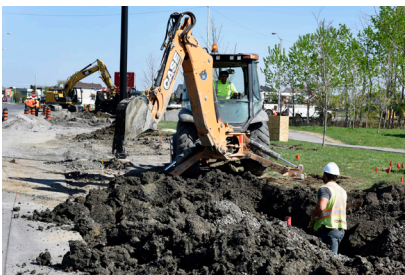




Standardization of Construction Specifications and Contract Language

A Better Deal for Taxpayers





The Opportunity

Public resources to support infrastructure modernization are finite. Most governments are struggling to keep pace with the taxpayer demands for the modernization and expansion of these assets.

Solutions to stretch limited public resources exist, but to achieve them, we must embrace a new way of doing business. Harmonization and standardization of both specifications and contracts language is by far the most cost-effective means of achieving this goal.

The Needs

According to the 2016 Canadian Infrastructure Report Card, adequate investment in repair and maintenance is essential to increasing the usable life of infrastructure assets. Despite continued efforts by municipal governments, the report card uncovered that re-investment rates are well below the minimum level required to achieve this goal. If this trend continues, the overall cost of infrastructure will increase substantially.

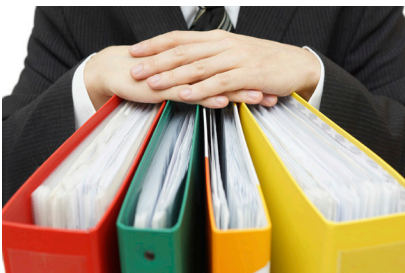
// In the end, it is not a question of investing or not investing, it's a question of **cost and good infrastructure management**. The bottom line is that the longer we wait to act on these repairs, the more expensive it will get. Canada needs to start planning for the future by re-investing in our existing assets now."

Raymond Louie, President of the Federation of Canadian Municipalities

So What Can We Do?

In order to provide effective infrastructure, public owners need to achieve efficiencies to capitalize on the funding that is available.

One way to achieve this goal is to embrace the inherent efficiencies of **standardized specifications and standard contract language**.



Standard Specifications Provide Cost Savings

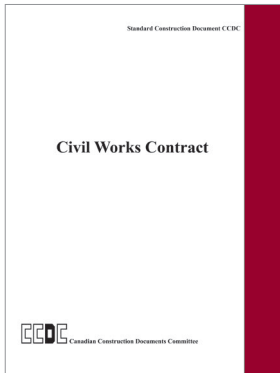
What Are Standard Specifications?

Construction specifications describe both the materials and workmanship required to complete a project. Standardization of specifications means taking all of the great work being done by various governments across Canada to create "the best of the best" set of standard specifications.

Currently, different specifications are being maintained and utilized by each level of government. Specifications from different documents are often pieced together to create a new specification, but they weren't designed to work together and often produce conflicts within the specifications. This often creates confusion, different expectations, and increased risk resulting in increased costs.

The solution is to take all of the great specification work already in existence and synthesize it into a master, collaborative, harmonized document covering all the different conditions and projects. Each jurisdiction would then be able to use the specification that best applies to their specific conditions for climate, soil and usage.

With limited public resources available to fund the modernization of government infrastructure, taxpayers can ill afford to have money wasted on reinventing the wheel at each level of government. This savings would benefit the actual construction of infrastructure!



Standard Contract Language Helps Reduce Costs

Through the use of standard contracts, all parties become familiar with the main framework that is used over and over again leaving the team time to focus on the unfamiliar supplementary conditions, and ensure clarity of the agreed-upon terms. This reduces construction risk which reduces costs.

The best examples of standard contracts come from the Canadian Construction Documents Committee (CCDC). Through the committee of volunteers representing public owners, private owners, architects, engineers, contractors, legal counsel, and specification writers, the group reaches consensus on the best language to allocate the appropriate risks to the appropriate parties. The CCDC offers contracts for all project delivery methods, including unit price, civil works, stipulated sum, design-build, and construction management. When project-specific modifications are required, they are done through supplemental instructions.

- **Familiarity Breeds Efficiencies**

When contractors understand the specifications and contract through repeated and consistent usage, they are able to price the project more accurately and competitively. Many private sector owners have adopted standard building design specifications and contracts to reduce cost and accelerate project construction.

Lack of familiarity with specifications increases risk and can lead contractors to either increase their price or ignore the tender altogether. If contractors choose not to bid, taxpayers have fewer competitive bids from which to choose.

- **Receive Better Pricing**

When estimators have standard specifications they can build their bidding software to reflect these standards which reduces the risk factor and allows for better, more confident pricing.

- **Eliminate Waste of Our Most Valuable Commodity—Time**

Time to read, time to understand, time to plan, time to build....time is a rare commodity! The goal of standardization is to give more time in our schedules to focus on the nuances of the project; as opposed to trying to understand the multitude of specifications and contract clauses.

- **Reduce Training Costs**

With the retirement of so many professionals in our industry, the experience of our workforce is decreasing for all construction industry partners, including owners, architects, engineers, and contractors. Standard specifications and contracts will allow repeated, frequent and focused training that will develop the required skills and expertise. Knowledgeable and experienced employees will allow for more practical versus theoretical inspection techniques, and the confidence to explore innovative cost savings and environmentally-friendly concepts.

- **Minimize Costly Disputes**

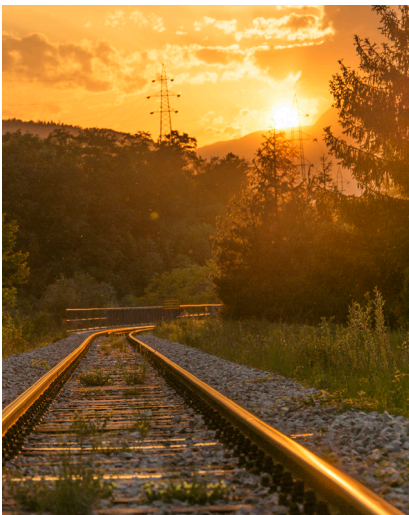
The construction world is complicated and disputes are fostered from inconsistencies and modifications. Uncertainty and lack of clarity equals opportunities for disputes. Disputes have an impact on total project cost and schedules.

- **Improve Quality**

In many cases specifications and contracts are 20 years old and have been pieced together from many different sources. When specified products don't match the execution specifications, it is wasteful and costly to make corrections. Standardization will put trust back into knowing what is needed to complete the project to the highest standards and improve quality control enabling inspectors to better know what to look for.



Where Do We Go from Here?



- **Improve Purchasing Power**

Standard specifications allow contractors to bulk purchase materials and avoid the expensive one-off purchases whether in new construction or maintenance. This equates to better purchasing power for taxpayer dollars.

- **Enhance Trust**

Utilizing standard specifications and contracts means that all parties can trust knowing what is stated and what it means. Trust is an important component for the success of any project.

- **Reduce Injuries**

Safety is everyone's responsibility. Familiarity of products and execution allows contractors to spend more time on honing and fostering safer work practices in the performance of their work. Safety starts at the top and is everyone's responsibility.

Making Standardization Work

One Size Does Not Fit All

It is recognized that any one specification may not fit all circumstances, but with a "database of choices" or through the use of supplementary conditions to the contract, project-specific modifications can be made. Resisting the temptation to tweak, but rather maintaining the focus on the value of standardization will provide the greatest benefit.

Maintenance of Standards

Through collaborative efforts of organizations like the CCDC, input is gathered from users, and discussions are held to modify contract clauses as necessary reflecting the goal of efficiency and innovation. It is far more effective to share the job collaboratively among many for a united purpose, rather than independently across the country. Today, there is no group assembling construction specification best practices.

The status quo is simply not good enough. With finite government resources under increasing pressure, the time has never been better to abandon existing practices in favour of a new approach.

In Canada there are two organizations in place to facilitate standardization of specifications and contracts:

1. Transportation Association of Canada (TAC) – TAC provides a neutral forum to exchange ideas and information on technical guidelines and best practices related to the Canadian transportation and roadways sectors.
2. Canadian Construction Documents Committee (CCDC) – CCDC is a national joint committee responsible for the development, production and review of standard Canadian construction contracts, forms and guides.

Rather than re-inventing the wheel, industry and government can work together to capitalize on the resources made available by these two important organizations.

It will take strong leadership and a commitment to collaboration; however, the results will lead to leaner operations, a reduction of wasted time and resources, and an industry that has trust in its specifications and contracts. Most importantly, it will provide savings to taxpayers and additional funding for much needed construction projects.