January 24, 2020

Submitted via e-mail: comm-financeaffairs@ola.org

Mr. Amarjot Sandhu, MPP, (Brampton West)
Chair
Standing Committee on Finance
and Economic Affairs

Julia Douglas
Clerk, Standing Committee on Finance
and Economic Affairs
Room B-304, Whitney Block
99 Wellesley St. W.
Queen's Park
Toronto, ON M7A 1A2

Re: 2020 Pre-Budget Consultation – Consulting Engineers of Ontario

Dear Mr. Sandhu and Ms. Douglas,

On behalf of the member firms of Consulting Engineers of Ontario (CEO), I would like to provide the following material to the Standing Committee on Finance and Economic Affairs as part of the Government of Ontario's 2020 pre-budget consultation process. This submission speaks to important issues that impact the effective delivery, design, procurement and construction of public infrastructure projects across the province.

The recommendations provided here highlight how and where the government can streamline existing infrastructure procurement practices to better inform current infrastructure strategies. The recommendations seek to improve the delivery, procurement and development of infrastructure projects in Ontario, and address the lack of willingness of private sector bidders to respond to tenders.

ABOUT CONSULTING ENGINEERS OF ONTARIO

CEO was founded in 1975 to represent the business interests of approximately 150 consulting engineering firms employing more than 21,000 Ontarians. We work with all levels of government and with industry to promote reasonable and insurable procurement and business practices to support our member firms by ensuring a sustainable and fair business environment.

Consulting engineers offer professional engineering services and expertise to both public and private sector organizations. Consulting engineers also act as independent agents and advocates for their clients, and are responsible for finding innovative solutions to technical problems and providing strategic solutions to business and government. In Canada, these licensed professionals offer a wide array of services and expertise in areas not only related to engineering and science, but also in economic sectors such as energy, resource development, environmental protection and manufacturing. Firms that specialize in consulting engineering are responsible for designing and building much of our public infrastructure.

OVERVIEW OF RECOMMENDATIONS

The attached appendices include two policy notes emphasizing priority issues identified by CEO as significantly impacting the delivery, design, and construction of public and private infrastructure projects. These briefs provide an overview of the key challenges facing the construction and design communities and recommendations for how to address these challenges. The recommendations contained in these briefs will help government and industry together operate at optimal levels of effectiveness and efficiency, while meeting the key strategic targets of: creating a more competitive business environment; connecting people to places; building healthier and safer communities; and making government smarter.

These notes include recommendations on the following issues:

1. ***Development of a Project Pipeline Document for all significant Public Infrastructure Project Investments***

    - The government should make available as much information about its broader procurement intentions as possible.

    - This information should be formatted similarly to that presented in Infrastructure Ontario's annual P3 Market Update document already provided to the market.

2. ***Selecting and Applying Proper Procurement Models for Public Infrastructure Projects***

    - Developing a Unified Procurement Model Decision Making Framework to standardize how the various Ministries and government agencies select a procurement model.

    - Improve the P3 and design build project models by following a standardized set of principles for good-practice delivery.

    - Incentives should be applied upon various stages of the procurement process, rather than at release, as this will encourage better performance and outcomes.

The collective experience of CEO's members hold a wealth of knowledge about how legislative, regulatory, and policy issues are affecting the actual design and construction of critical infrastructure across the province. We are always interested in discussing these issues with the government and offering our recommendations and assistance wherever we can improve how infrastructure is design, built, and delivered.

Please do not hesitate to contact David Zurawel, CEO's Director of Government and Stakeholder Relations at 416-620-1400 ext. 222 or via email at dzurawel@ceo.on.ca should you have any questions or require any further information.

Thank you for your attention and consideration of our proposals.

Sincerely,

Bruce G. Matthews, P. Eng.
Chief Executive Officer

APPENDIX A – Development of a Project Pipeline Document for all significant Public Infrastructure Project Investments

Issue: The absence of project pipeline information is jeopardizing the success of the provincial government's investment in public infrastructure. Program-critical preparations essential for efficient and effective project delivery required from the consulting engineering industry, such as service-specific team development, proposal development and project design, cannot be completed in advance of RFPs being issued to the market without this information. This situation represents a clearly defined risk to the government's public infrastructure agenda. However, this risk can be mitigated with the government's timely supply of information that can facilitate the consulting engineering industry's initiation of essential preparations.

Situational Analysis:

The consulting engineering industry, particularly its transportation sector, is eagerly anticipating the release of RFPs for highways, roads and bridge projects. However, there is also a growing sense of frustration. A great deal of speculation exists about the details of this program. This is rooted in the absence of the provincial government publishing an infrastructure project pipeline. This document is an essential resource for the consulting engineering industry. The information contained in the pipeline document namely; project descriptions, budgets, timeframes for delivery and procurement models to be used, provide crucial information for our member firms. These details enable the consulting industry to begin preparations ahead of the project season so as to be ready to meet the government's needs and expectations. This document empowers the consulting sector to be "open for business". The facts contained in the pipeline are relied upon by the consulting engineering industry to inform and shape internal firm planning and selection for pursuit of projects, hiring of staff, allocation of staff and financial resources and external partnering arrangements; particularly for large signature capital projects. Without this information the industry has no choice but to speculate about how programs, such as the provincial highways program and its projects, will be issued to the market and how the government will expect them to be delivered; these are significant considerations that impact efficiency of delivery, project price and delivery. Presently, there is no basis on which firms are able to accurately prepare for this considerable amount of work.

Clarity of intent will help facilitate successful outcomes:

The consulting engineering industry understands and respects that it is not possible at this time for the government to make public project-specific information. However, if the government were able to provide general insights as to the type and degree of support it will be seeking from our industry through this and other important ministry programs, then consulting engineering firms could be better prepared and able to respond to these projects once they are issued to the market. Any clarity of intent that can be provided to the following questions would be immeasurably helpful to the consulting industry's preparations for highways, roads, bridges and other projects.

Market Impact:

Any information the province can provide industry in advance of the issuing of program RFPs would be very helpful, allowing consultant firms to source top talent to be assigned to these opportunities. The more knowledge and time the consulting industry can have before the issuance of RFPs, the better the quality of people firms can secure for the assignments.

The importance of understanding how the government intends to procure its projects cannot be understated. Industry presently does not know how many RFPs will be issued and the scope of work they will require. Without this information it is difficult for consulting firms to form effective and efficient teams with defined project roles and responsibilities.

Recommendations:

1. The government should make available as much information about its broader procurement intentions as soon as possible to the consulting engineering industry. This information should be formatted similarly to that presented in Infrastructure Ontario's annual P3 Market Update document already provided to the market. This information, including anticipated projects, locations, timing, budget and procurement model for delivery, will provide considerable value to the public, the government and business as it will help facilitate a more efficient and effective procurement process through better project planning preparations.

APPENDIX B - Selection and Application of Appropriate Procurement Models for Public Infrastructure Projects

Issue: A key pillar of the provincial government's infrastructure strategy seeks to address the issue of timeliness of project completion and the current apparent lack of industry momentum of completing assignments quickly, efficiently and on budget. A number of project procurement and delivery models exist, each with their own advantages and challenges. What is certain is that selecting the appropriate procurement model for each project drives on-time, on-budget delivery.

Discussion:

With any form of investment, diversification is the best approach. For many years, public infrastructure construction in Ontario involved only established design-bid-build (DBB) approaches for its projects. Recent successes with both horizontal and vertical infrastructure projects here in Ontario and across Canada have proven the value that Public-Private Partnerships (P3s) and the variety of design/build approaches can offer. Under the right circumstances, both P3s and established procurement models, such as DBB, can deliver assets quickly, efficiently and with optimal sustainability.

While the need for P3 methods is understood, it must be acknowledged that Public-Private Partnerships and other non-traditional procurement models are a potential solution, not a universal remedy. Decisions to employ these models should be based on criteria that include maintaining and creating jobs, local and regional economies and the need to develop sustainable, long lasting projects. Bundling of projects simply to meet financial criteria, or create administrative ease, can harm smaller companies and design professionals in the construction and infrastructure sector, put smaller municipalities at a disadvantage and snuff out innovation.

Ontario is a large, geographically diverse and socially complex jurisdiction. A balanced approach that uses the most modern procurement and delivery methods available, that ensures a continued commitment to achieving value for money and optimizing taxpayer investments in public infrastructure will best serve the needs of this province.

Risk and return will ultimately be the issue that defines government's decisions. Infrastructure spending costs billions of dollars annually and it will be at a significant disadvantage if it does not take advantage of a comprehensive suite of procurement models that enables the consulting engineering sector to bring its diverse experience to market.

Procurement Models:

Several procurement models are available to governments. These include design-bid-build (DBB); design-build (DB); and, public private partnerships (P3). Public private partnership models include design-build-finance (DBF), design-build-finance-maintain (DBFM), and design-build-finance-operate-maintain (DBFM). Utilizing the right procurement model for each project is a significant driver of on-

time on-budget performance and efficiency in the province's design and construction industry. There are advantages and challenges to each procurement model. Consulting Engineers of Ontario (CEO) suggests that an even broader list of procurement and delivery models should be considered (e.g. Integrated Design Build /Progressive Design Build, Program Management & Construction Management, etc.). As well, CEO recommends the Province consider the use of Integrated Project Delivery (IPD) to optimize the project constraints of quality cost and time.

Recommendations:

1. It is recommended that a Unified Procurement Model Decision Making Framework be developed for provincial ministries and agencies to guide and assist with the selection of the most appropriate procurement models for infrastructure projects.

2. Recognizing the government's preference for DB and P3, it is important that three primary principles associated with good-practice delivery of these types of projects be observed. These recommendations will lead to improvements to procurement using a DB or P3 model for public infrastructure projects:

   Principle 1: Output specifications should be performance-based where possible, and only prescriptive where explicitly needed.

   - Quality-based procurement of technical advisory (TA) Services should be used to facilitate increased seniority and global expertise of TA resources involved in preparation of the output specs
   - Training courses for ministries, agencies and TAs regarding the preparation, use and benefits of performance-based output specifications and when to use prescriptiveness should be developed
   - A review of ministry and agency-required standards (pertaining to design, engineering, construction methods) to remove preference engineering and out-dated requirements for materials, means, and methods should be undertaken
   - The opportunity for design professionals to provide innovative and sustainable solutions should be encouraged
   - Improved reviews of output specifications before RFP release should be standard process to ensure they are as open to alternative solutions as possible, and not simply mandating the Reference Concept Design (RCD) and existing standards
   - Agencies (Infrastructure Ontario and Metrolinx) should consider whether it's possible to implement an Alternative Technical Concepts regime, which has showed success in driving value for money in other jurisdictions (e.g. the Denver Eagle P3 procurement)

   Principle 2: Project Agreements should allocate risk to the party best able to manage that risk to maximize value for money.

   - Consultation should be undertaken with suppliers on general risk allocation principles, including formal consultation papers, formal responses from suppliers, and a formal consultation report from ministries and agencies detailing the results. Some examples of the type of risks that should be subject to consultation are:

- Reliance on Owner-supplied Survey Data
- Utilities – relocations and self-performing utilities companies
- Utilities – improperly located and unknown
- Hydro-geotechnical
- Geotechnical
- Archaeological
- Contamination – existing, unknown, migrating
- Species-at-risk
- Defects in Third Party Infrastructure
- Permits, licenses and approvals
- Submittal Review by Third Parties
- Changes in Law
- Changes in Standards
- Property Acquisition
- Access – Project Lands, Third Party Lands, Municipal Rights of Way, Gates/Access Points

- An improved process reviewing risk allocation by ministries and agencies before RFP release needs to be in place so as to ensure this allocation is optimal and included within the cost estimate for the project

Principle 3: Comprehensive due diligence should be undertaken by ministries and agencies to ensure that RFPs (including Project Agreement (PA) and Output Spec(OS)) and supporting background information is ready to be released to the market to avoid the need for changes leading to long and expensive in-market periods.

- Improved ministry and agency review and due diligence of RFP (including PA and OS) and background information (e.g. by a team external to the project team) is needed, including the authority to recommend that RFP release is delayed if it is not ready for release
- Implement formal Stage Gates to improve quality control of RFPs (including PA and OS) and background information
- Guidance for ministries and agencies that in pursuit of value for money and good supply chain management, it is preferable to delay RFP release than issue an RFP that is not ready for release

3. Ministry and agency staff should not be incentivized using bonuses (or other staff performance management regimes) on RFP release, only on RFP close, commercial close, or financial close.