



Annual Capital Project Management Update – 2022 BIFAC Approved Contracts

Item 9H

June 23, 2023

Building Investment, Finance and Audit Committee

Report: BIFAC:2023-57

To: Building Investment, Finance and Audit Committee
("BIFAC")

From: Vice President, Facilities Management

Date: May 9, 2023

PURPOSE

The purpose of this report is to provide an update on planned capital construction that was approved by the BIFAC in 2022. This report provides details on how construction projects are managed, along with the processes and procedures in place to vet and manage cost and budget changes.

RECOMMENDATIONS

It is recommended that the BIFAC receive this report for information.

BACKGROUND

In 2022, TCHC delivered over 1,400 planned capital projects, ranging from small scale component replacements to complete and holistic tower renewals. Attachment 1 outlines the current status of capital project contract awards approved by BIFAC in 2022, including a summary of change orders and anticipated construction end dates for these projects.

TCHC's capital projects are managed and delivered by following three key phases:

1. Capital planning
2. Project design
3. Construction delivery

Each phase of capital delivery implements cost control measures to reduce significant changes at the latter end of a project, as costs tend to increase throughout the duration of a project.

Facilities Management has established governance protocols and practices internally to ensure that changes to budgets are vetted by the appropriate level of staff authority. These processes are aligned with TCHC's Procurement Policy, and ensure that project changes are reviewed and approved by senior staff, procurement review committees, the President and CEO, and the Board of Directors, in keeping with budget thresholds and signing authorities.

PROJECT CHANGES AND COST CONTROL

Change orders are a formal means of incorporating modifications into a construction project contract, and are a key cost control measure for TCHC. Change orders are modifications to the original scope of work, schedule, and/or budget.

The industry average for change orders is typically 5-20% of the original construction contract value, with the majority of construction projects incurring change orders between 10-15% (source: Ameresco Canada Inc.).

Renovation work will typically land in the higher end of the range. In the case of TCHC, the delivery of capital construction in fully occupied buildings, coupled with an aging portfolio and the state of facility conditions, presents a variety of challenges for project managers, and often contributes to additional scope of work arising during construction.

In keeping with industry best practice, TCHC tracks change orders against the following categories:

1. TCHC (Owner) Directed

TCHC (Owner) Directed is defined as changes to the project scope that arise through owner discretion and recommendation. For TCHC, this often means expanding work to address similar building requirements or deficiencies coincident to the original work, but excluded from the contract. For example, extending a corridor flooring replacement into a tenant common room that is in poor repair.

2. Unforeseeable Site Conditions

For TCHC, the largest cause of change orders arises from unforeseen issues within existing building conditions. This is, in part, due to portfolio age

(87% of the portfolio is over 30 years old and 49% is over 50 years old) and a capital repair plan that has been, until recent years, historically underfunded.

Often, poor building conditions and extensive degradation are concealed until the onset of construction work. While destructive testing, condition assessments and investigations are conducted routinely at the start of significant capital projects, TCHC is still vulnerable to additional costs due to unforeseeable site conditions.

3. Design Changes, Omissions and Oversight

Project cost control begins with a high-quality set of accurate contract documents. The professional design services who prepare contract documents are subject to the same limitations as other professional practices, such as medicine or law. Building owners, like TCHC, can rely on architects and engineers to prepare these documents with a reasonable standard of care and skill. It is to be expected that construction documents can and will contain some degree of inaccuracy or inconsistency. This is especially true of renovation projects where consultants must accurately map out existing conditions with limited access, or are required to rely on older building plans and survey materials provided by the owner.

4. Other/Miscellaneous

Working in occupied buildings while delivering a significant amount of capital work can lead to a wide range of additional costs that are often unique to TCHC. For example, in order to reduce risk to the company, TCHC may need to enact Constructor fees, which are built into construction contracts, in anticipation of multiple construction teams at a site. In addition, special provisions may be required to address the needs of a tenant or tenant group who require additional support or accommodation during construction. It is also common that a project may take on additional scope that was planned for a future project. For improved efficiencies and to minimize disruption to tenants, this scope is added to an existing project.

Table 1: 2022 Change Orders by Reason

Reason for Change Order	% of Change orders
TCHC (Owner) Directed	47%
Unforeseeable Site Conditions	28%
Design Changes and Omissions	14%
Other	11%
Total	100%

CONCLUSIONS:

In 2022, TCHC delivered its full \$350M capital plan with a change order rate of 10.93% (as calculated by TCHC Procurement) across completed projects. This is well within the industry average for retrofit work in occupied conditions.

TCHC will continue to adhere to industry norms in terms of construction project management. TCHC will maintain rigorous and effective cost control measures throughout the capital delivery process, in keeping with TCHC's Procurement Policy.

SIGNATURE:

"Allen Murray"

Allen Murray
Vice President, Facilities Management

ATTACHMENT:

1. BIFAC Approved Capital Project Contract Awards: Status Update

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