

Attachment-1 Construction Improvement Workshop Backgrounder

Station Name: Capital Project Planning and Design

The Capital Project Planning and Design station will focus on sharing with Mayor and Council information about the three phases of Capital Project Delivery - Planning, Design and Procurement – before Construction.

This will include:

- How projects are planned
- How staff prepare designs
- How staff collaborate with procurement to build the contracts, and
- Challenges experienced and potential initiatives to address them

Planning of projects starts with understanding the warrants and scope of work typically stemming from master plans, asset management principles, and user identity needs. Each project is summarised in a project sheet where relevant pre-design information is compiled (scope, budget) and reviewed by the client departments (those operating the assets). Projects are slotted into the multi-year budget based on Council priorities and available resourcing (people, budget).

Design of the work commences typically two years in advance of construction to ensure adequate time for well-informed design, land acquisition, utility coordination and quality review. Budget and schedule are continually reviewed at various stages to ensure the right amount of budget and time are allocated. The results of the design phase are a set of construction drawings and tender specifications.

Procurement includes preparing the Contract Documents and receiving bids for the work. At the start of Procurement, project budget and financing checks are made to ensure the City can award the project. Tendered construction is awarded to the lowest compliant bidder. Incentive and disincentive clauses are used to influence the contractors schedule and to prioritize what is important to the City. Based on the value of work and criticality, the City may pre-qualify contractors who are only able to bid on the project.

Staff confirm the quality and effectiveness of Capital Project Delivery using best practices from our Project Management Office and completing various gate phase checks as outlined in the Design and Construction Project Delivery Manual.

Recent Experience

While Engineering and Transportation Services (E&TS) is making strides in improving the efficiency of Capital Project Delivery, the increasing demands on project staff for well-informed, fast, efficient, quality construction can pose project delivery challenges. Over the past few years, Staff have experienced the following:

- Growing expectations for an enhanced level of active community engagement and communications;
- Increasing active management of consultants and contractors required to deliver projects;

- Uncertainty and changing requirements resulting from Provincial regulations;
- Evolving/changing internal processes;
- Staff vacancy and recruitment delays;
- Construction challenges that consume staff time to advance future projects; and
- Increased project delivery reporting and administration,

Construction Improvement Program

As part of the Construction Improvement (CI) Program, staff will be reviewing how improvements could be made in each stage of Capital Project Delivery before Construction. The work will include reviewing and completing potential actions in the planning, design, and procurement stages of a project. The actions will seek to provide staff with more clarity, accountability, improved processes, flexibility, and coordination opportunities to improve overall cost control and project delivery.

Discussion

Staff will seek to understand from Mayor and Council:

- What are the non-construction-related issues that you hear most about from constituents regarding Capital Project Delivery?
- Are there aspects of the Planning, Design and Procurement process that you would like more information about in general or on a project-specific basis?
- Are there priority initiatives that should be focused on to improve Capital Project Delivery?

At this station Council will learn more about:

- Understanding how construction projects are planned, designed, and procured.
- Understanding of challenges and opportunities
- Understanding of how staff manage costs and budgets