CIQS Participates in Landmark Prompt Payment Symposium

• Prompt Payment & Adjudication Symposium
• New Calgary Cancer Centre ‘building hope’
  • Canadian healthcare technology
• The cost of construction in Canada
Canada is witnessing the biggest changes to Construction Law in decades with reforms aimed at achieving prompt & complete payment and the resolution of disputes using adversarial or collaborative approaches.

Established in 2017, Adjudico Inc. is at the forefront of knowledge share and providing professional services to Owners, Contractors, Subcontractors, Suppliers, Lawyers, and others as these reforms are introduced and implemented.

Adjudico Inc. continues to provide independent review services supporting the resolution of construction issues that are in the process of resolution. Our Approach and Services are as follows:

**Approach:**

**Awareness**
*Understand* the reforms introducing Adjudication

**Support**
*Provide* assistance during the process of Adjudication

**Training**
*Introduce* measures to achieve expectations

**Resolution**
*Achieve* efficient and effective resolution of disputes

**Services:**

**Assessment Reports**
- Allowing quick and informed decision making

**Submissions & Responses**
- Enabling preparations of rationale based documents

**Subject Matter Reports**
- Providing appropriate Subject Matter Expertise

**Training & Support**
- Preparing stakeholders to achieve expectations

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CONSTRUCTION ECONOMIST
SUMMER 2019

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

Features

CIQS Congress 2019 agenda ........................................ 7
In memoriam ................................................................. 9
Prompt Payment & Adjudication Symposium .................. 17
The new Calgary Cancer Centre ‘building hope’ .............. 21
Overtime – Compliance with Ontario employment and labour standards ........................................ 22
Canadian healthcare technology .................................. 24
Life cycle costing and whole life costing ...................... 27
The cost of construction in Canada .............................. 29
Indigenous awareness – Part 4 ....................................... 32
The importance of QS & CE ........................................... 36

Corners

Education Corner ......................................................... 13
Legal Corner ................................................................. 14
Continuing Professional Development Corner ............. 16
Congratulations Corner .............................................. 16
Leadership Corner ....................................................... 37

Messages

Chair’s Message .......................................................... 4
Executive Director’s Message ....................................... 8
Editor’s Message .......................................................... 10

OUR CONCERN FOR THE ENVIRONMENT IS MORE THAN JUST TALK
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In May 2019, the CIQS board of directors met in Toronto for its regular quarterly meetings. The meetings took place over three days, including a half-day of learning and discussion about regulating. The regulation session was hosted by Ron Ross from Pathway Group, an experienced lobbyist with demonstrated success in government relations. The previous strategic plan included a long-term goal to become a government-regulated association and as a board we thought it important to learn more about what regulation looks like, how it would benefit the profession, and the risk and resources required to get there. The session was very informative and the board took away valuable information to share in more detail with our members at the 60th Congress in Quebec City, July 2019.

One of the early steps of developing the strategic plan is determining the vision, which included brand awareness, community, optimizing value, interdisciplinary partnerships, go-to provider, and elevating academic standards. The vision is the large picture, summarized into four areas of focus. These areas include actions that will form the strategic plan, which will be the focus of the Institute for the next three years.

The CIQS Community Engagement Initiative is the first of the four areas. We believe that reconnecting and rebuilding the relationships between the board, the chapters, and the membership is important to re-engaging our members. Some of the actions include having one board meeting per year outside Toronto, encouraging board members to visit chapter events outside their regions as well as a membership-wide town-hall meeting each year. Other actions include establishing the YQS program, clarifying roles and responsibilities of chapter and national duties, and supporting the chapters with governance tool kits. We will develop more actions and goals as we hear from the membership from future surveys and the 2019 Congress.

Education is another key priority identified in the strategic plan. The Education Committee is working on identifying the weaknesses and strengthens of the current courses and syllabus for architectural, mechanical, and electrical programs. Translation of the exams is progressing, but more work is needed. We also need to reconnect with colleges and post-secondary institutions to review accreditation, provide support to instructors, and offer mentorship to future professionals. We need support funding for new project management, estimating, and civil building programs being offered at educational institutions across Canada. We also need to support our self-learning students and aspiring professionals as they work to reach their CEC and PQS designations.

Addressing Resource Deficiencies of the CIQS is another important area of focus. The National office in Markham, Ontario, now supports and manages the administration and operations of the Institute. As members and volunteers, we cannot forget our team who work hard every day making sure that CIQS functions to serve, so we can promote the profession. Currently, we are working to fill two positions: executive assistant/events coordinator and distance learning lead. In addition, we are looking to acquire a technological assessment of our current digital and technological assets. The protected database, the website, and future initiatives will need to be improved or replaced, and having a viable roadmap implementation plan will get us started.

The Stakeholders Engagement Plan is the fourth key area of focus. This plan is no less important than the other key areas – it covers a wide range of topics that will need support from our volunteers and committees to achieve. The actions in this area include developing and implementing both a student engagement plan and a marketing and communications plan. Currently, our lobbyist professional is leading the environmental scan of the provincial governments. As this progresses, we will need to develop a members’ government engagement plan and to train spokespeople to engage government agencies to advance the knowledge and promote the Institute. To support lobbying and advertising CIQS members as the ‘go-to’ professionals, we will focus on collaboration projects and events with our industry stakeholders and educational institutes.

The mission of CIQS is to promote the professional status and gainful employment of Institute members by maintaining high standards of competence and ethics, furthering their education, and encouraging the interchange of knowledge and fellowship with other industry professionals. As a team working together to develop the strategic plan, we are confident that the plan reflects goals that support and reinforce the mission. Over the next few years, the plan may take on a different picture as we grow and learn more about the goals we strive to achieve. With the support of our community we can achieve this and more.
Plan stratégique
2019-2022 – présentation des faits saillants

En mai 2019, le Conseil d’administration de l’Institut canadien des économistes en construction (ICÉC) s’est rencontré à Toronto dans le cadre de ses réunions trimestrielles habituelles. Le programme s’est déroulé sur trois jours, dont une demi-journée consacrée à l’apprentissage et à la discussion sur la réglementation. La séance de réglementation était animée par Ron Ross de Pathway Group. Ron est un lobbyiste expérimenté qui a accompli d’importantes réalisations par l’entremise de ses relations gouvernementales. Le plan stratégique précédent comprenait un objectif à long terme consistant à faire évoluer l’association vers une association réglementée par le gouvernement; et en tant que Conseil, nous pensons qu’il est important d’en apprendre davantage sur les modèles de réglementation, sur les avantages pour la profession et sur les risques et les ressources nécessaires pour y parvenir. La séance s’est avérée très informative, et le Conseil a pu absorber une mine d’information extrêmement précieuse, informations qui seront partagées de manière plus approfondie avec nos membres lors du 60e Congrès qui se tiendra en juillet 2019 dans la Ville de Québec.

Lors de l’élaboration du plan stratégique, l’une des étapes précoces visait à déterminer la vision. La vision qui a été établie au moment de la séance englobait la notoriété et l’image de marque, la communauté, l’optimisation de la valeur, les partenariats interdisciplinaires, les fournisseurs de choix et l’élèvement des normes académiques. La vision qui constitue le tableau d’ensemble s’articule autour de quatre axes d’intérêt. Ces axes comprennent des mesures ou des projets qui formeront le plan stratégique, lequel sera le point central de l’Institut pour les trois prochaines années.

Le projet d’engagement communautaire de l’ICÉC est le premier des quatre axes prioritaires. Nous croyons que le rétablissement et la reconstruction des relations entre le Conseil, les chapitres et l’adhésion des membres sont des piliers importants pour remobiliser nos membres. Certaines de ces mesures consistent notamment à convoquer une fois par an une réunion du conseil d’administration à l’extérieur de Toronto, à encourager les membres siégeant au conseil de visiter les événements des chapitres à l’extérieur de leur région et à tenir des réunions-débats ouvertes à l’ensemble des membres chaque année. D’autres mesures couvrent l’établissement d’un programme lié aux jeunes économistes en construction, la clarification des rôles et des responsabilités du chapitre et des fonctions à l’échelle nationale ainsi que les outils de gouvernance pour soutenir les chapitres. Il s’agit d’une liste partielle d’actions et d’objectifs qui ont été identifiés, et que nous développerons plus en détail à mesure que nous entendrons les remarques lors du Congrès 2019 et que nous recueillerons les commentaires issus des futures enquêtes.

L’éducation est un autre axe prioritaire relevé dans le plan stratégique. Le Comité d’éducation travaille actuellement à identifier les forces et les faiblesses des cours et des descriptifs de cours pour les programmes d’architecture, de mécanique et d’électricité. La traduction des examens est en bonne voie, mais un travail supplémentaire s’impose. Nous devons également rétablir le contact avec les collèges et les établissements postsecondaires pour examiner le processus d’accréditation, pour fournir un soutien aux instructeurs et pour offrir un encadrement aux futurs professionnels. Nous entendons souvent parler de nouveaux programmes en matière de gestion de projets, d’estimation et de construction civile.
qui sont actuellement offerts dans les établissements d’enseignement à travers le Canada, et nous avons besoin de soutien pour trouver ces programmes. De plus, nous devons soutenir nos étudiants en auto-apprentissage et nos aspirants professionnels alors qu’ils poursuivent leurs efforts pour obtenir leur désignation Économiste en construction agrégé (ÉCA) et Estimateur en construction certifié (ECC).

La résolution du déficit en ressources de l’ICÉC représente un autre axe prioritaire. Le siège national situé à Markham en Ontario soutient et gère désormais l’administration et les opérations de l’Institut. En tant que membres et bénévoles, nous ne pouvons pas oublier notre équipe qui met tout en œuvre chaque jour pour s’assurer que les fonctions de l’ICÉC servent l’intérêt supérieur de sorte que nous puissions promouvoir la profession. Actuellement, nous travaillons à pourvoir deux postes, un adjoint de direction/coordinateur des événements et un dirigeant en apprentissage à distance. En complément des aspects précédemment décrits, nous cherchons à obtenir une évaluation technologique de nos biens numériques et technologiques. La base de données sécurisée, le site Web et les initiatives futures devront éventuellement être améliorés ou remplacés, et l’élaboration d’un plan de mise en œuvre visant une feuille de route viable est un point de départ essentiel.

Le plan d’engagement des intervenants est le quatrième axe prioritaire, et il n’est pas moins important que les trois autres axes précédemment présentés. Ce plan d’engagement couvre un vaste ensemble de sujets qui, pour pouvoir atteindre ses objectifs, aura besoin du soutien des bénévoles et des différents comités. Les différentes actions dans ce domaine comprennent notamment l’élaboration et la mise en œuvre d’un plan d’engagement des étudiants ainsi que l’élaboration et la mise en œuvre d’un plan de marketing et de communications. Actuellement, l’analyse environnementale des gouvernements provinciaux est sous la direction de notre professionnel lobbyist. À mesure de sa progression, il nous faudra élargir un plan visant à accroître le niveau d’engagement des membres avec les différents paliers du gouvernement et former des représentants pour mobiliser les organismes gouvernementaux de manière à faire progresser les connaissances et à promouvoir l’Institut auprès de ces organismes. Pour soutenir les activités de lobbying et pour mettre en avant les membres de l’ICÉC en tant que professionnels de choix, il nous faudra également nous centrer sur des projets et événements collaboratifs avec les intervenants de notre industrie et avec les établissements d’enseignement.

L’ICÉC a pour mission de promouvoir le statut professionnel et les emplois rémunérateurs pour les membres de l’Institut en maintenant des normes élevées en matière de compétences et de valeurs éthiques, en développant une éducation continue et en encourageant l’échange des connaissances et en nouant des liens étroits avec les autres professionnels de l’industrie. En tant qu’équipe soudée, travaillant ensemble pour élaborer le plan stratégique, nous estimons avec un haut degré de certitude que le plan reflète les objectifs qui soutiennent et renforcent la mission de l’ICÉC. Au cours des prochaines années, le plan pourrait prendre une toute nouvelle tournure à mesure de notre croissance et de la progression des objectifs à atteindre, et grâce au soutien de notre communauté, nous pouvons atteindre les objectifs fixés et d’autres encore.
Agenda & Registration Details

**Thursday, July 25, 2019**
- CIQS Board Meeting: 9:00am – 5:00pm
- YQS Meet and Greet: 5:15pm – 6:00pm
- Welcome Reception: 6:00pm – 8:30pm

**Friday, July 26, 2019**
- Technical Sessions: 9:00am – 5:00pm
- YQS Social Activity: 6:00pm – 8:00pm
- Free night for delegates

**Saturday, July 27, 2019**
- Annual General Meeting: 9:00am – 10:30am
- Chair’s Reception and Dinner: 6:30pm – 11:00pm

*60th Anniversary Celebration*

- **Clive Evans Living Golf Tournament**
  - Saturday, July 27, 2019 from 10:30am to 5:00pm

**Sunday, July 28, 2019**
- Farewell Breakfast: 7:30am – 10:00am

For more information and to register, please visit [ciqs.org/english/congress](http://ciqs.org/english/congress)

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Agenda & Inscriptions

**Jeudi 25 juillet 2019**
- Réunion du conseil de l'ICÉC: 9h00 – 17h00
- Accueil et rencontre du groupe YQS: 17h15 – 18h00
- Réception de bienvenue: 18h00 – 20h30

**Vendredi 26 juillet 2019**
- Séances techniques: 9h00 – 17h00
- Activité sociale du groupe YQS: 18h00 – 20h00
- Soirée libre pour les délégués

**Samedi 27 juillet 2019**
- Assemblée générale annuelle: 9h00 – 10h30
- Réception et souper du président: 18h30 – 23h00

*60th Anniversary Celebration*

- **Tournoi de golf Clive Evans Living**
  - Samedi 27 juillet 2019 de 10h30 à 17h00

**Dimanche 28 juillet 2019**
- Petit déjeuner d’adieu: 7h30 – 10h00

Pour plus d’informations et vous inscrire, rendez-vous sur [ciqs.org/french/congress](http://ciqs.org/french/congress)
Meeting updates and new marketing brochures

The CIQS board of directors held its quarterly meeting May 3-5, 2019 in Toronto, ON. The following is a list of highlights from the meeting.

- The first day and a half of the CIQS board meetings were focused on regulation and strategic planning. Ron Ross, from the CIQS’ lobbying firm, held a half-day regulation education session for the members of the board.
- The CIQS board of directors participated in a full day of strategic planning. See more on the strategic planning session in the Chair’s message of this issue.
- The deadline for CIQS National Board nominations was May 3, 2019. All nominations received by this date will go to the Nomination Committee for review.
- Three CIQS members have been awarded the Lois Metcalfe Fellowship Award. Arif Ghaffur, CIQS – Ontario, and Michael Gabert, CIQS – Prairies & NWT were each awarded the designation PQS(F), while Sudhir Jha, CIQS – Prairies, is CIQS’ first CEC(F). Recipients will receive their award at Congress 2019 in Quebec City.
- Phase I of environmental scan is complete and the board reviewed the report. Phase I included Federal, Ontario, British Columbia, and Alberta. CIQS is now starting Phase II which will focus on Quebec. Environmental scan of all provinces to be complete in 2019 and members will receive an update on the outcomes of the scan.
- CIQS has been approached by several academic institutions requesting accreditation of their programs.
- The CIQS Education Committee has begun the accreditation review of our current accredited programs. The CIQS board of directors has mandated that each CIQS accredited program will undergo a review every three years to ensure that each program still fits the criteria of the accreditation level awarded.
- New CIQS promotional brochures are here. The marketing committee has developed three newly designed brochures for CEC, PQS and students. To replace the current flyer, which includes information about both of our designations, the committee decided to design two very distinct brochures to separately highlight the benefits and criteria of PQS and CEC. In this way we are hoping to equally distinguish them, without making either one appear more significant than the other.
As a way to differentiate the student brochures from those of the PQS and CEC, we created a unique layout and design. To show the variety of projects a quantity surveyor works on, we decided to create four different iterations of the same brochure:

- Highways and Bridges
- Airports
- Stadiums
- Affordable Housing

The marketing committee also redesigned all of the CIQS banners to refresh the look and feel, and to introduce our updated tagline:

*Look at the world around you.*
*When every detail counts,*
*COUNT ON US*

- The CIQS board of directors’ meeting (Teleconference) was held on June 10. The next meeting will be held on July 25, 2019.

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**In memoriam**

**Maurice Tindale, PQS – London, Ontario**

Maurice was a long-standing member of CIQS who joined the Institute in 1961. A great supporter of CIQS and encouraged students to join during his time at Fanshawe College.

**Balwant Bhagwat, CEC – Woodbridge, ON**

Member of CIQS since 2014.
A scientific study, *Canada’s Changing Climate Report 2019* (www.changingclimate.ca/CCCR2019) indicates that Canada, on average, is warming at a rate that is two times faster than the rest of the world. In addition, many of the present effects, resulting from climate change, are seen as likely irreversible. Some alarming aspects include:

- Changes, which are already evident in many parts of the country and are projected to intensify.
- Canada’s Arctic has seen the deepest impact and will continue to warm at more than double the global rate.
- Canada’s annual average temperature has warmed by an estimated 1.7°C since being first recorded in 1948.
- The largest temperature increases have been seen in the North, the Prairies, and in northern British Columbia.
- Average annual temperatures in northern Canada have increased by approximately 2.3°C.

In terms of the debate on how much humans are to blame, the report states that, “While both human activities and natural variations in the climate have contributed to the observed warming in Canada, the human factor is dominant,” and also that, “It is likely that more than half of the observed warming in Canada is due to the influence of human activities.”

**Impacts and consequences**

The effects of global warming on Canada’s environment include more extreme weather. Hotter temperatures could mean more heat waves, resulting in higher risks of wildfires and droughts in some parts of the country. Oceans are expected to become more acidic and less oxygenated, which could harm marine life.

Parts of Canada’s Arctic Ocean are projected to have extensive ice-free periods during summer within a few decades. A rise in sea levels could also increase the risk of coastal flooding and more intense rainfall could cause problems with flooding in urban centres.

**Causes and concerns**

Canada’s rapid warming is due to a number of factors, some of which include the decline of snow and sea ice. According to the study, this decline has caused greater surface warming, as there is an increased absorption of solar radiation.

Despite the bleak projections, the study notes that the extent of warming could be limited if global action is taken by drastically reducing “carbon emissions to near zero early in the second half of the century, and [reducing] emissions of other greenhouse gases substantially.”
Civil society appears to be at a ‘tipping point’ on the issue with public opinion moving in support of governments taking action.

Canada is one of nearly 200 countries to have signed on to the Paris Agreement – a single global agreement on tackling climate change that seeks to keep temperatures ‘well below’ 2°C above pre-industrial times, and ‘endeavour to limit’ them even more, to 1.5°C.

The Canadian government says it will meet the Paris target of cutting emissions to 30% below 2005 levels by 2030 despite the fact that a number of official reports indicate the country is unlikely to meet its reduction targets without significant effort.

Public opinion
Matthew J. Hoffmann, a Professor of Political Science at the University of Toronto and Co-Director of the Environmental Governance Lab told us that, like the recent Intergovernmental Panel on Climate Change report, this one underscores the warnings about the impact of climate change.

“This is yet another reaffirmation of the urgency of this problem.” He states, “People are starting to feel climate change – it’s starting to be part of their lived experience.”

Civil society appears to be at a ‘tipping point’ on the issue, with public opinion moving in support of governments taking action. Mr. Hoffmann points to recent student protests in the UK, Canada, and elsewhere pushing for governments to take active steps to tackle the problem.

Incentives and carbon tax
Whilst householders are happy to be compensated by the federal government in the form of ‘climate action incentive’ rebates, the carbon tax has been met with the opposition Conservatives vowing to scrap it should they win federal elections in October. It is intended that the carbon tax will be added to the cost of fuel (i.e. 4.4 Canadian cents per litre initially) – equivalent to 20 Canadian dollars per tonne of carbon produced, more than doubling by 2022.

Government and industry
I recall that the current federal government, some two years ago warned the provinces that they needed to come up with plans by April 1, 2019 setting out how they would contribute to Canada’s reduction targets. The four that the government accuses of failing to introduce their own plans for tackling climate change are Ontario, Manitoba, Saskatchewan, and New Brunswick.

Impact on structures
Whilst the debate on climate change continues, what is clear is that all structures including, embankments, buildings (residential, commercial, and industrial), roads, tunnels, bridges, rail tracks, drainage systems, overhead, dams and transmission lines need to be designed for expected climate conditions which are projected to increase in frequency and intensity.

Existing structures
Whilst there is a huge focus on the development and construction of new infrastructure, there is a genuine concern about the viability of older and existing structures that have been exposed directly and indirectly to changes in weather and may be at risk of further damage and potential catastrophic collapse causing risk to human life.

Changing winters
The sheer volume of water resulting from wetter winters and heavier downpours makes it critical that rainwater and water from melting snow and ice are directed away from structures, be they residential houses, areas that are paved, and/or structures of any sort.

Regardless of the controlled direction of groundwater, we will see higher water tables and an increase in the water levels in streams and watercourses. This, combined with storm surges along coastlines, will result in seepage and flooding, something increasingly being experienced across Canada. There will need to be a higher vigilance to the control of water ingress and flooding.

Changing summers
Warmer summers will directly impact the durability of construction materials and affect the indoor climate of buildings with a heavier emphasis on the movement of suitable air and increased reliance on air conditioning and ventilation. These warmer summer conditions will also increase the dry conditions required for forest fires and the inherent risk to buildings and people’s lives.
Vulnerable structures

The severe weather events and change in climate will make structures vulnerable to the ongoing changes in climate with risks of catastrophic collapse and impacts on physical and mental health. This all points to significant loss of value resulting from severe weather conditions, the reduced life of building materials and direct impacts on those living/working in buildings and/or using infrastructure such as roads and bridges.

What is clear is that there will need to be regular and ongoing inspections and risk analysis of all structures with mapping of future risks of flooding and excessive heat, based on experience over the last few years as evidenced by scientific data, including weather records.

In summary, Canada is warming quicker than average. The effect of climate change on Canada is likely to be more severe than on the majority of the rest of the world. This will have devastating repercussions for wildlife. Only strenuous efforts to control emissions will reduce impacts. It is likely that there will be an increase in the movement to take active steps, particularly by those who are concerned about implications for future generations.

The debate around rebates and taxes will continue as political parties position themselves to maximise election votes, including those at the federal level. The various jurisdictions across Canada will no doubt continue to differ on what needs to be done, when, and who will pay the costs. What is clear is that almost every single structure will be affected by climate change to some extent. Older and existing structures that may have been built based on outdated building codes maybe at particular risk.

It is also evident that there will be a greater amount of ground water that will need to be managed. In conjunction, warmer weather conditions will impact buildings both internally and externally. A high level of vigilance will be required to monitor any failure of existing structures and losses resulting from damage caused by climate change. This has been witnessed by significant weather events across Canada, including forest fires in British Columbia and Alberta, and extensive flooding in parts of Ontario and Quebec. These events will no doubt lead to insurers having to respond to claims and, as a result, premiums coming under upward pressure.

For construction economists such as Quantity Surveyors, this means that they will be involved in the process of estimating and administrating the increased expenditure on enhancement work to existing structures and new build required to ensure buildings are able to withstand climatic change. Further, any taxes levied on the cost of production (carbon tax) will translate into additional construction costs that will impact budgets and final costs. During construction, climatic ‘events’ such as adverse/inclement weather will result in delays and disruption with potential additional costs adding pressure to project budgets, hence requiring the expertise of Quantity Surveyors.

I thank you for your support and contribution to the Construction Economist, and sincerely wish you and your families are having 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.

Arif Ghaffur PQS

The Construction Economist is also available in electronic format. Please visit the CIQS website www.ciqs.org and press the Publications tab.

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Did you know?

- Construction is one of the largest industries in Canada, worth nearly $2.7 trillion in assets, and large-scale projects require significant monetary investments with an expectation of profitability.
- One of every 13 workers in Canada, or 1.4 million people, earns a living from the construction industry. There are over 368,000 construction firms, which account for 7% of GDP and the industry is worth nearly $2.7 trillion in assets.

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Growing influences of females in the Institute

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Correction

On page 28 of Construction Economist’s Spring Edition, under 1. Professional Quantity Surveyor (‘PQS’), the sentence “…Associates (‘ARICS’) of the Royal Institution of Chartered Surveyors (‘RICS’), and whose primary professional discipline is quantity surveying” should be deleted and inserted as item g. under 3. Construction Estimator Certified (‘CEC’).
Up and running

Summer is here and with it comes the annual CIQS Congress. This year’s event marks our 60th Anniversary and will be a celebration of our Institute and our profession. The Congress team has great technical sessions planned – and events are also a great way to get CPD points! This year also marks the second year of the David Lai Young Quantity Surveyor (YQS) Congress Bursary Program, so I encourage all under-forty members to apply for this great program. Last year’s winners seemed to have a wonderful time in Halifax.

The Education Committee has been hard at work this quarter, getting up and running. The committee has been eager to volunteer to work on various projects that have been a bit too much for just one person. I’m excited by the direction that’s unfolding with this team. I need to give big thanks to Roy Lewis, Indu Elapatha, Tulsi Regmi, Rob Wilson, and Nick Charlton for all their work so far. I would be remiss if I didn’t also thank Sheila Lennon, Sophia Chin You, and Ian Duncan for their capable assistance.

In the upcoming fall issue of the Construction Economist magazine we’re excited to tell you we will be showcasing an editorial feature on the 60th anniversary of the CIQS.

We invite you to share in this special milestone celebrating 60 outstanding years by showing your support of the CIQS and including your company’s congratulatory ad within the feature, making it even more successful!

Contact Jeff Kutny today for more information on how you can be a part of this special 60th anniversary issue!
Rethinking corporate criminal liability

Author’s note: As those involved in the construction industry know well, there are a wide range of legislative and regulatory provisions that impose criminal, quasi-criminal (regulatory) and civil liability on corporate members of the industry. This article, which I wrote for a general legal audience in The Lawyer’s Daily, has considerable relevance to members of the construction industry. Therefore, I am grateful to the Construction Economist for its interest in republishing this article and hope that it will generate discussion and rethinking in this industry, which is an important sector of the economy.

Since the SNC-Lavalin deferred prosecution agreement issue surfaced in the media, along with the assertions that prosecuting the company could harm Canada’s economy, I have been wondering whether our approach to corporate criminal liability should be reconsidered.

I was heartened to see an article (SNC-Lavalin and the Corruption of Public Discourse, by Thomas Watson) in the Ivey Business Journal, Spring 2019, asking whether the fight against corporate corruption would be better served by focusing on punishing unethical individuals, not victimized organizations.

Perhaps the time has come for Canada – and other jurisdictions – to reconsider corporate criminal liability and to consider innovative alternatives to it.

One valuable societal outcome of all that has gone on may turn out to be such rethinking.

Let’s assume acceptance in our society of strong commitments to stemming corruption and other illegal activity in which corporate employees at various levels can cause corporations to engage, whether by sins of omission or sins of commission.

Let’s also recognize the reality – which has increased in an era of instantaneous and intense media and social media coverage – that the commencement and pursuit of criminal proceedings against a corporation, regardless of the outcome, can cause it serious harm in many ways, and indeed be fatal to it.

Witness, as one well-known example, the rapid demise of the major accounting firm Arthur Andersen and the consequences of that demise for its employees, its clients, and the economy.

To what end?

What is the public good in destroying, harming, or impeding a corporation that employs people, provides useful goods or services, and contributes to the economies of the jurisdictions in which it operates? One might ask, what purpose is served by the pursuit of criminal proceedings against a corporation at any time, unless the individual and the corporation are effectively one and the same?

Corporations as a whole don’t do bad things – people do bad things.

What is the appropriate balance between the imposition of liability on the individuals responsible for the bad things and the imposition of liability on a corporation, which may result in many innocents, or even the country as a whole, being harmed?

Of course, there is a range of situations that will confront us; at one end being the corporation that has dealt with its issues by reforming its leadership, its systems, its business practices, its culture, etc. At the other end may be the corporation ‘recently caught with its hand in the till’ and still needing all that reforming.

Recognizing the range of reasons that societies have criminal liability, what is achieved for society by imposing criminal liability on corporations, which despite having a legally recognized distinct personality can act only through people?

A wide-ranging thoughtful reconsideration of the entire question of corporate criminal liability would be a worthwhile exercise. It could lead to more effective and efficient ways of dealing with these kinds of situations.

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Not just ‘deferred prosecution agreements’ and the nature of penalties imposed on a corporation but whether in many cases criminal proceedings against a corporation are an effective and efficient mechanism, or as effective and efficient as other mechanisms that we could have available. For example, regularly we wrest control of an insolvent corporation from its management and turn the control over to court-appointed officials to restructure and to deal with the corporation’s assets for the benefit of stakeholders.

Why not consider the use of proceedings brought by the state that could lead to a court-supervised ‘restructuring’ the corporation that is doing, or has done, seriously bad things due to the actions or neglect of its top leadership (unless the corporation has restructured itself already, or is heading irrevocably down that road)?

The objective would be to reform its leadership, its systems, its business practices, its culture, etc., enabling the reformed corporation to carry on its business and operations for the benefit of the jurisdiction, and all stakeholders, direct and indirect.

Or why not have available on the menu of remedies other options such as court-appointed ‘monitors’, as we have seen used effectively in the US to watch over the reformation of public authorities such as police departments, public housing authorities, education systems, and so forth to deal with whatever the bad conduct has been – whether discriminatory practices or fundamentally poor management and operations.

Interestingly, reflecting this kind of innovation, The New York Times reported on May 1 that the US Federal Trade Commission is negotiating a settlement of privacy violation allegations with Facebook that could create a privacy committee to protect users’ data, as well as create the position of an external assessor, appointed by the company and the FTC. In addition, Facebook would have a head compliance officer. According to the newspaper, the settlement talks are being watched as a potential blueprint for privacy in the US.

Let’s use the momentum that the SNC-Lavallin situation has created in Canada and beyond to have a thoughtful reconsideration of corporate criminal liability and to consider the creation of innovative, effective, and efficient options and alternatives that may better serve the country and its fundamental values.

About the author
The Honourable Barry Leon is an independent arbitrator and mediator with Arbitration Place, Arbitrators@33BedfordRow (London) and Caribbean Arbitrators. He was presiding judge of BVI’s Commercial Court (2015-2018) and chair of ICC Canada’s Arbitration Committee.

This article was originally published by The Lawyer’s Daily (www.thelawyersdaily.ca), part of LexisNexis Canada Inc.
Did you know?

The following are the categories, typical activities and applicable CPD Points:

<table>
<thead>
<tr>
<th>Category</th>
<th>Activity Detail</th>
<th>CPD Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional Activity</td>
<td>Professional quantity surveyor work within the scope of practice: construction estimators, construction and project managers, contracts management, employment in the duties of cost and construction within government departments, banks, insurance, developers, hospitality industry, suppliers, manufacturing, educators, industry associations.</td>
<td>20 hours of professional work equals 1 CPD point up to a maximum of 20 CPD points per year.</td>
</tr>
<tr>
<td>Formal Activity</td>
<td>Structured courses provided by universities, colleges, industry and technical societies, etc. related to the industry.</td>
<td>1 hour of formal learning equals 2 CPD points.</td>
</tr>
<tr>
<td>Informal Activity</td>
<td>Unstructured courses – self-directed study, conferences, technical sessions, seminars related to the profession.</td>
<td>1 hour of informal learning equals 1 CPD point.</td>
</tr>
<tr>
<td>Participation</td>
<td>Service on QS boards and committees, or other boards and committees related to the industry.</td>
<td>1 hour of professional participation equals 1 CPD point.</td>
</tr>
<tr>
<td>Presentation</td>
<td>Technical and professional presentations at conference meetings, workshops, seminars and courses related to the profession.</td>
<td>1 hour of formal technical/professional equals 2 CPD points.</td>
</tr>
<tr>
<td>Contributions to QS Knowledge Base</td>
<td>Activities that expand or develop technical knowledge such as development of exams, courses, published papers and articles, etc.</td>
<td>1 published paper/article course/exam equals 15 CPD points.</td>
</tr>
</tbody>
</table>

Note: The minimum annual score required is 50 CPD points.

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With the new Prompt Payment and Adjudication legislation set to take effect on October 1, 2019, the Royal Institution of Chartered Surveyors (RICS) and Chartered Institute of Arbitrators (CIarb) hosted the Prompt Payment & Adjudication Symposium at Vantage Venues in downtown Toronto on May 29, 2019. 170 construction professionals and stakeholders attended the symposium, which sold out weeks in advance.

The symposium started with opening remarks from Dr. Paul Tichauer (Chair, CIarb Canada) who thanked Arif Ghaffur (President, Lakeland Consulting Inc. and Editor of the Construction Economist) for his dedication as the Chair of the Symposium Organizing Committee in enabling opportunity to knowledge share. Dr. Tichauer introduced the Chair for the morning session, Geza R. Banfai (Counsel, McMillan LLP) who touched on the ‘Background and Changes’ relating to prompt payment and adjudication, the morning session theme.

Following the introduction of the symposium, Sharon C. Vogel (Partner, Singleton, Urquhart, Reynolds, Vogel LLP) and Brendan Bowles (Partner, Glahtol LLP) collaborated to present the first topic of the day, ‘Prompt Payment Reforms Gather Momentum Across Canada’. Takeaways from this presentation included the historical context that led to the new legislation, the ‘profound cultural changes’ to impact the construction industry, and federal reforms.

The next topic was ‘Worldwide Trend Towards Prompt Payment and Interim Dispute Resolution’, presented by Dr. John Fletcher (Head of the RICS Dispute Resolution Service). Dr. Fletcher provided lessons learned from around the world, specifically in the UK, underscoring the context
of adjudication. He explained that adjudication should not be treated as another ‘quasi-legal’ process, but rather, a form of dispute resolution with the intention to resolve cash flow issues through ‘quick and affordable’ means.

After interacting with fellow professionals during a short networking break, Sandra Astolfo (Partner, WeirFoulds LLP) and Matthew Alter (Partner, Cassels Brock & Blackwell LLP) resumed the Symposium by discussing the ‘Implications of Prompt Payment for the Construction Industry’ in a fireside chat setting. The discussion highlighted the importance of a proper invoice, and included disputed invoices, non-payment, partial payment, and holdback.

Next was Howard Wise (Partner, Goodmans LLP), who spoke about ‘Construction Disputes & ‘Nuts & Bolts’ of Statutory Adjudication’. Mr. Wise covered the types of disputes that can be adjudicated, costs of adjudication, the purpose of the Authorised Nominating Authority, and enforcement/appeal of the adjudicator’s decision.

The final morning session was a moderated panel comprised of the moderator, Marcia J. Oliver (Partner, Advocates LLP) and panelists, Geza R. Banfai, Andrew, J. Heal (Partner, Heal & Co. LLP), Raymond Bassett (VP, Chief Underwriting Officer, Travelers), and Clive Thurston (President, OGCA) provided their thoughts on the topic of ‘Significance of Prompt Payment & Adjudication Reforms’, each sharing a different perspective. Recurring themes were ‘fixing cultural issues in the construction industry’ and maintaining relationships in the supply chain.

During lunch, Mr. David Dooks (National Chair, CIQS), provided a brief introduction to the CIQS, on behalf of the Lunch Sponsor (the Canadian Institute of Quantity Surveyors) and then introduced the lunchtime speaker, Bruce Reynolds (Partner, Singleton Urquhart Reynolds, Vogel LLP), who provided a lighthearted yet informative presentation on ‘The Right Stuff & The Adjudicator’. Mr. Reynolds identified the key characteristics of an effective adjudicator, including technical and interpersonal skills.

The afternoon session commenced with opening remarks by Neil Shah (Managing Director, RICS Americas) who introduced Glenn W. Ackerley (Partner & Chair of the Construction Practice Group, WeirFoulds LLP), as the Chair for the afternoon session. Mr. Ackerley announced the theme for the afternoon: ‘Compliance and Implementation’.

The first afternoon session was a joint presentation between Howard Krupat (Partner, DLA Piper (Canada) LLP) and Kenneth W. Movat (Partner, Fogler Rubinoff LLP) who spoke about the ‘Interaction between Lien Provisions & Adjudication’. Mr. Movat commenced by providing context to liens and the updated definitions. Mr. Krupat outlined
key interactions between liens and adjudication and strategic considerations in the pursuit of liens and adjudication.

On behalf of the Platinum Sponsor, Dominic Leadsom (Director) from Turner & Townsend introduced Robert Pattison (SVP Commercial Resolutions, Infrastructure Ontario) who presented on ‘P3’s and Interim Dispute Resolution’. Mr. Pattison stressed the importance of getting internal processes and procedures up to date and the requirement for the independent certifier to act as an adjudicator.

The second networking break provided an opportunity for reflection on the topics discussed in the day. Following this, Yonni Fushman (EVP, Chief Legal Officer & Secretary, Aecon Group Inc.) and Christopher Moran (Independent Contractor) discussed the ‘Potential Challenges for Adjudication’. Both presenters highlighted concerns about the new legislation from a contractor perspective such as resource availability, time periods, etc. and the need for ‘commercially savvy’ quantity surveyors.

The next presentation was a joint presentation between Matt Ainley (Chair, General Contractors Alliance of Canada (GCAC) and John Mollenhauer (President & CEO, the Toronto Construction Association) on ‘Preparing to Comply’. Key points included preparation for adjudication to “have a game plan before you are given a game plan” and suggested priorities that contractors and subcontractors need to address before October 1, 2019.

Similar to the morning session, the afternoon session concluded with a moderated panel. The moderator, Richard Wong (Partner & Chair, National Construction & Infrastructure Group, Osler, Hoskin & Harcourt LLP) and panelists, Glenn Ackerley, Sandra Skivsky (Chair, National Trade Contractors Coalition of Canada), Richard H. Morris (Head of Expert Services, Systech), and Paul Raboud (Past Chair, OGCA) discussed the ‘Implications of Prompt Payment & Adjudication’. The group shared their opinions, specifically on the workload shift from legal to an operational level and the importance of records.

The Symposium portion of the event, came to an end following closing remarks by John Hughes (Immediate Past President, RICS Global). This was followed by a reception and dinner. Neil Shah gave opening remarks and invited Dr. Paul Tichauer to the podium. Dr. Tichauer introduced The Honourable Barry Leon (Independent Arbitrator and Mediator) who recognized the Future Leaders in attendance, specifically Sophia Chin You (Membership Manager, CIQS), Weger Barwari (Quantity Surveyor, AW Hooker), Izak Rosenfeld (Member of the Board, CIARB Canada Branch), Margaret McBride (Project Director, CIMA+), Nicolas Serge (Senior Cost Consultant, Turner & Townsend), Saad Minhas (Legal Counsel, RBC), and Ricardo Raymond (Senior Contracts and Commercial Specialist, Lakeland Consulting Inc.).

The Honourable Barry Leon then introduced the evening’s guest speaker, Mr. Yasi Naqvi (CEO, Institute for Canadian Citizenship and the Former Attorney General of Ontario). Mr. Naqvi spoke about the development of the Construction Act from his perspective as the Attorney General of Ontario. He mentioned that the reforms proposed by Bill 142 received near universal parliamentary consensus and spoke about the importance of construction law experts in the formulation of the Bill. Mr. Naqvi also spoke about his current role as CEO for the Institute for Canadian Citizenship and the importance and impact of new Canadians.

Following Mr. Naqvi’s speech, The Honourable Barry Leon presented Mr. Naqvi with a gift of appreciation and invited Marcia J. Oliver to the podium who presented awards of recognition to Bruce Reynolds, Sharon Vogel, and James Little for their contributions to Construction Law in Canada.

Mr. Tichauer provided closing comments and concluded this informative, well received, and successful event. I thoroughly enjoyed attending the symposium, reception, and dinner.
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The joint Annual CIQS/RICS Construction & Project Management Seminar signature event was held, March 6, 2019 at Fort Calgary with all net proceeds donated to the Alberta Cancer Foundation. With over 80 people in attendance, including four representatives of the Alberta Cancer Foundation, it was the largest collaborative event to date.

L to R: Jerry Crawford (CIQS), Toby Hendrie (PCL), Doug Johannson (RICS)

“The vision of the Calgary Cancer Centre is to deliver leading, comprehensive cancer care that integrates patient and family-centred care, education, prevention screening and cancer research.”

With recent medical advances in early detection, the success of cancer treatment has vastly improved. Nonetheless, the sobering reality for Alberta is that 53 people, on average, will be diagnosed with this disease every day.

Mr. Toby Hendrie of PCL started his industry career in England and is the Project Director for the Calgary Cancer Centre (over 200,000m² GFA, $1.4 billion facility). He delivered an impressive overview to all attendees. The presentation included a comparison to his recent project experience on the Victorian Comprehensive Cancer Centre (VCCC) in Melbourne, Australia.

While the audience was treated to a variety of statistical data and construction feature elements, the biggest challenge for all industry stakeholders involved, including Quantity Surveyors, Estimators and Cost Consultants (QSECC), is how to stay effectively engaged and properly manage the overabundance of data. Consider the following statistical realities from the VCCC:

- Over 700 organizations involved.
- Over 3,200 individuals registered.
- Over 500,000 transmittals sent by the General Contractor.
- Over 3,000,000 transmittals received by the General Contractor.

Traditional organization charts, while still a convenient graphic illustration depicting reporting authority and accountability, often fail to demonstrate the complex communication interdependencies of internal and external stakeholder relationships. A failure to recognize the constraints associated with these interdependencies could put larger projects at considerable financial risk.

The digital communication graphic for reporting and interfacing during project procurement and execution is a different working environment. Once underway, a core risk project issue is communication. Most teams use email to communicate about their projects and tasks. The biggest challenge is that project communication resides in everyone’s email. So, if a new resource or stakeholder joins, it is vital to identify who needs to access the right level of information at the right time.

Not an easy communications task, given the number of organizations and individuals involved.

PCL defined their innovative approach to meet the quality management program into 4 distinct phases to deliver this ‘state-of-the-art’ design build project.

1) Design compliance verification.
2) BIM model coordination.
3) Construction quality planning.
4) Construction quality plan implementation.

As QSECC stakeholders on the project, alignment with the right level of communication and proactive interface becomes a challenging exercise in project cost control to manage the excessive data.

With advances and enhanced awareness of diverse applications of Lean Principles across industries and services, QSECC individuals may consider adopting various aspects of this methodology gradually within their organizations to ensure staff is effectively engaged on a project.

About the author
Jerry Crawford is a claim consulting professional, a CIQS member, and holds a PMP designation from the Project Management Institute. He is Gold Seal Certified with the Canadian Construction Association.

With over 40 years of construction industry experience both nationally and internationally, he is the founder and principal director of KGC Consulting Services Ltd., working with clients to provide construction dispute litigation support on transportation, energy, commercial, industrial, multi-family residential, civil, and building infrastructure projects.
All employers are faced with the responsibility of ensuring two outcomes: the fair and equitable treatment of their workforce, and the efficient operation of the business. One of the common denominators of these concerns is overtime work and its compensation. Key to keeping these bottom-line factors in equilibrium is vigilant communication and effective time management.

Even for quantity surveyors, who routinely deal in long-term, highly-detailed planning, this can test our skills. It is difficult to schedule workloads as we are dependent on a timely delivery of information from outside sources, such as receiving documents on time, or managing the influx of progress draw reviews at month’s end. Because overtime costs are typically not passed on to the client, it’s important to prudently budget internal staff resources. Also, regular contact with clients to update their forecasts on timely delivery is essential to scheduling staff resources.

In light of ongoing changes to Ontario’s Employment Standards Act (ESA), Rider Levett Bucknall has assessed the best practices for quantity surveyors from the perspective of both the firm and individuals as we revisit the processes and options for tracking and reporting overtime.

Assumptions, exceptions, and examples

Tradition suggests that a salaried employee receives a fixed salary, and they are expected to put in whatever time it takes to complete their tasks. Additional time, effort, productivity improvements, and overall company success are typically recognized in an end-of-year bonus.

In reality, for both exempt and non-exempt employees alike, the Ontario Government Employment rules start with a 40-hour work week, with any time worked in excess of 40 hours qualifying for additional compensation. However, the ESA does allow certain exceptions to this. There is an exemption for individuals who fit the following definition: ‘Managers who hire, manage, supervise, and fire employees’. In other words, if someone is working overtime but is performing a managerial function, or is an actuary, accountant, or lawyer, they are not entitled to overtime pay. This applies if you only perform managerial or supervisory work, or if you only perform non-managerial or non-supervisory work on an irregular or exceptional basis. In fact, most Quantity Surveyor Supervisors or Managers would not qualify for the exemption if much of their time is consistently billable. The theory is to protect ‘production’ or ‘billable’ staff from being exploited.

An approach to overtime that helps ensure a good work/life balance is to have an employee work up to 40 or 44 hours, and then send them home. Although time worked between 40 and 44 hours gets compensated at straight time, hours in excess of 44 are compensated at 1.5 times the hourly equivalent to their salary (i.e., salary divided by 40 hours x 52 weeks = 2,080 hours).

As Quantity Surveyors, we keep impeccable timesheets – of course! – and these can be used to calculate variations on a weekly reporting basis. As the formula is based on a 40-hour week, the calculations can be made weekly and compensation is to be made at the next payroll date.

These timesheet hours are not just for billable time, but account for all time spent on company matters, including activities such as training, travel time, administration time, writing proposals, and business development.

There are other methods of calculating overtime, but they can be complicated to administer, especially if some staff are being paid out, while others are accumulating Time in Lieu. As set out in the ESA, time has to be paid out in funds unless the employer and the employee enter into a written agreement that would permit the employer to do otherwise.

For example, the company could enter into an annual agreement with an employee that would allow the employee to receive time off in lieu of overtime wages, but the time off would have to be calculated at 1.5 times the amount of the overtime hours worked. If the employee consents in writing to accept overtime in the form of lieu time, the agreement has to be re-signed each and every year. The employee can still opt to revoke the agreement at any time.

The maximum number of hours an employee can be required to work in a week is 48. A written agreement with the employee is required to exceed this number, and approval by the Ontario Ministry’s Director of Employment Standards is required. While applications to schedule up to 60 hours per week are routinely approved by the Director of Employment Standards, applications for time beyond 60 hours are closely scrutinized. Remember, overtime would still need to be paid at the straight time and 1.5 times, as set out in ESA.

For example, if an employee worked 54 hours during one week, they would accumulate four hours off in lieu at straight time, and an additional ten hours of overtime payable at 1.5 times, equalling a total of 19 hours of time-off in lieu.

A questionable practice is to have the employee roll the project time into the affected project for a following week, or
taking the time and allocating it against 'administration', which basically is only compensating the hours ‘one for one’ and does not ‘account’ for the overtime being compensated at 1.5 times.

A final option is incorporating overtime pay into the annual bonus. This is not recommended, as doing so risks confusing the issues of merit versus earned wages, and could lead to a complaint being filed with the Ministry of Labour requiring proof from the employer that the overtime wages have actually been properly calculated and paid.

What’s more, this would be particularly difficult to calculate in the case of a mid-year employee termination where a merit bonus may not have been earned, but the overtime would still be payable. If some employees receive regular overtime adjustments with each pay, and another employee is compensated at year end, the presumed disparity in the bonus amounts may cause tension amongst the employees.

**Watching the clock**
While there may be occasional circumstances beyond our control such as unexpected scheduling changes, a firm that maintains a proactive approach to time management can accomplish multiple objectives: keep overtime in check, keep reporting accurate, and keep the business focused on its goals.

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**About the author**
Joe Pendlebury is Senior Vice President of Rider Levett Bucknall’s North American practice and is responsible for leading the Toronto office. Joe is a Professional Quantity Surveyor with over 30 years of national and international project experience. A Fellow and a Past President of the Canadian Institute of Quantity Surveyors, Joe is also a member of the Royal Institution of Chartered Surveyors and the Canadian Association of Consulting Quantity Surveyors.

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In January 2018, ErinoakKids Centre for Treatment and Development (ErinoakKids) first opened the doors of three new purpose-built, technologically advanced, state-of-the-art facilities built to significantly enhance the treatment experience for children with disabilities.

ErinoakKids is Ontario’s largest children’s treatment centre and serves a catchment area comprising the Regions of Peel, Halton, and Dufferin County, with a population base of greater than 2.5 million. The organization provides a wide range of services for clients with disabilities and chronic disorders, including spina bifida, cerebral palsy, traumatic injury, muscular dystrophy, autism, developmental delay, and hearing and/or vision problems.

Located in the Brampton, Mississauga, and Oakville communities, the new facilities consist of a total of over 290,000 square feet of newly built space and 60,000 square feet of newly built exterior therapy space, hosting 850 staff and serving 17,000 clients annually.

Legacy facilities had consisted primarily of leased office spaces that had been transformed into exam rooms, treatment rooms, and gyms. These converted office buildings significantly lacked current accessibility standards, acoustic properties and natural daylight, while there were numerous space and building code deficiencies. Exterior therapeutic play areas were significantly lacking and technology was outdated – all while demand for services was increasing at a rate of 10-20% annually.

When ErinoakKids was given the opportunity to create these three new children’s treatment facilities, they were empowered with new, idiomatic therapeutic possibilities. ErinoakKids established key design principles of the new facilities very early in the planning process. These included:

1. The provision of accessible space for all children
2. Focus on the impact of environment on children with Autism
3. Focus on the impact of environment on Medically Fragile, Technologically Dependent (MFTD) children
4. Normalization of therapy for behavioural skills, occupational therapy, and physiotherapy
5. Ability to use the facilities as a therapy, learning, and teaching tool

Unique to the design of these healthcare facilities, ErinoakKids investigated the environmental experience of how children could interact with the building as a form of treatment. Ages of ErinoakKids clients range from newborn to 18 years, and it was also important to senior leadership that all age ranges of clients feel welcomed and engaged.

The design therefore needed to incorporate unique principles of being ‘child-friendly’, but avoid the sense of...
being ‘child-like’. In order to achieve these child-friendly goals, ErinoakKids focused on how technology could improve the impact of environment for all ages, such as voice lift systems for meeting spaces and for use throughout the facilities for clients with hearing disabilities, audiometric equipment, rehabilitation equipment, and climbing walls.

Four specific examples of clinically focused technologies that are successfully enhancing the client experience in the new facilities today are:

1. **Multi-sensory stimulation rooms:**
   Multi-sensory environments at each facility offer a relaxed atmosphere for clients. These rooms offer many sensory possibilities, such as soothing sounds, aromas, tactile experiences, massage, vibration, and gentle movement. Opportunities for interaction and engagement support a number of ErinoakKids client groups including occupational therapy and children with challenging behaviour, learning disabilities and/or autism. Equipment in these rooms includes image projectors, interactive wall panels, bubble tubes, wall and floor cushions, and a ball pit. The design of the rooms and the supply and installation of the equipment were procured through a competitive tender process which was awarded to Flaghouse, an official distributor of Snoezelen Multi-Sensory Environments.

2. **Audio visual recording:**
   Treatment rooms within the new facilities were designed with audio visual recording capabilities. These systems allow clinical staff the opportunity to either broadcast live or to record treatment sessions for client files and for staff training purposes. The live broadcast and recording system is a securely protected, closed-circuit configuration, specifically designed with strict confidentiality constraints. Observation rooms are strategically placed within the facilities to allow parents and staff the opportunity to watch live sessions remotely.

   During the design stages, ErinoakKids clinical subject matter experts had expressed concerns that, in the past, parents or caregivers observing a treatment session from within the room often became a distraction for the children. Remote observation rooms, equipped with video monitors and audio headsets with password encrypted access, now enable parents to be fully engaged in viewing live or recorded sessions while avoiding the potential of causing disruptions.

3. **Audio visual interactive mirrors:**
   As a learning tool within the Autism program, mirrors were equipped with LCD screen monitors – integrated within the mirrors – which allow the

“The organization provides a wide range of services for clients with disabilities and chronic disorders, including spina bifida, cerebral palsy, traumatic injury, muscular dystrophy, autism, developmental delay, and hearing and/or vision problems.”
Playback of various educational and self-learning programs. The mirrors are installed in the autism washrooms and are used by clinical staff to teach the children washroom techniques such as handwashing and brushing teeth. When the audio-visual system is not in use, the screen is hidden within the reflection of the mirror to avoid potential distractions to the clients.

4. Truth windows – Openings in interior building surfaces, protected with transparent glazing, were created to reveal inner components within the walls, ceilings, and adjacent rooms of the new facilities that visitors would not normally have the opportunity to view. The truth windows serve two purposes:
   • To gain educational credits related to Leadership in Energy and Environmental Design (LEED) Certification which supports the LEED Silver designation submission for the new facilities
   • As an interactive, entertaining and educational opportunity for clients and families. Examples of truth windows include an opening within the elevator shaft to reveal inner workings of the elevators and openings within Information Technology (IT) closets and server rooms to reveal the IT equipment. Truth windows have been strategically installed in corridor ceilings to expose lengths of mechanical and electrical services and a window has been installed to reveal the various layers of structure, insulation and cladding included in a typical building envelope assembly. The results have been highly successful as the children are regularly engaged and are often seen interacting with the visuals the truth windows provide.

About the author
Robert Hofmann, Principal of Hofmann PM Inc., is a specialist in Public, Private and Institutional Capital Redevelopment projects, with a focus primarily in the health care sector. He recently completed a development for ErinoakKids Centre for Treatment and Development, a 290,000 square foot development of three new Children’s Treatment Facilities in Halton and Peel Regions. The project was procured under the Infrastructure Ontario, P3, Design Build Finance model. Robert can be reached at robert.hofmann@hofmannpm.com or at 647-287-5315.

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WHEN A CLIENT undertakes a project, they want a maximum project performance, better value for money, and superior decision-making along the way. They also want to know what a project will cost in the long-term from maintenance and repair perspective, although this does depend on the client’s value drivers.

Life cycle costing and whole life costing is a value-added process that can help clients anticipate future long-term costs and plan effectively. By producing an optimal design for a project and taking into account the construction costs over the life of a project, life cycle costing or whole life costing can help:

• Reduce operational whole life costs
• Reduce energy usage and carbon emissions
• Optimize sustainability performance
• Establish budgets for long-term costs

What’s involved?
Before the process begins, the Consulting Quantity Surveyor needs to establish what the client’s objectives and requirements are. Life cycle costs can be established for existing building stock where advice is more required for single component replacement to support the client in life cycle option appraisal (e.g. which floor finish or boiler to select based on long-term costs). However, life cycle costing may also be required at the early stages for an entire facility or portfolio of facilities, where a long-term cash flow forecast is required for budgeting purposes.

But it’s not just about asking what the client wants, it is also about what his value drivers may be. A developer developing for sale may not consider having a quantity surveyor provide costs for life cycle facilities management a useful exercise, unless considerations of long-term costs make it an attractive proposition to purchasers. Purchasers may be swayed if they are purchasing a building that will run efficiently and has the potential to save them money in the long run. An owner occupier would place value on knowing the long-term costs as well as ensuring minimum disruption of facilities in use – choice of materials/equipment would be important as this would dictate frequency of replacement cycles.

A developer building for commercial lease would also focus on minimum disruption in use to ensure that tenants are satisfied. However, the focus may be on functional utility and durability of components – the reason being that tenants may change often (necessitating a change in components in any case) and if components are retained, then hopefully minimal work is needed.

An example of choice of components may be as detailed as the choice of paint finish (e.g. would reduce the paint cycles whereas you cannot wash emulsion paint, hence cycles will tend to be more frequent).

The public sector has long been an advocate of consideration of life cycle and facilities management costs, with many costing commissions requiring consideration of life cycle costs. Also, with public private partnerships (P3) projects it is a key consideration to consider the long-term cost of ownership with full transparency.

During the inception stage, decisions about both initial capital costs and maintenance and operating costs can be made to optimize a development both of terms of cost and operating efficiency.

A life cycle cost estimator can work with the client and the appointed team through all stages of the design to build up whole life cost plans/models. At the early stages, in the absence of design information, whole life cycle costs are provided as single rate estimates (i.e. a rate per square foot per annum based on a gross floor area). As the design progresses and some idea of material and component specification becomes available, life cycle cost models can be developed, providing a spend profile over the required period.

These life cycle models are generated from capital cost plans and, hence, would also be able to guide the design through design development.

There is an overlap between the need to replace components and the maintenance regime adopted for the buildings. This needs to be addressed early (with input from the client) in the design and procurement process to determine what items need to be considered as life cycle replacement and what items are regarded as operating or facilities management costs.
Life cycle costs constitute major repair and replacement – it would include periodic replacement of components such as replacement of a boiler, doors or repainting, but would also include minor replacement such as door hardware, grouting of tiles, or replacement of active components of mechanical and electrical equipment.

Facilities management costs are more all-encompassing and cover a wide range of areas, which can be categorized as hard, which refers to the physical maintenance of buildings and equipment and soft, which include labour intensive activities such as cleaning or catering. The differential between life cycle cost and facilities management costs are often difficult to make, however as a general rule, facilities management costs, which are related to the building fabric, are work activities that occur on an annual basis or more frequently (such as annual maintenance on equipment and changing light bulbs, etc.). Energy costs, although not labour focused, are annual costs and would fall under operating costs.

Life cycle costing and facilities management costing usually focuses on the long-term building specific costs, such as revenue streams, staffing costs, catering, reception, etc., which would provide a facilities total return on investment over the long-term. This is termed whole life cycle costing. Hence, whole life costing should be seen as a holistic approach that assesses the full design implications, and achieves the best value for money for the project, from a long-term perspective considering all expenditure and income streams.

**Life cycle costing and whole life cycle costing guidelines**
The Consulting Quantity Surveyor calculates life cycle costs with knowledge of component life (Determined by experience, in-house data, and recognised publications), capital costs, and building type. Facilities Management or operating costs are derived from likely operating tasks required for the particular facility and resource requirements. Other inputs, like revenue streams and core service staffing will be provided by the clients, and will be included into a consolidated model, which the client can use as a forecasting tool. It is recommended that a whole life cycle model be updated on a three-year basis, as it remains an active tool. Life cycle or whole life cycle cost models can be produced at real costs or as a discounted cash flow where a net present value (NPV) will be determined.

With life cycle/whole life cost costing, clients will understand the true financial impact of a property investment and are able to make an informed decision on long-term costs, not just capital costs.  

(From the CACQS Cost Management: Best Practices Guide – 2016)
The IMF is forecasting weaker growth in the Chinese and US economies, which may lead to slower growth in Canada in 2019. Oil prices and global stock exchange markets took a sharp dive near the end of 2018 and though a rebound occurred in the first quarter of this year, high interest rates, continuing stock market uncertainty, tighter banking regulations, and the recent impact of trade tariffs are still affecting global business confidence. The Bank of Canada’s April Monetary Policy Report has revised this years real economic growth down to 1.2% from a previous 2.0% in July 2018.¹

Nevertheless, Canada’s construction sectors retain momentum. New major projects are being approved including the Kitimat LNG plant, Canada's largest project, along with the new Ontario Line that will bring much needed relief to the GTA commute as part of a $28.5 billion expansion of subway infrastructure announced by the Ontario Provincial Government in April 2019. Residential construction is buoyant in the major metropolis regions, but reduced affordability and tighter lending restrictions are forcing buyers towards the cheaper condo sector in the larger cities. Large commercial and education construction projects are also underway, but labour shortages continue to affect costs.


The impact of tariffs
Since taking effect on June 1, 2018, the US tariffs on steel and aluminum have added immense capital costs to both ground-up and fit-up projects across Canada. However, in a joint announcement on May 17, both governments agreed to eliminate the tariffs, bringing to an end of a nearly year-long tariff war.

The introduction of the US’ tariffs had led Canada to announce retaliatory tariffs on steel and a variety of other US goods. The net effect was an increase in the prices of steel and aluminum-based building products in the Canadian market. The tariffs have caused prices of steel and aluminum-based products to soar to unusual heights. Comparing estimates last year to those this year, we saw prices rise beyond the traditional/historical trend of 3 to 4% per annum to a blended escalation rate of 5 to 8% per annum in 2018. Whilst the elimination of the tariffs is good news for the construction industry, it is too early to tell whether steel and aluminium prices will retract to pre-tariff norms. However, the anticipated move towards a new Canada-US-Mexico Agreement (CUSMA) should alleviate some recent pressures, particularly in Vancouver, which has shown a high impact of steel tariffs.

Minimizing risk in new projects
The implementation of the tariffs had created an environment with increased risk as industry players for the last year have had unreliable numbers of both supply availability and the escalating costs. Robust milestone or stage estimates provide an opportunity to ‘pulse check’ on whether the project budget is on track or not.

Steps to minimize cost risks
The impact of tariffs and general market conditions has led us to encourage clients to build in a robust risk contingency in their overall budget.

1. Increase total hard cost budgets for any estimate done in 2018 by 5 to 8%.
2. Include amendments in future contracts to mitigate cost risk.
3. Introduce a management fee of 5% of total budget to mitigate any uncertainties.

Regional overview
Labour shortages continue to have a significant impact on the costs of infrastructure and real estate construction projects across Canada. Recent strike action by sheet metal workers in Hamilton and Thunder Bay and the ongoing negotiations between Local 46 (Pipefitters) and the Trade Association are likely to have a short and mid-term affect on construction prices across affected regions.

Our International Construction Market Survey found that Vancouver is the most expensive place to build in Canada – and the 14th priciest location globally – with an average construction cost of $2,720.80 US dollars per m².
All four Canadian cities surveyed this year – Vancouver, Toronto, Edmonton and Ottawa – are classed as ‘hot’ construction markets. Toronto was ranked the 27th most expensive place to build globally, with Edmonton ranked 28th, and Ottawa 30th.

**Toronto**
- The trend for non-residential hard construction costs in the Toronto (GTA) market increased to 4 to 6%.
- Residential building in Toronto (GTA) should expect an increase of 5 to 8% in hard construction costs in 2019.
- A significant volume of non-residential construction investment in Toronto is directed at commercial developments with office vacancy rates down to a record low.
- New housing construction has receded from the record levels recorded in 2017, but immigration, set against limited land availability, will continue to drive multifamily, mid- and high-rise projects in and around the GTA.
- Major infrastructure projects are being delivered or are planned in the decade ahead. This will have significant impacts on the GTA. All such projects (light rail, suburban trains, airport developments) are a long term game the impacts of which with respect to construction costs seen across the years 2020 and 2030.

**Southern Ontario**
- Across Ontario, wage increase pressures and lack of availability of skilled resources are making it hard to fill vacancies and may contribute to a slowdown in economic growth.
- Engineering construction requirements – driven by nuclear refurbishment, public transportation and other major infrastructure investments – are expected to propel non-residential construction employment to a new plateau by 2020, with over $6 billion in projects currently underway.

**Northern Ontario**
- The labour market has weakened since 2008 and is expected to continue through 2019. The timing and overlap of major projects could tighten the limited market capacity as new government investment targets infrastructure, manufacturing and forestry sectors.

**Ottawa**
- Residential and non-residential construction in Ottawa is expected to increase by 6.5 to 7% in 2019.
- There is demand for infill properties, due to an influx of buyers and investors relocating from expensive cities such as Toronto.
- Several major projects – including Centre Block redevelopment, LRT Phase 2, and the West Memorial redevelopment – and the resulting pressure on supply of resources will continue to affect the market in 2019.

**Quebec**
- The continuing strong economy and the aging population in Quebec has led to a labour shortage. For more than two years, the Quebec unemployment rate has been below the Canadian average. With many multi-billion dollar projects underway, the surge is straining the province’s resources. This factor, along with rising interest rates, could see a slowdown in growth in 2019.

**Atlantic region**
- PEI, New Brunswick, and Nova Scotia have seen steady increases in population, which have contributed to housing starts. Growth will remain moderate in these provinces.
- Newfoundland’s large scale projects (including Hebron oil field and Muskrat Falls dam) are nearing completion and are shifting from construction to production, reducing the impetus to growth. Going forward, Newfoundland’s increased oil production, signs of prospective exploration work in the Flemish Pass Basin, and promising mining projects are expected to fuel renewed growth.

**Edmonton**
- Hard construction costs in Edmonton are expected to remain flat with modest increases primarily related to material costs.
- The Edmonton market suffers from excess supply in various assets and not enough net migration increase to stimulate the economy. This will affect contractors, who will have excess staff/labour to support projects.

**Vancouver**
- Vancouver is expecting a 5 to 8% increase in hard construction costs for residential and non-residential buildings.
- Continued construction of BC Hydro’s Site C $10 billion hydroelectric dam project and other natural resources projects will increase competition for construction services, materials, plant, and equipment across the supply chain.
- Labour skills shortages are likely to worsen adding to cost pressures. This is further exacerbated by the Premier’s proposal to implement Community Benefits Agreements (CBAs) which will require labour on key infrastructure projects to be unionized and managed.
through a Crown Corporation. The impact of these proposals has yet to be fully assessed.

A large number of major programs across Canada (Site C in BC, Metrolinx projects in Toronto, and various projects in Ottawa and Montreal) have all had a major impact on their respective market’s construction volumes. The availability of sub trades large enough to take on the large programs means that project costs are being driven up by trades having to travel from other locations. In addition, general market uncompetitiveness in the large urban centres indicates that, despite the recent lifting of steel and aluminium tariffs, there is no sign of the current trend of construction cost increases abating in the short-term.


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The nuts and bolts of WORKING TOGETHER

An old Indigenous proverb says, “All honourable men belong to the same tribe.”
Another very wise man says, “Our state of mind creates our world.”

If you thought this was going to be easy, think again. The factors at play in any relationship with Canada’s Indigenous communities are complex and challenging. Working with Indigenous peoples and their communities has become a critical component of governments, corporations, and social service agencies operational planning, especially if you are working on the land or under it. Getting onto the land is now a national issue impacting practically every industry from coast to coast.

Whenever court decisions support the claims that Indigenous communities have a legal right to the use of natural resources and protections of the environment, why is it that far too many industries find this concept so unbelievable and often simply unacceptable? Thankfully many of these outdated ideas are slowly being rejected.

Many in Canada’s industries claim they did not know or simply refuse to believe that free, prior, informed consent is required, and now must comply with the law. Put simply, the rules of engagement between industry and Indigenous communities have changed the ‘doing business’ landscape forever. Many provincial governments have been of the same mindset and now find themselves dismayed, confused and giving out some really bad advice. Fortunately, a growing number of provincial governments acknowledge the need for reconciliation and respecting existing laws.

Indigenous awareness training is only the beginning of what should become a long-term, committed relationship-building exercise, leading to reconciliation with and inclusions of Canada’s Indigenous peoples. Companies and contractors need to identify the business case and develop Indigenous relations programs to ensure certainty, consent, Indigenous participation, and access to land and resources. There is no quick fix, one-size-fits-all solution.

Strategies, objectives, action matrices, assigning resources, ensuring clarity and senior executive support eventually evolve into your own Corporate Indigenous Relations Program and Policies. Learning how to be good neighbours and business partners with Indigenous peoples is essential if we wish to operate effectively and efficiently in a constantly changing regulatory environment, and to turn these partnerships into a significant competitive advantage.

Time travel
Think about this: Indigenous peoples missed the industrial revolution and found themselves obliged to travel from their traditional life style of thousands of years into the space age, all within the past 60 years. Most Indigenous communities lack the appropriate institutions, resources, and expertise to deal effectively with a public or private consultation process. Therefore, to participate, they require industry
and government support. There is an over-arching objective, here. It is to find approaches that strengthen the capacity of Indigenous communities and organizations to design and deliver programs and services to meet the needs of their people and partners, while meeting external demands from governments, the public, and industry. Indigenous community leadership cannot take money from education or housing budgets, for example, to pay people to consult. The vast majority of these Indigenous communities simply do not have the resources, staff, or institutions to address all the demands. Many are destitute – and are constantly under-funded.

**Community finances**
The system under which these communities operate is not helping matters much. In fact, it is part of the problem. Once federal monies are sent to the First Nation governments, for example, Canada’s Auditor General cannot, under the current law, even trace how it is spent. Recently, the Auditor General of Canada noted that each of Canada’s 640 Indigenous governments must complete 168 reports to your federal government annually. Are Indigenous leaders learning self-government by generating all these reports? Are they doing the work of the federal bureaucrats at comparable pay scales? I don’t believe anyone in the federal government receiving these reports even reads them. Apparently, of those 640 Indigenous governments preparing reports, only 5% are under third-party management for overspending by 8% or more.

There has been a funding cap of 2% on these overspent budgets for at least 20 years. The growth rate among the Canada’s Indigenous populations since the last audit in 2011 has been nothing short of spectacular, and yet there is no growth in these budget allocations, until just recently with a newly elected federal government.

Whenever industry comes calling, this is just one factor that it might encounter on any first meeting with Indigenous leaders, Elders, and representatives. Some First Nations, because of their historical destitution, often look at industry as the ‘great white hope’. Do they have expectations? If so, how does one find out what they are? It would be wise to think of your arrival as bringing hope, which is very different from an expectation, and has to be dealt with in a much more sensitive way.

**Overburdened and underfunded**
Many Indigenous communities – already dealing with such concerns as land claims, health issues, self-government negotiations, treaty issues, poverty, and housing – feel they are over-extended and seriously underfunded. Their few key resource people are in constant demand for consultation meetings and travel, and that doesn’t include local governance responsibilities. Community support or opposition significantly affects the risk and costs of large capital projects. The World Bank, International Monetary Fund, global insurance companies, and other international development agencies, are actively encouraging socially responsible development projects by the corporate sector.

Due diligence is now long overdue. Responding to the hopes, dreams and concerns of the Indigenous communities impacted has become a critical component of any corporate business case. I strongly suggest that those in the natural resource development industries become extremely good at building long-term relationships with Indigenous peoples with whom they interact. Another factor of importance is that any contractor participating in the project should be fully engaged as well.

Indigenous communities’ leadership, management, and staff become overwhelmed; the process either stops or slows to a crawl, shortly after industry comes knocking. If you understand this, you will have gone a long way towards starting the whole process on the right foot. Learning how to do this right is a critical go-forward decision.

**What Indigenous leaders want to know**
Indigenous leaders are prioritizing with whom they meet. Many local and regional Indigenous governments have appointed small committees to review requests for consultation. These groups have the responsibility to determine which requests are the most viable and interesting. They’ll ask for more information such as a copy of the following:

1. Indigenous Relations Program.
2. Two letters of reference from other Indigenous communities and/or Indigenous businesses your company has worked with in the past.
3. Number of Indigenous people employed with your company.
4. Biographies of the people you would like them to meet.
5. Details of what the benefits of your proposed project would bring to their community.

These community committees typically qualify their call for information with a statement such as: “Upon our review of the information you have provided, we will then determine if and when we should begin building our consultation plan with your organization.”
Respect and knowledge
Community relationship-building is a team effort and an integrated part of participation between industry stakeholders and Indigenous rights holders. Most Indigenous peoples don’t consider themselves ‘stakeholders’. They are much more than that. Rights and traditional uses include uses of public lands such burial grounds, gathering sites, historic or ceremonial locations, and existing constitutionally protected rights to hunt, trap, gather, and fish – and do not refer to proprietary interests in the land.

Where are traditional lands and who has jurisdictional authority? Are there maps available so industry can determine whether or not they’re hoped-for project is on traditional territory? Who does industry begin discussions with? Where and what are the expected protocols required to proceed? Do First Nations governments and Métis governments claim the same traditional lands, which they may use for different purposes? Do they have agreements in place among themselves? And if these agreements are in place, can industry get copies so it can learn what’s required?

These are a few examples of focused challenges in Canada as we move towards greater inclusion and economic participation of Indigenous peoples. Imagine for a moment how you would feel and/or react if a drilling contractor came into your traditional lands after your leadership had been fined and jailed for opposing the exploration. These people would then be able to begin the exploration of their claim with a court sanctioned and approved permit and under contract with the mining company and full support of governments.

They could then begin construction, surveying, sample taking or drilling through the graves of your loved ones. Would all 600 people in your community require being jailed to ensure a safe place to drill? Are you really sure you would want to go through something like this as a company focused on natural resource extraction initiatives?

Industry’s capacity to understand, appreciate and have respect for ‘traditional ecological knowledge’ as well as ‘traditional land uses’ will go a long way in building the bridges required. Acknowledging the value of traditional knowledge will demonstrate commitment to principles of sustainable development. If you interact with Indigenous peoples only on a business basis, then your consultation processes will not begin well and may even be doomed. Do the people doing the consultation know how to develop a ‘Consultation Protocol Agreement’?

Partnerships should be developed to assist Indigenous peoples as they make the transition from a traditional lifestyle to one of full-blown industrialization in a modern society. The effort put forward to preserve a traditional lifestyle within a modern society is really quite extraordinary and, in most cases, there is no forfeit of one for the other.

“Successful partnerships require dedication, commitment, hard work, understanding, trust and mutual respect. They also involve recognizing each other’s values and aspirations, and identifying and communicating common goals,” says the Plutonic Power Corporation.

Preservation of what Indigenous communities have, the survival of individuals, and individual very diverse cultures, and all that those encompass, are the motivating factors – they must be understood and they must be respected.

The land in which we live now was called ‘the New World’ 500 years ago, even though it had been around for 20,000 years. When this place was ‘discovered’, there were more people in the western hemisphere here than in Europe.

Learning how to demonstrate respect is critical, as this leads to trust and credibility. Both are essential for any successful working relationship, whether personal or professional. Indigenous communities will disapprove of organizations that approach them with preconceived notions, plans or self-serving proposals, including recruitment of Indigenous employees. Their needs are much more complex than that, and they have every reason to be skeptical of your good intentions, whether governments, project proponents, or their contractors.

What is meant by ‘accommodation’ in Supreme Court rulings on Aboriginal consultation?
Here are some interpretations:
“A compromise or an attempt to harmonize conflicting interests and move further down the path of reconciliation and balancing Indigenous concerns with other societal interests” (Haida/Taku)
“...an adjustment or adaptation to suit a special or different purpose. A convenient arrangement, a settlement or compromise” (Haida Nation)
The industry must be prepared, along with all levels of governments to defend its consultation process and the adequacy of the accommodation measures proposed.

Successful best practices over many years clearly demonstrate that doing it right works. There are literally hundreds of examples of industry best practices available, and good work and much success have been achieved. Why the constant attitude of resistance is really difficult to comprehend. What is this, fear of the unknown?

Anti-industry? No way
Indigenous communities are really searching for viable economic development opportunities. Education support leading to employment and training is considered an economic as well as social priority. Statistics from the Northeastern Alberta Aboriginal Business Association in Fort McMurray show that about $500 million worth of business with Indigenous partners and communities is currently carried out in the Regional Municipality of Wood Buffalo each year.

The Fort McKay First Nation does about $20 million worth of business per year with some of their oil company partners.

“We are not against development, but our ways must be respected,” said Elder Joe Crowshoe, Pikani First Nation, in 1986. “Indigenous awareness training for industry? Go and learn as much about us as you can, for the same reasons we learned all about you. We know your language, studied your religions, learned your laws, are experiencing your justice systems, and know your cultures. I wish you could say the same for us.”

Indigenous governments, community leaders, groups of Elders, organizations and businesses all agree that the key to effective, positive, durable relationships is mutual respect leading to trust. Listening and learning brings knowledge, comfort and understanding. Consultation is a must; sincerity and long-term commitments must be clearly demonstrated. Learning how is the challenge.

A corporation’s Indigenous community initiatives are an investment, not just an expense and, once committed to, will go on for a long time. There are many success stories in which challenges have been overcome for mutual benefit. It all comes down to our all getting along, and to do that we must dispel the myths, check out what we base our opinions on, learn everything we can about each other, and demonstrate care and respect for each other.

Indigenous Awareness Canada
Indigenous Awareness Canada has been working for over 30 years to provide training programs that help people connect, create greater understanding, and to enhance communications between Indigenous and non-Indigenous people. Indigenous awareness training is an important first step and a foundational building block for developing long-term committed relationships and achieving better outcomes. Trusting and respectful relationships are built through improved awareness, comfort, confidence, and communications.

www.indigenousawarenesscanada.com

About the author
Robert Laboucane, originally from Fort McMurray Alberta, is Director of the Calgary-based Indigenous Awareness Canada. Since 1985, he and his staff have been facilitating one-day workshops and offering a number of exciting Online Training Programs for companies and organizations across Canada, including local, provincial and federal government departments, small businesses, service agencies and major corporations.

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The importance of QS & CE
Establishing quantity surveying and cost estimating departments

Quantity surveying and estimating are pivotal departments in the construction industry. Many companies either have established quantity surveying/estimating departments or use the services of professional individuals/companies to carry out these activities on their behalf. Companies using these activities tend to produce more accurate estimates and are often more successful in bidding. This contributes to a company’s overall success.

It is also observed that some companies comprise individuals who are neither certified estimators nor professional quantity surveyors, but are knowledgeable, competent, and capable of carrying out quality work in this particular field. Many companies, however, generally do not focus enough on the aspect of quantity surveying and estimating. These companies tend to not have in-house quantity surveyors/estimators, and avoid external assistance from other professionals. Consequently, such companies can face heavy financial losses as a result of poor-quality work in the quantity surveying and estimating field.

Many years ago, when I was working in the Middle East, I witnessed an incident occurring over a span of a few years. A newly established construction company with a large office situated in an upscale area of the city had decorated and furnished offices, modern and expensive construction equipment, numerous company departments, etc. However, the company did not believe it was necessary to have a quantity surveying/estimating department, and also chose not to engage itself with any professional in this field. Instead, the company’s quantity surveying/estimating responsibilities were assigned to its construction management and supervisory team.

During its early years, the company thrived as a result of being awarded work from its owner as a sole source construction company, without competitive bidding. While the company was successful in building these projects, it was having no success in winning new, major contracts. Approximately three years from the company’s inception, its major projects were completed but due to a lack of awarded work going forward, large layoffs began. Over the next few years, the company worked on small/medium-sized projects and continued its bidding efforts in the hopes of securing new contracts. Unfortunately, there was no success and the company began to face heavy financial losses. It was forced to file for bankruptcy.

An internal investigation revealed that the work performed with regards to the estimating and bidding processes was poor due to the fact that the company did not have any professionally qualified or certified quantity surveyors or estimators. The construction management and supervisory team was competent in its discipline, but did not have adequate experience in quantity surveying/estimating.

From the above, it is obvious that the company’s management either tried to limit expenses by avoiding hiring appropriately qualified quantity surveyors/estimators, or it did not understand the importance of the professional Quantity Surveyors/Estimators role. In spite of having all the resources to run a construction company, the company was unable to succeed due to the absence of competent staff that could fulfill the quantity surveying/estimating function.

Therefore, in order to succeed in this competitive market, it is essential to use the services of competent, professional, and certified resources for the quantity surveying and estimating disciplines.

About the author
Majeed Ahmad (PQS) is a senior cost estimator for CNRL in Calgary, Canada. He has over 35 years of experience in residential, commercial, industrial, institutional, and oil and gas sectors. His experience includes site supervision, project management, cost estimating, and quantity surveying in Canada and the Middle East. He holds a Diploma in Business Management and a Bachelor of Science and Diploma in Civil Engineering.
A great new tool

In this edition I would like to promote a new tool that will enhance your business, improve productivity and, if fully implemented, improve your relationships – both at home and work. The great news is that there is no need to download a new app, upgrade your servers, or invest in significant training. In fact, you do not even need a Wi-Fi connection.

This new tool is called ‘Conversation’ and the only hardware that you require is the innate ability with which you were to communicate with other people. Over the years, we seem to have lost the ability to have meaningful, timely, and on-purpose conversations. In this article, we will look into the benefits of having real conversations, and highlight the risks if we choose not to implement this tried and tested tool.

Fierce conversations
I just finished reading a Fierce Conversations by Susan Scott. It was a great read, and in the opening chapter she succinctly sums up something we all need to be reminded of from time to time: relationships are just a series of conversations. If you look at the strongest and healthiest relationships you have – with your spouse, a trusted friend, or other family member – they are likely to have one thing in common: the ability to have completely honest and open conversations. The opposite is also true: some of the most troublesome relationships in our lives are built on closed and biased conversations, or more often no conversation at all.

Challenges and communication
We are lucky to live in a place and time where we have access to some of the best education in the world. As a result, we have learned the technical skills required to compete at the highest levels. However, when I am tasked to work with a project team or leadership team, the challenges are rarely, if ever, related to an individual’s ability to technically complete their job. The challenges and resulting conflicts, inefficiencies and ultimate failings more often than not come down to an individual’s inability to clearly communicate a point of view, listen, and understand an opposing point of view, and make unbiased decisions to move forward.

Remaining present
Being present seems like an obvious starting point and, when questioned, most of us would confirm that we are always completely ‘in the moment’ when engaging in a conversation. Yet we have all been in conversations that have been interrupted by someone’s cell phone or an urgent email. Even the simple act of looking at your cell phone and stating, “Oh it’s not important. I will call them back later,” implies that, had it been important, our current discussion would have been relegated to the ‘we will pick this up later’ category.

Understanding conversations
I try to make it a habit to switch my phone to silent whenever I am having a conversation with someone, not just when I am in a meeting. The other part of being present, a far more difficult task, is to stay focused on the discussion. Listening to understand and respond takes a lot more energy than listening to react, which is what we typically do. Next time you are in a conversation, pause and question whether you actually understand what was said and ask questions to enhance your understanding, rather than waiting for a long-enough break in the discussion to insert your pre-conceived idea.

Recognizing bias
Along with being present, we also need to recognize that we all have a certain bias, either conscious or unconscious. Our brains work in mysterious ways, one such phenomenon is ‘cognitive dissonance’. A complex psychological occurrence happens when a person with firmly held beliefs is provided with contradictory evidence. Our brains do not like the discomfort associated with this feeling, so we choose to either ignore the contradictory evidence or fabricate new evidence to confirm our initial beliefs. I witnessed this first-hand recently when providing feedback to a group of individuals on their Myers Briggs personality assessments. Two individuals with exactly the same profile were given the exact same report and instructed to read it and report back on what they had taken from it. Both came back with different views and actually challenged each other stating ‘that was not in the report’. On further investigation they discovered it was in fact in the report but because it was not aligned with their beliefs about their personality and style they unconsciously chose to ignore the information, thus avoiding the mental anguish associated with the cognitive dissonance. We all experience this on a daily basis, we filter the information we receive in order to achieve better alignment with our beliefs.

Active listening
Another important aspect of successful conversations is silence. We should all get better at embracing silence, our egos convince us that if we do not respond
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