is perhaps the most important factors. The Professional Quantity Surveyor is the most qualified expert in the field. Consider – “If you required brain surgery would you go to a specialist in that field or would you leave it to your general practitioner?”

Independence
The Professional Quantity Surveyor may well choose to specialise in one particular sector of expertise noted above. Estimators working for general contractors or subcontractors may well have attained the designation. There are those who specialise in one particular trade or industry such as HVAC, Electrical, Civil Engineering, Oil and Gas, Infrastructure etc. No matter the area of the industry in which you work or specialise, the Professional Quantity Surveyor is bound to conduct his/her affairs under the Code of Ethics and Professional Conduct, pertinent extracts of which in respect of Independence include:

“Members of CIQS shall:
- Maintain confidentiality and avoid a conflict of interest, but where such conflict arises, fully disclose the circumstances without delay to the employer or client; not accept an engagement to review the work of another member for the same client, except with the knowledge of that member;”

“For an owner to omit the Professional Quantity Surveyor from the construction project team is, in my view, a gross error.”

“Duties of a CIQS member to an employer or to a client:
- Act as faithful agent and trustee and treat as confidential any information obtained by him as to the employer or client’s business affairs, technical methods, or processes;
- Have no interest, direct or indirect, in any materials, supplies or equipment used by his employer or client, or in persons or firms receiving contracts from his employer without in advance informing his employer or client of the nature of the interest;
- Not act as consultant to other parties in respect of any work in which his employer has business interests without first advising his employer.”

The essence of the whole Code of Ethics and Professional Conduct is one of independence and ethical practice.

When a Professional Quantity Surveyor takes on a commitment to represent a Client for whatever mandate, the Professional Quantity Surveyor is warranting that he/she has the experience and qualifications to perform the mandate. Decisions, advice, actions and conclusions will be: based upon reasoned assessment, unbiased, impartial and in accordance with ethical practice.

Irrespective of who pays Quantity Surveyors’ fees or who engages their services, Quantity Surveyors must provide an impartial and unbiased estimate or opinion, even if their Clients disagree with those estimates or opinions.

About the author
Ian B. Duncan PQS(f), MRICS, GSC, is the Principal of Atrium Consultants with over 40 years of experience in Quantity Surveying, Construction Management, and Estimating in Canada, the UK and the Caribbean. Ian has worked in General Contracting, Development, and as a Cost Consultant in ICI, Residential, and Infrastructure. He is currently specializing in providing expert support and cost analyses for construction related contract disputes. Ian is a fellow and past chair of the Canadian Institute of Quantity Surveyors, past Chair of the Pacific Association of Quantity Surveyors, Trustee of ICMS and Chartered Quantity Surveyor with the Royal Institution of Quantity Surveyors.
The saga continues

The areas of project tracking, reporting and analysis have experienced exponential growth in recent years. Technological improvements have impacted the construction industry and, over time, led to narrower specialisations. The construction industry continues to see the emergence of more highly skilled and trained experts as increasingly sophisticated forensic software comes to market. Similarly, the growth of diverse views and opinions about the use of these tools has become more prevalent.

The diversity of opinion has transcended all facets of the industry including the legal and alternative dispute resolution systems. Although there is still no definitive position in law, the standard of proof required is that of ‘on the balance of probabilities.’ Therefore, the onus is to show sufficient evidence to ‘tilt the balance’ (i.e. there is a higher probability that the said event caused delays to the project).

This discussion paper will explore differing opinions with respect to this contentious subject and the role of software as a sufficient evidentiary tool. The author’s conclusions are based on experiences in various jurisdictions and review of the available literature.

The proper and effective use of sophisticated software can be of enormous assistance to a party and ultimately help ‘tilt the balance’ in one’s favour. Proponents argue that, when a project is delayed, the Contractor is usually adversely affected and they need to be adequately compensated (time and/or money). This can be quantified scientifically using software specially designed to monitor and track projects.

CASE LAW

**John Barker Construction Limited v London Portman Hotel Limited 83**

Held – ‘a fair extension of time called for a logical analysis of the impact of relevant matters in a methodical manner’, ‘...I accept that the assessment of a fair and reasonable extension involves an exercise of judgment, but that judgment must be fairly and rationally based.’ Mr. Recorder Roger Toulson QC.

This case established a minimum threshold; it confirms the nature and extent of analysis required when determining entitlement for extension of time. In this matter, Critical Path Method (CPM) was deemed to be a fair and appropriate method to calculate a reasonable extension of time. It stands to reason that similar methods would have achieved the same results. The critical criterion as considered in this case is that of being logical and methodical.

The Society of Construction Law published official guidelines on the matter (see Delay and Disruption Protocol). Notwithstanding the provisions of the Contract Conditions, the Delay and Disruption Protocol recommends the following;

• Agreement on choice of software and approach to be employed
• Constant and continuous monitoring and record keeping
• Contractor to inform employer of events causing delay as soon as possible
• Parties should deal with the impact of employer risk events as it occurs

Most standard forms of contract (and bespoke agreements) require the Contractor to mitigate impacts of events on the project schedule. This contractual obligation also includes the effects of Owner risk events.

On the other hand, opponents are of the view that these scientific tools are too theoretical. Further, they have been criticised by the courts and practitioners for their inability to illustrate criticality and, in some cases, can virtually ignore reality. Despite these arguments, Contractors and their experts continue to use these tools to demonstrate delay impacts using visual aids.

**CASE LAW**

**Royal Brompton Hospital NHS Trust v Hammond 76**

Held – “an assessment of entitlement to an extension of time did not depend upon any sort of scientific evaluation of any type of material but simply on impression formed on the basis of previous experience,” His Honour Judge Richard Seymour QC.

It is apparent that this ruling endorses the impressionistic approach to delay analysis. This argument is further supported by the commission on International Arbitration of the ICC, which expresses concerns with the objectivity of such analysis, stating that:

“It quite frequently happens that many of the numerous assumptions that have been made in the construction of such a retrospective network are in the end so controversial that the network cannot be accepted by the Tribunal for the purposes for which it was created.”

The ethos of the myriad of scheduling software available is to analyse the impact of project events on the progress (disruption) and completion (delay) — **Delay Impact Analysis.** To this end, several approaches have been adopted, including; the Critical Path Method, Global Impact Technique, Net Impact
Technique, Snapshot Technique, Collapsing Technique, etc. One must be mindful of the fact that the use of such aids in the preparation of claims is not an exact science.

Application of these tools requires one to exercise professional judgement, objectivity and independence when assessing their usefulness in preparation of a specific claim. The court or tribunal involved in the resolution of a dispute in respect of delay will most likely consider one of the aforementioned or similar techniques along with testimony from a suitable expert (in some cases, the weighted testimony of more than one expert).

Use of such tools should not be assessed in isolation; the parties involved are in a contractual relationship, the terms of which must form a basis for resolving disputes relating to delay impacts. It is therefore imperative that the parties agree on the details with regards to the type and extent of use of such tools. Also, the need to practise fairness, discretion and transparency cannot be substituted by any software.

Although it can be argued that software employs scientific processes, the outcomes rely sufficiently on input, which in some cases can be subjective (shall we say, “rubbish in – rubbish out”). As before mentioned, this is not an exact science and so the outcome will be just as subjective as the data fed into the process. “The application of an impressionistic rather than a calculated and rational assessment is not sufficient,” (Palles-Clark R, 2002).

The Courts and Tribunals are unlikely to rely solely on the results of such a potentially subjective process as sufficient proof of a claim. Independent and objective supporting documentation must accompany the resultant graphic aid generated by these tools. “It is always essential to consider the audience for the analysis, the cost benefit of adopting a particular method, and to find ways of communicating the results in a way that is both credible and readily understandable”, (Palles-Clark R, 2002).

Although such forensic tools are useful for both the analysis of delays and the graphical presentation in support of the basis for a claim, they must be adequately supported with project records and other pertinent information (drawings, schedules, instructions, reports, etc.) amassed during the project.

Here lies the ‘art’ in delay analysis, where a keen knowledge of contract law must combine with practical understanding of the commercial aspects of construction management to enable successful evaluation of claims. Adequate consideration must be given to the probative value of the chosen technique for the given case to answer the following questions:

- Float - Who owns the float?
- Concurrent delays - Are there concurrent delays and how should they be treated? The definition of concurrent is evolving, therefore, defining concurrent delays may be subject to discussion and agreement by contracting parties.
- Global claims - Can claims be global and to what extent?
- Impact - Do the delays shown affect completion of works and to what extent?

CASE LAW

McAlpine Humberoak Ltd v McDermott International Inc

Plaintiff – “…each instruction was critical and impacted in full upon completion date without considering the event in the context of what was actually happening at the time and without considering what other work was being carried out at the time.”

Defendant – “…a retrospective and dissectional reconstruction by expert evidence of events almost day by day... designed to show that the spate of additional drawings which descended on McAlpine virtually from the start of the work had little retarding effect on its progress” Held - DISMISSED per Lloyd, L.J. “…in any analysis of project delays, the contractor is required to take into account realistic resource levelling”. It was unlikely for wholly theoretical calculations to succeed.

Henry Boot Construction (UK) Ltd v Malmaison Hotel (Manchester) Ltd. It was decided that, “the respondent was entitled to respond to the claim not by arguing that the variations, late information and so on relied on by the claimant did not cause any delay...”
because they were not on the critical path and positively by arguing that the true cause of delay was other matters…”

“I am clearly of the view that, where there is an extension of time clause such as that agreed upon in this case and where delay is caused by two or more effective causes, one of which entitles the Contractor to an extension of time as being a Relevant Event, the Contractor is entitled to a full extension of time.” Mr. Justice Dyson.

Science or Art? The Quantity Surveyor in me says both! Notwithstanding, contracting parties should be cognisant of the following:

- The need to observe Contract provisions.
- Make every attempt to deal with an incident as it occurs or as soon as possible thereafter.
- Presentations must be clear and support (a) Entitlement (b) Quantum.
- Such tools must be supported by relevant records (drawings, instructions, reports etc).
- Scheduling is not an exact science; all assumptions must be seen to be objective and fair. Remember, ‘rubbish in, rubbish out’.

Although the views on the extreme peripheries of the pendulum are sometimes advanced, the preceding discourse demonstrates that an understanding of the legal principles governing delay analysis including appropriate approach, factual evidence, effective presentation and transparency of procedure are the essential ingredients for the successful preparation of a construction claim.

About the author
Antoine Aurelis MRICS, PQS, MCIArb, MSc
Antoine is a Director at Lakeland Consulting Inc., a Chartered Quantity Surveyor with 25+ years international commercial experience. He has worked in both consultancy and contractor sides of the industry and currently focuses on contract services including dispute prevention and resolution. Antoine’s expertise also includes defense and prevention of claims, ADR, independent certification and industry training.

Antoine has worked throughout the Caribbean, the United Kingdom and the Cayman Islands, advising clients in the areas of Quantity Surveying, Project Management and Dispute Resolution, P3 projects, Independent Certification, Commissioning, Construction Management, Arbitration, Mediation, ADR, Due Diligence, Construction Valuations, Cost Estimating, Cost Planning, Value Engineering and Value Management.
The following is an abstract from The Canadian Association of Consulting Quantity Surveyors Cost Management Best Practices Guide (2016).

Property Conditions Assessments

Know the potential costs of repairs before they are needed

The goal
It is not enough to build a property and call it a day. Buildings require maintenance and upkeep. Property Conditions Assessments (PCA reports) help clients assess the current condition of a building's various components and systems. The assessment provides everyone with a clear picture of the capital repair requirements for a building over short-term and long-term periods.

What is involved?
Property Condition Assessments, which are often referred to as Building Condition Assessments or Facility Condition Assessments, are an important part of the planning process. They are completed for both private and public sector clients for properties in all asset classes. This includes office, retail, industrial and multi-unit residential. A typical report includes a capital plan and a reserve fund cash flow table to show the timing and costs of the various items in need of repair or replacement.

Often requested as part of the Condition Assessments, is either a ‘Replacement Cost Estimate,’ or a ‘Reproduction Cost Estimate’ and either of these estimates can be enhanced with a ‘Depreciated Cost’ for either of these cost estimates. These estimates allow the owner to develop a ‘Value for Money’ evaluation before expending monies to address the issues raised in the Condition Assessment.

PCA reports are produced by Consulting Quantity Surveyors in consultation with engineering and construction professionals, including professional engineers, architects and certified engineering technicians.

PCA reports for the private sector
For private sector clients, PCA reports are prepared as part of the due diligence process for commercial real estate transactions. They are also important for financing purposes to meet a lender’s requirements.

It is usually the purchaser who commissions the PCA report. The goal? To determine the current physical condition of the assets and the capital requirements for repairs over a defined period.

Sometimes, vendors of real estate property will also ask for a PCA report. The independent report helps them during sales negotiations and can help reduce the sales cycle.

PCA reports for the public sector
For public sector clients, PCA reports are prepared for capital planning and asset management purposes. They are usually done for facilities and institutions like healthcare facilities, schools, transit facilities, correctional facilities, municipal and government buildings and social housing organizations.

Condominium corporations and social housing organizations also complete PCA reports and reserve fund studies for similar reasons.

Generally, a PCA report will follow the ASTM E2018-08 standard. There is also a reference standard called Protocols for Building Condition Assessment, developed by the National Research Council of Canada in 1993 as a tool for consultants, property, and buyers/investors of real estate assets.

Why it is valued
With a PCA report, owners, vendors and purchasers get a clear picture of capital repair requirements over both the short term and long term. The report is an essential tool for accurately forecasting necessary costs.

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To read the whole report visit:
Managing Change

With Ontario’s new Construction Act and other similar legislation on the horizon, the Canadian construction industry is in the midst of significant change. Osler’s specialized lawyers, many of whom are also engineers, can help you revise your procurement documents, design and construction documents, and loan agreements to stay on top of the changes, and strike your own balance.

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