



ASSOCIATION OF CONSULTING
ENGINEERING COMPANIES | SK

Best Practices for Procuring Private Sector Engineering Firms

ACEC-SK RECOMMENDATIONS TO SASKBUILDS

May 2020



EXECUTIVE SUMMARY

Disruptions to global supply chain because of COVID-19 highlight the need to better balance local supplier development while continuing to honour the intent of open, transparent, competitions within current trade boundaries. Local supply chain resiliency will play an important role in future economic development.

The Association of Consulting Engineering Companies – Saskatchewan (ACEC-SK) therefore offers the following recommendations to procure professional engineering services within current trade agreement boundaries:

1. **Market Sounding**

SaskBuilds, in conjunction with their Ministerial, Crown or Agency clients, should regularly conduct engineering industry market sounding on many different types of projects. Even projects that are viewed by Owners as routine may benefit from market sounding because certain Owner assumptions may not be applicable in the current marketplace.

2. **Increased Utilization of Request for Qualifications (RFQs)**

SaskBuilds should utilize the two-stage Request for Qualifications (RFQs) followed by a restricted Request for Proposals (RFPs) solicitation process much more frequently than it currently does. It should correspondingly limit the number of open Request for Proposals (RFPs) competitions it offers which will greatly reduce the volume of proposals it receives for any given project. This will ensure only qualified proposals are considered and will garner considerable cost-savings for Saskatchewan taxpayers.

3. **Adopt Qualifications-Based Selection and Negotiate Scope & Fees**

The Government of Saskatchewan (GoS) should adopt Qualifications-Based Selection and negotiate scope and fees with the qualified short-listed engineering teams to achieve benefits such as innovation, lifecycle cost savings and sustainability.

4. **Revised Weighted Scoring for Local Content**

'Local content' should be weighted more heavily for the Owner to fully realize the benefits of this qualifying criterion.

5. **Local Supplier Development**

A better balance between awarding projects based on technical experience versus local risk elements should occur to encourage local engineering supplier development.

6. **Harness Government's Knowledge of Engineering Industry Capacity More Effectively**

The next stage of the Saskatchewan Integrated Capital Plan maturity should include grouping projects from multiple provincial government entities by engineering discipline/area of practice when procuring engineering services. This should be followed by a phased announcement schedule to best capture the benefits of engineering industry capacity knowledge.

7. **Industry Engagement and Collaboration for Process Development & Improvement**

A return to early industry engagement and collaboration on all procurement considerations should occur as they are being developed rather than consulting with industry once solutions are nearly finalized.

INTRODUCTION

The Association of Consulting Engineering Companies – Saskatchewan (ACEC-SK) was fully supportive when the newly formed provincial government procurement entity, Priority Saskatchewan, promoted a ‘Best Value’ procurement approach as opposed to relying on ‘lowest price’ for professional engineering services. ACEC-SK played an integral role in early consultations to help define “Best Value” and identify “Best Value” criteria for selecting engineering services that would most benefit Saskatchewan taxpayers.

This is because **how** professional engineering services are procured plays an integral role in how successful a project can be. In fact, procurement methodology influences the value of professional services more than just about any other type of good or service being procured. Best Value procurement of the right Engineering team is defined by greatly reduced construction as well as operations and maintenance costs.

How Engineers are procured today is vastly different from how it has been done in the past. Historically, the Engineer had direct access to the Owner. The benefits of direct access were multi-fold:

- Ability to discuss on multiple occasions the many items that influenced the challenge to be addressed, which afforded an Engineer the ability to gain a thorough understanding of the problem. This included the ability of the Engineer to ask probing questions about things the Owner may not have considered, ensuring as many aspects of the problem as possible were considered before design began. This ultimately led to the “scope” of any given project being jointly developed by the Owner and the Engineer.
- Immediate ability for the Engineer to react to Owner’s priorities to adapt design solutions as the pre-design evolved. Cost and schedule implications could often be addressed well before a design was finalized because of direct on-going communication as a solution was being contemplated.
- Ability for creative and innovative solutions was significantly increased because of this on-going dialogue.

Today, with increased reliance on procurement professionals and the influence of trade agreements, the opportunity for the Engineer and Owner to work closely together to develop a “scope of work” has essentially disappeared, with the following unintended consequences:

- In a bid for openness, transparency, and competitive advantage, the best environment to collaboratively create innovative solutions has been sacrificed.
- Professional procurement officers act as intermediaries between Owners and Engineers and are responsible for overseeing the actual procurement process itself, and very often rely solely on the Owner for technical expertise because they are not subject matter experts.
- Owners are now often developing “scopes” in the absence of robust technical input which is leading to incomplete Request for Proposal (RFP) information, making it difficult for the Engineering community to respond appropriately.
- Without direct access, unknowns may be overlooked that could be critical to the outcome which in turn could have been considered if early and on-going discussions Owner and Engineer were allowed.

The need for open, transparent procurement is not in dispute. However, from the Saskatchewan consulting engineering industry’s perspective, some of the administrative processes developed in response to this need fell short. They do not deliver Best Value to the Owner who is seeking professional engineering services. The intent of this paper is to offer recommendations for procurement adjustments to continue to operate with trade agreement boundaries while still encouraging heightened involvement of local suppliers.

RECOMMENDATIONS

1. MARKET SOUNDING

It is the private sector's experience that currently very limited provincial government-led market sounding is being used to procure professional engineering services. There are a limited number of 'general' supply chain events offered, but these simply list upcoming projects, not specific project details. The purpose of these supply chain events is not to garner feedback about specific projects, nor does it offer opportunities to allow this feedback to be offered. As well, these events are not typically offered to **specific** suppliers – e.g. the consulting engineering community – which again does not afford the opportunity to solicit specific industry feedback.

Individual public sector entities should regularly share their capital asset spending plans with the private sector in advance of release to market to ensure the private sector can align their resources to respond appropriately. Market sounding also lends itself to testing the viability of projects' details. It is important to test all unknown or uncertain details.

Timing of market sounding is critical. If done very early in the project development stage, very often the project description is too broad, offering insufficient detail about size, capacity, and scope. If left too late, the project description is often so detailed that it is not possible for effective private sector input. Ultimately, market sounding needs to happen when the initial contract structure, technical requirements, and delivery model have been developed, but are not far enough along that private sector input cannot be accommodated. It is important for the Owner to obtain expert private sector opinions about such things as market conditions (e.g. capacity), technical input, and risk allocation. While this does not replace Engineers having direct access to individual Owners, it does allow for dialogue to occur to better define the scope of a project prior to its release to maximize the Owner's return on investment.

There are different ways to undertake Market Sounding, including:

- Written communications
- Industry meetings, and
- Meetings with individual companies

Information about an upcoming engineering service needs can be shared in a number of ways through:

- A presentation to all interested stakeholders who in turn provide feedback to the Owner
- A project memo that can be circulated on-line to pre-qualified companies for feedback, or
- A draft contract

ACEC-SK recommends SaskBuilds, in conjunction with their Ministerial, Crown or Agency clients, regularly conduct market sounding on many different types of projects. Even projects that are viewed by Owners as routine may benefit from Market Sounding because certain Owner assumptions may not be applicable in the current marketplace.

Consider:

- ***Holding meetings with specific qualified ACEC-SK member firms prior to opening competitions to:***
 - ***ascertain whether project details are viable (i.e. ensuring "scope" accurately describes the problem to be solved)***
 - ***share how the competition will be scored.***
- ***Relying on the consulting engineering industry association to act as a conduit of information between Owners and ACEC-SK members***

2. INCREASED UTILIZATION OF REQUEST FOR QUALIFICATIONS (RFQs)

In recent years, various experts have provided interpretations to government regarding what is deemed 'competitive' within the boundaries of applicable trade agreements (e.g. New West Partnership Trade Agreement and Canada Free Trade Agreement). These interpretations have motivated Priority Saskatchewan to prioritize Requests for Proposals (RFPs) as the procurement method of choice for a large majority of projects, a process that is very labour intensive and costly to both the Owner and Consulting Engineering Firms. Heavy reliance on the RFP process removes significant dollars from the collective marketplace that could be better spent elsewhere, which is an argument in and of itself that current processes do not deliver Best Value for Saskatchewan citizens.

A significant difference between the two processes is the time, and consequently the dollars, necessary to create and review RFQs versus RFPs. Typically, RFQs are submitted annually to Owners by those who wish to compete for work, although Owners may choose a greater or lesser timeline. The onus is on those wishing to remain in the pre-qualification database to provide updated information to the Owner should there be a change in between submission times. In this example, effort by the proponent would include creating a pre-qualification document *once per year*, and limited effort throughout the year to update should it be necessary. Effort by the Owner for RFQs would be to enter all companies' pre-qualification information once a year in a relational database that could inform Owners which proponents offer the best qualifications for any work offered during that year. In an RFP process, those who wish to compete for an Owner's work must create a Proposal document *each time throughout the year* work is advertised, a document that takes the same level of effort and dollars to create as a single RFQ document. Responses to RFPs result in multiple companies producing many RFPs in any given year. An associated amount of increased effort also is incurred by the Owner to review the collection of received proposals for each opportunity in response to each of its RFPs, an often-overlooked cost of the RFP process.

A more balanced approach, one that is quite widely accepted and adopted by many public agencies in Saskatchewan and across Canada, is to first use a Request for Qualifications (RFQ) procurement process that identifies which firms meet the qualification criteria. Only a limited number of qualifying firms then are asked to participate in an RFP process. The priority is to seek a few proposals from qualified Engineering firms rather than significant numbers of proposals from both qualified and unqualified firms. Using RFQs to narrow down the number of Engineering firms asked to respond to an RFP is a much less labour intensive, time-consuming process for all. Another benefit is that it can streamline the contracting process for both the Owners and the engineering firms. By entering into a single standing offer of master services agreement that can cover multiple assignments, much of the duplication of effort can be eliminated.

ACEC-SK has consistently supported the adoption of a Request for Qualifications (RFQs), or pre-qualification, process. The association acknowledges that the Government of Saskatchewan does use the RFQ process, but it could take advantage of the opportunity to harness this opportunity much more frequently than it currently does, including when:

- Requirements for a project are not complex
- Requirements for a well-defined, specific project that requires the use of a specialist
- There is potential for significant interest in a specific project because it is a known entity
- There is desire to create a list of pre-qualified suppliers for future opportunities

This process is particularly appropriate for medium and small assignments, where the RFP process and the time required by both the Owner and the proponent is disproportionate to the size of the project.

ACEC-SK recommends SaskBuilds utilize the two-stage Request for Qualifications (RFQs)/Request for Proposals (RFPs) solicitation process much more frequently than it currently does. It should correspondingly limit the number of open Request for Proposals (RFPs) competitions it offers which will greatly reduce the volume of proposals it receives for any given project. This will ensure only qualified proposals are considered and will garner considerable cost-savings for Saskatchewan taxpayers.

3. ADOPT QUALIFICATIONS-BASED SELECTION AND NEGOTIATE SCOPE & FEES

Procurement experts in various jurisdictions emphasize the benefits of selecting professional engineering services using qualification criteria, followed by negotiating scope and fees. This is a widely accepted Best Practice in almost every state in the U.S. and is gaining significant traction in Canada. Adopting these Best Practice principles results in selecting the right engineering team, which in turn encourages innovation, lifecycle cost savings and sustainability. The principles of Qualifications-Based Selection (QBS) are far more significant than short-term savings provided by the lowest-price design. In fact, studies have shown that engineering costs typically represent less than 2% of the lifecycle project costs, yet the impacts on the lifecycle costs are significant.

Decisions made during the project planning and design have ramifications over the entire service life of a project. The public will have to live with those decisions for decades, even generations. An appropriate investment in professional services at the onset of a project can potentially reduce capital, maintenance and operating costs while improving reliability and extending service life. Conversely, reducing the investment at the planning and design stage can result in significantly higher capital, operating and maintenance costs throughout the service life of the project.

The Owner's willingness to negotiate the scope and consequently the fees for a project will capture these benefits. This approach does not preclude the consideration of price in the process. Rather, it encourages consideration of price within a more meaningful context by bringing the fee into the equation after the scope of work has been jointly established and agreement reached with the top-ranked firm. Negotiating concurrently with short-listed candidates will only result in narrowly defined scopes being contemplated which will not lead to the desired outcomes noted above.

ACEC-SK recommends the Government of Saskatchewan (GoS) adopt Qualifications-Based Selection and negotiate scope and fees with qualified short-listed engineering teams to achieve benefits such as innovation, lifecycle cost savings and sustainability.

4. REVISED WEIGHTED SCORING FOR LOCAL CONTENT

During an industry consultation session very early in the development of Priority Saskatchewan, the recommendation that 'local content' be considered a 'qualifying selection criterion' for the procurement of professional engineering services was recognized and adopted. It was acknowledged at the time that the Owner greatly benefits from things such as knowledge of local soils, knowledge of local supply chains, knowledge of local codes, etc.

Today, the GoS regularly incorporates 'local content' as a consideration in its competitions. However, it is only one of many considerations included in the technical rating which minimizes its importance in the final selection. For instance, in some Ministries scores for price often significantly outweigh local content scores which negates any benefit the Owner may achieve from suppliers that can demonstrate an awareness of local content.

ACEC-SK recommends 'local content' should be weighted more heavily for the Owner to realize the benefits of this qualifying criterion.

5. LOCAL SUPPLIER DEVELOPMENT

ACEC-SK members consistently report that suppliers outside of Saskatchewan are awarded assignments where the expertise is resident in this province. Reports indicate competitions are structured in such a way as to ensure only specific types of experience are considered when awarding the project. This demonstrates either that government may not understand:

- Certain types of engineering experience are transferrable – i.e. Engineering firms demonstrating the ability to successfully complete projects using similar complexity, size and scope can often undertake similar types of work, or that
- It is necessary for government to take on a certain level of risk if it wishes to grow the local supply chain.

If this type of procurement philosophy continues, local engineering firms will never develop the necessary experience to compete on certain types of work. This negatively impacts provincial economic growth.

Additionally, when firms from outside the province undertake a project, often these firms engage local sub-consultants to do reviews. Engineering inspections are areas where engineering firms incur the greatest risk, leading to a disproportionate amount of risk for limited return by local sub-consultants. The firm from outside the province obtains greater reward from these types of projects than does the local company.

ACEC-SK recommends a better balance between awarding based on technical experience versus local risk elements to develop local engineering supplier development.

6. HARNESS INDUSTRY CAPACITY KNOWLEDGE EFFECTIVELY

The Government of Saskatchewan will benefit the most from having a current understanding of consulting engineering industry capacity if considered through the lens of engineering discipline/areas practice. Instead of the provincial government releasing projects by Owner (Ministry, Crown, Agency), the SaskBuilds procurement body should coordinate the release of projects that rely on specific areas of practice (e.g. vertical infrastructure, horizontal infrastructure, waterworks), so that the market can properly absorb the work. That coupled with a more transparent process for the industry to understand the scope, scale and timelines for various procurements, will allow industry's response to be more reflective of capacity, thereby maximizing utilization rate and cost-savings for Saskatchewan taxpayers. This is because industry would have a big-picture understanding of what is available, allowing them to be selective in their responses rather than responding to every new solicitation within the same engineering disciplines/area of practice because of unknown future available work. In other words, announcing similar types of projects from multiple government entities using a phased in approach would support a more evenly distributed industry response.

ACEC-SK recommends the next stage of the Saskatchewan Integrated Capital Plan utilization should include grouping projects from multiple provincial government entities by engineering discipline/area of practice. This should be followed by a phased announcement schedule to best capture the benefits of engineering industry capacity knowledge.

7. INDUSTRY ENGAGEMENT AND COLLABORATION FOR PROCESS DEVELOPMENT & IMPROVEMENT

Industry engagement early in the development of procurement policies, processes, documents and even government employee expectations/training leads to greater efficiencies than if government develops these in isolation first, then delivers them to the private sector. There have been instances in the past where early and consistent engagement has led to business process improvement that ultimately benefits Saskatchewan taxpayers through a greater understanding by the other public and private sector needs.

ACEC-SK recommends the return to early industry engagement and collaboration on all procurement considerations as they are being developed rather than consulting with industry once solutions are nearly finalized.

CONCLUSION

Utilizing the Best Practice for procuring engineering services will garner many benefits for Saskatchewan taxpayers while continuing to operate within trade barrier boundaries.

Best Value procurement can have many definitions by many stakeholder groups. Successful Best Value procurement is most likely to occur if the Government of Saskatchewan and the consulting engineering industry operate using the same Best Value definition. From the consulting engineering industry's perspective, achieving Best Value is the combined result of incorporating:

- Innovation
- Lifecycle cost savings
- Sustainability, and
- Local engineering expertise

ACEC-SK took the opportunity to present this information to multiple senior Cabinet Ministers on March 3, 2020. A copy of this presentation is included among several documents in the addenda, all of which outline in significant detail the considerations that influence how the Best Practice for procuring private sector Engineering firms. Also included in the Addenda is a PowerPoint presentation that identified ACEC-SK's (then CES's) concerns about how the New West Partnership Trade Agreement could create negative unintended consequences when procuring professional engineering services.

Ultimately, procurement can be a tool in the provincial government's toolbox to develop local engineering expertise. If this is done in tandem with pursuing the right Engineering teams for the right projects to support Saskatchewan economic growth, everybody wins!

ADDENDA:

1. *Qualifications-Based Selection (QBS) - The Best Practice for Hiring Engineering Firms (PowerPoint), March 2020*
2. *Best Practice for Procurement of Consulting Engineering Services – A Guideline for Selecting Your Consulting Engineering Team (Detailed Guidance Document), February, 2016*
3. *CONCEPT – Hiring Engineering Firms (High-level Document Describing Benefits of Qualifications-Based Selection), May 2014*
4. *Unintended Consequences (PowerPoint presented to Cabinet in May, 2012 describing the Unintended Consequences for procurement of professional engineering services under the boundaries of this Trade Agreement), May, 2012*
5. *The Engineering Procurement Dichotomy (A Thought Leadership document provided to SaskPower Procurement that discusses the benefits of QBS, and some unintended consequences of NOT using QBS), June 2018*