

Capital Works Procedures Manual



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December 2021 (rev. 1.2)



City of Toronto

Engineering & Construction Services Capital Works Procedures Manual

Version History

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Introduction

Objectives and Scope

The overall objective of this manual is to help City staff who are involved in the delivery and support of capital projects to understand the responsibilities that accompany each role at each stage of a contract, the steps involved in the procurement process, and how to be consistent in the management and administration of internally and externally managed contracts. This manual documents the procedures, practices, policies and guidelines that are applicable in the procurement and administration of capital works contracts.

This manual is intended to encompass both linear and vertical projects, and should be utilized in conjunction with the *Field Services Manual*, *Contract Administration Manual* and the appropriate contract documents. City Project Leads and Contract Administrators should fully review all contract documents, consulting agreements, applicable standards, special specifications, and drawings to ensure compliance with all contract requirements.

With the exception of payment and other matters exclusively related to the engagement of external services, the administrative, monitoring, filing and documentation procedures relevant to planning, delivery, acceptance and contract closing described in this manual are applicable to both internal and external services.

In the event that information contained within this manual contradicts the specific contract documents, the *Purchasing By-Law* or the *Procurement Processes Policy*, the aforementioned documents shall take precedence. Should any information within this manual conflict with the *Field Services Manual*, the document with the most recent revision date shall take precedence.

This manual is a living document, and will be updated periodically to reflect technical refinements and updates over time. As such, readers are advised to ensure they are referring to the most recent edition. This manual is available in electronic form only.

Transition from Construction Lien Act to Construction Act

Bill 142, Construction Lien Amendment Act, 2017, received Royal Assent on December 12, 2017. This act includes substantive amendments to the Construction Lien Act to modernize the construction lien and holdback rules. It also introduces new processes for prompt payment and adjudication.

These amendments will take effect in two stages. The first stage of changes – amendments related to modernization of the lien and holdback rules – will come into effect on July 1, 2018, and will apply to all contracts that do not meet any of the following conditions:

- a) a contract was entered into before that day, regardless of when any subcontract under the contract was entered into;*
- b) a procurement process, if any, was commenced before that day by the owner of the premises; or*
- c) the premises is subject to a leasehold interest, and the lease was first entered into before that day.*

For example, if a contract was entered into prior to July 1, 2018, the rules set out in the Construction Act, as it read before July 1 2018, would still apply. However, if a contract was entered on July 2, 2018, the new rules would apply unless the procurement process was commenced prior to July 1, 2018. In other words, the first stage of changes are applicable to contracts resulting from procurements advertised on or after July 1, 2018.

The second stage of changes – amendments related to prompt payment and adjudication) – will come into effect on October 1, 2019.

Sections that have been edited to reflect the July 1, 2018 amendments are highlighted with a vertical line alongside the text (as demonstrated with this paragraph). The revised wording for the highlighted sections is provided in Addendum 1 to this manual. The addendum is available on the ECS intranet site:

<http://insideto.toronto.ca/ecs/ess/cwp/>

Disclaimer

It is the City's expectation and requirement that Project Leads and Contract Administrators deliver all capital projects in accordance with the procedures provided in, and referenced throughout, this manual. This manual is not intended to be an exhaustive list of all requirements, nor is it a substitute for professional judgement. Consultants remain responsible for conducting their own research and for seeking any other advice they deem necessary for the completion of their work.

Nothing contained in this manual shall relieve City staff or Consultants of their obligations and responsibility to deliver projects in compliance with applicable Municipal, Regional, Provincial and Federal legislation or regulations. Unless the requirements set out in this manual are more stringent, the information contained in this manual does not supersede or replace any legislation or regulation governing the provision of engineering services by City staff or Consultants.

It should be noted that the policies and procedures described in this manual do not apply in emergency situations. Staff who may be involved in emergency projects are advised to familiarize themselves with appropriate City policies and guidelines.

The requirements of this manual may only be changed with the written approval of the Chief Engineer and Executive Director's Office.

Compliance with Corporate Policies

All City staff involved in the delivery and support of capital projects are expected to observe and comply with the City's corporate policies in performing their duties. Of particular importance is the compliance with the *Conflict of Interest and Confidentiality* provisions included in the *Toronto Public Service By-Law*. It is imperative that each staff becomes familiar with these provisions and discuss any doubt with their manager. Staff are expected and required to perform their duties in strict adherence to the policy. Failure to comply with the policy will lead to disciplinary actions up to and including dismissal.

The *Toronto Public Service By-Law* is available at <http://insideto.toronto.ca/tps/>.

Roles and Responsibilities

This section provides a general description of the Engineering & Construction Services Division, as well as the job classifications involved in the overall workflow procedure for a contract or project. Detailed discussion on the specific responsibilities for each job classification is provided within the body of this manual.

Engineering & Construction Services: Overview

The primary function of Engineering & Construction Services (ECS) is to provide technical and administrative support in the delivery of the Capital Works Program initiated by our main internal Clients: Solid Waste Management Services, Toronto Water and Transportation Services.

ECS also provides similar services to Toronto Transit Commission (TTC), City Planning and Economic Development & Culture and other agencies / departments when requested. This work is coordinated by the Design & Construction Units with support from Engineering Support Services, as illustrated in Figure 1.

Capital projects are infrastructure replacements, rehabilitations or installations that are planned and coordinated through the Capital Works Program. These include but are not limited to additions, replacements, rehabilitation, protection and improvements to solid waste management facilities and watercourses, roads, sidewalks, bridges, water treatment facilities, water distribution systems and wastewater collection and treatment systems.

Design & Construction Sections

Capital projects are delivered by the following Design & Construction sections:

- **Major Infrastructure (MI):** This section handles upgrades and renovations to the City's wastewater treatment plants, water treatment and solid waste facilities. The Major Infrastructure section also provides project management and construction administration for the Don River & Central Waterfront Wet Weather Flow system, and the Integrated Pumping Station for the Ashbridge's Bay Treatment Plant.

- **Linear Underground Infrastructure (LUI):** This section delivers projects related to the Basement Flooding Protection Program (delivery of modelling-based infrastructure upgrades to reduce risk of basement flooding, erosion, and damage to existing infrastructure), standalone undergrounds (infrastructure that conveys water and wastewater to and from residents), stormwater management infrastructure (watercourses where infrastructure at risk of erosion, stormwater management facilities, green infrastructure), as well as trunk sewers and transmission mains (large diameter water and sewer pipes and storage tanks for trunk sewers).
- **Transportation Infrastructure (TI), Roadways:** This section undertakes work related to the rehabilitation, reconstruction and inspection of local roads (installation of underground work as well as the resurfacing or reconstruction of local roads), major roads (resurfacing or reconstruction of major roads, as well as construction of retaining walls, streetscaping and underground work including sewers and watermains), and streetcar ways and special projects (underground and road work within streetcar ways and civic works for Business Improvement Areas (BIA) and more complex projects involving complex City infrastructure).
- **Transportation Infrastructure (TI), Bridges and Expressways:** This section undertakes work related to the rehabilitation, reconstruction and inspection of bridges, structures, and expressways, as well as rehabilitation of the Gardiner Expressway.

Engineering Support Services

The Design & Construction sections may be supported by the Engineering Support Services section, which is made up of the following units:

- **Business Improvement & Standards:** This unit is responsible for developing and implementing new guidelines, standards, specifications, practices and procedures affecting municipal infrastructure.
- **Construction Inspection:** This unit ensures that the work performed by Contractors on internally managed projects is completed and constructed to City's standards and specifications. For detailed information on inspection services, refer to the *Field Services Manual*.

- **Contracts, Tenders & Payments:** The Contracts, Tenders & Payments (CT&P) unit assists Contract Administrators and Project Leads in the preparation, review and submission of Call Documents (Requests for Tender, Requests for Proposals, Requests for Quotation, etc.) for the procurement of professional services and construction. The CT&P unit also prepares documents for and coordinates the award and legal execution of contracts for ECS and manages payments for all construction and professional services. CT&P liaises with the Procurement and Materials Management Division (PMMD), Insurance & Risk Management (IRM) and Legal Services staff on matters related to tender calls and requests for proposals, as well as the execution of the corresponding contracts and agreements.
- **Engineering Surveys:** This unit's main responsibility is supporting the delivery of ECS's core business, including the Capital Works Program by performing preliminary, construction layout and as-built surveys of City of Toronto infrastructure. The Engineering Surveys unit also provides technical expertise and services in the following survey areas: geodetic, LiDAR, CADD, sub-surface utility locates (SUL) and topographic surveys for other City Divisions.
- **Infrastructure Coordination:** The Infrastructure Coordination Unit (ICU) guides the multi-year coordination process for planned construction projects to be completed by City Divisions, utilities and third party groups. The ICU mandate is to reduce the impact and disruption that construction activities within the City may have on the public.
- **Land & Property Surveys:** This unit is responsible for undertaking property and topographic surveys of lands owned by the City and its ABC's; preparing legal descriptions of land; managing property records; undertaking title searches and analyzing complex property records; and the street naming and addressing functions for the City.

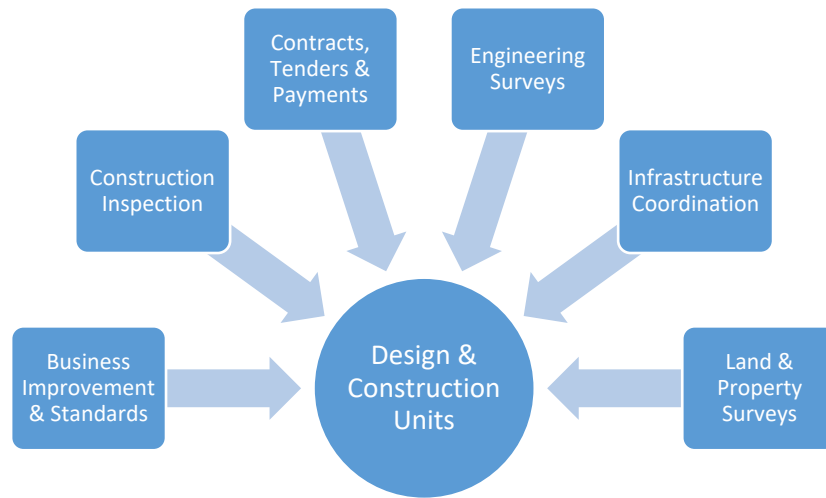


Figure 1: ECS Infrastructure Delivery Operation Chart

Engineering Review Section

The Engineering Review section is responsible for ensuring that applications for land developments and third-party projects conform to City standards, policies, guidelines and procedures. Engineering Review also ensures that these projects can be serviced by existing infrastructure. In cases where this is not possible, Engineering Review ensures that new or upgraded infrastructure is provided. These services are carried out by the following units:

- **Development Engineering:** Provides a "one-window" service to City Planning and the development industry on behalf of some of the City's commenting divisions including: Fire Services, Solid Waste Management, Toronto Water, Transportation Services. Developing Engineering reviews development applications submitted and assess their impacts on municipal infrastructure and services.
- **Soil and Groundwater Quality:** Provides professional and strategic expertise on soil and groundwater issues to support legislation for the management of contaminated sites, the development and implementation of related risk management policies. This unit assists and support other divisions with their environmental initiatives. The Soil and Groundwater Quality unit also provides technical and contract management support to the City's environmental peer review process and the Geotechnical,

Geoenvironmental and Hydrogeologic Investigation program for the division's Capital Works initiatives.

- **Engineering Transit Review:** Responsible for facilitating proposed transit projects for transit organizations, such as Metrolinx, TTC, etc., primarily within the City's right-of-way. This unit assists transit organizations in navigating the City's engineering review and approval processes, while protecting the interests of our internal clients, by reviewing the proposed transit projects and providing technical expertise, and advice.
- **Utility Mapping:** supports third party construction projects by providing information regarding drawings and maps for organizations such as; Metrolinx, TTC and utility companies. Additionally Utility Mapping supports the City as holders and maintainers of its engineering records, including as-builts drawings and utility maps.

Inputs by Other Divisions and Offices

Public consultation and community outreach is provided through the Public Consultation Unit (PCU) of the Policy, Planning, Finance & Administration (PPFA) division or the Office of the Chief Engineer and Executive Director, depending on the nature of the construction project. Refer to Chapter 2.8 Communication: External Stakeholders for additional information on communication with the general public regarding construction projects.

Legal support is provided by the Legal Services division, primarily through the Municipal Law practice section. Services include providing legal opinions and advice on issues that arise in the course of operations and work related to the preparation and finalization of agreements, by-laws and reports to Committees and Council. Support is also provided through the Litigation group, which handles such matters as defense of claims against the City.

Procurement of products and services is handled by Purchasing & Materials Management Division (PMMD). PMMD is responsible for ensuring all purchases assist in delivering City services at the best value possible for residents of the City of Toronto. PMMD develops policies, procedures and guidelines for the procurement of goods and services to ensure an open, fair, competitive, and transparent municipal procurement processes.

Financial services are available from the PPFA and Corporate Finance divisions.

Responsibilities of Engineering & Construction Services

ECS staff is responsible for delivery of various aspects of the Capital Works Program. These include:

- Managing individual projects within the Capital Works Program
- Providing design services for a wide variety of small to large multidisciplinary projects
- Coordinating the procurement of various contracts and professional services for studies and design, post-construction services and contract administration services
- Tendering, awarding, and legal execution of construction contracts
- Ensuring application of City standards
- Administration and financial management of the contracts and agreements
- Providing advice to the Clients on scheduling and structuring of capital works projects to optimize the delivery of the projects
- Working with Purchasing & Materials Management (PMMD) and Legal Services divisions to support the implementation of capital works projects
- Updating project estimates, schedules, and cash flow for projects being managed by ECS
- Identifying new project needs as they arise during the delivery of a project, and communicating with the respective client asset management units
- Recommending alternate procurement methods, if appropriate, and obtaining authority to implement them

In carrying out these duties, ECS must ensure compliance with applicable regulations, and Division and City policies to ensure the effective and efficient completion of capital work projects within scope, on time, within budget and in accordance with terms and specifications of the contract.

In most cases the Client Division, within its capital works project planning group, is responsible for determining which capital project(s), phasing, and level of service is required from ECS based on its

partnership agreement and in consultation with ECS. There are exceptions; for example, planning for the City's bridge inventory is completed by the Bridges, Structures and Expressways unit of the Bridges and Expressways section.

Study, pre-design, and detailed design of capital projects may be undertaken by ECS staff or by External Service Providers. Where external resources are used, ECS is responsible for overseeing the activities of the External Service Providers. Whether the project is undertaken by in-house staff or External Service Providers, an ECS Project Lead is assigned to manage the delivery of the project from planning through to closure. The Project Lead is accountable for acquiring the required services and overall day to day administration and documentation of the project. Table 1 lists the general types of Design & Construction projects provided by ECS.

Table 1 – Types of Capital Works Projects

Major Infrastructure (MI)	Linear Underground Infrastructure (LUI)	Transportation Infrastructure (TI)
Don River & Central Waterfront	Local and trunk Storm sewer construction – new, replacement and rehabilitation	Local road resurfacing / reconstruction
Utility relocation associated with facilities projects	Local and trunk sanitary sewer construction – new, replacement and rehabilitation	Major road resurfacing / reconstruction
Wastewater treatment plants	Local and trunk watermain construction – new, replacement and rehabilitation	Ramps & expressway on grade
Water treatment plants	Local and trunk watermain construction – new, replacement and rehabilitation	Laneway reconstruction
Solid waste management facilities	Watercourse Environmental Assessments and studies	Sidewalk reconstruction and new construction
Reservoirs	Watercourses – replacement,	Bridge rehabilitation and reconstruction
Elevated water tanks		Structural retaining walls
Pumping stations		
Planning and feasibility studies related to water treatment		

Major Infrastructure (MI)	Linear Underground Infrastructure (LUI)	Transportation Infrastructure (TI)
	<p>rehabilitation and protection</p> <p>Stormwater management facilities – new, replacement, rehabilitation and protection</p> <p>Non-treatment storm water facilities</p> <p>Force mains</p> <p>Inflow and infiltration reduction</p> <p>Sanitary or CSO Storage tanks</p> <p>Water distribution studies</p> <p>Green infrastructure implementation</p> <p>Protect streams from erosion and improve aquatic habitat conditions</p>	<p>Elevated ramps & expressways</p> <p>Required utility cut repairs</p> <p>Streetscape works</p> <p>BIA and City Planning funded projects</p> <p>TTC track reconstruction</p> <p>Metrolinx funded projects</p>

Definition of Roles

Client, Client Division - Unit or agency that represents funded programs that impact infrastructure within the City's right-of-way, such as Toronto Water, Transportation Services, Solid Waste, TTC, and BIA. In most cases, the Client is accountable to identify and update project limits, scope, budget, and delivery year through the life of projects.

Also referred to as the Asset Owner.

Construction Supervisor – On internally inspected projects, Construction Supervisors are responsible for supervising, motivating, training, and the day to day management of construction inspection staff. The Construction Supervisor provides daily functional direction to the Construction Inspection staff as well as dealing with site and contract issues.

For additional details, refer to the *Field Services Manual*

Consultant – The Consultant is the person or entity engaged by the City and identified as such in the formal contract agreement. The Consultant can be the architect, engineer, or business entity licensed to practise in the province or territory of the place of the work. The term Consultant means the Consultant or the Consultant's authorized representative.

The Consultant may provide study, design, engineering services, and Contract Administration services for City projects, as stated in the agreement.

Contract Administrator – On internally managed projects, the Contract Administrator provides functional direction to the Inspector and is accountable for all matters related to the project, including managing the project's scope, budget, schedule, maintaining contract documentation, and reporting progress to their manager as well as all Clients or Stakeholders. The role involves overseeing the various project states from pre-construction to completion, reviewing Inspector's reports, contract changes and authorizing payments.

When an External Service Provider, typically a Consultant, is involved in the project, they take on the role of Contract Administrator. On these projects, the Consultant must work with the City's Project Lead throughout the project as defined in the agreement.

Details of roles and responsibilities are outlined in the Call Document and consulting services agreement for the project or program. Generally, the City Project Lead is responsible for decisions related to scope, schedule, budget and design impacts, and ensuring that the project is delivered on time and on budget while meeting the City's requirements. The External Service Provider makes recommendations to the City's Project Lead on a variety of items such as Contractor payments and Contract changes.

For both internally and externally managed projects, the Contract Administrator shall be familiar with all submissions, additional approvals, and other items specific to the Contract that are to be completed to the satisfaction of the City at various stages of the construction phase.

See also "Project Lead."

Contractor - The person or business that enters into a contract to furnish supplies or perform work at a certain price or rate and with a certain schedule. When in a binding agreement with the City, the Contractor is required to fulfill the obligations as outlined in the contract documents and specifications within a given schedule and price. All City contracts place the onus on the Contractor for complying with all applicable bylaws, statutes, and regulations and for carrying out the works in such a manner so as not to unnecessarily or unreasonably inconvenience the public. The Inspector (for internally managed projects) must assure that the quality of materials and workmanship is not compromised during the Contractor's due process. Any deviation from the contract design or specifications must be approved by the City prior to being implemented.

It is the Contractor's responsibility to direct their staff and subcontractors.

Design Supervisor – For linear internally designed projects, Design Supervisors are responsible for supervising the designers and draftspersons as they complete the design, as per the scope of work and schedule.

Division Head – Reports directly to the Deputy City Manager and is responsible for setting the overall strategic direction of their division by establishing its goals and objectives. Also responsible for establishing effective working relationships with other departments such as Corporate Services, Finance, Economic Development Culture and

Tourism, City Planning, as well as suppliers, union officials and the community to achieve mutual objectives. In regards to the processes described in this manual their role is to review and approve projects within their delegated signing authority. For ECS, this is the Chief Engineer and Executive Director. For Toronto Water and Transportation Services, this is the General Manager.

External Service Provider – A person or entity engaged by the City to provide services including but not limited to consulting, design, and contract administration.

See also "Consultant", "Contract Administrator."

Fairness Monitor – A third party retained to assess the procurement process and provide assurance that all components and/or proponents on a call were evaluated objectively and in accordance with approved and required procedures.

Field Ambassador - The Field Ambassador is the dedicated point of contact for the general public during program delivered construction projects, such as the Basement Flooding Protection Program. In a typical project, the Contract Administrator is the main point of contact for the general public, and the Inspector directs on-site communications. When a Field Ambassador is involved in a project, their role is to provide direct and timely response to issues from the public, reducing the amount of involvement between the public and the Contractor and construction delivery staff.

General Contractor – The person or business who contracts for and takes responsibility for completing a construction project. The General Contractor also hires, supervises, and pays all subcontractors and suppliers.

Inspector – The Inspector leads all inspection activities on site and works directly with the Contract Administrator. The Inspector also documents field activities completed by the Contractor. For further detail, refer to the *Field Services Manual*.

Operations Lead – On Major Infrastructure and Facilities projects, this is the Operations staff member who is the single point of contact for Operations. The Operations Lead is assigned to assist the Project Lead by assembling an Operations review team for Operability and Maintainability review of the new Capital Project.

Program Manager - When a collection of projects are being delivered under a Program Management structure by External Service Providers, the financial and strategic aspects of the program are overseen by a Program Manager. The Program Manager also works in conjunction with Project Leads, who manage the day-to-day activities of the individual projects.

Project Lead – The Project Lead is the project engineer, project manager, senior project engineer, or senior project manager who is accountable for ensuring the completion of the project from pre-design to the end of the warranty period.

While a contract is in the pre-design, design, and tender stages, responsibilities of the Project Lead include confirming the scope with the various internal Clients, liaising with internal and external Stakeholders, overseeing the completion of the design (overseeing the Consultant through completion of design, in some cases), obtaining all necessary approvals, as well as developing, reviewing and tendering the contract documents.

After an internally managed contract has been awarded, the role of Contract Administrator is taken on by the Project Lead. Responsibilities include overseeing the construction phase, managing the approval of change orders, managing the approval of monthly payment certificates and ensuring final acceptance of the work at the various stages of construction.

After an externally managed contract has been awarded, the Consultant is usually assigned the role of Contract Administrator and reports to the City Project Lead. The City Project Lead provides support and oversight on items such as payments and contract changes, upon receipt of recommendations from the Consultant Contract Administrator. The Project Lead works with the Consultant to

ensure that the projects are designed and constructed within budget, schedule, as per City and applicable standards, and meet the expectations of the Clients.

On both internally and externally managed contracts, final authorization on payments is provided at manager level. Authorization of Changes in the Work are determined by signing authority, in accordance with the Financial Control By-law. The Project Lead liaises with internal and external Clients or Stakeholders and is the single point of contact for the Client Division.

See also "Contract Administrator."

Stakeholders – The units, groups, or individuals that may affect, be affected by, or perceive themselves to be affected by a decision, activity, or outcome of a project.

Chapter 1: Communication

1.1. Introduction

This chapter provides an introduction to the methods used to communicate with internal and external Stakeholders and the project team.

Effective communication between all parties is critical to the success of any project. This includes communication between the Project Lead, and the public, Consultants, project team, as well as internal and external Stakeholders.

Municipal construction works will often cause varying degrees of disruption to the local community. Depending on the project, it is important to be aware of the impacts a project will have on a community (such as street access, driveway access, lane access, effects on traffic, generation of dust, noisy work, or disruptions to water service) and to provide as much information about these impacts (length, duration, dates) as possible. This is reflected in Engineering & Construction Services' mission statement:

"To create safe and sustainable municipal infrastructure that enhances the high quality of life for the people of Toronto, through professionalism in project planning, engineering and project management services."

Notifying the community about the project, its potential impact and benefits are essential in gaining understanding and support from the community. Keeping open lines of communication within the project team ensures the same understanding about project goals and objectives, it also promotes efficiency as team members complete their tasks. Communication between all parties will help ensure the project is completed successfully.

1.2. Communication: External Stakeholders

When the design stage of a project begins, the Project Lead should identify the potential Stakeholders and assess the need for a communication plan. Stakeholders may include residents, tenants, property owners, businesses, and institutions such as schools, places of worship, community centres, libraries, and hospitals. Stakeholders may also include Councillors, utilities, and road users such as drivers, pedestrians, cyclists, and transit providers.

1.2.1. Communication Management

The [Customer Experience Manual](#) provides guidance to ECS staff regarding their responsibilities in providing the expected positive customer experience as City of Toronto employees in their daily work. This manual also discusses roles and responsibilities regarding external communication for construction projects is outlined in the Customer Experience Manual, as well as those of the Communication Coordinator, Capital Construction (C4).

The C4 plays a critical role in the communication with external stakeholders and the public. Some of their responsibilities include supporting the development and implementation of communication strategies, providing responses and material for high-level / high stakes outreach, and ensuring AODA compliance for files for website posting.

Project Leads, CAs and Field Ambassadors should submit responses to compliants and other external communication distribution to C4 for review and approval prior to distribution. For most construction projects, information is conveyed to the residents, businesses, and Councillors for local and adjacent wards to the construction area through the use of Pre-construction Notices and Construction Notices. Notices are prepared, approved and distributed according to the process provided in the Customer Experience Manual, as well as the [Notification Guide for Design and Construction Projects](#).

In certain situations, external communication is managed through the Public Consultation Unit (PCU) of the Policy, Planning, Finance & Administration (PPFA) division. The PCU is the City of Toronto's in-house public consultation service provider, and often leads public consultation activity for Municipal Class Environmental Assessments (MCEA). Public consultation is regularly required by Council and is an integral part of many planning processes such as MCEA.

Support from PCU may be required if the project is one, or a combination of the following:

- The result of an environmental assessment that was managed by the PCU
- Has Business Improvement Area (BIA) involvement
- Work is planned for an arterial or collector road (watermain, sewer and road) and impacts are severe and lengthy

- Has other Stakeholders (Councillors, resident associations, businesses, etc.) involved
- Will require a complete shutdown of any kind (intersection, road, service, etc.)

The Project Lead should refer to the [Notification Guide for Design and Construction Projects](#) for guidance in assessing the notification and communication requirements and for notice templates. The Notification Guide was developed by the PCU.

The *Notification Guide*, as well as a checklist to assist Project Leads to determine communication needs, are available on the [PPFA intranet site](#).

1.2.2. Pre-Construction Notices

Pre-Construction notices advise affected stakeholders of project details, which include:

- Expected construction start month
- Expected construction end month
- Map of work area
- What to expect before construction starts, such as markings that will be made on the ground
- Contact information for Project Lead
- Ways to obtain additional information (Project Lead contact information, 311, TTY Hearing Impaired Service, project website)

Any required actions or planning by property owners should also be included in the Pre-Construction Notice, such as removal of installations (sprinklers, furniture, etc.) in the right-of-way, planning for substandard water service replacement or pre-construction surveys.

It is important that all stakeholders, including City agencies, are included in the distribution of these notices, so that any required preparation on their part can be planned accordingly. For example, where "Pay and Display" machines fall within or near the work area, the Toronto Parking Authority should be notified so that they are aware of revenue impacts, and can evaluate whether or not the machines need to be removed.

The process for preparing Pre-construction notices is provided in the [Customer Experience Manual](#) and [PCU Notification Guide](#), and should be followed.

1.2.3. Construction Notices and Construction Updates

Construction notices provide more detailed information, in addition to the details provided in the pre-construction notice, such as:

- information on equipment to be moved on site
- what to expect during construction (including noise, dust, traffic detours)
- hours of work
- road and sidewalk access restrictions
- parking restrictions
- changes to garbage and recycling collection
- information regarding surface finishes to be restored after construction
- changes to transit service

In some cases, it may be useful to distribute a construction update during the construction period to keep affected residents and businesses updated with progress, such as when the construction period is long with distinct phases of work, where there are important community and business impacts, or a change of schedule.

For instances where a disruption will only affect a limited number of properties, construction updates can be hand delivered to the properties.

The processes for preparing construction notices are detailed in the [Customer Experience Manual](#) and [PCU Notification Guide](#), and should be followed.

1.2.4. Notice Preparation

Templates for various types of notices are available on the PPFA PCU Notification Guide intranet page at <http://insideto.toronto.ca/ppfa/pcu->

[notification-guide.htm](#). A new template must be downloaded each time a notice needs to be prepared. The templates and other materials are updated periodically, as such, downloading a new template for each notice will ensure that the the most recent version is being used.

Maps for notices may be prepared using the Map Creator tool, available on the [ECS intranet site](#): under the "Tools" tab, click on "DMOG (Base mapping/SSARA)", then click "Map Creator." Note that this tool is suited for roadwork; other resources may be used to prepare maps for work in ravines, parks, ponds, etc.

Complex projects, such as those with severe traffic impacts, planned in busy downtown communities and with active residents, businesses and councillors, will require more detailed and robust communications plans and tools. The Project Lead should be prepared for additional consultation / update meetings, more frequent updates and notices and sharing information for emails, websites and social media.

Additional information about managing communications on these type of projects are outlined in the *Notification Guide*.

1.2.5. Signage

Capital improvement project construction signs are erected at the project location prior to or at the start of construction. These signs summarize project information including the project title, start date, expected completion dates, project details, and contract number. Before construction work begins, these signs are to be located near entry and exit points, or at the beginning and end locations of the project. All signage is to be removed at the end of construction and when not in use.

Orange and black advisory signage is installed in perimeter areas to inform motorists and the general public of road closures and lane reductions. These signs are typically installed two weeks before work begins.

It is important to remember that these signs are meant to provide at-a-glance information to pedestrians and motorists. As such, content should be kept as brief and concise as possible. Templates and specifications for the signs are available on the City's external website for the Contractor to reference. Support for signage wording to ensure compliance and consistency is available in the [Customer Experience Manual](#).

The Contractor is responsible for the production and installation of these signs; however, the Project Lead and Contract Administrator shall work with the Contractor and, when required, the Work Zone Coordinator (responsible for coordinating access of right of way for construction purposes and act as a liaison with the public), to determine the appropriate locations. The responsibilities of the Contractor with respect to the size and number of Capital Improvement Project Construction Signs are to be detailed in the contract specifications.

Construction fence mesh banners may also be used to communicate project details to the public. When used, the Contractor is responsible for the supply, installation, relocation, maintenance, and removal of these banners. Signage is also used to control traffic once work has commenced. The responsibilities of the Contractor with respect to traffic control signage are to be detailed in the contract specifications.

1.2.6. Communication with TTC

On projects that will be occurring near TTC infrastructure (above underground subway tunnels, or under / near streetcar cables), additional approvals may be required from TTC. In these situations, consideration should be given to contacting TTC at the planning and design stages to determine what approvals or permissions may be required in advance. For example:

- if work will be carried out under or near TTC streetcar cables, a TTC "Overhead DC Line Field Condition Guarantee Isolation" form must be signed by the Contractor before the work can proceed. This should be made clear in the scope of work.
- If there is potential for interruption to TTC service resulting from the work, TTC Service Planning should be contacted

1.2.7. Other Communication Tools

Depending on the project and advice from appropriate ECS and PCU staff, additional tools may be used to communicate project information with the public. These tools and their use are detailed in the [Customer Service Manual](#).

1.3. Communication: Project Meetings

Communication to internal stakeholders will occur through a variety of methods, depending on the nature of the information being conveyed. These methods include but are not limited to progress and spending forecasts and updates, briefing notes (as requested for senior management or councillors), responses to inquiries from the public, and responses to inquiries from the media.

Keeping open lines of communication within the project team ensures the same understanding about project goals and objectives, it also promotes efficiency as team members complete their tasks. Communication will occur through several methods, including but not limited to email, telephone conversations, and organized meetings. Retention and filing of project-related correspondence is discussed in Chapter 9. This section outlines the major types of meetings that may be held during the course of a project.

The Project Lead will hold regular meetings throughout a project to facilitate communication among the project team members, as well as to monitor and control progress. Several types of meetings are conducted, depending on the type of project. These include initiation meetings, pre-construction meetings, and site meetings.

These meetings are introduced below.

1.3.1. Meeting Organization: Agendas, Minutes

Key elements of effective meetings are:

- **Planning:** Ensure that there is a need for the meeting, prepare an agenda with realistic time frames and distribute in advance. Arrange for the appropriate parties to be invited to the meeting, and let them know why their attendance is required.
- **Control:** Start on time, have a clear purpose for the meeting, establish ground rules for the meeting (i.e., do not allow people to interrupt each other and eliminate side conversations), and keep on track.
- **Record:** Take notes during the meeting (or designate a recorder) so that key points and decisions are documented. Action items should be recorded with completion dates and the name of the person or organization who is responsible to complete the action item. The meeting minutes should be kept in a consistent format, and ensure that the minutes are distributed to all attendees and

filed in accordance with Appendix I: Centralized Filing. These elements should be incorporated into all meetings to ensure that discussions and decisions are documented for the project file.

- **Issuance of Minutes:** Minutes taken during the meetings should be distributed within five working days of the meeting.

1.3.2. Initiation Meeting

On consulting assignments and internally designed projects, an initiation meeting with the Project Lead, the External Service Provider (primarily engineering Consultant, if applicable), Stakeholders (as required), and the Client lead should be held to ensure that all parties have a full understanding of the project and contractual terms. Topics to discuss during an initiation meeting include project scope, schedule, funding, and cost. These meetings are also referred to as "kickoff meetings."

Additional details regarding the initiation meeting can be found in Sections 2.6.3, 4.5.2.2, and 5.2.1. Document ECS-CWP-01 is a sample agenda for an initiation meeting, including sample topics that may be discussed.

1.3.3. Pre-construction Meeting

On construction projects (Chapter 6), a pre-construction meeting with the major participants in the construction phase, should be held. The purpose of the pre-construction meeting is to introduce the parties involved in the construction phase, and to discuss procedures to be followed throughout the course of the project. It often includes a review of the required permits, approvals and communications required and confirmation of the Contractor mobilization and schedule. The pre-construction meeting should occur after the contract is awarded and the contract is executed by the Contractor and before the work commences.

Additional details regarding the pre-construction meeting can be found in Section 6.5.2.1. Document ECS-CWP-02a is a sample agenda for a pre-construction meeting for a linear project, and Document ECS-CWP-02b is a sample agenda for a vertical project.

1.3.4. Site / Progress Meetings

Site meetings (or Progress Meetings) are conducted once a project is underway. Site meetings should be held at least once per month, depending on the nature and duration of the project, and as noted in the contract. Site meetings may be held more frequently if warranted by the construction schedule or if required during commissioning. The Contract Administrator, Inspector, and the Contractor should determine the frequency of the meetings and call for special meetings when necessary.

The meetings should generally be attended by the

- Project Lead
- Contract Administrator
- Inspection Staff
- Client's representative, if applicable and appropriate
- External Service Provider, if one is engaged (usually a Consultant)
- General Contractor's representative
- Utility companies' representatives, if applicable
- Subcontractors' representative upon invitation by the General Contractor
- Third Parties and Stakeholders impacted by the project, such as TTC, Metrolinx, Parks, Forestry & Recreation, CNR or other similar agencies.

The minutes of meetings should be kept in a consistent format. The Project Lead should ensure that the minutes are distributed to all attendees and the appropriate Stakeholders.

Additional details regarding site meetings can be found in Section 6.5.3, as well as the *Field Services Manual*.

Chapter 2: Project Initiation and Planning

2.1. Introduction

This chapter describes how projects are initiated before they are assigned to ECS, how projects are tracked and set up after they have been initiated, and typical files that are set up once they have been assigned.

2.2. Project Initiation

Linear projects (projects within the municipal right-of-way) are coordinated by Infrastructure Coordination Unit (ICU) (formerly known as Major Capital Infrastructure Coordination). Major infrastructure projects (wastewater treatment plants, water treatment and solid waste facilities) are initiated by the Client Division.

2.2.1. Linear Infrastructure Projects

ECS obtains the majority of capital works projects from the respective infrastructure asset management and programming/planning sections of the Client Divisions.

The ICU guides the multi-year coordination of linear infrastructure planning, design and construction on behalf of City divisions, various utilities and other organizations. As projects move closer to delivery, ICU manages specific identified risks with the objective of improving project delivery rates.

ICU, with input from various divisions within the City, develops the Capital Works Program through an annual budget planning process. Following the approval of the Program by Council, the planning and asset management sections of the operating divisions, in consultation with ECS, identify on an annual basis, capital works projects that require support from ECS in design, procurement and project administration.

There are six distinct phases identified in the delivery of capital works:

1. **Assessment of Needs.** In this phase, Client Divisions evaluate and prioritize their infrastructure needs. Depending on the project, an Environmental Assessment may be required.
2. **Intra-divisional clearances or Intra-organizational clearance.** In this phase, Client Divisions share and review the needs lists within their Division or organization, and assess the condition of all their assets in locations where construction is proposed.
3. **Inter-divisional Clearance or inter-organizational clearance.** In this phase, Client Divisions exchange their complete programs and review all their assets in locations where construction is proposed by others.
4. **Pre-Design.** In this phase, the scope of individual projects is fully defined and clearances are obtained from the Client Divisions.
5. **Detailed Design.** Detailed design is undertaken by the delivery agents (e.g. ECS). In this phase, the design details are confirmed, and the project is brought to a tender-ready stage. Some projects, depending on their nature and complexity, may require a longer design period.
6. **Construction.** In this phase, work is tendered out to a Contractor by the delivery agents, and the work is undertaken by the Contractor.

Engineering & Construction Services becomes involved in the process at the pre-design phase. After the Inter-Divisional / Intra-Organizational Clearance phase (prior to pre-design), the Capital Works Program is closed for changes. Changes that arise during the pre-design, detailed design, and construction phases must go through the ICU Program Change Management process as detailed in the *Capital Coordination Protocol* document available for download on the [ICU intranet site](#).

Information provided to the ECS Design and Construction sections at the pre-design stage includes a spreadsheet summarizing project locations, work types, and preliminary budget.

The location, type and timing of construction that is planned across the city each year is presented in T.O. INview, an online map that displays

work planned each year, by each organization. T.O. INview is accessed through the [ICU intranet site](#) and the [City of Toronto external website](#).

Detailed information on how ICU develops and maintains a five-year coordinated capital program is presented in the document *Capital Coordination Protocol*, available on the [ICU intranet site](#).

2.2.2. Facilities and Major Infrastructure Projects

Facilities and major infrastructure projects are initiated by the Client Divisions. The Client Division identifies the need for the work and documents this through a business case. The work is jointly reviewed by the Client Division and the Project Delivery groups to determine the method for delivery of the work and the timing. The project is then assigned to a Project Lead, who works with the Operations Lead to establish a budget and project team. The budget and business case are included in the Capital Works Program and subject to approval by City Council, the project proceeds.

The Project Lead defines the Scope of Work after consultation with all the Stakeholders, completes a Project Charter (if required) and prepares the Call Document to hire a Consultant for the engineering of the project and the contract administration during construction stage of the project. The Project Lead takes the responsibility for completing the project from initial engineering through to the end of the warranty period.

2.2.3. Procurement of External Services

Once a project has been initiated, a need for preliminary drawings and reports by an External Service Provider may be identified. Refer to Section 4.2 for detailed information on the procurement of External Service Providers. Chapter 3 provides detailed discussion on the policies governing the procurement of services.

2.3. Project Tracking Portal

Project Tracking Portal (PTP) is a web-based system used by the City to track projects, contracts, cashflow, commitments and expenditures. It provides up-to-date project information on scope, schedule, effort, budget, engineering fees, expenditures and milestones as well as produces a variety of operational and executive reports.

Detailed information on the setup and management of projects and contracts, as well as time tracking responsibilities of staff, is available in the document *PTP Business Protocols*, available on the intranet at <http://insideto.toronto.ca/ptp/protocols.htm>, as well as from the Information & Technology intranet site at <http://insideto.toronto.ca/itweb/training-resources/guides.html>.

There are three types of contracts established in PTP:

- Unit Price – Used primarily by the Linear Underground Infrastructure and Transportation Infrastructure sections for unit price construction work. Unit price contracts reference standard items in PTP.
- Professional Services – Used for request for proposals (RFP) for consulting services and request for quotations (RFQ) for engineering and testing services.
- Lump Sum – Used primarily by the Major Infrastructure section, the Bridges Structures & Expressways unit, and other units for lump sum construction work.

Projects are created in PTP as soon as they are initiated or confirmed, usually before a project is assigned to a Project Lead. When the Capital Works Program for the current year is confirmed by ICU, linear projects are entered into PTP by the PTP Administrator. Vertical projects are created in PTP by the Manager or CT&P Supervisor after authorization to proceed with the project has been confirmed.

Project dates and financial information is tracked through their various phases, such as planning, design, construction and post-construction. Contracts are tracked in PTP through the pre-tender, tender, award, construction, and warranty phases.

2.4. Project Filing

ProjectWise is an integrated suite of software solutions used by ECS staff for document/file management, publishing, and collaboration. Electronic files must be maintained on ProjectWise as soon as possible upon the initiation of the project or contract, so that the files are accessible to all project team members.

Hard copies of certain documents may be required to be kept for legal reasons (for example, sealed documents, or those with original signatures). The types of files that are required to be retained are further described in Chapter 9.

Detailed information about ProjectWise can be found on the intranet site (<http://insideto.toronto.ca/projectwise/>).

2.5. Types of Files

This section describes the types of files typically generated on various types of projects.

2.5.1. Files for Consulting Assignments

All documents related to these projects should be filed for record as per the filing structure accepted by the section or unit. Examples of files generated on consulting assignments include:

- RFP files - information and documents pertaining to the development of the terms of reference, addenda, technical and financial proposals, procurement process, record of reference checks, etc.
- Contract files – executed contracts, bonds and insurance certificates, minutes of meetings, correspondence, requests, authorizations, release and waiver, completion certificate, etc.
- Payment files – billing information (as stipulated in the RFP or Agreement), Contractor invoices and supporting documentation (including payroll information, Workplace Safety and Insurance Board (WSIB) certificates and statutory declarations where applicable), approved scope change documentations, approved payment certificates, claims related documents, etc.
- General files - internal/public/councillors/utilities correspondence, miscellaneous documents

Some of the documents may be maintained in an External Service Provider's filing system. All project documentation is to be turned over to the City Project Lead at the conclusion of the project, before the final payment is processed. All materials and goods purchased in connection with the project and paid for by the City should also be turned over to the Project Lead. The Project Lead should take necessary steps to deduct from the final payment any cost of materials and goods that were not turned over to the City.

Refer to Chapter 4 for additional information on the management of external study and design services.

2.5.2. Files for Internally Designed Projects

For internally designed projects (Chapter 5), working drawings, draft documents, preliminary, and any correspondence related to decisions made regarding the design should be kept on file. Other examples of files from internally designed projects include:

- documents pertaining to scope confirmation
- 30, 60 and 90% design, design-related correspondence
- meeting minutes
- internal correspondence and comments
- external correspondence and comments (public, Councillors, utilities)

Refer to Chapter 5 for additional information on the steps undertaken for projects designed in-house.

2.5.3. Files for Construction Projects

Files and directories for construction projects (Chapter 6) are typically set up at the tender stage. All documents related to a construction project should be filed during the various phases of the project. Examples of files for construction projects include the following:

- design and tendering files – Information and documents pertaining to project design and tendering such as checklists, approvals, addenda, bids, etc.
- contract administration files – Executed contracts, bonds and insurance certificates, minutes of meetings, Client correspondence, requests, authorizations, etc.
- contractor files – Contractor correspondence, request for information, Request for Quotation, performance evaluations, correspondence pertaining to Change Directives and Change Orders, etc.
- Inspectors' reports
- payment files – Price schedules (base items and accepted "equivalents and alternatives" where applicable), Contractor invoices and supporting documentation (including WSIB Clearance Certificates and statutory declarations where applicable), approved

Change Directives and Change Orders, third party cost recovery billing information (set up separate sub-files for each third party if necessary), approved payment certificates, etc.

- claim related files – Claims submitted by the Contractor, as well as any documentation pertaining to the claim or potential claim. See Section 6.5.14 for further discussion on dealing with claims.
- general files – Internal correspondence, public correspondence, correspondence with Councillors, correspondence with utilities, comments, miscellaneous documents

Insurance certificates and surety bonds should be kept in the project file in a separate sub-directory with the agreement for easy access. For further information regarding safekeeping of insurance certificates and surety bonds, refer to the document *Instructions for Safekeeping of Letters of Credit, Performance Bonds, Insurance Certificates and Parental Guarantees*, available on the [Corporate Finance intranet site](#).

External Service Providers acting as Contract Administrators may have maintained a file system for the project. The Project Lead shall ensure that the files are turned over to the City by the end of the contract, before the final payment is issued, and stored at an appropriate location.

Refer to Chapter 6 for additional information on the management of construction projects.

2.6. Project Planning

This section describes the planning activities taken by ECS upon the initiation of a project. Main activities and tasks include confirmation of funding availability, assigning staff, defining project scope and notifying Stakeholders.

2.6.1. Internal Scheduling, Costing, Budgeting

To minimize or avoid any contract amendments, sufficient time should be allocated for project planning, meeting and verifying project scope with all Stakeholders prior to finalizing the procurement document. All information pertaining to the agreed project scope, budget, and schedule are documented.

2.6.2. Staff Resources and Project Team

The ECS Director or Manager shall determine whether there are sufficient in-house resources to carry out the work and whether the project is within the area of expertise of in-house staff. If not, the procurement of an appropriate External Service Provider will be initiated.

In any case, the ECS Director or Manager assigns the project management duty to a Project Lead and, in consultation with the Client Division, identifies the appropriate Client lead.

The ECS Project Lead is responsible for the overall management and administration of the project. This includes, where necessary, defining and documenting the roles and responsibilities of each team member, communications protocol and the expected commitment and involvement at the various stages of the project.

Where necessary on internally managed projects, the ECS Manager may assign a staff member(s) to the team, and through mutual agreement, designate an appropriate Client lead or staff member having the requisite professional expertise or experience, to be responsible for specific tasks, such as:

- participating in the development of the Call Document
- overseeing the quality of delivery of a particular area(s) of work
- other functions including reviewing and agreeing to certain parts of all progress payments, and sign off of milestones and deliverables.

Typical project teams are organized as shown in Figure 2 and Figure 3.

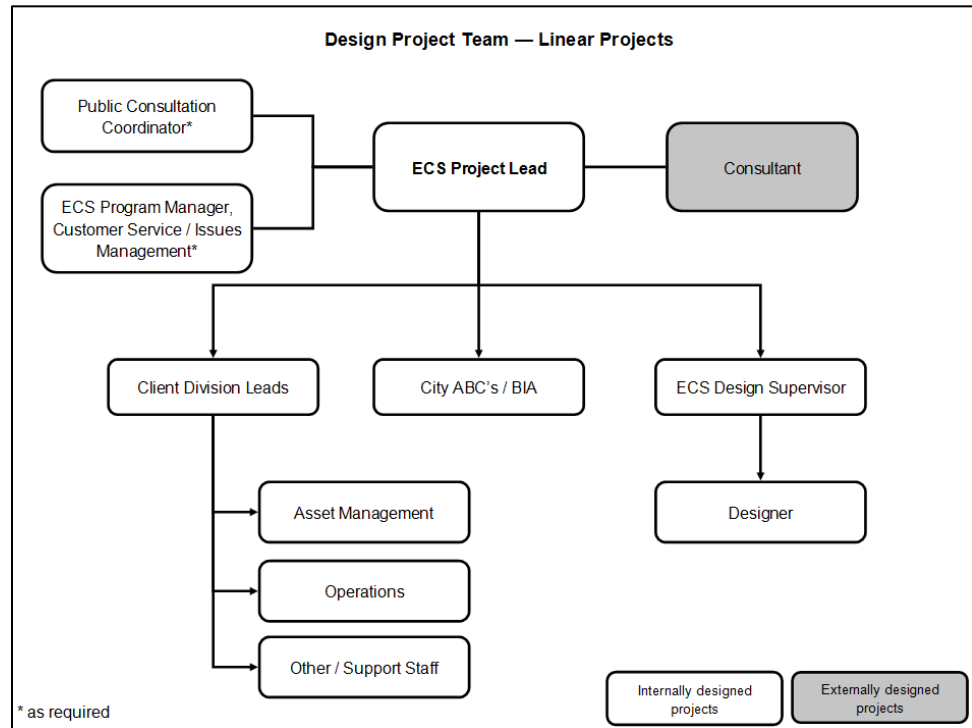


Figure 2: Design Services - Linear Project Team

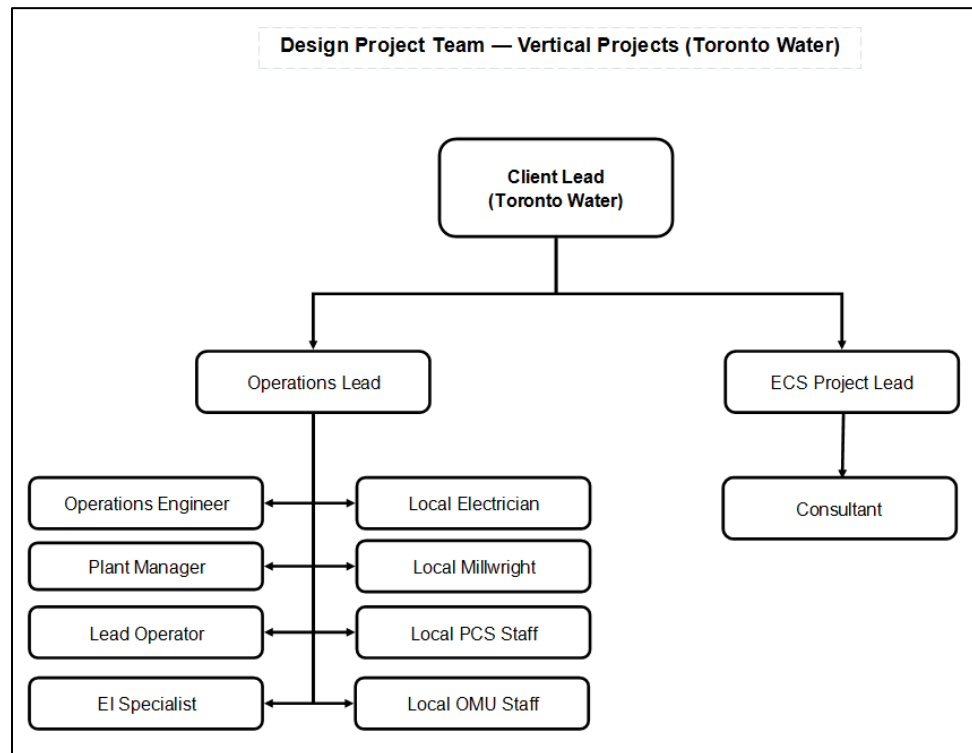


Figure 3: Design Services - Vertical Project Team

2.6.3. Defining Project Scope

2.6.3.1. Linear Contracts

The Project Lead sets up an initiation meeting where project scope, funding, limits, schedule, and required approvals and permits are confirmed by the respective Clients. Refer to document ECS-CWP-01 for a sample initiation meeting agenda.

The ECS Project Lead is to produce a Pre-Design Report (ECS-CWP-03) which confirms the budget estimates, scheduling information, and project scope discussed at the initiation meeting. This report must be completed before any preliminary or detailed design work on internally designed projects. Refer to Section 5.2.1 for additional information on initiation meetings for internally designed projects.

2.6.3.2. Vertical Contracts

Prior to commencement of any design work, the Project Lead shall ensure that the Project Work Scope has been defined and signed by the Client Division. The Project Lead defines the "Scope of Work" after consultation with all the Stakeholders, and prepares the Call Document to hire a Consultant for the designing of the project and the contract administration during construction stage of the project. A Project Charter may be used at this stage.

2.6.3.3. Managing Changes in Project Scope

For both linear and vertical contracts, good communication with the Client Division is important, particularly when it comes to changes in the Project Scope. The Client Division shall also be kept informed in writing prior to the additional expenditures which would result in the exceedance of the total contract or Client funding as part of the Purchase Order (PO) Amendment process.

For scope changes initiated by the Client Division, the Client should provide a formal written change request to the Project Lead. Substantial scope changes (changes in scope that have large implications on the project as a whole), are to be avoided if at all possible, especially after a contract is awarded.

Substantial scope changes initiated by the Client Division after contract award can undermine the integrity of the City's procurement process. This may also indicate a lack of proper upfront planning, and may

provide undue advantage to the winning bidder. Should change requests arise, they should be dealt with on a case-by-case basis at the discretion of the Project Lead. Where it is not possible to avoid such changes, the Client Division should be fully informed of the impact of substantial scope changes on contract costs and timelines.

2.7. Approvals and Permits

Project Leads should be aware of necessary approvals and permits that may be required to complete a project. Typically, applications for these are initiated at or around the detailed design stage. All necessary approvals and permits for the engineering design are to be secured prior to tendering unless approved otherwise by the appropriate Director.

Where required, the application process for an Environmental Compliance Approval (ECA) from the Ministry of the Environment, Conservation and Parks (MECP) should be initiated as soon as the final design is completed.

An ECA may be required for projects that will generate emissions and discharges related to air, noise, waste, or sewage. The ECA application form (available on the MECP website at <https://www.ontario.ca/page/environmental-permissions>) is signed by the Project Lead or their manager, and is submitted through the City's Transfer of Review Program. Information regarding the Transfer of Review Program is available on the Toronto Water intranet site on [Policy and Program Development](#).

Watermain approval is required on all watermain replacement projects; see <https://www.ontario.ca/page/guide-applying-drinking-water-works-permit-amendments-licence-amendments>

Activities posing minimal risk to the environment and human health may be registered with the Environmental Activity and Sector Registry (EASR). Detailed information on whether an ECA or EASR is required is available on the MECP website.

Ideally, MECP approval should be completed prior to tendering the project. However, for Linear Infrastructure replacement projects and Major Infrastructure projects, tendering may proceed prior to obtaining the ECA. If this is the case, the specification of the contract should clearly indicate that the City has applied for but not yet received MECP approval and that award of the contract is dependent on the project being approved. It should be noted that the tender may become void

while waiting for the approval due to the expiry of the bid bond validity period.

Except in cases where the ECA is subject to equipment capacity or selection, under no circumstances shall a plant or facility contract be awarded for construction prior to the issuance of an ECA by the MECP. In the case of the above exception, the ECA application and review have to be completed.

Approval from other entities such as the Toronto and Region Conservation Authority (TRCA), MECP permit to take water, and the Toronto Public Utilities Coordinating Committee (TPUCC) may also be required. If required, sign-off should be secured prior to tendering.

Chapter 3: Procurement

3.1. Introduction

This chapter describes the bylaws governing procurement at the City of Toronto, the mechanisms in place for procuring the services of Contractors and Consultants, and the methods through which contracts are awarded. This chapter also discusses the use of rosters, and the role of Fairness Monitors in the procurement process. For details on the specific tasks carried out by the Contracts, Tenders & Payments (CT&P) unit, refer to the *Contract Administration Manual* available on the [ECS intranet site](#).

The procurement of goods and services – including the services of Consultants and Contractors – is handled through the Purchasing & Material Management Division (PMMD). PMMD oversees procurement activities and develops policies, procedures and guidelines for the procurement of goods to ensure an open, fair, competitive, and transparent municipal procurement process.

ECS Design & Construction sections, in conjunction with the CT&P unit, work with PMMD to procure the services of Consultants and Contractors. The Design & Construction sections translate the Client Divisions' needs into the standard specifications and drawings included in the Call Documents. The CT&P unit ensures that the Call Documents are complete before they are submitted to PMMD for distribution to the vendor community. PMMD acts as an intermediary between the City and the vendor community.

In general, the procurement process consists of the following steps:

1. Define need, Project Scope, and project estimate
2. Confirm funding
3. Develop, review and post Call Document
4. Evaluate responses to Call Document
5. Recommend proponent
6. Award to proponent
7. Execute project / purchase

PMMD estimates that the time to get through all of the steps can range from five to seven months. The timeframe may be longer, depending on how long it takes to complete the design and develop the Call Document.

Depending on the nature of the project, procurement may be carried out using one of the following Call Documents:

- **Request for Proposal (RFP)** – A formal invitation from the City for firms or individuals to submit a proposal to a stated problem or need the City has identified. Proponents are evaluated on technical quality and price.
- **Request for Quotation (RFQ)** – An invitation from the City to vendors/suppliers to bid on specific products or services. Used when project requirements can be precisely defined as a fixed price or on a unit basis, or a combination of both. Bidders are generally differentiated on price only.
- **Request for Tender (RFT)** – Similar to an RFQ but specifically used on Construction projects. Chapter 195 of the municipal code defines Construction as *“the construction of any improvement in or on real property and includes the repair, renovation, or demolition of an improvement.”* Bidders are differentiated on price only, but may also have to meet minimum experience qualifications as defined in the RFT.

If a better understanding of the supply market is needed before a RFP can be issued, a Request for Information, Request to Pre-Qualify, or Request for Expression of Interest can be used:

- **Request for Information (RFI)** –Used to obtain information from prospective bidders to assist in developing the scope of the work. The RFI describes the nature of the assignment, outlines the areas where the scope of work needs to be firmed up or filled in and asks a series of specific questions that the bidders are asked to respond to. Responding to a RFI is not a pre-qualification step; however, it would be acceptable to narrow the list of prospective bidders to those who respond to the RFI (as long as that is disclosed).

- **Request to Pre-Qualify (RTP)** - Precedes a Call for Tenders, Quotations or Proposals. Used to identify and pre-select bidders, where it is deemed that the nature and complexity of the work involved warrants the time and effort required to pre-select the most experienced and qualified bidders.
- **Request for Expression of Interest (REOI)** – Helps determine the interest of the market place to provide a scope of work or services being contemplated by the City. A REOI typically provides a brief description of the opportunity, outlines the steps towards award, and asks for general information about the Proponent. An REOI essentially establishes a bidders list or roster; it is not to be confused with a pre-qualification process. REOI's may include cost information.

The Project Lead should be aware of the policy *Access to Information for Members of Council at Various Stages of the Procurement Process* which sets the criteria and process for Council input and direction into the specifications and scope of a particular procurement. This policy is available on the [PMMD Bylaws, Policies and Procedures intranet site](#) (subject to change under new bylaw).

3.2. Financial Control and Purchasing Bylaws

Procurement at the City of Toronto is undertaken with regard for the *Financial Control By-Law* (Chapter 71 of the Municipal Code), the *Purchasing By-Law* (Chapter 195 of the Municipal Code), as well as the *Procurement Processes Policy*.

The *Purchasing By-Law*, with the *Financial Control By-Law*, provides the overall framework for proper and effective procurement processes in the City that meet divisional operational needs, while ensuring effective financial controls and accountability. More specifically, the *Purchasing By-law*, with the *Procurement Processes Policy* outlines:

- the authority, roles and responsibilities of the Chief Purchasing Officer and other City officials;
- the authority of the Bid Award Panel, Standing Committees and Council;
- the process for calling of bids and awarding of contracts;
- the conditions under which goods and services can be sourced without a competitive process;

- the conditions under which a bid may be deemed unbalanced;
- bid disqualification; and
- dispute resolution.

The *Purchasing By-Law* and the *Procurement Processes Policy* are updated periodically. Current versions of PMMD bylaws, policies, and procedures are available on the [PMMD Bylaws, Policies and Procedures intranet site](#).

3.3. Signing Authorities

The *Financial Control By-Law* delegates the signing authorities to each Division Head. Signing authority amounts are applicable to an individual award or commitment, which is defined in Chapter 71 of the Municipal Code as "*a contractual obligation for the purchases of goods, services or construction, including the execution of any document evidencing the obligation.*" This includes the authorization of a purchase requisition for the issuance of a PO (Chapter 195 of the Municipal Code).

For an award that covers multiple contracts or phases over several years, such as design, construction administration, and post-construction services, the delegated signing authority limit is applicable to the total value of the original authorized award amount of that commitment, not the individual contracts and PO's issued under that award, unless the contracts are issued to different External Service Providers.

3.4. Role of Purchasing & Materials Management Division

PMMD provides the following services:

- Determining the appropriate method of procurement and also providing guidance and advice to Clients regarding the most appropriate method of competitive bidding for their requirements.

- Maintaining templates for Request for Quotation, Request for Tender and Request for Proposal documents for issuance.
- Posting bid documents electronically on online Call Document system for purchase by bidders, as well as managing distribution of USBs and DVDs for large data files
- Conducting formal public opening for Call documents
- Preparing summaries of bids received
- Forwarding bid summaries and bid responses to Clients for their evaluation and recommendation
- Reviewing Call Documents and Specifications provided by the Clients for completeness
- Facilitating Fair Wage check
- Posting of awards on the City's internet site
- Advising on the use and applicability of a Fairness Monitor in the preparation and review of a Call document
- Assisting Client Divisions in the evaluation of bids received.
- Reviewing the recommendations from Client Divisions to ensure the award is appropriately made to the lowest bidder for a RFQ, or best value for a RFP, meeting the required specifications
- Ensuring that all purchases meet the policies required by the Client Divisions and applicable legislation
- Conducting call debriefings at the end of the call process when requested by the proponent/bidder after an award has been made or if the call has been cancelled.

3.5. Unbalanced Bid Analysis

Unbalanced bidding can occur when a bidder places prices on items that do not appear to reflect reasonable, actual costs. Because an unbalanced bid may not result in the lowest overall cost to the City (even though it may be the lowest submitted bid), all bids received in response to a Call are analyzed for unbalanced items by PMMD.

The *Unbalanced Bid Analysis Procedure* is available on the [PMMD Policies and Procedures intranet site](#). The implementation of the procedure helps to ensure awarded bids represent the best value for the City.

A bid may be deemed unbalanced when:

- it is based on prices which are significantly less than cost for some items of work and prices which are significantly overstated in relation to cost for other items of work; and
- the bid may not result in the lowest overall cost even though it may be the lowest submitted bid; or
- it is so unbalanced as to be tantamount to allowing an advance payment.

PMMD will work with staff on the Call Document to obtain more information about estimated quantities and prices in order to conduct the unbalanced bid analysis once bids are received. In the case of RFT's, the Division is to provide PMMD with a price summary template (details on the price summary template are available in the *Unbalanced Bid Analysis Procedure*). In the case of RFQ's or RFP's, either the Division or PMMD shall develop the price summary template. In all cases it is the responsibility of the Division to provide the price and quantity estimates, where feasible. All Call Documents will provide disclosure to prospective bidders that the City may reject a bid if it determines, in its sole discretion, that a bid is materially unbalanced.

After a Call closes, bids are evaluated by PMMD following the *Unbalanced Bid Analysis Procedure*. PMMD will summarize the bids in a spreadsheet and flag any concerns regarding unbalanced line items for divisional staff to review and consider, in light of the estimates and fluctuations in unit prices among bidders. For lump sum contracts, the unbalanced bid analysis will consider whether the price has been structured to provide for an upfront payment to the vendor. This may result in a joint decision between PMMD and divisional staff to cancel a Call or disqualify a particular bidder for providing an unbalanced bid.

3.6. Request for Proposal

A RFP is an invitation to External Service Providers to submit a quotation to the City for a specific set of requirements, along with a proposed approach for meeting those requirements. The RFP document must clearly articulate both what is required and the factors that are important in delivering the product and/or service.

Proponents are evaluated on both the technical quality of the proposal and price. Proponents may offer different approaches to meeting the requirements. Proposals are not assumed to be equivalent across proponents.

The request for proposal procedure is outlined in the *Request for Proposal Procedure* available on the [PMMD Bylaws, Policies and Procedures intranet site](#).

When preparing the RFP document, the Project Lead should, in most cases, work with the Client lead on the technical part of the document. Also, special security and / or insurance requirements shall be determined in consultation with the Insurance & Risk Management section of Corporate Finance. The Project Lead should refer to the following checklists, both available on the [PMMD Bylaws, Policies and Procedures intranet site](#):

- RFP Process Key Considerations / Requirements
- Effective Contract Management Key Considerations / Requirements

The current generic RFP template posted on the [PMMD template site](#) may be used for preparing the RFP document. A previously issued RFP document shall not be used in place of the current generic template to ensure up-to-date requirements are included in the RFP document.

A version of this template that is to be used in procuring professional engineering services for plant contracts, and may be used by other units as required, is available on the ECS intranet site: <http://insideto.toronto.ca/ecs/dc/templates.htm> Appendixes that are to accompany the RFP, as well as the Consulting Agreement Template, are also available on the intranet site.

Instructions for preparing and assembling the RFP documents are included within the RFP template, and should be followed closely. With the exception of optional provisions and project specific requirements which are noted in the template, the content of the RFP is not to be modified without the approval of PMMD and Legal Services.

RFP Call Documents can be issued to include the cost and technical aspects together or through a two envelope system where the evaluation of the technical aspects of the proposal is reviewed and scored prior to the opening of the cost envelope. The selection of one of these options is required to be included in the Call Documents.

Regardless of the version of the Call Document used, it is imperative that all works and tasks (e.g. securing necessary permits or approvals) to be performed as well as documentation requirements are clearly identified in the terms of reference. The RFP document is recommended to be reviewed by at least one additional staff member prior to being forwarded to PMMD. Further, all Call Documents will provide disclosure to prospective bidders that the City may reject a bid if it determines, in its sole discretion, that a bid is materially unbalanced.

The RFP package is forwarded to PMMD with a covering memorandum signed by the appropriate ECS staff that has the delegated signing authority.

3.6.1. City Standards, Policies and Procedures

The following are common standards, policies and procedures that may be applicable in design assignments. Note that this list is not exhaustive; other project/discipline-specific standards may be required.

- [CADD Graphic Specification Manual](#)
- City's drawing number and contract number
- [Construction Specifications and Drawings for Road Works](#)
- [Construction Specifications and Drawings for Sewers and Watermains](#)
- [Ontario Provincial Standards](#)
- Utility cut circulation and permit procedures, requirements and applications (refer to the [Municipal Consent Requirements webpage](#))
- [Standard project notifications to councillor, other Stakeholders and/or residents impacted by the project](#)
- Public consultation procedures

- Standard templates for [linear](#) and [vertical](#) tender documents (Section 3.11)
- [Road Disruption Activity Reporting System](#) (RoDARS) procedures
- [Road Allowance Control System](#) (RACS)
- [Design Criteria for Sewers and Watermains](#)
- [Curb Radii Guidelines](#)
- [Vehicle Travel Lane Width Guidelines](#)
- [Pavement Design Guidelines](#)
- [Accessibility Design Guidelines](#)
- [Process Control System \(PCS\) Implementation Manual](#)
- Toronto Water Electrical Specifications and Master Single Line Diagrams (SLD)
- Commissioning Guidelines

The applicable items should be referenced in the RFP document. The Project Lead should assist or facilitate the consulting / contracted professional services provider to obtain the referenced documents.

3.6.2. Evaluation of Proposals

RFPs must have an evaluation process that is applied in a fair manner to all respondents. The scoring/weighting table must be prepared and submitted to PMMD prior to distribution of the RFP Call Document to the evaluation team.

The procedure *Determining the Evaluation Team* is available on the [PMMD Bylaws, Policies and Procedures intranet site](#). The evaluation team members must evaluate the proposals in accordance with the evaluation process set out in the RFP and provided to PMMD.

Mandatory requirements and the evaluation criteria are not to be deviated from in the evaluation process. A term, condition or requirement for evaluation not explicitly stated in the Call Document or in an addenda cannot later be used to evaluate submissions, nor can any method of scoring/weighting contained in the Call Document be changed. For these reasons, it is critical that the development of the

Call Document and its terms and conditions, expected deliverables and process of evaluation, be carefully prepared.

Parties proposing a more complex evaluation process involving more than one stage to the evaluation, should discuss proposed evaluation approaches with staff from PMMD prior to issuance of the Call Documents.

When determining the composition of the selection committee, care should be taken to ensure a balanced representation of Client views and expertise. The committee size is determined by the nature of the assignment and the extent of expertise required. A minimum of two evaluators are required.

Selection committee members are required to sign a *Non-Disclosure & Conflict of Interest Declaration* form. This form is available on the [PMMD Bylaws, Policies and Procedures intranet site](#). This form must be maintained by the Project Lead, and provided to PMMD.

For RFPs with estimated values over \$500,000, PMMD should be requested to attend the selection committee meetings as an observer to ensure that the evaluation processes is followed objectively and to answer any process questions of the selection committee. Clients may request PMMD's attendance as an observer at selection committee meetings for lower value proposals as necessary.

Extreme caution should be used on mandatory criteria. Mandatory criteria should appear in only one place in the document to ensure the bidders know what they are. Mandatory requirements include technical mandatories, contractual mandatories and submission mandatories. Failure to meet any mandatory requirement results in the rejection of a Proposal.

3.6.3. References

It is the responsibility of the Project Lead to check references if references are requested in the Call Documents. References must be checked prior to forwarding the final recommendation to PMMD. Documentation related to the reference checks shall be kept, as described in Section 2.5

3.7. Performance Evaluations

Each Call Document should include information regarding Contractor or Consultant performance evaluations. At time of tender, the

proponent will be aware of the basis upon which they will be evaluated throughout and at the end of the project.

3.7.1. Contractor Performance Evaluations

The Contract Administrator will confirm the frequency of Contractor Performance Evaluations with the General Contractor at the pre-construction meeting, which is to be consistent with the Contract requirements. On externally managed construction projects, the City's Project Lead is to advise the Contract Administrator with the milestones for performing the Contractor Performance Evaluations.

The frequency for completing Contractor Performance Evaluations is detailed on the PMMD intranet site at http://insideto.toronto.ca/purchasing/cpe_tool.htm.

3.7.2. Professional Services Performance Evaluation

For ECS and Toronto Water projects, External Service Providers are evaluated using the Professional Services Performance Evaluation Form (PSPE), available on the ECS intranet site at <http://insideto.toronto.ca/ecs/excel/professional-services-performance-evaluation.xlsm>. The number of Professional Services Performance Evaluations conducted throughout a consulting assignment will depend on the complexity and duration of the assignment. At a minimum, one interim and one final evaluation should be conducted per phase / PO. Consideration may be given to performing an evaluation after the warranty period is complete.

3.8. Request for Information and Request for Expression of Interest

Requests for Information (RFI) or Requests for Expression of Interest (REOI) are used to help determine the interest of the marketplace to provide a scope of work or services being contemplated by the City. The bids submitted with these Calls may include cost information.

The steps to issue a RFI or REOI are the same as those for an RFP Call.

The RFI or REOI process shall not be used to pre-qualify potential suppliers or Consultants. Responses cannot be used to influence the chances of the participating suppliers, Contractors or Consultants from becoming the successful proponent in any subsequent opportunity.

3.9. Request for Supplier Qualifications (Request to Pre-qualify)

A Request for Supplier Qualifications or Request to Pre-qualify (RTP) shall be used, and precede a Call for Tenders, Quotations or Proposals in order to identify and pre-select bidders, where it is deemed that the nature and complexity of the work involved warrants the time and effort required to pre-select the most experienced and qualified bidders.

A RTP may also be utilized for projects that may benefit from, or require, an accelerated Tender schedule. During the RTP process, typically 90% drawings are issued to allow the bidders to review the scope of work in detail, although drawings at earlier stages of completion may also be issued depending on the project. During the subsequent RFT process, the bidders are already familiar with the project and are more likely to have their questions prepared at the beginning of the Tender period. This may allow for a shorter tender period and reduce requests for an extension in the closing date.

Note that going through the RTP process may not always result in a shorter tendering period. The bids received in response to these Calls shall not include cost information.

3.10. Request for Quotation

A RFQ is an invitation to External Service Providers to submit a quotation to the City at a lump sum fixed price, or on a unit cost basis, or a combination of both.

The RFQ procurement process is used where tasks and deliverables involve technical solutions that are highly specific, and where there is a low likelihood of much variation among the approaches to be submitted. The Terms of Reference and/or Technical Specifications for the Services or Goods to be delivered must be clearly defined.

Usually the most competitive price is the major factor for evaluation. A RFQ submittal is evaluated for contractual formality and with the lowest priced proponent being awarded the assignment.

The RFQ process is described in the document *Request for Quotation Procedure* posted on the [PMMD Bylaws, Policies and Procedures intranet site](#).

3.11. Request for Tender

Request for Tender (RFT) Calls are to be used on construction projects. Chapter 195 of the Municipal Code defines construction as *“the construction of any improvement in or on real property and includes the repair, renovation, or demolition of an improvement.”* Generally, "real property" refers to land and buildings.

~~Two forms of the tender document template are available: one for linear projects, and one for vertical projects. These templates are modified from the PMMD templates (available on the [PMMD Templates intranet site](#)) and are updated periodically. As such, new RFTs should always be prepared using the latest version of the ECS templates.~~

~~The linear template (available on the [ECS Linear Tender Document Templates intranet site](#)) is used for road, TTC, bridge, sewer, watermain, transmission watermain, trunk sewers, streetscape, and sidewalk projects, which are usually based on unit price. The linear template can be used for other types of projects if the contract is based on unit price. Certain contracts based on lump sum can also use the linear template, with some changes.~~

~~The vertical template (available on the [ECS Vertical Tender Document Templates intranet site](#)) is used for building and facilities construction projects that are usually based on a lump sum price.~~

~~The linear and vertical templates are similar, except for Section 5 (General Conditions of Contract) and Section 6 (Contract Execution Package) which reference different documents:~~

- ~~• Section 5 – General Conditions of Contract

 - ~~□ linear template uses General Conditions of Contract Linear Infrastructure~~
 - ~~□ vertical template uses CCDC 2 Stipulated Price Contract and the Supplementary Conditions to CCDC 2~~~~
- ~~• Section 6 – Contract Execution Package

 - ~~□ Form of Agreement

 - ~~▪ linear template uses the City's standard form~~
 - ~~▪ vertical template uses the agreement form in CCDC 2~~~~
 - ~~□ Performance Bond

 - ~~▪ linear template uses the City's standard bond form~~
 - ~~▪ vertical template uses CCDC 221-2002 Performance Bond form~~~~
 - ~~□ Payment Bond

 - ~~▪ linear template uses the City's standard bond form~~~~~~

- ~~vertical template uses CCDC 222-2002 Payment Bond form~~

3.11.1. Tender Document Sections

Instructions for preparing and assembling the tender documents are included within the Tender templates ~~and Appendix K to this manual~~, and should be followed closely. The following paragraphs serve to highlight some of the instructions as well as to provide supplementary information on the tender document.

With the exception of optional provisions and project specific requirements which are noted in the template, the content of the tender template is not to be modified without the approval of PMMD and Legal Services.

One of the items in ~~Section 2~~ to be specified is the percentage of bid bond required. In accordance with policy adopted by City Council in July 2005, the amount to be noted as required for bid bond is "*10% of the bid price with consideration for contract size.*"

Specifically, the monetary value of the bid bond required is not to be included in the tender document. The tender documents should reference that the bidder is to provide a bid bond of 10% of their bid price. This is done so as to not provide bidders with insight into the City's estimated price for the contract.

The percentage of the bid bond can be modified in consideration with contract size. Table 2 shows the minimum acceptable percentages to be requested by ECS for a range of contract values.

Table 2 – Bid Security Amount

Bid Security Requirement		
Engineering Construction Cost Estimate, \$		Bid Bond Percentage
From	To	
Up to 250,000		10%
>250,000	2,500,000	10%
>2,500,000	5,000,000	10%
>5,000,000	10,000,000	7%

>10,000,000	50,000,000	4%
>50,000,000	100,000,000	3%
>100,000,000	250,000,000	2%
>250,000,000		2%

The Project Lead can refer to the document *Bid Bonds / Performance Bonds*, available on the [PMMD Bylaws, Policies and Procedures intranet site](#), for guidance on factors that may warrant a higher bid bond percentage. Consultation with Insurance and Risk Management is advisable for large, complex or unusual projects prior to establishing a required bid bond amount.

~~Section 4 contains the Scope of Work. This section should be as complete as possible to avoid the need for issuing addenda during tendering and minimizing Changes in the Work during construction. The Project Lead should work closely with the Client Divisions to ensure their requirements are clearly defined and covered in the Scope of Work and that they are aware of the change procedures discussed in Chapter 7.~~

~~Section 4A contains the Special Specifications. These are specifications that cover requirements specific to a project that are not detailed in any standard specification. As such, the Project Lead must ensure that the Special Specifications include only project specific requirements. Special Specifications should be cross-referenced to a unit work item in the Pricing Form of the tender, unless the costs associated with that Special Specification are incidental or mandatory to the project. Terms and conditions of tendering process or contract must not be included in this section. Non-standard special provisions should be reviewed to confirm that they do not conflict with the General Conditions of Contract or Specific Conditions.~~

A list of existing Special Specifications is available on the [ECS Special Specifications intranet site](#). Also available on the Special Specifications intranet page is the document *Writing Special Specifications*, which provides guidance on how to write and modify Special Specifications.

~~Section 5 of the linear template includes the General Conditions of Contract (GC) adopted by the City Council. Approvals by Legal Services and the ECS Chief Engineer and Executive Director are required for any amendment to the provisions in the GC. The GC's are~~

~~updated periodically and available on the [ECS Linear Tender Document Templates intranet site](#). CT&P will insert the most current version to the Tender document.~~

~~The Project Lead is advised to review Section 5A to ensure the Specific Conditions that may be applicable are properly reflected in the tender Call Document. The Liquidated Damages and insurance provisions should be reviewed and requirements adjusted according to project needs. Liquidated Damages are further discussed in Section 3.11.2. Changes to Section 5A require approval from Legal Services.~~

Insurance and Risk Management has established standard limits of commercial liability insurance, automobile insurance and pollution insurance. For projects involving new building construction, design-build, large renovation or unusual construction or arrangement, the Project Lead should seek advice from Insurance and Risk Management for insurance requirements of the project.

Some conditions of contract such as penalty for delay or a higher amount of Liquidated Damages can influence the tender pricing and yet they may not be easily enforced. Should it be necessary to amend the provisions in Section 5 and Section 5A, PMMD and Legal Services should be consulted. Similarly, amendments to the *General Conditions of Contract* and the *Supplementary Conditions to CCDC 2* require the approval of the ECS Chief Engineer and Executive Director and Legal Services.

Current applicable City policy documents should be included in Section 7. CT&P is responsible for including the appropriate policies in Section 7.

3.11.2. Liquidated Damages

The amount of Liquidated Damages should be based on a "true estimate" of damage as a result of delay in completion of the project. It should be calculated for each project and the documentation should be kept in the project file.

Document ECS-CWP-04 is a spreadsheet that demonstrates how Liquidated Damages may be calculated.

3.11.3. Pre-Tender Tasks

Tasks to be completed by the Project Lead, CT&P, PMMD, Contractor and the External Service Provider prior to the tendering of the contract are provided in Appendix D, and are summarized below.

Although the tasks are listed more or less in the order of procurement process, they need not be completed in the sequence listed as some can be performed concurrently:

1. Enter planned milestones into PTP
2. Complete draft tender document and engineering estimate
3. Obtain written confirmation / commitment of funding from the Client Division / third party for their share of costs. See subsection 3.11.3.1 below for details on funding approval
4. Complete the Pre-tender Approval form (ECS-CWP-05) indicating funding authority, funding availability and regulatory approval
5. Draft tender document, engineering estimate, and Pre-tender Approval form to be forwarded to CT&P. CT&P sends draft tender to PMMD for review inclusive of specifications (Linear Infrastructure section requires the tender documents to be checked by at least one additional staff member)
6. After the document has been reviewed and approved by PMMD, finalize tender documents inclusive of specifications and drawings, fully signed and stamped
7. For Linear and Vertical projects: ensure that geotechnical reports (Linear projects only), designated substance reports, and any other specific reports, if any, are incorporated in the tender documents. Note that, MI projects specifically exclude geotechnical reports from the tender Call Documents.
8. Complete the applicable Tender Document Checklist (ECS-CWP-07 and ECS-CWP-08 for linear and vertical tenders respectively) and attach to the fully completed Pre-tender Approval Form (ECS-CWP-05). All signatures are required on the Tender Document Checklists before the tender Call Documents are printed.

9. CT&P to arrange for printing and delivery of a specified number of tender documents to PMMD with the Print Office. As a general guide, a minimum of 2 business days should be allowed for the printing of tender documents prior to forwarding tender package to PMMD.
10. Ensure an appropriate number of copies of tender documents including drawings are sent to PMMD by the issue date, and apprise the Consultant, Client lead, designated Contract Administrator, and other key staff involved in the administration of the contract

3.11.3.1. *Funding Approval*

Toronto Water Projects. On linear projects, Level 2 funding approval for Toronto Water projects is obtained via email request from the Project Lead to Toronto Water Asset Management. Level 3 funding approval is obtained using a Capital Project Contract Award Authorization form (CAAF). The CT&P unit will prepare a CAAF, which details the 2nd level account codes already assigned via email, and will forward it to the Project Lead for review and signature. CT&P will then send the signed CAAF, Contractor's pricing form, and bid analysis to Toronto Water for authorization. Toronto Water approves and signs the CAAF, and sends it back to CT&P along with 3rd level account codes.

On vertical projects, a CAAF is used to obtain both Level 2 and Level 3 funding, initiated by the Project Lead. For Level 3 funding, the Project Lead forwards the signed CAAF, low bid, bid analysis, and Consultant's recommendation letter to Toronto Water.

Transportation Services Projects. Funding approval for Transportation Services projects is obtained using a Transportation Capital Authorization Form (TCAF) and shall follow the *Guidelines and Protocols for Use of Account Codes and Approved Budget*, which are updated annually and available on the [Transportation Services Infrastructure Asset Management & Programming intranet site](#). The Project Lead will prepare the TCAF for the 2nd level account codes, and will forward the TCAF, along with the engineering estimate, detailed project location(s) and description to the Transportation Infrastructure Asset Management & Programming unit (IAM&P) for authorization. IAM&P will review the TCAF and provide approval via email to confirm the level 2nd level account codes. For 3rd level requests, CT&P will prepare the TCAF and will forward the TCAF to the Project Lead for review and approval. CT&P will forward the approved TCAF, the low bid, and the breakdown of the low bid cost distribution report to IAM&P.

A signed TCAF is not required for Transportation Services projects, as an emailed TCAF will confirm the request.

Solid Waste Projects. Level 2 and Level 3 funding approval for Solid Waste projects is obtained by the Project Lead via email request to Solid Waste Management Services.

Additional detail on these processes can be found in the *Contract Administration Manual*.

3.11.4. Decision on Formality of Tender

Tender opening is conducted by PMMD. After tenders are opened, PMMD will check if all required documents are submitted and also if they are completed properly. PMMD will deal with any bid irregularities found during the opening in accordance with the Procurement Process Policy.

The Project Lead shall review all submitted tenders for formality and conformance to all tendering requirements as specified in the tender document.

Guidance for dealing with various general bid irregularities and mathematical errors can be found in the PMMD documents titled *Procurement Processes Policy* and *Mathematical Errors* posted on the [PMMD Bylaws, Policies and Procedures intranet site](#).

The Project Lead should review all submitted tenders upon receipt from PMMD. The review should focus on all tendering requirements as specified in the tender document. If a tender includes a potential informality, the Project Lead is to seek confirmation and/or clarification from the PMMD buyer. PMMD will make the determination, in consultation with Legal where required, and advise of their decision. The declaration of informality, if warranted, is made by PMMD.

3.11.5. Review of Alternative Proposals

If the tender includes an option for bidders to provide “alternate or alternative” proposals, the Project Lead should ensure the proposal complies with the requirements that may include the need to also submit a base proposal and the necessary supporting documentations for the alternatives with the tender. PMMD shall be contacted for any tenders that may be considered informal due to non-compliance of requirements.

The alternative proposals shall be evaluated based on the submitted information and documentation provided with the tender. At no time during the review of the alternative proposals which may impact the ranking of tender for award, should staff seek additional information or clarification with respect to the alternative from the bidder and its sub-trades or suppliers. Should it be necessary to seek clarification from the bidder, the Project Lead should consult with the PMMD buyer who is the only person permitted to speak with bidders prior to award.

Alternate proposals should only be considered from the proponent whose proposal offers the best value after the base bid review. If the offered price savings for an alternative impacts the ranking of the tenders, then the alternative must be reviewed and accepted or rejected prior to awarding the contract.

If the alternative proposal's price savings do not impact the ranking of the tenders, then the tenders can be evaluated without the review of the acceptability of the alternative. The successful tender will then be selected after evaluating the base scope of the tenders and the contract will be awarded accordingly.

Following award of the contract, and prior to commencing work on the area of the project where the alternative may apply, the proposed alternative must be reviewed and accepted or rejected. The tendered price savings must be applied if the alternative is accepted.

3.12. Contingency Allowance

The Contingency Allowance is a percentage of the overall bid specified in the Contract documents intended to cover increases in cost for Changes in the Work. As these changes are not defined, the cost requirements for this Work cannot be expected to be known in advance. Work performed under a Contingency Allowance is authorized and conducted through change management procedures (Chapter 7).

The percentage of the Contingency Allowance will vary from one project to the next, typically amounting to 10 to 15% of the estimated project cost. Ideally, the percentage should be sufficient to cover potential costs of managing unforeseen risks and unknown site conditions leading to Changes in the Work.

When determining the Contingency Allowance, the Project Lead should take a number of items into consideration, including industry practices, relative risk of the project, level of certainty in site conditions

(soil conditions, existing infrastructure), duration of the project, and confidence in the design and scope of the work.

Contingency Allowances are often discussed among the Project Lead, the Client Division, and the Unit Manager before they are set.

3.13. RFP, RFQ and RFT Advertising Period

PMMD must provide a reasonable period of time for suppliers to prepare and submit bids by taking into consideration factors such as:

- the nature and complexity of the procurement;
- the extent of subcontracting anticipated; and
- the time necessary for transmitting solicitation documentation by non-electronic means.

The timelines for posting solicitations also depend on the estimated maximum value of the solicitation, which is determined by the Division in consultation with PMMD. The estimated value is then compared against the thresholds set out in the Canadian Free Trade Agreement (CFTA) and the Canada-European Union Comprehensive Economic and Trade Agreement (CETA) for goods, services, and construction services.

The CFTA thresholds are generally lower than the CETA thresholds. Both CFTA and CETA thresholds are detailed in the PMMD procedure *Notice of Intended Procurement and Timelines for Posting Procurements*, available on the [PMMD intranet site](#).

For solicitations with values greater than the CFTA threshold and less than CETA thresholds, the advertising period must be at least 15 calendar days. A Notice of Intended Procurement is required. A Summary Notice is not required for these solicitations. Templates for the Notice of Intended Procurement and the Summary Notice are available on the [PMMD intranet site](#).

Solicitations for works above the CETA threshold require both a Notice of Intended Procurement and a Summary Notice. The minimum advertising period is dependent on the publication date of the Notice of Intended Procurement. The advertising period may be reduced by 5 day reduction for each of the following circumstances:

- the Notice of Intended Procurement is published by electronic means

- all the RFP, RFQ and RFT documentation is made available by electronic means from the date of publication of the Notice of Intended Procurement
- the City accepts tenders by electronic means

At time of writing, the City is addressing the last two bullet points.

Where a site meeting (mandatory or optional) is stipulated in the Call Document, the Project Lead should make arrangements as soon as possible to set up the meeting, particularly the availability and suitability of the meeting facility. Information regarding the attendees, including their names, their companies or affiliations and phone numbers must be recorded for the project file. The attendee list must be kept confidential; the attendee list should not be released in subsequent addenda.

Any inquiries received by the Project Lead following the site meeting regarding meeting attendees, or any other matter concerning the Call Document, must be directed to PMMD (refer to Section 3.14). Should any inquiries concerning the Call Document result in further research or preparation by bidders, the advertising period may be adjusted accordingly.

Project Leads are responsible for preparing any technical addenda that arise during the advertising period and for providing them to PMMD. If a Consultant is retained to prepare the Call Documents, it is still the responsibility of the Project Lead to approve any addenda and forward them to PMMD. It should be noted that any required addenda should be issued at least 48 hours before closing. Document ECS-CWP-09 is a sample addendum.

3.14. Communication with with Bidders

According to the City's *Procurement Process Policy*, the Chief Purchasing Officer or designate is the official point of contact for all calls. Up to and including the announcement of award, all communication and inquiries must be directed to the official point of contact.

Inquiries during the call process must be referred to PMMD to avoid the appearance of unfairness to other bidders. In the event that a bidder requests information from the Project Lead directly, the Request for Information must be fully documented for the project file, and the bidder must be directed to the CPO or designate. Information resulting

from a Request for Information must be distributed to all bidders in an addendum to the Call Document.

If a debriefing is requested by a vendor in regard to its bid, the request must be directed to PMMD which will coordinate the response with the division and if required, Legal Services.

No staff shall communicate any additional information or internal discussion with any bidder in the process of award of the contract. Notification of award shall only be done after the final position is determined, as declared by PMMD.

3.15. Bid Award Panel, Standing Committees and City Council

Award of contracts must be made in compliance with the Toronto Municipal Code Chapter 195 - Purchasing. Generally, the Project Lead will recommend the successful bidder to be awarded the contract to CT&P and PMMD. The Chief Purchasing Officer, Bid Award Panel, or Standing Committee has the authority to make the award depending on the value of the contract and if all of the following requirements are met:

- award is to the highest ranked proponent resulting from an evaluation and meeting the requirements,
- funding approval is in place, and
- there are no material written objections to the award

The award authority of the Chief Purchasing Officer and the Bid Award Panel is subject to the value of the contract (excluding taxes) as follows:

- Chief Purchasing Officer – value of contract is \$500,000 or less
- Bid Award Panel – value of contract is over \$500,000, and less than \$20 million

If the award is to be made by the Chief Purchasing Officer, then prepare a memo recommending the award. The memo is to be authorized according to the delegated signing authority. Document ECS-CWP-10b is a template for a memo of recommendation for award of a construction project. Documents ECS-CWP-11 and ECS-CWP-12 are sample memos of recommendation for consulting assignments under a single and multiple agreements / PO's, respectively.

If the award is to be made by the Bid Award Panel, then in addition to the award recommendation memo authorized by the ECS Director, a Bid Award Panel report is required. The Bid Award Panel report is prepared by the division and reviewed and signed by the Chief Purchasing Officer. The report should be reviewed by the appropriate ECS Director prior to forwarding to PMMD. A Bid Award Panel report template is available at the following link:

<http://insideto.toronto.ca/secretariat/staffreport/index.htm>

If the value of the contract exceeds \$20 million (excluding taxes) and all three requirements indicated above are satisfied, the Standing Committee responsible for the program is authorized to make the award or make a recommendation to City Council.

In this case, a staff report recommending the award shall be referred to the Standing Committee responsible for the program (Public Works & Infrastructure Committee for Solid Waste Services, Engineering & Construction Services, Transportation Services and Toronto Water projects). The staff report is to be jointly prepared by the Division undertaking the project and PMMD and signed by the appropriate Division Head and CPO.

The draft award report should be circulated to PMMD and the Capital Asset Manager of the Client Division. The following issues should be clarified before the draft report is circulated:

- disqualification of lowest bidder, resulting in the contract being awarded to the second lowest bidder
- any bid irregularities

The delegated signing authority for the memo recommending the award will vary depending on the value of the contract. The delegated signing authority limits are updated on an annual basis and are specific to each division.

After the award of contract is made, a letter is forwarded to the successful bidder by PMMD. In addition, CT&P should provide a letter indicating that the City will be forwarding to them documents for execution. Documents ECS-CWP-13a and ECS-CWP-13b are templates for the letter of acceptance for linear and vertical projects, respectively. The acceptance letter may be faxed or emailed to the successful bidder. If faxed, the fax confirmation sheet is to be filed for record.

Regardless of contract value, if any of the three requirements indicated above are not satisfied, City Council's approval, through the Standing Committee responsible for the program, is required for the award.

3.16. Purchase Requisition and Purchase Order

A purchase order (PO) is required for all construction contracts and consulting assignments. Note that a purchase requisition is required for the issuance of a PO.

A project can have more than one funding source; the sources are identified on the Purchase Requisition. It is imperative that each source be treated separately in accordance with Toronto Municipal Code Chapter 71 – Financial Control: the total funding available for a project does not represent a pool of funds that can be used for any portion of the work. If the cost of work exceeds the available funding for the designated account, funds cannot be taken from other sources within the same project.

Prior to the issuance of a PO, a number of items of documentation must be completed, including but not limited to:

- recommendation memo (see document ECS-CWP-11 and ECS-CWP-12 for single and multiple POs, respectively)
- for projects approved by the Bid Award Panel, Bid Award Panel report (see template on <http://insideto.toronto.ca/purchasing/procedures.htm>)
- insurance certificate, WSIB (see Section 4.5.2.1 for information on security and insurance requirements)
- surety bonds
- any mandatory requirements prior to award stipulated in the Call Document

The Project Lead should confirm with the PMMD buyer assigned to the tender call what other documentation is required, as requirements may vary depending on the project.

Following the execution of the agreement where required, the Project Lead or CT&P (depending on the type of project) is to request PMMD to issue a PO to the External Service Provider. This is done through a Purchase Requisition.

For construction contracts, CT&P prepares the Purchase Requisition and requests PMMD to issue the PO. For consulting assignments, the Project Lead prepares the Purchase Requisition and requests PMMD to issue the PO. The Project Lead shall note that some projects can have two or more funding sources associated with them; these should be

identified on the Purchase Requisition. It is imperative that each source be treated separately in accordance with Toronto Municipal Code Chapter 71 – Financial Control.

PMMD requires a copy of the first page of the agreement, which shows the agreement date, and last page, which shows signatures, of the executed agreement to issue the PO. On Consultant projects, only the Consultant's signature is required on the signature page for the issuance of the PO.

If the PO is issued to utility owners performing works on their own utilities, the template for additional terms and conditions in Document ECS-CWP-14 shall be completed and attached to the PO request sent to PMMD.

Exceeding of approved funds from an account requires a Purchase Order Amendment (POA) and proper authorization. Refer to Section 7.11 for additional details on the POA process.

3.17. Use of Rosters for Consultants

Rosters can be established to reduce the work required to issue and review call and bid documents for works that are done on a consistent basis. A roster should only be used where sufficient upcoming work has been identified to justify the category required.

Each work assignment must not be greater than \$500,000.00, excluding taxes and should be approved by the appropriate delegated signing authority. A formal call, rather than a roster, must be issued by PMMD for work where the actual assignment amount is greater than \$500,000.00.

A formal agreement is required for all assignments, unless Legal Services has reviewed the REOI terms and conditions associated with the roster, and has provided written confirmation that no formal agreement is necessary.

Refer to the PMMD policy *Using an Established Roster to Obtain Professional, Consultant or Other Services*, available on the [PMMD Policies and Procedures intranet site](#), for further information on the use of rosters for Consultants.

3.18. Fairness Monitor

The primary purpose of a Fairness Monitor is to assess and provide assurance that all components and/or proponents on a call were evaluated objectively and in accordance with approved and required processes. The Fairness Monitor does not address whether the right product or vendor was selected. Rather, it is the process of the selection itself that is assessed in terms of whether all participants were evaluated objectively according to approved and required processes.

Fairness Monitors may be perceived by both internal and external parties, as providing more neutrality and independence than that provided by staff. Assurance from an arms-length party that procurement was consistent with best practices may reduce controversy, complaints and liability. This perceived objectivity, in turn, enhances the defensibility of procurement decisions.

The need for a Fairness Monitor should be assessed by a group of staff from the Client Division, PMMD, Legal and others as required. Fairness Monitor shall be used only in limited circumstances defined by call complexity and the likelihood of intense scrutiny, such as high-profile projects where there is significant public interest, for calls where the value of procurement exceeds the CETA threshold, and for calls where City Council is required to approve them such as multi-year projects.

The policy detailing the use of Fairness Monitors (*Feasibility of Using Fairness Consultants for Certain Procurements*) is available on the [PMMD Bylaws, Policies and Procedures intranet site](#).

3.19. Non-Competitive Procurement

Non-competitive procurement is the procurement of goods or services through the solicitation or acceptance of a proposal from a single provider.

Chapter 195 of the Municipal Code sets out the allowable exceptions to a competitive process based on procurement practices and trade agreements, where both the proposed non-competitive procurement and the particular supplier can be justified in good faith, based on one or more of the following:

- a statutory monopoly

- an absence of competition in the market due to technical reasons
- the existence of exclusive rights such as patent, copyright, license or warranty restriction
- procurement of a work of art
- for additional deliveries by an original supplier of goods and services that were not included in the original procurement, but where a change cannot be made for economic or technical reasons without causing significant inconvenience or substantial duplication of costs for the City
- an attempt to acquire the goods competitive in good faith has failed to find a compliant supplier or where the submissions received are collusive
- an emergency;
- construction, renovations, repairs and/or maintenance in respect of real estate leased or occupied by the City which may only be conducted by another person in accordance with a real estate agreement;
- the goods or services are purchased under circumstances which are exceptionally advantageous to the City, such as in the case of a bankruptcy or receivership;
- it is advantageous to the City to acquire the goods or services from another public body;
- another organization is funding or substantially funding the procurement and the City has determined that the supplier and the terms and conditions of the commitment into which the City will enter are beneficial to the City;
- the procurement of a particular brand of goods or services that are intended solely for resale to the public and no other brand meets the City's program objectives nor is the brand available from any other source;
- goods purchased on the commodity market;
- purchase of a prototype or a first good or service that is developed in the course of a contract for research, experiment, study or original development

- a contract to be awarded to the winner of a design contest, provided that:
 - the contest is organized in a manner that is consistent with the principle of fair competition contained in this policy, in particular relating to advertising; and,
 - the participants are judged by an independent jury with a view to design contract being awarded to a winner; or
 - such other non-competitive procurement exemptions authorized by Council.

Non-Competitive purchases less than \$50,000 excluding taxes can be processed through a Divisional Purchase Order (DPO) with proper approvals. Details regarding the Non-Competitive and DPO processes and associated forms are posted on the [PMMD Bylaws, Policies and Procedures intranet site](#).

3.19.1. Non-Competitive Procurement less than \$500,000

Purchases in excess of \$50,000 and less than \$500,000, exclusive of taxes, require the completion of a *Non-Competitive Procurement Form*, available on the [PMMD Bylaws, Policies and Procedures intranet site](#).

The rationale stated in the *Non-Competitive Procurement Procedure Form* must include the detailed reason(s) for the product or service selected as well as verification and the identification of the Non-Competitive vendor and why no other vendor could be selected to provide the product or service that is required, or why proper purchasing procedures (i.e. competitive bidding process) cannot be followed. All pertinent supporting documents are to be attached to the completed *Non-Competitive Procurement Procedure Form*.

In the case of a proprietary situation, the *Non-Competitive Procurement Procedure Form* is to include a written confirmation from the vendor either by email or on a separate company letterhead, confirming they have proprietary, trademark or patent rights. If the product or service is unique or exclusive to a particular vendor, it is also necessary to justify why that particular product/service is the only one that can be acquired to meet requirements. When the vendor is a sole authorized distributor, confirmation from the manufacturer that they are the sole authorized distributor is required.

The procedures to be followed to complete a *Non-Competitive Procurement Procedure Form* can be found on the [PMMD Bylaws, Policies and Procedures intranet site](#).

3.19.2. Non-Competitive Procurement more than \$500,000

Non-competitive purchases greater than \$500,000, exclusive of taxes (i.e. gross amount exclusive of taxes, not the new cost after deductions, refunds and credits), or purchases subject to approval of Standing Committees require a staff report which must be approved by Standing Committee and Council. The staff report should be prepared by the Project Lead in conjunction with PMMD staff.

The staff report must clearly indicate that it is a non-competitive request and note the reason for the non-competitive purchase using one of the reasons noted in Section 3.19.

3.20. Social Procurement

The City of Toronto Social Procurement Program encourages the use of the procurement process for goods and services to advance positive economic, workforce, and social development outcomes. Social Procurement for Capital Works projects will either require workforce development, for procurement with a total contract value of more than \$5 million or supply chain diversity for contracts over \$100,000. For DPOs, a quote from a certified diverse supplier must be included as part of the three-quote process.

Language in the Call Document templates reflects this component of the procurement process. Further information on Social Procurement is available from the Social Procurement Purchasing Coordinator and through the [PMMD Social Procurement intranet page](#).

3.21. Certificate of Recognition

The City of Toronto has endorsed and adopted the Certificate of Recognition (COR™) program as a mandatory requirement for companies bidding on construction and professional services contracts. All Suppliers are required to have COR™ certification.

Additional information regarding COR™ is available in Appendix F.

Chapter 4: Consulting Assignments

4.1. Introduction

Studies or design of capital projects would typically require the services of a Professional Engineer. These services could either be provided by in-house staff or by External Service Providers with the required qualifications.

External Service Providers or Consultants are used when City staff are fully occupied with other assignments and are not available to undertake additional projects, and when specific experience or expertise required is not available in-house. Project Leads managing large program management assignments work in conjunction with a Program Manager (see Roles and Responsibilities). External Service Providers are also used on bridge design projects.

This section describes the process of procuring study and design services from External Service Providers and the administration of the ensuing contracts.

4.2. Procurement of External Services

The Purchasing & Material Management Division (PMMD) Procurement Processes Policy, posted on the intranet at <http://insideto.toronto.ca/purchasing/procedures.htm>, provides an overview of the City purchasing processes and policies. PMMD procedures for the following methods of procuring services are also posted at the same location:

- Request for Expressions of Interest (REOIs)
- Request for Supplier Qualifications, or Request to Pre-Qualify
- Request for Proposals (RFPs)
- Request for Quotations (RFQs) and
- Non-Competitive Procurement

The Client Division's requirement and PMMD's advice should be taken into consideration in selecting an appropriate procurement method. Detailed discussion on the various methods of procurement and the policies governing them are provided in Chapter 3.

The following sections describe the Request for Expressions of Interest (REOs), Request to Pre-Qualify (RTP), Request for Proposals (RFPs), Request for Quotations (RFQs) and Non-Competitive Procurement procedures for acquiring external study and design services, including consulting services, for ECS projects.

4.2.1. Consulting Services

The Project Lead should be aware of specific requirements for hiring Consultants. The *Selection and Hiring of Consulting Services Policy* defines “consulting services” as any firm or individual providing expert advice/opinion on a non-recurring basis to support/assist management decision in the following areas:

- **Technical** - undertake activities on a defined assignment in analyzing technical problems and recommending solutions (including the selection of engineering/architectural designs, research, appraisals, planning).
- **Management / Research and Development** – undertake planning, organizing and directing activities to assist managers in analyzing management problems and recommending solutions for a defined assignment (can be operational, administrative, organizational or policy in nature); with research and development being investigative study to provide the City with increased knowledge or information.
- **Information Technology** – undertake activities on a defined assignment to assist managers in needs assessment and system selection including information processing, telecommunications and office automation (can be analytical, testing or of a business process nature).
- **External Lawyers and Planners** – as determined in consultation with Legal Services staff
- **Creative Communications** – inclusive of advertising, promotions, public relations and design advice.

4.2.2. Request for Expressions of Interest

If a better understanding of the supply market is needed before an RFP can be issued, a Request for Expression of Interest (REOI) can be used. An REOI helps determine the interest of the market place to provide a scope of work or services being contemplated by the City. REOI's may include cost information.

The REOI terms of reference will be prepared by the ECS Project Lead with support/review by the ECS Manager, and final review by the Client Division (if necessary).

Administrative tasks of the Project Lead include forwarding the completed terms of reference with a covering memorandum, signed by the appropriate ECS staff with the delegated signing authority, to CT&P requesting the REOI be issued. For Linear Infrastructure projects, the REOI document must be reviewed by at least one additional staff member prior to being forwarded to CT&P who deals with PMMD.

PMMD is responsible for distributing the REOI package to the potential consulting firms.

4.2.3. Request for Proposal

A Request for Proposal (RFP) is a formal invitation from the City for firms or individuals to submit a proposal to a stated problem or a need the City has identified.

When preparing an RFP, the Project Lead should follow the general procedures described in the PMMD document *Request for Proposal Procedure* posted on the [PMMD Bylaws, Policies and Procedures intranet site](#).

The City Project Lead must review and be familiar with the RFP terms and conditions, RFP appendixes, as well as the technical and financial proposal from the External Service Provider. This is required to ensure that the consulting assignment can be managed in accordance with the scope and the terms and conditions of the consulting agreement. The consulting agreement includes the RFP, any addenda, cost proposal, and the legal agreement.

Detailed discussion on the policies governing Requests for Proposal is presented in Chapter 3.

4.2.3.1. *Use of Fairness Monitor*

The primary purpose of a Fairness Monitor is to assess and provide assurance that all components and/or proponents on a call were evaluated objectively and in accordance with approved and required processes.

Detailed discussion on the use of Fairness Monitors is provided in Chapter 3.

4.2.3.2. *RFP Procedure*

Prior to initiating an RFP request, the Project Lead should confirm funding availability with the Client Division. The RFP procedure is outlined in the document *Request for Proposal Procedure* posted on the [PMMD Bylaws, Policies and Procedures intranet site](#).

The RFP package is forwarded to PMMD with a covering memorandum signed by the appropriate ECS manager or director. Document ECS-CWP-15 is a sample memo to PMMD requesting the issuance of a RFP.

The RFP submissions are to be evaluated according to the criteria specified in the RFP and by an evaluation team established by the Division Head or designate. The procedures for determining the evaluation team and for evaluating the RFP are provided on the [PMMD Bylaws, Policies and Procedures intranet site](#) (*Determining the Evaluation Team and Request for Proposal Procedure*).

Upon completion of the evaluation and a successful proponent is selected, the Project Lead will prepare for the award of the contract in accordance with Toronto Municipal Code Chapter 195 – Purchasing, and as described in the next section.

4.2.3.3. *Award of Consulting Assignments*

Generally, the Project Lead will recommend which proponent should be awarded the contract to CT&P. The CT&P unit assists in awarding and execution of the contract; refer to Appendix D for additional information on the roles and responsibilities of the award process. The Chief Purchasing Officer, Bid Award Panel, Standing Committee or City Council has the authority to make the award, depending on the value of the contract. Detailed discussion on the role of the Bid Award Panel, Standing Committees and City Council is provided in Section 3.15.

The Project Lead is to prepare or coordinate the required memo or staff report under the appropriate delegated signing authority for awards to be made either by the Chief Purchasing Officer (CPO), Bid Award Panel, Standing Committee or Council. The requirement for a memo or a report is as follows:

- Award to be made by the CPO – a memo recommending the award is required. Documents ECS-CWP-11 and ECS-CWP-12 are sample memos of recommendation for consulting assignments under a single and multiple agreements / PO's, respectively.
- Award to be made by the Bid Award Panel – in addition to the memo recommending the award authorized by the appropriate delegated signing authority, a staff report jointly prepared by ECS and PMMD and signed by the director of PMMD is required. A sample staff report recommending the award of an assignment is provided on the PMMD template site <http://insideto.toronto.ca/purchasing/templates.htm>.
- Award to be made by the Standing Committee or City Council – a staff report recommending the award shall be referred to the Standing Committee responsible for the program (Public Works & Infrastructure Committee for Solid Waste Services, ECS, Transportation Services and Toronto Water projects). The report, jointly prepared by ECS and PMMD, is to be authorized by the Chief Engineer and Executive Director of ECS and the CPO.

The City Clerk's Office sets meeting dates for Council and committees, and sets the submission dates for staff reports. Project Leads must be aware of the lead times required for staff reports to be reviewed and submitted to the Chief Engineer and Executive Director of ECS in order to be included on the meeting agenda. Details regarding the procedure for staff report submissions, report templates, and report deadlines are available at <http://insideto.toronto.ca/ecs/divguide/reporting/>.

For Toronto Water projects requiring the approval of Bid Award Panel, Standing Committee or City Council, the draft award report should be forwarded to the manager of Capital Programming & Facility Asset Planning unit of Water Infrastructure Management (WIM) for review and confirmation of funding availability.

Successful proponent(s) who met the minimum technical score but were unsuccessful, and proponents who did not meet the minimum technical score requirements are notified in writing by PMMD.

Following the award of the study / design services contract, Project Lead shall take steps to execute a formal agreement where one is required (Section 4.3) and to ensure that a Purchase Order is issued through PMMD (Sections 3.16 and 4.4).

4.2.4. Request for Quotation

A Request for Quotation (RFQ) is an invitation to External Service Providers to submit a quotation to the City at a lump sum fixed price, or on a unit cost basis, or a combination of both.

When preparing an RFQ, the Project Lead should coordinate with the Roster Captain if required, and refer to the document *Key Considerations/Requirements Checklist*, available on the [PMMD Bylaws, Policies and Procedures intranet site](#).

Discussion on the policies governing Requests for Quotation is presented in Section 3.10.

4.2.5. Non-Competitive Procurement

Non-competitive procurement is the procurement of goods or services through the solicitation or acceptance of a proposal from a single provider.

According to the *Non-Competitive Procurement Policy*, a non-competitive process shall only be used if one or more certain conditions apply and a process of negotiation is undertaken to obtain the best value for the City.

The conditions under which non-competitive procurement may be used and the procedure to complete the required documentation are detailed in Section 3.19, as well as the *Non-Competitive Procurement Policy*, available on the [PMMD Bylaws, Policies and Procedures intranet site](#).

Following the required approvals, the Project Lead shall take steps to execute a formal agreement (Section 4.3) or to ensure a PO is issued (Section 4.4).

4.3. Formal Agreement

A formal agreement is required for competitive purchases valued at more than \$100,000.00 and all Non-Competitive purchases. A formal

agreement may be also prepared for competitive purchases valued at less than \$100,000.00; consult Legal Services if specific guidance is required. A copy of the Consulting Agreement Template is available on the ECS intranet site: <http://insideto.toronto.ca/ecs/dc/templates.htm>.

If the contract is awarded by Bid Award Panel or a Standing Committee, the date on the agreement should be the date of the award. If it is a staff awarded contract, the date should be the date that the purchase requisition is signed by the delegated signing authority.

Where study / design assignments involve work activities, such as design, site supervision, post construction/warranty, that have a definitive boundary between the completion of one work component and the commencement of the other, separate agreements and POs will be required to facilitate the release of Construction Act holdbacks.

For contracts where a formal agreement is required, the Project Lead is to use the standard agreement template. The authority for signing the agreement is set out in Toronto Municipal Code Chapter 257. The *Criteria and Guidelines for Formal Agreements for Goods and Services* document and the *Execution of Formal Agreements for Goods and/or Services* document (both are posted at <http://insideto.toronto.ca/purchasing/procedures.htm>) outline the criteria for requirements of a formal agreement and the procedures for its execution. Table 3 summarizes the formal agreement criteria and the corresponding signing authority.

For contracts where Legal involvement is required, the Project Lead is to forward the five original copies of the agreement that has been executed by the External Service Provider to Legal Services for execution by the City. Fully executed agreements are distributed as follows:

- Legal Services - 1 copy
- Purchasing & Materials Management Division – 1 copy
- External Service Provider - 1 copy
- Engineering & Construction Services - 1 copy
- Client Division – 1 copy (for Major Infrastructure Projects)

Distribution requirements may vary by unit; Project Leads are to request clarification as required.

Table 3 – Formal Agreement & Delegated Signing Authority

Type & Value of Purchase Excluding Taxes	Agreement Requirement	Signing Authority
Competitive purchase up to \$100,000	No formal agreement is required. The Call Document should set out the terms and conditions	Not applicable
Competitive purchase \$100,000 to \$500,000	Formal agreement is required	Division head, Deputy City Manager or City Manager
Competitive purchase Over \$500,000	Formal agreement is required	City Clerk <u>and</u> Division Head or the City Manager or the Chief Financial Officer
Non-Competitive purchase Up to \$50,000	Formal agreement is required	Division Head
Non-Competitive purchase Up to \$500,000	Formal agreement is required	City Manager
Non-Competitive purchase Over \$500,000	Formal agreement is required	City Clerk <u>and</u> Division Head
Consultant Roster RFQ's up to \$500,000	Formal agreement is required unless Legal has reviewed REOI terms and conditions	Division Head

- NOTE: Check most recent version of signing authority schedule.

4.4. Purchase Order

A Purchase Order (PO) is required for all external service assignments. Following the execution of the agreement where required, CT&P is to prepare a purchase requisition and request PMMD to issue a PO to the External Service Provider.

Refer to Section 3.16 for information regarding Purchase Orders.

4.5. Management of Consulting Assignments

The Project Lead, with assistance from supporting staff, is accountable for the overall management and administration of the contracts. Key management and administration functions include setting up file structures for depositing and tracking of project related records and payments, monitoring the progress of the project, processing of payments, dealing with Changes in the Work, and accepting the completed work. This section describes those functions and the related tasks and procedures.

4.5.1. Project Setup in Project Tracking Portal

Once a professional services project has been initiated, a "Professional Services Contract" will be set up in Project Tracking Portal (PTP) by CT&P and linked with the project.

General information on PTP is provided in Section 2.3. Detailed information on the setup and management of projects and contracts, as well as time tracking responsibilities of staff, is available in the document *PTP Business Protocols*, available on the intranet at <http://insideto.toronto.ca/ptp/protocols.htm>.

4.5.2. Commencement of Work

Following the execution of the agreement, the Project Lead should take the steps described in the following subsections in preparation for the commencement of work and subsequent administration of the contract.

4.5.2.1. Security / Insurance Requirements

Prior to commencement of the project and issuance of a PO, CT&P shall ensure that all insurance, bonding and security requirements as stipulated in the agreement (note that the RFP document is part of the agreement) are in place. The expiry dates of insurance, bond and security should be noted and steps be taken one year prior to expiry (90 days for WSIB) to ensure uninterrupted coverage through the project.

Typical insurance requirements for External Service Providers include:

- Professional liability insurance (errors and omissions)
- Automobile insurance
- Comprehensive general liability (if applicable)
- Pollution liability (if applicable)
- Workplace Safety and Insurance Board (WSIB)

The insurance certificate should be checked for compliance with the contract requirements. Guidelines for checking the insurance certificate can be found on the Insurance and Risk management intranet site at http://insideto.toronto.ca/corporate_finance/insurance/certificate-insurance.htm

Insurance certificates and surety bonds should be kept in the project file with the agreement for easy access. For further information regarding safekeeping of insurance certificates and surety bonds, refer to the [Corporate Finance intranet site](#).

4.5.2.2. Initiation Meeting

An initiation meeting with the External Service Provider and the Client lead(s) ensures that all parties have a full understanding of the project and contractual terms, particularly:

- **Project Scope** - confirm the project deliverables and expectations and if necessary, identify tasks leading to such deliverables. For complex, multidisciplinary projects that span over several years, the Project Lead shall keep a Project Deliverable Checklist in the form of an issue log to capture key issues, decisions, changes and deliverables specific to the project. The Project Deliverable Checklist is to be updated as the project progresses to document

scope changes if there are any. Document ECS-CWP-16 is a list of typical activities included in pre-design and detailed design projects, which can be used to form the basis of a Project Deliverable Checklist.

- **Project schedule** - confirm the overall project schedule and dates for completion of Milestones to be provided by External Service Provider
- **Project cost** - confirm the proposed fee or quotation and the payment terms specified in the legal agreement which includes the Call Document and all addenda and any subsequent clarification communications with the Client lead and the Consultant. Any adjustment to the payment terms must be agreed to by the External Service Provider and the City and confirmed in writing. A copy of the confirmation letter is to be kept in the payment file.
- **Drawing format** – confirm the drawing format with the External Service Provider at the initiation meeting

See ECS-CWP-01 for a sample initiation meeting agenda.

4.5.3. General Management Duties and Tasks

The External Service Provider's agreement with the City, which includes the Call Document and the Consultant's submission, defines the External Service Provider's obligations. The role of the Project Lead is to liaise with the External Service Provider and provide assistance or advice where necessary to comply with City policies, standards and procedures and to ensure achievement of deliverables in accordance with the Agreement.

4.5.3.1. External Service Provider's Requests

The Project Lead should review requests from the External Service Provider and provide timely response. Where the requests may have an impact on the terms and conditions of the agreement, responses must be provided in writing and where necessary under signature by the delegated signing authority.

4.5.3.2. City Standards, Policies and Procedures

To ensure compliance with City standards, procedures and Municipal Codes, the Project Lead should assist the External Service Provider in

obtaining the applicable documents as referenced or identified in the Call Document. Refer to Section 3.6.1 for further information on City standards, policies and procedures.

4.5.3.3. Project Deliverables

The External Service Provider is required to carry out the Scope of Work and submit project deliverables as defined in the agreement. The Project Lead should review the agreement, including the terms of reference and the External Service Provider's proposal, and summarize the deliverables by developing a Project Deliverable Checklist. Document ECS-CWP-16 is a list of typical activities included in predesign and detailed design projects, which can be used to form the basis of a Project Deliverable Checklist.

In general, the Project Lead shall:

- Monitor the project deliverables as specified in the agreement and confirmed at the initiation meeting;
- Review the deliverables to ensure they are as specified in the agreement and are of acceptable quality;
- Provide timely feedback to External Service Provider if deliverables do not meet the requirements of the agreement;
- Ensure that requests for Changes in the Work or scope changes are properly authorized and administered according to the terms of the agreement. Chapter 7 describes the procedure and requirements for Changes in the Work; and
- Ensure that all project deliverables are received at the completion of the project.

4.5.3.4. Project Schedule

The schedule that is included in the agreement and any agreed to changes at the initiation meeting defines the contracted timelines in which the project deliverables are to be provided.

The Project Lead's tasks in monitoring the project schedule include:

- Monitoring the progress in relation to the schedule paying particular attention to critical path and Milestone events

- Following up with the External Service Provider if deliverables are not submitted as scheduled
- Reviewing status reports and updated schedules submitted (where required) by the External Service Provider and providing timely feedback if there are any concerns
- Reviewing requests to revise project schedule and confirming approval or denial of requests in writing with External Service Provider. Note that proper authorization is required and a PO Amendment may also be required if the change results in an increase in cost (Section 4.6) or planned completion date.

4.5.3.5. Project Cost and Progress Payment

The Project Lead is to monitor the project cost with respect to the progress of the project. Payments to the External Service Providers are to be made according to the terms stipulated in the agreement and any adjustments agreed to at the initiation meeting. Payments should only be made for the works completed and when the deliverables are acceptable according to the requirements of the agreement.

The following are some of the general requirements for processing the payments:

- Status report is current and reflects the work completed to the invoice date
- Supporting documents identify the staff, billing hours and billing rate
- The assigned staff and billing rate are consistent with the fee proposal in the agreement
- Changes to staff (as identified in the RFP, cost proposal, or contract documents) or billing rate have received written approval, either by a submittal form from the Consultant or email, depending on the terms of the agreement. A sample memo is provided in Document ECS-CWP-17.
- Charges against provisional items, contingency or additional work are pre-authorized through appropriate change management procedures
- Disbursements are claimed according to the provisions and are supported with receipts and/or documentations

- Accumulated invoice amount is consistent with the progress of the project
- Earned Value reporting should be included where the project contract allows for it
- Construction Act holdback is applied where required

For projects that last many months, the Consultant should create a spreadsheet summarizing the billing amounts, paid amounts, the balance for each category of cost (base deliverables, disbursements, provisional item, contingencies) and other pertinent information as required for the monitoring of the expenditures and progress.

The engineering agreement mentioned in Section 4.3 states that materials or goods purchased by the External Service Provider in connection with the project and paid for by the City shall become the City's property. A spreadsheet listing the items should be created and updated as payments are processed to track the purchased materials or goods that shall be turned over to the City. The list is to be used at the conclusion of the project to verify if all items are accounted for.

4.6. Authorization of Changes to Scope of Work

To avoid any potential contractual disputes and delays in completing the original work on time, significant additional work should be avoided. The steps and information required for the authorization of a change in scope of work are discussed in Chapter 7.

4.7. Acceptance of Study / Pre-design

On completion of the study/pre-design assignment, the required deliverables shall be submitted to the City for review and comment. The Project Deliverable Checklist (Document ECS-CWP-16) developed at the beginning of the project can be used to verify that the project is completed according to the agreement and all required deliverables have been submitted.

Depending on the project requirements, the Project Lead may circulate the deliverables to the Client Divisions and other applicable Stakeholders for their review and comments. The consolidated feedback resulting from the reviews is to be forwarded to the External Service Provider for discussion/incorporation into the final study/pre-design report.

Upon acceptance of the final study/pre-design report, the Project Lead should issue a letter of acceptance to the External Service Provider advising that the report has been reviewed and accepted (sample wording is provided in Document ECS-CWP-18). If the project includes detailed design, the External Service Provider should also be advised to commence the next stage of the assignment.

For Toronto Water projects, the procedure *Capital Project Operations Review PR-TW-7380*, available on the Toronto Water Project Delivery System intranet site (http://insideto.toronto.ca/water_pds/) must be followed.

It is imperative that the study/pre-design report be finalized and accepted by the Clients as the report forms the “baseline” on how the next phase of the assignment will proceed. An unfinished baseline will have a detrimental impact on the next phase pertaining to scope, time and money. City staff should attempt to review documents in a timely manner, ideally completing reviews with a three week turnaround time.

4.8. Acceptance of Detailed Design

At the completion of the detailed design stage of a project, the deliverables to be received by the Project Lead are tender-ready contract drawings and specifications, both in hardcopy and electronic format. Drawings and specifications must be signed and stamped by a Professional Engineer (who is licensed to practice in the Province of Ontario) on behalf of the External Service Provider. The City's standards and drawings for linear and facility projects are available on the [City of Toronto external website](#) (under "CADD Graphic Specifications.")

The Project Lead is to file the hardcopy and the electronic copy of the contract documents in supervised, centralized, secured and readily accessible location within their work unit location. Refer to Chapters 2 and 9 for additional discussion on project files.

4.9. Turn Over of Records and Purchases

The Project Lead should ensure all documents related to the project, as well as materials and goods purchased in connection with the project and paid for by the City are turned over to the City at the conclusion of the project in electronic format before final payment is processed. If a list of purchased materials and goods paid for by the

City has been created and maintained, it should be utilized for verification and confirmation of receipt.

The Project Lead should take necessary steps to deduct from the final payment any cost of materials and goods that were not provided (turned over) to the City.

See also Chapter 9 for additional information on the retention of project files.

4.10. Final Payment and Holdback Release

Prior to processing the payment of the External Service Provider's final invoice and the release of the statutory holdback, if there is any, the Project Lead is responsible to:

- confirm with the Client(s) of their acceptance of all final deliverables
- ensure that there are no outstanding claim(s)

Further, CT&P staff will:

- initiate a lien search
- ensure that the External Service Provider has submitted a statutory declaration (SD-Final in Document ECS-CWP-19) sworn before a commissioner of oaths. In cases where the External Service Provider has hired a subcontractor to perform work, SD-Final is issued by the subcontractor.
- where required according to the payment terms and conditions of the agreement, ensure that the External Service Provider has submitted a certificate of an auditor licensed under the Public Accounting Act, 2004.

The final payment should be made as soon as possible and the statutory holdback be released after 45 days as per the provisions of the Construction Act. For ease of tracking and monitoring, the holdback and final payment may be released as separate payments.

After the final payment is processed and the holdback is released, CT&P requests that PMMD close the PO in the SAP financial system, and that the remaining funds are returned to the Client Division.

4.11. Professional Services Performance Evaluations

Consultants' performance is evaluated at specified intervals using the *Professional Services Performance Evaluation Form*, available on the [ECS intranet site](#). The number of Professional Services Performance Evaluations conducted throughout a consulting assignment will depend on the assignment's complexity and duration. Refer to Section 3.7 for additional information on performance evaluations.

4.12. Claims by External Service Providers

A claim is an assertion by a claimant (in this case, an External Service Provider) for compensation, payment, or reimbursement for a loss under a contract or agreement, such as unanticipated delays in work.

The Project Lead is to ensure that the claim is reviewed carefully and resolved in a timely and equitable manner. Upon receipt of a claim from an External Service Provider, the Project Lead shall brief their manager and review the claim as soon as possible.

Items to review when assessing the validity of the claim include but are not limited to the following:

- Call Document, particularly the original scope of work
- scope and rationale for the claim
- any other supporting documentation, correspondence, minutes, records

The Project Lead shall contact the External Service Provider for additional information or clarification where and when necessary.

Following the review of the claim, the Project Lead should convene a meeting with the Client Division(s) to discuss the claim and any proposed resolution.

Any agreement made with the External Service Provider in resolving the claim must be in writing. If the agreement results in additional cost, the approval must be provided in accordance with the delegated signing authority. If the costs result in exceeding the original PO value, a Purchase Order Amendment will be required (refer to Section 7.11).

Chapter 5: Linear Project Design

5.1. Introduction

In general, linear projects – watermain, sewer, and road projects – are designed internally. External Service Providers are used for design when City resources are limited, or when specific experience or required expertise is not available in-house (refer to Chapter 4). In many cases, the services for the design of capital projects is provided by in-house Professional Engineers and engineering designers.

This section describes the general process of designing linear projects when conducted internally. Externally designed projects encompass the same general steps, such as pre-engineering and subsurface utility engineering. Program-specific design requirements, as well as roles and responsibilities of the City and the External Service Provider, are detailed in the RFP.

5.2. Design Initiation and Pre-Engineering

Once the capital project has been assigned to an ECS unit for internal design and delivery, the project is assigned to a Project Lead by the unit's Manager. At the same time, the project is also assigned to a Design Supervisor. The Project Lead is responsible for coordinating with the Design Supervisor and for initiating the design of the proposed improvement.

Following the assignment of the project to a Project Lead and Design Supervisor, the Project Lead should take the steps described in the following subsections in preparation for the commencement of work and subsequent administration of the contract.

5.2.1. Initiation Meeting

The Project Lead is responsible to confirm the Project Scope and limits of the project with the respective Client Divisions. Prior to the commencement of any preliminary design work, the Project Lead shall conduct an initiation meeting with the design staff and the Client lead(s) to ensure that all parties have a full understanding of the project, particularly:

- **Project scope** - confirm the project deliverables and limits and if necessary, identify tasks leading to such deliverables

- **Project schedule** - confirm the overall project schedule and dates for completion of Milestones
- **Project budget** - confirm the Clients' budget for each component of the project

On internally designed projects, the scope, schedule, and budget should be captured in a Pre-Design Report. Document ECS-CWP-03 is a sample Pre-Design Report and Project Checklist for internally designed projects. This form summarizes scope and budget, and provides checklists for required investigations, Stakeholder consultations, and approval requirements. This form should be completed and its contents confirmed prior to proceeding with the design.

5.2.2. Pre-engineering Site Reviews

For road, sidewalk, and underground related work, the Construction Supervisor coordinates a pre-engineering site review prior to undertaking detailed design stage. The purpose of the review is to ascertain the general condition of the asset, obtain initial quantity estimates, etc.

The Design Supervisor coordinates the transfer of the information to a base plan and arranges for the Designer to undergo a site visit to confirm location, quantities, etc. The base plans are to be revised as necessary.

The Project Lead shall then conduct a site review, with the draft base plan, to confirm the Scope of the Work and limits of construction.

The responsibility of reviewing and approving the pre-engineering site review lies with the Project Lead.

5.2.3. Engineering Survey and Subsurface Utility Engineering Investigations

Once the Project Lead confirms the Project Scope and limits of the project, the request for engineering surveys and a subsurface utility engineering (SUE) investigation is then initiated by the Design Supervisor to the Manager of the Engineering Surveys unit. This is done by completing a Survey Request Form (ECS-CWP-20) and emailing it to engsvy@toronto.ca.

The Design Supervisor, in consultation with the Project Lead, shall be responsible for specifying the category of survey and the level of SUE required. Engineering surveys are completed using ECS's in-house surveying resources. Subsurface utility engineering investigations are completed by an external vendor and managed by the Engineering Surveys unit.

Subsurface utility engineering investigations are typically required for underground engineering design projects and in some cases, specialized surface related engineering projects which involve road alterations, utility relocations, streetscaping and TTC track work. Existing subsurface utilities and their related structures constitute a significant portion of this infrastructure, which creates risks for projects.

Inaccurate, incomplete and/or out-of-date information on the existence and location of existing subsurface utilities reduces the abilities of the Project Lead, Design Supervisor, City and Contractor to make informed decisions and to support risk management decisions regarding the project's impact on existing utilities.

In general, the levels of SUE typically required are as follows:

- **SUE Quality Level B:** Information obtained through the application of appropriate surface geophysical methods to determine the existence and approximate horizontal position of subsurface utilities.
- **SUE Quality Level A:** Precise horizontal and vertical location of utilities obtained by the actual exposure (or verification of previously exposed and surveyed utilities) and subsequent measurement of subsurface utilities, usually at a specific point. Minimally intrusive excavation equipment is typically used to minimize the potential for potential damage.

One or both of SUE Quality Level A or B may be required on engineering design projects. The level(s) required are determined by the complexity of the work.

In certain cases, SUE Quality Level A is requested during the detailed design phase after SUE Quality Level B information has been determined and critical subsurface information is needed to provide input to the design.

5.2.4. Utility Circulation

At the pre-engineering phase of the project, the Design Supervisor issues a Utility Design Initiation Notice (DIN) to all utilities located within the right-of-way and limits of the proposed project. A sample DIN is provided in Document ECS-CWP-21. The purpose of the DIN is to:

- notify utilities of the proposed improvement
- obtain as-built drawings indicating existing and abandoned plant locations
- recommend that the utilities conduct an inspection of all existing infrastructure to assess the condition and possible need for repairs, relocation or upgrades prior to the commencement of the City's project
- identify any conflicts with existing or planned utilities

Information obtained through the utility circulation process is incorporated into the engineering design.

5.2.5. Geotechnical Investigation

The Project Lead is responsible for requesting geotechnical investigation work through the Soil and Groundwater Quality Unit (SGQ). Geotechnical investigations are completed by external vendors and managed by SGQ.

The request for geotechnical investigation is submitted using Document ECS-CWP-22 ("Form 1", also available from SGQ), and must include basic project information such as contract number, project type, street, project limits, project tender date and geotechnical investigation report submission date. Staff from SGQ will work with the Project Lead to determine the scope of work and testing requirements for the geotechnical investigation. All testing requirements are documented in Document ECS-CWP-22. Once the scope and testing requirements are confirmed, the work request is submitted to an External Service Provider for delivery.

The draft and final geotechnical investigation reports and recommendations are submitted to the Project Lead for review and comments.

5.2.6. Other Investigations

The Project Lead shall review the scope and determine if any additional investigations are required prior to commencing detailed design. These may include non-destructive testing for road work, or condition surveys of retaining walls, slopes, or historical buildings. The design and / or construction methods may be determined from the results of the condition surveys.

5.3. Detailed Design

The Project Lead and Design Supervisor work together with the appropriate engineering design staff to move the project through the design phase. Typically, engineering designs are provided to the Project Lead for review and comment at the 30%, 60%, 90% and 100% stages of development.

To avoid any potential conflict and delay in completing the original work on time, significant additional work should be avoided. All proposed works should be confirmed with the Client Division at the initiation meeting (Section 5.2.1).

The Project Lead sets up design review meetings with the Design Supervisor, design staff and Client leads to review and provide comments as the design progresses. At the 90% design stage, designs are peer-reviewed by an alternate Project Lead within the same unit. As well, the Construction Supervisor provides comments on constructability. Refer to Section 5.5 for discussion on the peer review process.

The tasks and Milestones that comprise each watermain, sewer, and road project will vary from one project to the next. Sample design Milestones for the 30%, 60%, 90% and 100% stages of development for watermain, sewer and road projects are provided in Appendix E to this manual. These Milestones are to be used as a guide, and are not to be considered an exhaustive list of the design details required.

5.3.1. City Standards, Policies and Procedures

To ensure compliance of City standards, policies, procedures and Municipal Codes, the Project Lead and design staff should utilize the appropriate City standards, policies and procedures during detailed design. The following are common standards, policies and procedures that may be applicable in design assignments:

- [CADD Graphic Specification Manual](#)
- [Construction Specifications and Drawings for Road Works](#)
- [Construction Specifications and Drawings for Sewers and Watermains](#)
- [Ontario Provincial Standards](#)
- [Special Specifications](#)
- [Standard templates for tender documents](#)
- [Design Criteria for Sewers and Watermains](#)
- [Curb Radii Guidelines](#)
- [Vehicle Travel Lane Width Guidelines](#)
- [Pavement Design Guidelines](#)
- [Accessibility Design Guidelines](#)
- [Field Services Manual](#)

5.3.2. Project Deliverables

In general, the Project Lead shall:

- monitor the project deliverables as specified and confirmed at the initiation meeting
- review the design to ensure they are as specified and are of acceptable quality
- provide timely comments to engineering design staff if the design does not meet the requirements

- prepare Special Specifications, list of tender items, engineer's estimate and tender documents. Ensure that the Client Division receives a copy of the engineer's estimate. This should be completed at the 90% design stage.
- coordinate funding approval (based on the engineer's estimate) prior to tendering of the project, and tender call documents – refer to Chapter 3 for information on funding approval.

5.4. Approvals and Permits

All necessary approvals and permits are to be secured prior to tendering unless approved otherwise by the appropriate director. Where required, the application process for an Environmental Compliance Approval (ECA) from the Ministry of the Environment, Conservation and Parks (MECP) should be initiated as soon as the final design is completed.

Refer to Section 2.7 for further information on approvals and permits.

5.5. Peer Review

At the 90% design stage, designs are peer reviewed by an alternate Project Lead within the same unit, as well as the Construction Supervisor for final review. The purpose of the Construction Supervisor's review is to comment solely on constructability issues.

The purpose of the peer review is to identify any oversights in design or areas requiring clarification during the design process, as well as to review the accuracy of design drawings against unit priced items. The peer reviewer, assigned by the unit's manager, undertakes a technical review of drawings, tender documents and special specifications.

The peer review process typically takes approximately 2 weeks, and the results are submitted to the Project Lead.

5.6. Completion of Detailed Design

At the completion of the detailed design stage of a project, the deliverables by Project Lead are tender-ready contract drawings and specifications. Drawings and specifications must be signed and stamped by a Professional Engineer (who is licensed to practice in the

Province of Ontario). At this point, the Project Lead may contact CT&P to begin the procurement process.

The Project Lead is to file the hardcopy and the electronic copy of the contract documents in a supervised, centralized, secured and readily accessible location within their work unit location. Refer to Chapter 2 for information on file storage, as well as Chapter 9 for information on file retention.

5.7. Project Tender

Once the contract documents are prepared, the project is ready to be tendered. Refer to Section 6.4 for detailed information on the tendering process. Details on the policies governing the procurement of goods and services are presented in Chapter 3.

Chapter 6: Construction Projects

6.1. Introduction

This chapter deals with the administration of construction contracts delivered by Engineering & Construction Services (ECS) both internally designed and through External Service Providers.

6.2. Approvals and Permits

All necessary approvals and permits are to be secured prior to tendering unless approved otherwise by the appropriate Director. Refer to Section 2.7 for information on approvals and permits.

6.3. Works Performed by Third Party Owners

City capital works may affect gas, phone, cable, hydro, pipeline and railway facilities or structures. If the City engages any owner of these facilities, utilities or railways (Third Party Owner) to undertake any work on their own assets, either one of the following two methods of service procurement may be used:

- Non-Competitive process and issuance of a Purchase Order (PO)
- Cheque Requisition in accordance with Section 71-14 (Schedule A, item 4) of the Toronto Municipal Code Chapter 71 – Financial Control (Schedule A payment process)

The Non-Competitive process for the issuance of a Purchase Order should be used only if the Third Party Owner insists on a PO from the City. In which case, the *Additional Terms & Conditions for Purchase Orders to Third Parties Performing Work on Own Facilities* (ECS-CWP-14) is to be attached to the PO to be issued to the Third Party Owner undertaking the work by the Project Lead. This will negate the need for a formal agreement for the Non-Competitive process.

The preferred method of engaging and paying for the Third Party Owner's services for works on its own assets is by Cheque Requisition or invoice payment. It involves the following steps:

1. Obtain a proposal for work to be performed and the estimated costs from the Third Party Owner

2. Review the proposal and if determined to be satisfactory, confirm funding availability with the Client Division, and then provide a written confirmation under the delegated signing authority to the Third Party Owner indicating:
 - a. Acceptance of its proposal
 - b. A “not to exceed” cost which is to be paid on a time and material basis or lump sum depending on the discussion and ensuing understanding with the Third Party Owner
 - c. That a PO is not necessarily required pursuant to Section 71-14 of the Toronto Municipal Code Chapter 71 – Financial Control (though a PO can be issued if requested)
3. Forward an email or internal memorandum attaching all of the above mentioned documentations to CT&P advising that payment(s) to this particular work is/are to be made by cheque requisition(s) after receipt of an invoice in accordance with Section 71-14 of the Toronto Municipal Code Chapter 71 – Financial Control

The delegated signing authority is the same as that for the award of a contract acquired through a competitive procurement process. The limits, based on value of work and exclusive of taxes, are updated on an annual basis and are specific to each division.

6.4. Request for Tender

Request for Tender (RFT) Calls are to be used on construction projects. Refer to Section 3.11 for detailed discussion on the RFT process, the templates to be used, and the components of each template.

While PMMD is responsible for handling the tendering process, preparation of the tender Call Document is the responsibility of the Project Lead. PMMD will work with staff on the Call Document to get more information about estimated quantities and prices, in order to conduct the unbalanced bid analysis once bids are received. Refer to Section 3.5 for information on Unbalanced Bid Analysis.

Figure 4 summarizes the major tasks of construction contract tendering procedures. The following sections describe the key activities to be

performed when issuing a tender call for a construction project. These tasks, and the parties responsible for each task, are further outlined in in Appendix D.

The procedures of RFT and the governing procedures are discussed in Chapter 3.

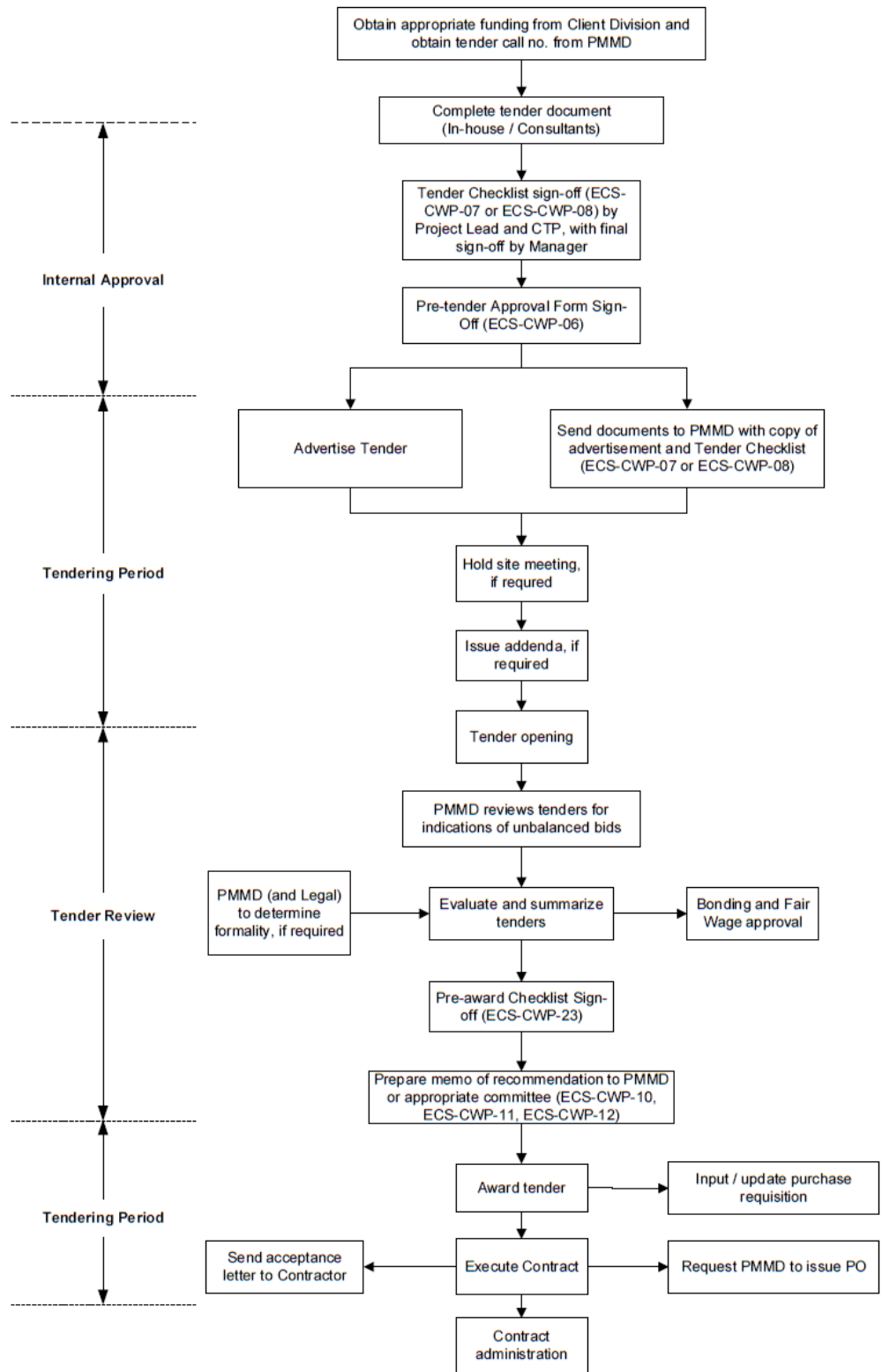


Figure 4: Formal Contract Tendering Procedures

6.4.1. Pre-tender Tasks

Before a project can be tendered, there are a number of tasks and items of documentation that are to be completed, including confirmation of funding, preparation of the call document and engineering estimate, preparing supplementary documents such as drawings and geotechnical reports for distribution with the tender books, and printing hard copies of the Call Document for distribution to bidders (the tender Call Document books). These tasks are discussed in detail in Section 3.11.3.

6.4.2. Tendering Period

The tendering period begins after a tender call has been issued and ends when the tender closes. During this time, bidders review the tender package, submit questions, if any, to PMMD, and addenda are issued as necessary. Mandatory site meetings and bidders meetings are also held during this time.

Refer to Section 3.13 for further discussion on the tender advertising period.

6.4.3. Decision on Formality of Tenders

Tenders are opened by PMMD. PMMD will check if all the required documents are submitted, and if they were completed properly. Tenders that comply with submission requirements are considered to be formal, and those that do not are considered to be informal.

Decision on the formality of tenders, including tender opening and bid irregularities, is discussed in greater detail in Section 3.11.4.

6.4.4. Communication with Bidders

During the tendering process, the Chief Purchasing Officer (CPO) or designate is the official point of contact for all vendors. Up to and including the announcement of award, all communication and inquiries must be directed to the official point of contact. Communication with bidders is discussed in further detail in Section 3.14.

6.4.5. Review of Alternative Proposals

Tenders may allow bidders to provide "alternate or alternative" proposals. In these cases, refer to Section 3.11.5 for discussion on how to evaluate alternative proposals, particularly if a tender's ranking is affected. Note that the selection is made based on the base bid.

6.4.6. Evaluation of Bids

PMMD receives and reviews the bids, and forwards them to CT&P for bid analysis. Part of PMMD's bid analysis includes reviewing all construction calls to identify mathematically and materially unbalanced bids (see Section 3.5). Detailed information on this review is available on the PMMD intranet page introducing the [Unbalanced Bid Analysis Procedure](#). The procedure is also available on the [PMMD Policies and Procedures intranet site](#).

Upon receipt of opened tenders and Unbalanced Bid Analysis summary from PMMD, CT&P conducts the bid analysis in PTP. CT&P will forward the tenders, PMMD's Unbalanced Bid Analysis summary, and the PTP Bid Analysis Report to the Project Lead. The Project Lead, together with a peer (not a manager), must evaluate the bids in accordance with the evaluation process set out in the tender and provided to PMMD, and in accordance with the Unbalanced Bid Analysis Procedure. This includes reviewing all unit prices, confirming quantity estimates, and determining whether the low bid represents the best value to the City, even after mathematically unbalanced items are taken into consideration. The Project Lead is to then prepare a memo (ECS-CWP-10a) that acknowledges that the unbalanced bid analysis has been completed, and summarizes the results of the review.

The memo must state that the prices and quantities of mathematically unbalanced items (if any) can be managed during construction. Conversely, if significant errors were detected in the tender quantities that would cause a financial impact to the City, the memo may recommend that the tender be cancelled and retendered with revised quantities at a future date.

6.4.7. Award of Construction Contracts

After the bids have been evaluated, the construction contract may be awarded. The policies governing who has the authority to award construction contracts are discussed in Section 3.15.

The Project Lead should then proceed with the following steps:

1. Review, complete and sign the Pre-Award Checklist (Document ECS-CWP-23)
2. Obtain the External Service Provider's recommendation if applicable
3. Confirm experience and qualifications (if applicable)
4. Verify that the following requirements are met:
 - Award is to the qualified bidder with the lowest bid price meeting the requirements
 - Funding approval is in place (see Section 3.11.3.1)
 - There are no material written objections to the award
5. If all three preceding requirements are met, determine if the award is to be made by the Chief Purchasing Officer or Bid Award Panel according to their award authority indicated in Section 3.15.
 - For award to be made by the Chief Purchasing Officer: prepare a memo recommending the award. The memo is to be authorized according to the delegated signing authority. A template for a memo recommending award of a construction project is provided in Document ECS-CWP-10b.
 - For award to be made by the Bid Award Panel: in addition to the memo recommending the award authorized by the delegated signing authority, a report prepared by the division, reviewed by PMMD and signed by the Chief Purchasing Officer is required. The report should be reviewed by the appropriate ECS Director prior to forwarding to PMMD. A Bid Award Panel report template is available at:
<http://insideto.toronto.ca/secretariat/staffreport/index.htm>
 - For award to be made by the Standing Committee or City Council, a staff report shall be referred to the Standing Committee responsible for the program (Public Works and Infrastructure Committee for Solid Waste Services, Engineering & Construction Services, Transportation Services and Toronto Water projects). The staff report to the Standing Committee recommending the award is to be jointly prepared by the Division undertaking the

project and PMMD and signed by the appropriate Division Head and CPO.

6. The delegated signing authority for the memo recommending the award will vary depending on the value of the contract. The delegated signing authority limits are updated on an annual basis and are specific to each division.
7. The draft award report should be circulated to PMMD and the Capital Asset Manager of the Client Division. The following issues should be clarified before the draft report is circulated:
 - Disqualification of lowest bidder, resulting in the contract being awarded to the second lowest bidder
 - Any bid irregularities
8. After the award of contract is made, a letter is forwarded to the successful bidder by PMMD. In addition, CT&P should provide a letter indicating that the City will be forwarding to them documents for execution. Documents ECS-CWP-13a and ECS-CWP-13b are templates for the letter of acceptance for linear and vertical projects, respectively. The acceptance letter may be faxed or emailed to the successful bidder. If faxed, the fax confirmation sheet is to be filed for record.
9. Within three (3) days after the contract is awarded, the Project Lead is to advise the PMMD buyer with the milestones for performing the Contractor Performance Evaluations.

Any decisions or renegotiations that involve financial commitments for contract terms which appear to be ambiguous, unclear or inconsistent are only to be made after consultation with the City's Legal Services Division and approval by senior management. All such consultations and approvals are to be documented.

The City Clerk's Office sets meeting dates for Council and committees, and sets the submission dates for staff reports. Project Leads must be aware of the lead times required for staff reports to be reviewed and submitted to the Chief Engineer and Executive Director of ECS in order to be included on the meeting agenda. Details regarding the procedure for staff report submissions, report templates, and report deadlines are available at <http://insideto.toronto.ca/ecs/divguide/reporting/>.

6.4.8. Execution of Agreement

Following the award of the contract, agreements should be executed according to the procedure *Execution of Formal Agreements*, posted on the [PMMD Policies and Procedures intranet site](#). A copy of the Form of Agreement is included in Section 6 of the tender documents. As noted in Section 3.10, the linear template uses the City's standard form whereas the vertical template uses the agreement form in CCDC 2 Stipulated Price Contract.

Execution of agreement generally involves the preparation of required forms, forwarding the completed forms to the Contractor for execution, checking the Contractor's original executed copies of agreement to ensure that no changes are made and that the documents are properly completed, signed, sealed and where required, witnessed. Finally, the original copies of the agreement will then be executed by City official(s).

CT&P staff preparing the agreement document should be aware that the date of agreement is the date of award and that it must be consistent across all contract documents, such as the Performance Bond and the Payment Bond.

Subsections 6.4.8.1 and 6.4.8.2 provide further information on the preparation of documents for execution. The documents are forwarded by CT&P with a covering letter (see documents ECS-CWP-13a and ECS-CWP-13b) to the successful bidder for execution. If the Contractor fails to execute the agreement within the time period stipulated in the tender document, CT&P should be advised so that they can issue a reminder letter (ECS-CWP-24) to the Contractor.

6.4.8.1. Forms for Linear Project Agreements

CT&P staff prepares the standard form of agreement for execution, under the delegation of authority approved by City Council in 2001 ([Clause 6, Report No. 2 of the Works Committee](#), as adopted by the Council at its meeting held on March 6, 7 and 8, 2001).

The following are the City's standard forms required for the execution of linear contracts. These forms are included in Section 6 (Contract Execution Package) of the linear template, posted at <http://insideto.toronto.ca/purchasing/templates.htm>:

- Form of Agreement (with a pre-printed "Approve As To Form" stamp)

- Performance Bond form
- Payment Bond form
- WSIB and Tax Statutory Declaration Form
- Insurance Certificate form
- Statutory Declaration Form for OHSA, if applicable
- Declaration of Compliance with Anti-Harassment Discrimination Legislation and City Policy

The Form of Agreement includes instructions for preparing the Form for execution. The other forms are completed by filling in the pertinent information required.

Three original copies of the forms (four if Legal Services handles the execution) should be forwarded to the Contractor with a covering letter outlining the execution requirements. Legal Services handles executions for Multi-Year Contracts and Special Contracts. Document ECS-CWP-13a is a template for the letter of acceptance for linear projects.

6.4.8.2. Forms for Facility Project Agreements

Facility project agreements require the following Canadian Construction Documents Committee (CCDC) forms:

- Agreement Between Owner and Contractor form, typically in the CCDC 2 Stipulated Price Contract document,
- Performance Bond form (CCDC 221), and
- Labour and Material Payment Bond form (CCDC 222)

and the following City's standard forms:

- WSIB & Tax Statutory Declaration Form,
- Insurance Certificate form,
- Declaration of Compliance with Anti-Harassment/Discrimination Legislation & City Policy Form, and if applicable
- Statutory Declaration Form for OHSA.

The Performance Bond form and the Payment Bond form are usually supplied and completed by the Contractor's surety company.

Three (four if Legal Services performs the execution) original copies of the completed Agreement and other forms mentioned above are forwarded to the successful bidder with a covering letter that outlines the execution requirements. Legal Services handles executions for Multi-Year Contracts and Special Contracts. If Legal is performing the execution, the letter shall indicate that Legal Services will be forwarding to them the appropriate documents for execution. Document ECS-CWP-13b is a template of the letter for vertical agreements.

It is imperative that the acceptance letter indicates the requirement for a construction schedule. The acceptance letter may be faxed or emailed to the successful bidder. The fax confirmation sheet is to be filed for record.

6.4.8.3. *Execution of Agreement by the City*

Prior to the execution of the agreement by the City, CT&P staff should ensure all required documents are executed and submitted. All documents should be checked to ensure that there are no unauthorized changes and all documents are properly completed, signed, sealed and where required, witnessed. Once this is done, an Order to Commence can be issued by the Project Lead.

The PMMD document *Execution of Formal Agreements*, available on the [PMMD policies and procedures intranet site](#), sets out the procedures for the execution of formal agreements. Generally,

- Agreements with value less than \$500,000 may be executed by the Division Head, Deputy City Manager or the City Manager in accordance with the delegated signing authority under the Financial Control By-law
- Agreements with value exceeding \$500,000 must be executed by the Division Head having the delegated signing authority and the City Clerk

The date on the agreement (effective date) should be the date of the award if the contract is awarded by Bid Award Panel or a Standing Committee (\$500k and above). ~~If it is a staff awarded contract, the date should be the date that the Purchase Requisition is signed by the Division Head/Director.~~ For contracts up to \$500k, the effective date is the date on the letter of award to the successful bidder [revised Nov. 2023].

For linear and vertical construction contracts over \$500,000 in value, three sets of agreements (four if prepared by Legal) are prepared and sent to the following for internal signatures:

- Manager, Capital Markets, Corporate Finance
- Chief Engineer and Executive Director, ECS
- City Clerk

If the contract is under \$500,000, City Clerks is not sent a copy. The original executed copies of the agreement are distributed, one copy to each of the following:

- 1 copy to the Vendor/Contractor
- 1 copy to Accounting Services
- 1 copy to Legal, if they prepared the agreement
- Payment File

Once the contract document/agreement has been successfully executed, a PO (Section 6.4.9) and an Order to Commence Work (Section 6.5.2.2) are to be issued.

6.4.9. Purchase Order

A Purchase Order (PO) is required for all construction contracts. Following the execution of the agreement where required, CT&P is to prepare a purchase requisition and request PMMD to issue a PO to the External Service Provider.

If the PO is issued to utility owners performing works on their own utilities, the template for additional terms and conditions in Document ECS-CWP-14 shall be completed and attached to the PO request sent to PMMD.

Refer to Section 3.16 for additional information regarding PO's.

6.5. Administration of Construction Contracts

Following the execution of the contract and after the issuance of the PO and Order to Commence Work (Section 6.5.2.2), the project enters into the construction phase. This section describes the ensuing construction contract administration activities and procedures, and the

Project Lead / Contract Administrator's responsibilities, which are summarized in Figure 5.

For linear projects, the Project Lead is primarily accountable for the administration of construction contracts and is usually assigned the role of Contract Administrator (CA) which is defined in the General Conditions of Contract – Linear Infrastructure as “the person, partnership or corporation delegated by the Owner to be the Owner's representative for the purposes of the Contract.” For contracts based on *CCDC 2 Stipulated Price Contract* (generally vertical contracts and bridge contracts), the External Service Provider takes on the role of CA, and as well provides inspection services.

The CA shall be familiar with all submissions, additional approvals, and other items specific to the contract that are to be completed to the satisfaction of the City at various stages of the construction phase, such as the completion of asbestos training.

In cases in which an External Service Provider is assigned the role of the CA, the External Service Provider, instead of the Project Lead, should perform those responsibilities/tasks identified in this section that are directly related to contract administration functions. The Project Lead is responsible for providing the necessary oversight and ensuring that the CA fulfills this role.

Poorly performing Contractors can be suspended from bidding on future City contracts. The Contract Administrator should therefore actively monitor Contractor performance throughout the contract period and take appropriate actions such as completing the necessary interim evaluations to correct and rectify unsatisfactory performances.

Detailed information about Contractor Performance Evaluations is available on the [PMMD intranet site](#). The *Contractor Performance Evaluation* Procedure, available on the [PMMD policies and procedures intranet site](#), should be used for evaluating the Contractor performance during and after the completion of construction. Refer to Section 8.8 for additional information on Contractor Performance Evaluations.

For additional information on the administration of construction projects in the field, refer to the *Field Services Manual*.

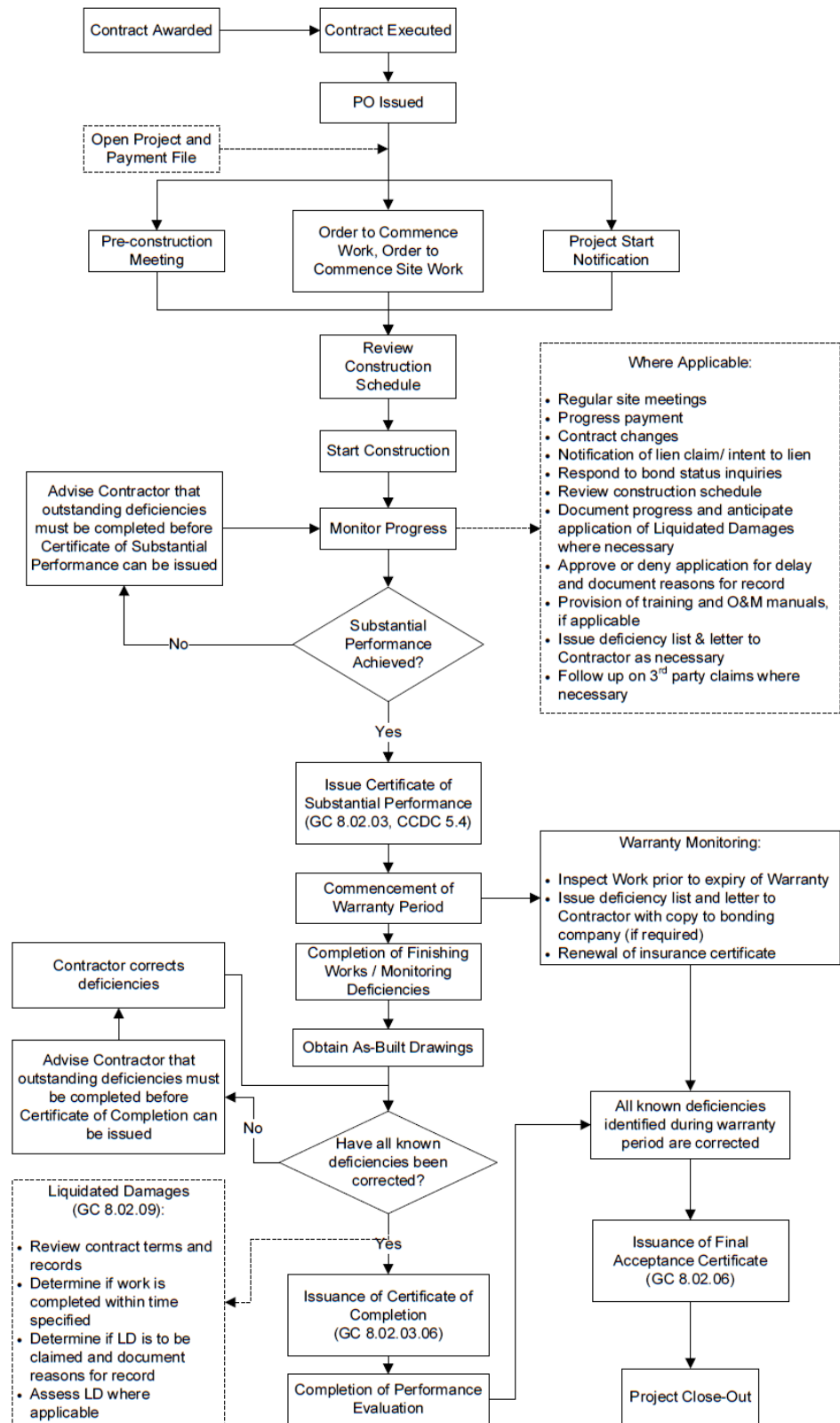


Figure 5: General Construction Contract Administration

6.5.1. Multiple Project Funding Accounts

For projects with multiple funding sources, it is imperative that each source is treated separately in accordance with Toronto Municipal Code Chapter 71 – Financial Control.

Portions of the work to be covered under a particular account must be paid solely from that account: the total funding available for a project does not represent a pool of funds that can be used for any portion of the work. If the cost of work exceeds the available funding for the designated account, funds cannot be taken from other sources within the same project. Exceeding of approved funds from an account requires a Purchase Order Amendment (POA) and proper authorization. Refer to Section 7.11 for additional details on the POA process.

6.5.2. Pre-Construction Tasks

Tasks to be performed by the Project Lead prior to the commencement of construction include:

- Holding a pre-construction meeting
- Issuing an Order to Commence Work
- Reviewing and confirming the construction schedule
- Notifying Toronto Water Laboratory for watermain projects
- Requesting Cut Permit from Transportation Services
- Issuance of Construction Notices (See Chapter 1)

6.5.2.1. Pre-construction Meeting

A pre-construction meeting should be held by the Project Lead after the award of the contract and before the start of the work.

Generally, the pre-construction meeting serves to identify, clarify and confirm the following:

- City's Health and Safety expectations from a Contractor (refer to *Field Services Manual, Appendix H*)
- Protocols for communication, quantity verification (e.g. material and truck weighing), inspection

- Progress payment requirements
- Change management procedures
- Claims and Dispute resolution procedures – both *General Conditions of Contract – Linear Infrastructure* (Section GC 3.14.04) and *Supplementary Conditions to CCDC 2* (Section 8.3) provide for three escalating levels of negotiation for resolving disputes. The Project Lead should obtain the names of the Contractor's staff who may be involved in such negotiations.
- Status of executed documents, bonding, insurance, and Order to Commence Work
- Construction schedule
- Pre-commencement activities: traffic management plans, shutdowns
- Required permits and approvals
- Occupation and use of site
- Emergency contacts information (names and phone numbers)
- Frequency of Contractor Performance Evaluations

The Contract Administrator shall prepare a project-specific agenda prior to the meeting to ensure that all relevant topics are covered. Document ECS-CWP-02a is a sample agenda for linear project, and Document ECS-CWP-02b is a sample agenda for a vertical project. For projects involving road resurfacing, a pre-pave meeting should be held. Document ECS-CWP-26 is a sample agenda including potential discussion items for a pre-pave meeting.

The Project Lead / Contract Administrator is to ensure that minutes of the meeting are recorded, distributed and filed. The minutes should include the time and location of the meeting, names of those in attendance and the organizations they represent, in addition to the decisions or actions taken/required for the agenda items.

6.5.2.2. *Order to Commence Work*

An Order to Commence Work letter (ECS-CWP-29) is to be issued by the Project Lead when all required documents have been submitted by the Contractor, and approved by ECS. Prior to issuing the Order to Commence Work letter to the Contractor, the Project Lead should:

1. Ensure that a PO is or has been issued by PMMD
2. Identify who is/are the Constructor(s) according to Occupational Health and Safety Act (typically the Contractor)
3. If the City is deemed to be the Constructor, provide a *Notice of Project* to the Ministry of Labour. The *Notice of Project* can be completed online through the [Ministry of Labour website](#), or by completing a hard copy of the form. A sample of the form is provided in Document ECS-CWP-27. (Note that ECS shall not permit the City to become the Constructor without written consent by Program Manager – Health & Safety and Emergency Planning, section Director and Chief Engineer and Executive Director)
4. Complete the appropriate *Registration of Constructors and Employers Engaged in Construction* form, also referred to as *Form 1000* (ECS form is available on the [ECS intranet site](#), under "Health & Safety") and submit to the Constructor for posting at project site. Note that the box for the "Average Number of Employees on Project" on the form refers to the number of employees that will be at the site at any given time and not necessarily the total number that will visit or work at the site for its duration.
5. When the City is deemed to be the Constructor, each company that will be working on the site is required to submit a similar form to the City. Note that ECS shall not permit the City to become the Constructor without written consent by Program Manager – Health & Safety and Emergency Planning, Director and Chief Engineer and Executive Director
6. For vertical contracts, complete the Order to Commence Work checklist in ECS-CWP-28.
7. If all above items are in order, the Project Lead should then issue the Order to Commence Work letter. A template for a

sample letter is provided in ECS-CWP-29. The Ministry of Labour does not require a copy of this letter.

8. The Contract Administrator should consult with Legal Services for actions to be taken if the Contractor has failed to commence work within the 14-day period as stipulated in “General Conditions of Contract – Linear Infrastructure”, or the period stipulated elsewhere in the contract with a higher order of precedence.

In situations where preliminary work can be done in advance of construction, an Order to Commence Site Work is issued to Contractors. The Order to Commence Site Work provides authorization to Contractors to begin preliminary work, such as the preparation of shop drawings, locating utilities on site, securing approvals, and ordering materials. Preliminary work on site is not permitted until an Order to Commence Site Work is issued by the Contract Administrator. The Order to Commence Site Work is currently used only by the Bridges, Structures & Expressways unit. A sample Order to Commence Site Work is presented in Document ECS-CWP-30.

6.5.2.3. Construction Schedule

The Contract Administrator should ensure that a construction schedule is submitted and updated by the Contractor according to the contract documents.

The schedule should be in the format specified in the Tender document. It should be reviewed carefully to ensure the information, particularly durations and Milestone dates, shown are in agreement with those in the contract where specified. Deviations should be clarified with the Contractor as soon as possible.

Generally, the following items may be included in the schedule, and should be verified:

- Start date corresponds to the date of Order to Commence Work or the Order to Commence Site Work
- Schedule duration matches the tender duration. (Even if the Contractor is indicating that the work will be completed earlier, the completion date on the schedule **MUST** be as indicated on the tender submission)

- Major tasks / Milestones and the completion dates are as specified in the Contract
- In weekly intervals, the sequence and timing of major activities, proposed start dates and estimated duration for activities
- Resource loading is appropriate to complete the work in the durations identified
- Requirement and constraints specified in the contract
- The project critical path is highlighted or identified in a contrasting colour from other activities
- The works to be performed by each specific subcontractor and where applicable, the specific location, labour, construction crews, plant and equipment to be employed
- Timing for shop drawing submission and review – ensure sufficient time is allotted for review
- Timing of testing and commissioning as specified in contract
- Timing for training
- Timing for submission of as-built drawings, record drawings and operations manuals

If the submitted schedule meets the requirements, an acceptable letter should be issued to the Contractor. Document ECS-CWP-18 provides sample wording for letter indicating the acceptance of the proposed schedule and reminding the Contractor to update the schedule.

The Contractor is required to update the construction schedule in accordance with the GCs or provisions stated elsewhere in the contract documents.

6.5.2.4. Notification of Watermain Project Start

The Client Division is normally notified of the upcoming construction work by copy of the Notice of Construction letter. When the project involves watermain construction or relining, Toronto Water Laboratory should be notified and provided with relevant contact information. The notification, a template for which is provided as ECS-CWP-31, is to be copied to other affected parties.

6.5.3. Site Meetings

Site meetings should ideally be held at least once per month and more frequently as needed. The Contract Administrator, Inspector and Contractor shall determine the frequency of the meetings and call for a special meeting when necessary.

The meetings should generally be attended by the:

- Project Lead
- Contract Administrator
- Inspection staff
- Client lead, if applicable
- External Service Provider, if one is engaged
- General Contractor's representative
- Utility companies' representatives, if applicable
- Subcontractors' representative upon invitation by the General Contractor
- Third party representatives, such as TTC, Metrolinx, CNR

Prior to the meeting, an agenda shall be prepared and distributed by the Contractor Administrator. The agenda should include all issues to be discussed and may include the following:

- Review and update of health and safety issues (refer to *Field Services Manual, Appendix H*)
- General and special announcements, as well as opening remarks

- Acceptance of minutes of previous meeting by attendees
- Review and follow-up of items in minutes of last meeting
- Review of the issues log
- Review the latest updated schedule. Any slippage from the originally submitted construction schedule must be clearly identified, and recorded in the meeting minutes. It is important that an updated schedule is obtained from the Contractor and reviewed for accuracy as it can be used later to substantiate or deny a delay claim.
- Six (6) week look ahead
- Discussion of plan of action to meet contract requirements if there was any schedule slippage
- Review Request for Information (RFI) status
- Change Directive / Order status
- Shop drawing and as-built drawing status
- Record drawing status
- City restrictions i.e. shut down and/or plant support activities
- New business

The minutes of meetings should be kept in a consistent format. The Project Lead / Contract Administrator should ensure that the minutes are distributed to all invitees.

6.5.4. Daily and Weekly Reports

Daily reports documenting site activities, quantities of materials delivered and works performed are required on construction projects. Responsibilities for the preparation and signing of daily and weekly reports are provided in Chapter 4 of the *Field Services Manual*.

In general, on internally-managed projects daily reports are prepared by City Inspectors, and on externally-managed projects they are prepared by the Consultant's staff. On unit price contracts, information from the daily reports are used to generate weekly reports, which are used for invoicing / payment purposes.

It is important to note that the Inspectors' reports can be used as evidence to substantiate or deny future claims made by the Contractor or the City. The Project Lead should add any Health and Safety issues observed to the observation checklist / matrix, and notify the Health & Safety and Emergency Planning Consultant as required.

6.5.5. Authorized Representative on Project Site

The City's Project Lead must ensure that for internal and external contracts, Contract Administrators are in compliance with the various terms of the construction contract. This includes ensuring that the General Contractor has an authorized representative on site at all times. Insufficient work direction and delays could result due to absence of Contractor's representative on site for decision making purposes.

For externally managed contracts, the City's Project Lead and Contract Administrator must ensure that the General Contractor provides an authorized representative on the project site all times that is knowledgeable and has the authority for making decisions. On internally managed contracts, this is ensured by the Construction Supervisor.

The Contract Administrator must obtain from the Contractor, prior to the commencement of work, the name and contact phone number of the on-site Superintendent that has authority for making decisions and if necessary, an alternate from their team that is knowledgeable and competent to assume the role of the Superintendent when the on-site Superintendent is not available. The Contractor is to be advised at the pre-construction meeting that the Contract Administrator must be notified when an on-site Superintendent is not available and the delegated alternate including name and contact phone number.

6.5.6. Construction Material Reports

6.5.6.1. Material Documentation

Appropriate documentation is to be maintained for quantity control of materials on unit rate projects. All quantities of material delivered to the project site are to be documented, logged and placed in the project file. Proper rationale must be documented and maintained on file, including the written consent of the City, in the form of a Change Order for items outside the original Project Scope. Refer to Chapter 7 for additional details on how to deal with changes in scope.

To avoid overpayments for items not included in the original Project Scope, it is critical that material quantities are verified, supported with written consent of the City, properly documented, and filed. The Construction Supervisor is to be advised of any item overruns or added quantities initiated by the Project Lead or Inspector. The Construction Supervisor/Coordinator is to follow final measurement procedures identified in the FSM and associated SOP.

Refer to the *Field Services Manual* for additional detail on documenting materials brought to site.

6.5.6.2. Testing and Quality Assurance

Testing and quality assurance are performed to ensure and verify that construction materials, provided for construction contracts, are in accordance with contract specifications. The CA must verify that the minimum quality requirements for materials are correct on the testing forms by initialing the test result forms and ensuring that the appropriate commentary is provided for test results when exceptions are noted. The CA must ensure that the Construction Supervisor and inspection staff are advised of these actions. Construction Supervisors are responsible to ensure that inspection staff adhere to the above requirements.

Contract Administrators are required to verify that quality assurance of construction materials, performed by third party Consultants, are in accordance with contract specifications. The City's Project Lead is responsible for ensuring that the CA for Consultant managed contracts adheres to the above requirements.

Appropriate documentation is to be maintained for quality assurance and quality control of materials. All materials delivered to the project are to be documented, logged and placed in the project file. All action required/taken for construction materials that have been determined non-compliant with specifications must also be documented and placed in the project file. All materials delivered to site that are visibly defective or substandard must be immediately rejected and the Project Lead and/or CA notified. The City's Project Lead is responsible for ensuring that the CA for Consultant managed contracts adheres to these requirements.

The contract documents typically make reference to codes and standards. There may be exceptions where the contract is tailored specifying the type and frequency of sampling and testing of construction materials for quality assurance. In cases where batch or

lot size of the material supplied and/or placed does not coincide with those specified in contract documents, the Contractor Administrator may revise the frequency of sampling and testing; however, the rationale for deviating from the contract specifications must be documented. The City's Project Lead is responsible for ensuring that the CA for Consultant managed contracts adheres to these requirements

Additional information regarding material testing is available in the *Field Services Manual*.

6.5.7. Resident / Property Owner / Public Complaints and Claims

Complaints by residents, property owners or general public should be handled in a professional manner and managed fairly and effectively. The City's *Complaint Handling Guidelines* (posted on the [City's intranet site](#)) provides guidelines on complaint handling. Complaints related to capital construction projects can be submitted to the City according to the [ECS Complaints Process](#) posted on the City of Toronto external website.

All claims by the public against the City for injury or property damage should be referred to City Clerk's Office. Staff should not admit to any fault when contacted by the public about any claims. A record of the contact should be kept in the project file. The information to be documented may include:

- the claimant's name and contact information
- date of claim
- description and / or nature of claim, including the date of incident
- date and details of response and / or information provided (e.g. contact information for Clerk's Office)

ECS has developed a process for third party liability claims involving Contractors. The process is included in Appendix C of the Insurance & Risk Management Claims Manual, available from the Insurance & Risk Management unit.

It should be noted that the Tender document includes a provision that lays out the Contractor's responsibilities and obligations in responding to third party claims as well as City's responsibilities to ensure the claims are handled properly and in a timely manner.

Detailed information on claims procedures can be found on the Insurance & Risk Management intranet site at http://insideto.toronto.ca/corporate_finance/insurance/index.htm

6.5.8. Progress Payments

Progress payments are typically made on a monthly basis. Payments should only be approved if the supporting documentation is accurate and it reconciles with the amount to be paid.

For linear projects, General Conditions of Contract – Linear Infrastructure, GC 8.02.03.01.04 requires that the payment be made within 30 calendar days of the approval of the Progress Payment Certificate by the Contract Administrator or Project Lead for internally managed projects.

For Major Infrastructure projects, Supplementary Conditions to CCDC 2 clause 3.19.2 requires that the payment be made within 30 calendar days "after the *Consultant* and the *Contractor* have reached mutual agreement on the amount of the invoice evidencing the *Work* being invoiced with required supporting documents."

For contracts administered through an External Services Provider, the City's Project Lead must indicate that they have reviewed the invoice and progress payments by providing their signature. This practice is applicable to all engineering services invoices and progress payments, including work done under change orders.

If the invoice contains errors, requires corrections or if the final amount of work performed is different from the invoice provided then the Contract Administrator must advise the Contractor of the corrections required, and an updated invoice must be submitted by the Contractor. The Contract Administrator must not make manual adjustments to invoices since it increases the risk of fraud and can potentially result in overpayments.

6.5.8.1. Progress Payment for Linear Contracts

Progress payments for linear projects are based on quantities presented in the weekly reports (refer to Section 6.5.4 and the *Field Services Manual* for detailed information on weekly reports). The Project Lead authorizes the weekly report, then sends it to CT&P so that a progress payment can be generated. Progress payments are generated and tracked in PTP.

Prior to releasing the first progress payment, CT&P should verify that the following items are received where required under the terms of the contract:

- Construction schedule if required
- WSIB Clearance Certificate for the General Contractor (valid for 90 days, and is expected for each payment)

All payments to the Contractors are to be supported by proper documentation. Upon verification of quantities and / or progress with the supporting documentation (particularly Inspector's reports) and / or information from the Contractor and after checking the accuracy of the calculations, CT&P is to prepare a payment certificate generated in PTP showing the:

- Description of each tendered item, the tendered quantity, unit bid price and total price (ensure that if the alternative proposal mentioned in Section 6.4.5 is accepted, the prices for the alternative items and not the base items are applied)
- Description of contract change item (described in Change Directive and/or Change Order), the quantity, agreed unit price and total price / lump sum price. Note that there may be cost savings if the change is a reduction in the tendered work. The Inspector's Daily Report form is required if the item is based on a negotiated lump sum price or negotiated unit price. Report of Extra Work Completed form is required if the item is based on Time and Material. Refer to the *Field Services Manual* for the Inspector's Daily Report form and the Report of Extra Work Completed form)
- Previous payment quantity, current payment quantity and the cumulative quantity for each tendered and contract change item
- Amount of previous payment, current payment and cumulative total for each tendered and contract change item
- Amount of early release of statutory holdback pertaining to 100% completed sub-trade work, if any
- Percentage of completion at cut-off date for each tendered and contract change item
- Amount of statutory holdback

- Amount of statutory holdback release (require completion of Holdback Release & PO Closure Form by Project Lead, Document ECS-CWP-32)
- Amount of applicable tax
- Deficiency holdback based on an estimate of the cost required to rectify the deficiency shall be established. The value of the deficiency holdback shall be deducted from the payment
- Amount of assessed Liquidated Damages, if any, deducted from payment in accordance with the contract provision (found in Section 5A of the tender document)

The payment certificate, attached to the Capital Transmittal Form, also generated in PTP, is to be reviewed and signed off by the Contract Administrator (Project Lead to sign if Contract Administrator is an External Service Provider) and the respective manager.

At the same time the progress payment is processed, invoices should be issued for costs to be recovered from third parties according to the *Cost Recovery Procedure* available on the [ECS Capital Works Procedures Manual intranet site](#).

The following points should be noted when processing the payment for Changes in the Work that are on a Time and Material basis:

- If the Contractor has submitted a Contractor's Payroll Burden Form (Document ECS-CWP-33 or ECS-CWP-34) as stipulated in the tender document and it is acceptable, the Payroll Burden rate indicated on the Form is to be applied for all Time and Material related works throughout the Contract as stipulated in the tender document. Note that different subtrades may have different payroll burden rates.
- If the Contractor has not submitted a Contractor's Payroll Burden Form, the standard 40% rate is to be applied.

The Excel spreadsheet in Document ECS-CWP-35 may be used to facilitate the calculation of Time and Material payments.

6.5.8.2. Progress Payment for Vertical Contracts

Prior to releasing the first progress payment, CT&P should verify that the following items are received where required under the terms of the contract:

- Construction schedule, if required
- WSIB Clearance Certificate for the General Contractor (valid for 90 days, and is expected for each payment)
- Detailed breakdown of the lump sum prices, according to Supplementary Conditions 3.18.3 paragraph 5.2.9
- "A schedule of values for the parts of the *Work*, aggregating the total amount of the *Contract Price*", according to CCDC 2 GC 5.2.4

The following documents are required for each monthly payment:

- WSIB Clearance Certificate according to Supplementary Conditions 3.18.3 paragraph 5.2.
- Statutory Declaration of Progress Payment Distribution (CCDC 9A) according to Supplementary Conditions 3.18.3 paragraph 5.2.8
- Monthly projected/estimated payment schedule according to Supplementary Conditions 3.8.3 paragraph 5.2.13

Other than the above mentioned required documents, the payment is processed similar to the way linear contract payments are processed.

6.5.9. WSIB Clearance Requirements

A WSIB Clearance Certificate for the Contractor must be obtained prior to the commencement of any construction and prior to the release of every progress payment.

In compliance with the General Conditions of Contract – Linear Infrastructure, a WSIB Clearance Certificate is also required prior to the release of the following:

- Subcontract statutory holdback release payment (GC 8.02.03.03.01.c / CCDC2 5.6.1 + SC 3.22.1.c) – a WSIB Clearance Certificate relating to the subcontract
- Substantial Performance statutory holdback release payment (GC 8.02.03.05.04.c / CCDC2 5.5.1.2 + SC 3.21.1) - WSIB Clearance Certificate is required for the General Contractor
- Completion statutory holdback release payment (GC 8.02.03.07.03c) - a WSIB Clearance Certificate is required for the General Contractor

A WSIB Clearance Certificate is valid for 90 days. It is the responsibility of the Project Lead to ensure that the Contractor's WSIB Clearance Certificate is valid. This can be checked with each progress payment; however, if the time that passes between invoices exceeds 90 days, the Project Lead must request a copy of the WSIB Clearance Certificate from the contractor, or check with the WSIB office. A WSIB Clearance Certificate can be requested at any time during the course of the contract from the WSIB office (contact information available on the [WSIB website](#)) by providing the Contractor's account number. WSIB also provides an online service for obtaining the clearances anytime. Details of using the service can be found on the [WSIB website](#).

6.5.10. Bond Status Inquiries

Periodically, bonding companies request updates on the status of contract completion and payment. Such requests – typically a form to be filled out – may arrive via Legal Services or directly from the bonding company. When responding to an inquiry, a disclaimer must be included when completing the form provided by the bonding company. A sample of a contract status form that may be received from a bonding company, including the disclaimer, is provided in Document ECS-CWP-36.

6.5.11. Construction Lien

A construction lien is a right granted by law to persons who supply services or material to an improvement of a premises. The Construction Act sets out the process by which lien claimants can enforce their various rights.

Generally, a construction lien is a charge upon:

1. The interest of the owner in the premises improved (subject to certain exceptions such as when the premise is a public street or highway), and
2. The holdback required to be retained, and
3. Any additional amount owed in relation to the improvement subject to rights of set-off.

Construction liens provide some financial protection to parties supplying labour or materials for a construction project. This is especially important to subcontractors who have no direct contract with

the Owner (and therefore no right to bring an action for payment under a contract).

The following subsections discuss how to deal with lien claims, what the limitation periods are on liens, and how to conduct a lien search. Note that the most recent version of the Construction Act should be checked for revisions that may affect the following sections.

6.5.11.1. Dealing with Lien Claims

The Contractor, subcontractors or suppliers or their lawyers may notify the City of a claim for lien or intent to lien (i.e. a written notice of a lien). If the lien attaches to the premises, a lien claim may be registered on title, in which case, a title search at the land registry office will reveal the existence of a claim for lien. Figure 6: Construction Lien Process shows the procedures of handling lien claims.

Upon becoming aware of a lien claim or receiving a written notice of a lien, a letter to the Contractor under the Manager's signature should be issued by the Project Lead, unless there is a particular legal issue or the Project Lead specifically asks Legal Services for assistance. The letter (Document ECS-CWP-37) shall advise the Contractor that the full amount of the lien claim, plus a security amount equal to 25% of the lien claim up to a maximum of \$50,000, will be withheld from current or future payments. Note that this amount for lien claim security is in addition to the 10% statutory holdback. The letter is copied to the following, with a copy of lien or intent to lien documentation attached for recipients identified with a “*”:

- Legal Services *
- Lien Claimant
- Lien File *
- Payment File *
- External Service Provider project manager*
- Bonding company showing bond number*
- Project file copy* (circulated to Project Lead, and directors)

For the purpose of tracking, pertinent information of every lien claim or intent to lien such as the lien claimant, type of document (lien, intent, certificate of action, court order or vacating of lien), instrument number

(if registered), registration (Registry or Land Titles), date, amount of claim are to be summarized by CT&P staff in a table for each contract. The comment column can be used to identify actions taken in respect of the lien.

The payment withheld from the Contractor as security shall not be released until:

- Notice of a lien or intent to lien (i.e. written notice of a lien) is withdrawn in writing or
- Preserved or Perfected lien claim is discharged or vacated

Prior to releasing the security money to the Contractor, a lien search should be conducted to verify that a release in respect of the claim for lien or certificate of action has been registered for liens attached to premises or that any liens have been vacated by court order. The release of claims for liens in respect of public streets or highways must be given to the Clerk's office. In either case, a lien search can be conducted as described in Section 6.5.11.3.

In any case, the 10% statutory holdback is not to be released prior to the expiry of the 45 day period following the publication of the certification of substantial performance or completion in accordance with appropriate sections of the Construction Act (and then only released if there are no liens preserved prior to the expiry of this time period and if the City is not setting off any amounts from funds that are no longer statutory holdback funds).

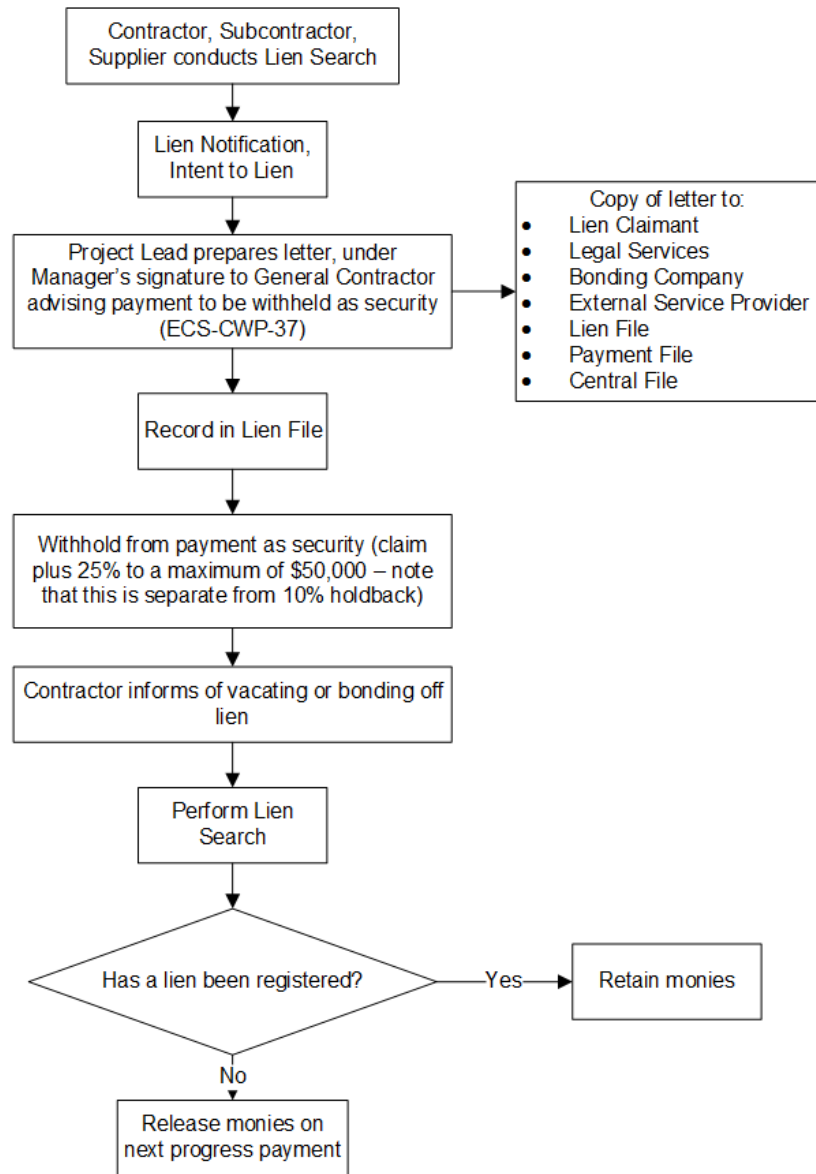


Figure 6: Construction Lien Process

6.5.11.2. Lien Limitation Periods

A lien of a contractor expires unless it is preserved within 45 days from the earliest of

- The date on which a copy of the certificate or declaration of substantial performance is published in a construction trade newspaper (i.e. "Daily Commercial News"), or
- Date that the contract is completed or abandoned

A lien may be preserved during the construction or any time before it expires by registration in the land registry office of a claim for lien on the title of the premises. Where the lien does not attach to premises, for example public streets or highways, a copy of the claim for lien and affidavit of verification must be given to the Clerk's office.

A preserved lien expires at the end of the 45 day period next following the last day the lien could have been preserved unless it is perfected. A preserved lien is perfected when the claimant commences an action to enforce the lien and, except where an order to vacate the registration of the lien is made, registers a certificate of action in the land registry office on the title of the premises. Note that in the case where the lien is in respect of public streets or highways, the certificate of action must be given to the Clerk's office.

A preserved or perfected lien can be discharged by the registration of a release in the prescribed form on the title of the premises. The release shall, except where the lien claimant is a corporation, be supported by an affidavit of execution. If the lien does not attach to the premises, the lien can be discharged by giving a release in the prescribed form to the Clerk's office if the lien is in respect of a public street or highway.

A lien can also be vacated by posting security for the lien with the Court and a Court Order is obtained to vacate the registration of the claim. Once a vacating order is made, the lien is only a charge on the security posted with the Court and is not a charge against the premises, holdback or additional amounts owed.

A perfected lien can expire. The Litigation Section of Legal Services will provide advice in such circumstances.

6.5.11.3. Lien Searches

Before a progress payment is made and before the holdback funds are released, the Project Lead should initiate a lien search through CT&P

to ensure that there are no registered liens against the property or facility.

For projects that are within public streets or highways, lien searches are conducted by CT&P by emailing the City Clerk's Office at clerkmailreg@toronto.ca and providing the following information:

- Description of contract
- Contractor's name
- Period to search (start and end dates of the project, or the start date and the date of publication of Substantial Performance)
- Date of Substantial Performance
- Date of publication of Certificate of Substantial Performance

For facilities and works that attach to property (whether private or City-owned, other than roads), lien searches can be conducted at the land registry office. The following is a general guide for conducting a lien search at the land registry office:

- Search should include new liens, outstanding liens and any vacated liens.
- Search should be done **at least** 1 day after the expiration of the 45-day lien period.
- Day Book should be checked for entries that have not yet been entered in the Abstract Book.
- Ensure that all registration in the Fee/Day Book as well as the Abstract Book, up to the end of the 45th day of lien period, has been searched.
- Ensure that the entire project area (all lots or blocks) involved by the work done or materials supplied are searched.

6.5.12. Changes During Construction

Contract changes should be minimized or avoided. Where changes are necessary, Change Directives and Change Orders formalize the agreement between the City and the Contractor where it is necessary to perform changes to the scope of the original contract, and must be approved prior to commencement of a Change in the Work.

To avoid any potential contractual disputes and delay in completing the original Project Scope on time, no significant change in Project Scope should be considered after contract award or issuance of the Purchase Order. Additional work outside the spatial limits of the contract (i.e. tendered contractual boundaries) should only be permitted in extraordinary cases and only with prior authorization of the Client Division and the Chief Engineer and Executive Director of ECS.

Refer to Chapter 7 for detailed discussion on the issuance of Change Directives and Change Orders.

6.5.13. Extension of Contract Time / Liquidated Damages

An extension of contract time may be considered according to GC 3.07 "Extension of Contract Time" for circumstances stated in GC 3.08 "Delays" and GC 3.11 "Changes in the Work" (correspondingly, the CCDC references are CCDC 6.5.6 for circumstances stated in CCDC 6.5 "Delays", CCDC 6.2 "Change Order" and 6.3 "Change Directive.") The Contractor shall apply to the Contract Administrator in writing for an extension if it is deemed necessary. The Contractor's request should include the following:

- Cause of delay
- Number of additional days required
- Financial impact
- Impact to critical path
- Revised schedule with a new Substantial Performance and full and final contract completion date

Approval to extend the contract time where justified must be done in writing with the reasons and the new completion date clearly stated. Document ECS-CWP-38 is a template for the approval letter. Similarly, rejection to grant extension should also be in writing, stating the

reasons. Refer to ECS-CWP-39 for a sample letter where an extension is rejected, and Liquidated Damages (LD) are applied.

Although the Contractor is required to apply to the City's Contract Administrator for an extension of contract time where deemed necessary, as a matter of good contract management practice, Contract Administrators and Inspectors are advised to be proactive in monitoring the progress of the contract. The status of the schedule should be discussed at site meetings; any slip in the contract schedule should be followed up with the Contractor promptly and documented in the meeting minutes.

If the Contractor's application to extend the contract time was rejected or the Contractor failed to apply for an extension of contract time and the completion of the contract is delayed, the Contract Administrator shall issue a "show cause" letter (ECS-CWP-40) requesting justification for the delay, reasons why LD should not be assessed, and a new completion date, noting that the Contractor should have applied for an extension at least 15 calendar days prior to the expiration of the contract time.

If it is determined that the Contractor does not have valid reasons for the delay, LD may be assessed in accordance with GC 8.02.09 / CCDC 6.5.9 or as stated in other parts of the contract document with a higher order of precedence. The LD letter is to be issued under the Director's signature and copied to the Division Head. Document ECS-CWP-39 is a sample letter applying the LD.

6.5.14. Dealing with Claims by Contractor

Construction claims can arise due to a variety of factors such as:

- Extensive number of Changes in the Work
- Unforeseen site conditions
- Hidden designated substances
- Archaeological finds
- Inclement weather conditions
- Labour disputes
- Errors / omissions in contract documents

- Late delivery of critical materials or equipment

As discussed in Section 6.5.13, an extension of contract time may be considered pursuant to GC 3.07 (Extension of Contract Time) / CCDC 6.5.6 under certain circumstances, including some of the aforementioned factors. However, an extension of contract time may not prevent a Contractor from making delay claims for additional compensation.

It should be noted that GC 3.14.01 (Continuance of the Work) / CCDC 8.1.1 (Continuance of the Work) requires the Contractor to continue with the work after serving or receiving any notification of a claim.

Contractors pursuing a claim for extra compensation should follow the procedure in GC 3.14.03 (Claims Procedure) / CCDC 2 GC 8.2 (Claims Procedure). If the Contractor disagrees with the City's opinion given, the Contract Administrator should proceed to negotiate with the Contractor pursuant to GC 3.14.04 (Negotiations) / CCDC 2 GC 8.3 (Negotiations). If the claim is not successfully resolved through the negotiation process, the next step to be taken is through the mediation process given in GC 3.14.05 (Mediation) / CCDC 2 GC 8.4 (Mediation). If all preceding processes failed to resolve the claim satisfactorily, either the Contractor or the City may request to resolve the claim by arbitration process given in GC 3.15 (Arbitration) / CCDC 2 GC 7.7 (Arbitration).

6.5.14.1. Reviewing Contractor Claims

When the Contractor contacts the Contract Administrator identifying a problem or a potential problem on the project, either in writing or verbally then followed in writing, the Project Lead / Contract Administrator should take appropriate actions to investigate and follow up. Attempts should be made to resolve issues or disputes on site before allowing them to escalate to higher levels.

Upon receipt of a claim from the Contractor, the Project Lead / Contract Administrator should:

- Acknowledge the receipt of the notification of claim in writing
- Review the claim and documentation submitted by the Contractor ensuring that the item(s) or circumstance(s) that led to the claim and the basis for the claim are clearly defined
- Ensure that the cost associated with the claim is reasonable and in accordance with the terms of the contract

- Ensure that all calculations, supporting documentation, correspondence, and other records such as photographs, charts, copies of correspondence, and any other evidence that are relevant to the claim are complete and consistent
- Review the project records to assess and determine the validity of the claim, particularly the critical path shown on the original construction schedule submitted by the Contractor and the subsequent updated schedules received and reviewed at site meetings
- Request further information or clarification where necessary
- Review applicable contract documents including GC 3.14 (Claims, Negotiations, Mediation) for linear contracts, and Part 8.0 (Dispute Resolution) for CCDC contracts

The process may involve discussions with the Contractor in attempts to settle the claim. Where required, the appropriate Director and Legal Services shall be consulted during the review of Contractor claims and any resolution proposals.

6.5.14.2. Responding to Contractor Claims

Contractor claim for delay can either be compensable or non-compensable depending on the circumstance(s) causing the delay. Refer to the General Conditions for details on what constitutes a compensable and non-compensable delay.

Following the review and assessment of the delay claim and determination as to whether additional compensation is warranted or not, the Contract Administrator shall provide timely written response to the Contractor. The written response should indicate the validity of the claim and its rationale. If an agreement has been reached with the Contractor, the terms of the agreement as well as the revised schedule and completion date should be clearly stated.

6.5.15. Dealing with Contractor Default

Pursuant to the provisions of contract documents, including the General Conditions (Linear GC 4.05 and CCDC 2 GC Part 7), the Contractor may be considered to be in default if the

- Contractor is in bankruptcy or insolvency;

- Contractor fails to commence work within the time limit following the order to commence work as stated in the contract; or
- Contractor fails to perform the work properly in accordance with the terms and conditions of the contract.

It is stated in GC 4.06 and in CCDC 2 GC 7.1.2 that failure to give timely notice of default “shall neither constitute nor be construed as waiver of the default.” Nevertheless, prompt actions to give notice will avoid any potential dispute with the surety company. If one of the above occurs, the Project Lead shall consult with Legal Services and give written notice to the Contractor promptly.

In the case of Contractor bankruptcy, notice is given to the surety company with demands to fulfil its obligations in accordance with the terms and conditions of the surety bonds provided in the contract.

In the event of failure to commence work or failure to perform, a case must be prepared to formally declare the Contractor in default. In consultation with Legal Services, warning notification letters will be issued to the Contractor and copied to the surety company advising of failure to perform work and to have the work completed within associated timelines.

When dealing with Contractor default, the Project Lead should be aware of the Contractor’s right to correct a default, as provided in GC 4.07 for linear contracts and in CCDC 2 GC 7.1 for vertical contracts.

In the event that default leads to contract termination, the Project lead should consult Legal Services for guidance on further action required.

6.5.16. Subcontract Completion and Statutory Holdback Release

Under the provisions of Construction Act s (25), GC 8.02.03.02, and CCDC 2 GC 5.6 as amended by SC 3.22, the Contractor may notify the Contract Administrator that a subcontract has been completed satisfactorily and request the CA to certify the completion of the subcontract before the substantial performance of the contract.

Upon receipt of the request from the Contractor, the CA is to verify that the:

- Subcontract work is 100% completed and it has been completed satisfactorily in accordance with the contract specification and the cost of the work completed

- Subcontractor has previously received Fair Wage clearance
- If both of the above conditions are satisfied, the CA shall certify the completion of the subcontract:
 - Complete Form 7, *Certificate of Completion of Subcontract* (available at <http://ontariocourtforms.on.ca/en/construction-lien-act-forms/>) including signature by the CA
 - Within 7 days of certification, give a copy of the Certificate to the subcontractor
 - Complete Form 5, *Declaration of Last Supply* (available at <http://ontariocourtforms.on.ca/en/construction-lien-act-forms/>) if the appropriate Director and/or Legal Services has determined that it is required.
- Section (25) of the Construction Act provides for the release of the statutory holdback to the subcontractor 45 days after the Certification of Completion of the subcontract is issued. The Contractor is required to submit the following in accordance with GC 8.02.03.03 / CCDC 2 5.6.1 as amended by SC 3.22.1 prior to the release of the payment:
 - From the Subcontractor: a release and waiver (form SSHR-1 in Document ECS-CWP-41) and a statutory declaration (form SSHR-2 in Document ECS-CWP-42)
 - From the Contractor: a release and waiver (form SSHR-3 in Document ECS-CWP-43) and a statutory declaration (form SSHR-4 in Document ECS-CWP-44)
 - For lump sum and unit price contracts, a copy of the contract between the Contractor and the Subcontractor and a financial statement from the Contractor showing the amount of payment due the Subcontractor. *The Contract Administrator must be aware that holdback is based on progress payments issued by the City, or the value of the PO (whichever is less)*
- A Holdback Release & PO Closure Form (ECS-CWP-32) should be completed to process the holdback release payment.

6.5.17. Substantial Performance of Contract

The value of deficient / defective / uncompleted work must be estimated by the Contract Administrator in order to determine whether or not Substantial Performance has been achieved. Deficiencies are logged in a project's deficiency list (see Chapter 4 of the Field Services Manual for details on deficiency lists.) The value of the outstanding work is then compared against the monetary thresholds set out in the Construction Act.

Section 2(1) of the Construction Act defines Substantial Performance as follows:

“a contract is substantially performed,

- (a) When the improvement to be made under that contract or a substantial part thereof is ready for use or is being used for the purposes intended; and
- (b) When the improvement to be made under that contract is capable of completion or, where there is a known defect, correction, at a cost of not more than,
 - (i) 3 per cent of the first \$500,000 of the contract price,
 - (ii) 2 per cent of the next \$500,000 of the contract price, and
 - (iii) 1 per cent of the balance of the contract price.”

It should be noted that the cost value for evaluation with respect to part (b) above should be the total of both the value of the remaining work and the cost of correcting the defective work. Document ECS-CWP-45 may be used to determine whether or not a project has achieved Substantial Performance.

For plant or facility projects, work will not be deemed to be ready for its intended purpose until completion of all employee training, submission of Operations and Maintenance (O&M) manuals, redline drawings, successful testing and commissioning of piping, equipment, devices and all automatic operation systems applicable to the project as stipulated in the contract documents.

On receipt of the Contractor's application for Substantial Performance, the Project Lead shall:

- Confirm status of all deficiencies identified at the date Substantial Performance is requested by the Contractor. Advise the Contractor

that outstanding deficiencies must be corrected before a Certificate of Substantial Performance can be issued.

- Determine if the completion of the contract is delayed or not, and if so, whether a claim for Liquidated Damages is warranted. Document the result of the review in a memo to file identifying rationale for either assessing or not assessing Liquidated Damages. A sample memo is included in Document ECS-CWP-46. If a Consultant is overseeing the construction phase, recommendations are required from the Consultant.
- Establish value of defective work.
- Establish value of remaining work.
- Notify the Client Division of the application and obtain concurrence for the Certificate of Substantial Performance, if applicable.
- Complete Form 6 - *Certificate of Substantial Performance* (available at <http://ontariocourtforms.on.ca/en/construction-lien-act-forms/>) if the Contractor has satisfied the requirement for substantial performance according to the Construction Act.
- Send a copy of the completed Form 6 to the Contractor with a letter outlining their obligations for release of the holdback (On linear projects, CT&P sends Form 6 to the Contractor). According to GC 8.02.03.05.04 (CCDC 5.4 + SC 3.20 and CCDC 5.5 + SC 3.21) the Contractor is required to provide a release, a statutory declaration, WSIB Clearance Certificate and proof of publication of the Certificate of Substantial Performance. A template for the letter is included in ECS-CWP-47 together with the standard release form SP-1 (ECS-CWP-48a for linear contracts, and ECS-CWP-48b for CCDC contracts) and statutory declaration form SP-2 (ECS-CWP-49 for both linear and CCDC contracts).
- CT&P will conduct a lien search and check WSIB Clearance Certificate on the 46th day after publication (as indicated in Section 6.5.9 of this manual, WSIB Clearance Certificate is required for the General Contractor).
- Process payment on the 46th day if no lien and the Contractor has satisfied the requirement of GC 8.02.03.05.04 / CCDC 5.5 mentioned above. The payment is to be processed similar to the way a progress payment is processed, as described in Section 6.5.8 of this manual.

A Holdback Release & PO Closure Form (ECS-CWP-32) should be completed to process the holdback release payment.

6.5.18. Pre-Start Health and Safety Review

A Pre-Start Health and Safety Review (PHSR) is an assessment of any industrial apparatus, protective element, process, or structure, which may uncover deficiencies with respect to relevant sections of the Occupational Health and Safety Act and Regulations for Industrial Establishments O.Reg. 851. A PHSR typically applies to vertical contracts.

Under the Regulations for Industrial Establishments O.Reg. 851:

(2) Subject to subsections (5), (7), (8) and (9), a pre-start health and safety review is required if, in a factory other than a logging operation, a provision of this Regulation listed in the Table applies and the circumstances described in the Table will exist,

(a) because a new apparatus, structure or protective element is to be constructed, added or installed or a new process is to be used; or

(b) because an existing apparatus, structure, protective element or process is to be modified and one of the following steps must be taken to obtain compliance with the applicable provision:

1. New or modified engineering controls are used.
2. Other new or modified measures are used.
3. A combination of new, existing or modified engineering controls and other new or modified measures is used. O. Reg. 528/00, s. 2.

When applicable (typically vertical contracts), Consultants are required to prepare an initial PHSR report during the design stage of a project based on review of the final drawings and specifications. Prior to commissioning, the report must be finalized to reflect modifications to detailed tender drawings and specifications, changes during the construction phase, as well as the results of an on-site inspection of the as-constructed works. Requirements for PHSR's are discussed in the standard appendixes to the RFP.

The PHSR shall be conducted by the designer (if the scope of work includes the review tasks) or a third party. A written report meeting the requirements of the requirements set out in Section 7 of O. Reg. 851,

is then submitted to the City at the completion of the review, before testing and commissioning of the project.

6.5.19. Commissioning

Commissioning (typically applicable to vertical projects) shall only commence after, where applicable:

- The works have been completed and ready for the intended use
- The completion of the PHSR (where required) and all measures or actions identified during the review have been properly addressed
- Satisfactory completion of factory acceptance tests (FAT) and site acceptance tests (SAT), both involving the Client Division representative
- All other testing and training documents as required in the contract have been submitted.

During commissioning, the Project Lead is to ensure that the commissioning plan identified in the design phase is followed. Documentation of the commissioning of each individual piece of equipment and/or system shall be reviewed by the Project Lead, submitted to the City in the O&M manual, and filed for record.

6.5.20. Shop Drawings, Project Documents, As-built and Record Drawings

For projects that require the preparation and submission of shop drawings by the Contractor (typically vertical projects), the Contract Administrator must maintain a log of all shop drawings with the date received, reviewed and approved. The Contract Administrator shall adequately safeguard approved copies of shop drawings and copies of the same are to be provided to the City at the completion of contract.

External Service Providers acting as Contract Administrators may have maintained a file system for the project. The Project Lead should ensure that the files are turned over to the City at the end of the contract. Additional discussion on which documents must be retained is provided in Chapter 9.

Drawings should be updated and maintained during the course of a project; further detail is provided in the *Field Services Manual*.

As-built drawings are to be produced at the completion of the project unless record drawings are specifically required in the contract documents or for legislative purposes. Requirements for as-built drawings are discussed in the *Field Services Manual*, as well as the Design Criteria for Sewer and Watermain document. The process of producing the as-built drawings is described in the following sections.

6.5.20.1. Design & Construction – MI Projects

The Contractor is required to document all changes made to the design, including the works performed by the subcontractors, during construction. The Contract Administrator shall ensure that the changes are marked on a set of drawings as soon as the changes are made in a clear and accurate manner.

If an External Service Provider is engaged to oversee the construction project and the service includes producing the as-built drawings, the External Service Provider shall review the Contractor's redline drawings as they are created and create a set of as-built drawings in the agreed format immediately after commissioning of the project and submitted within the time line stipulated in the terms of reference.

All as-built drawings are to be in the City's standard format. The Project Lead is to ensure that the as-built drawings are forwarded to the supervisor of Utility Mapping for storage.

Other documents required for MI Projects may include but are not limited to:

- Operations and Maintenance Manual
- Process Control Narrative (PCN)
- Work Management System (WMS) Database

6.5.20.2. Design & Construction – LUI and TI Projects

The Contract Administrator must ensure that the site Inspector maintains a set of redline drawings documenting all revisions to the work. If such revisions pertain to underground plant or objects that would not be visible after backfilling, the redline drawing shall indicate both the horizontal and vertical references.

When the work is complete, the redline drawings shall be supplied to the supervisor of Utility Mapping. The supervisor of Utility Mapping

shall digitize the redline drawings, upload the electronic copy to ImageSite for storage, and send the original redline drawings back to the Project Lead.

6.5.21. Deficiency Holdbacks

Deficiency holdbacks should not be released unless the deficiencies (documented in the Deficiency List form – refer to the *Field Services Manual* for detailed information on deficiency lists) have been rectified. In the event that a deficiency has not been corrected and has been deemed as not required to be rectified under the contract, the holdback amount shall be credited as credit Change Order under the appropriate delegated signing authority. CT&P should be advised by the Project Lead, so that they can arrange for the appropriate accounts to be credited. The signing limits for the credit change order are the same as those for approving Changes in the Work.

Chapter 7: Change Management

7.1. Introduction

Changes or adjustments to the original contract scope of work are often required over the course of a project. Ideally, such changes should not occur frequently; however, when they are required, they must be verified, documented and monitored to ensure financial control and accountability.

It is the responsibility of the Project Lead to inform the Client Division of impacts to cost and timelines when substantial scope of work changes occur. It is important that Contract Administrators, Consultants, and Contractors be open to resolving issues, that lines of communication be kept open, and that Contract Administrators understand the wording of their contracts.

This chapter discusses the differences between Change Directives and Change Orders (ECS-CWP-50 and ECS-CWP-51 respectively), when Change Directives and Change Orders should be used and how to manage changes to consulting agreements.

7.2. Purpose of Change Directives and Change Orders

When authorizing changes to original project scope, Project Leads must ensure that the work is properly tracked, monitored and documented. In construction projects, changes to the original contract scope are managed and documented through the use of Change Directives and Change Orders. Change Directives and Change Orders formalize the agreement between the City and the Contractor where it is necessary to perform changes to the scope of the original contract, and at least one of the two must be approved prior to commencement of a Change in Work.

In consulting assignments, the process to authorize additional work is similar in principle to the process used on construction contracts (identify the need for changed / additional work, determine impacts to project cost and duration, provide / obtain authority to proceed), though the mechanisms are not as thoroughly detailed as they are in the construction contracts. "Change Orders" and "Change Directives" are not defined terms under the consulting agreement; however, the requirement for written authorization prior to proceeding with any additional or provisional work – the general equivalent to a Change Order – is clearly specified.

Change Directives and Change Orders serve related but different purposes:

- **Change Directives** are used to provide written direction to Contractors to proceed with performing changes to the original scope of the contract prior to agreeing on adjustments in price and time – in other words, *before* a Change Order is issued. They are typically issued in situations where the work is time-sensitive and cannot wait for the issuance of a Change Order, for example tasks on the critical path or emergency work. They keep work progressing, assist in avoiding delays in the work, and provide Contractors with assurance that the work is authorized and that payment will be made in accordance with a forthcoming Change Order. On unit rate contracts, Change Directives are also used to authorize item overruns in excess of \$5,000.
- **Change Orders** are used to amend the contract to reflect the Change in Work, specifying the terms of payment and extensions of time for the work. Change Orders are also used to amend contracts to reflect decreases or credits for deleted work scope.

Project Leads should be aware that a Change Order is a written amendment to a construction contract, typically amending things like scope, value or duration and is subject to the same terms and conditions of the overall contract. It is, therefore, critical to establish within a Change Order, the work scope, method of payment, and schedule impacts on the overall contract.

Change Orders or Change Directives should be issued as soon as possible after the change is identified and the appropriate documentation is compiled. This is required to prevent the City from being subject to further claims related to the issue for which the Change Order or Change Directive relates.

7.3. When to Use a Change Directive

A Change Directive shall be issued when:

- the change is related solely to an increase in quantity of a tendered unit price item (see 7.3.2, "Item Overruns").
- the change must be undertaken prior to agreement between the parties on the change in the Contract Price and/or Contract Time.

In general, each Change Directive is to be followed by a Change Order (see 7.3.2, "Item Overruns" for the exception). Until a Change Directive

or a Change Order is issued by the City Project Lead, a Contractor is not obligated to proceed with a Change in the Work as described in the original contract.

The flowcharts in Appendix G summarize the process of monitoring Changes in Work through Change Directives. In cases of uncertainty, the Project Lead is to consult with their manager, and deal with the issue on a project-specific basis.

7.3.1. Time-Sensitive Changes

For situations where changes are required that may result in impacts to the critical path or result in lost time claims by the Contractor, the Project Lead may authorize an emergency change in the field. These must be immediately followed up with a phone call to the delegated signing authority, as well as an email confirming the action. A Change Directive must then be issued by the City Project Lead as soon as possible, as well as a Change Order.

7.3.2. Item Overruns

Once a project is underway, unforeseen circumstances may arise that can result in an exceedance of an estimated quantity, resulting in an overrun. Similarly, some items of work may require less than the estimated quantity, resulting in an underrun. In order to provide some degree of latitude and to reduce contract administration efforts required for small changes, a threshold of \$5,000 has been implemented. This threshold excludes tax, and is included in the delegated signing authority limits.

When an item overrun is identified (flagged on the daily report, weekly report, or as advised by the Inspector through the use of an Over/Underrun Justification Report), the Project Lead should, in consultation with the Inspector / Construction Supervisor and to the best of their ability, estimate what the total cost of the overrun will be by the end of the project.

- If the estimated cost of the overrun is greater than \$5,000, Change Directive will be required prior to starting the work.
- If the estimated cost of the overrun is equal to or less than \$5,000, the Project Lead may authorize work to proceed without a Change Directive, with payment being processed under the original line item. If the Contractor requests a Change Directive for the sub-threshold work, the Project Lead is to comply with the request.

Project Leads are to continuously monitor item overruns and underruns. As estimated quantities are approached and / or exceeded, the Contract Change Summary Spreadsheet (ECS-CWP-65) is updated to maintain an ongoing awareness of where the current contract expenditures are relative to the PO amount. This summary of all overruns and underruns shall be maintained for tracking purposes.

If the PO amount is expected to be exceeded, the Project Lead must advise their manager and initiate steps towards a Purchase Order Amendment (section 7.11).

At final project completion, once the final quantities are known, the Project Lead is to evaluate the contract expenditures, including item overruns and underruns, to determine whether the Base Contract Value has been exceeded. If the Base Contract Value has not been exceeded, a Change Order is not required.

If the Base Contract Value has been exceeded, a Change Order is to be prepared to encompass all of the overruns and underruns, and approved under the appropriate delegated signing authority.

Refer to CWP-SOP-09a for further detail on overrun management.

7.4. When to Use a Change Order

In general, a Change Order shall be issued when

- the Change in the Work does not relate solely to quantities of unit price work items in the tender call
- the Change in the Work exceeds the base contract approval and is within the overall contingency allowance contained in the contract
- one or more Change Directives were issued to address item overruns, and at the end of the project the Base Contract Value has been exceeded (see section 7.3.2)
- a provisional sum is utilized
- to document re-allocation of underruns to the contingency

If the Change in the Work will cause the available contingency allowance to be exceeded, a PO Amendment will need to be obtained prior to the Change Order (refer to Section 7.11).

If a Change in Work can have its work scope clearly defined with an agreed-to corresponding cost and time impact before the work needs to take place, a Change Order can be issued without the need for a Change Directive. This is generally the case with lump sum contracts. On unit rate (typically linear) contracts, Change Directives are often issued prior to Change Orders due to the time-sensitivity of Changes in Work.

The flowcharts in Appendix G summarize the process of monitoring Changes in Work through Change Orders. In cases of uncertainty, the Contract Administrator is to consult with their manager, and deal with the issue on a project-specific basis.

7.5. Requests for Quotation

Prior to the issuance of a Change Order, the Contract Administrator is to request a cost estimate from the Contractor through the use of a Request for Quotation (RFQ). The Contractor can quote the price of the work as lump sum, time and material, or unit cost, as best agreed by the Project Lead and Contractor.

The CA must provide sufficiently detailed information on the changes for the Contractor to fully understand the Scope of Work and to be able to submit a realistic price and time impact to perform the Change in the Work. This can be sent with an email message. Turnaround times for RFQs must be specified on each RFQ.

Caution should be used when asking for additional costing information in the lump sum quote provided by the Contractor. The Project Lead or CA may request that a lump sum quotation be broken down to provide additional detail as to what is included in the quotation. However, if the request is such that the Contractor breaks a lump sum quotation down into individual work items each with separate and associated cost components, the quote has then changed from a lump sum quotation to a unit price quotation. Acceptance of this by all parties relegates that the Change in Work will be performed on a unit price basis and paid as such.

The Contractor can provide a cost breakdown consisting of material and labour costs – this type of cost breakdown maintains the lump sum quote.

On linear projects, the RFQ shall be issued using form ECS-FSM-109, or via email provided that all the information conveyed in form ECS-FSM-109 is included in the email. The RFQ and the corresponding

results are to be provided as part of the supporting documentation backing up the Change Order.

7.6. Preparing Change Directives and Change Orders

On internally managed projects, the preparation of Change Orders, Change Directives, and associated documentation is the responsibility of the Project Lead. Only the Project Lead may finalize Change Orders and Change Directives. The Project Lead is also responsible for the preparation of associated documentation such as briefing notes, and covering letters.

On externally managed contracts, the Contract Administrator is to provide details and recommendations regarding Changes in the Work to the Project Lead. The Consultant is also responsible for preparing the Change Order and accompanying documentation. The City Project Lead is responsible for ensuring that the Consultant completes these tasks, and ensuring that the Change Order is approved by the appropriate delegated signing authority. The Project Lead is also responsible for the preparation of associated documentation such as briefing notes, covering letters, and liability assessment.

Change Directives and Change Orders that require Director level approval or higher are to be forwarded to the appropriate Director.

7.6.1. Supporting Documentation for Change Orders

When the Change Order form is submitted for approval, sufficient documentation must be provided to substantiate the Change Order. The Change Order Checklist (ECS-CWP-52) itemizes the documentation required as part of a Change Order package. At a minimum, the following items must be included with each Change Order package:

- the Change Order form (ECS-CWP-51)
- the Change Order Checklist, as required (ECS-CWP-52)
- a briefing note (for Change Orders and Change Directives that require Director or Chief Engineer and Executive Director level approval)
- Contract Change Summary (spreadsheet itemizing contract changes and associated costs to date, and comparison of overall contract contingency and provisional allowances). Summaries for

linear contracts to include an overrun/underrun summary. See Document ECS-CWP-55 for consulting projects, and ECS-CWP-65 for linear projects.

- for work that has already been completed, the signed Change Directive form (ECS-CWP-50), and a copy of the Report of Changes in the Work Completed (ECS-FSM-102 in *Field Services Manual*), including reference to daily reports where Change in the Work was documented (where applicable)
- routing form, when delegated signing authority exceeds Manager level (ECS-CWP-53)

The documentation accompanying the Change Order form is meant to provide information on the following items (generally answering answers to the following inquiries):

- description of change to the base scope of work
- why it is essential to complete the change under the current contract
- how the scope of work for the change is going to be performed
- how the change will affect the schedule and other contract impacts
- what will be the cost to complete the change to the Scope of Work
- what other options were explored or investigated, and what was the rationale for the recommended course of action

When the Change Order has been approved, the supporting documentation is not included when circulated to Contractors or Consultants. These items are summarized in Appendix H, "Change Order Management Quick Reference Guide."

7.6.2. Additional Documentation

In order to verify progress and facilitate Contractor progress payments, for all Changes in Work performed on a time and material basis, the Inspector must document manpower, materials, and equipment (including hours worked) on a daily basis. For linear contracts, this is done using the Report of Changes in the Work Completed form (ECS-FSM-102 in the *Field Services Manual*).

As Change Directives and Change Orders are issued, the Contract Change Summary (Document ECS-CWP-65) must be updated by the Project Lead to maintain an ongoing awareness of where the current contract expenditures are relative to the Purchase Order amount.

7.7. Additional Bonding

Additional bonding may be required if the contract price increases beyond the original estimated amount as a result of a Change Order. This is of particular importance on contracts whose procurement processes began on or after October 1, 2019, as contingency allowances are included in the Purchase Order amount, but not in the contract value.

Contract Administrators are to use their discretion in determining when to request increases in bond values; for example, it may make sense to request additional bonding whenever the contract value increases by of 10% of the original contract price. Alternatively, setting a monetary threshold, such as \$50,000, may work better depending on the scale of the project. As work nears completion, the need to seek increases to the bond amount is reduced as the increase in scope or added value is offset by the value of work already completed.

If it is determined that additional bonding is required, Contract Administrators are to ask Contractors for a rider from their surety company to amend the bond values accordingly. Project Leads may consult with Insurance and Risk Management for guidance on whether the additional bonding is required. Project Leads may also seek direction from their managers on when to request additional bonding, recognizing that there may be Division- or Agency-specific guidelines as to when to request an increase in bond value.

For information on bonding and insurance extensions triggered by work performed after the warranty period, refer to Section 8.6.1 of this document.

For detailed information on surety bonds, please refer to the document "Use of Surety Bonds on Procurement Contracts" available at <http://insideto.toronto.ca/irm/files/surety-bond-guidance-document.pdf>

7.8. Authorizing Changes in the Work

The Project Lead is responsible for signing Change Orders and Change Directives. Higher signing authority must be obtained when

the value of the Change Order or Change Directive exceeds the Project Lead's delegated signing authority level. Project Leads are to refer to the most recent schedule of signing authority for their division, which is updated annually.

Change Orders must be signed by all involved parties:

- Contract Administrator / Consultant
- City Project Lead, Division Head (or as required by delegated signing authority level)

On certain program management assignments, Consultants may be authorized to act as agents for the City, as approved by City Council, for the purposes of approving, committing the City to and signing on behalf of the city, construction contract Change Orders.

Following are steps and information requirements for the authorization of Change in the Work to the project:

1. Description of the Change in the Work
2. Rationale for the Change in the Work required
3. If the Change in the Work is proposed by the External Service Provider, acceptance of its proposal by the Project Lead and if necessary, in consultation with the Client Division
4. Obtain price quotation for the Change in the Work
5. If the cost for the Change in the Work can be accommodated within the awarded value of the contract (original PO value), it can be approved according to the division's delegated signing authority. The delegated signing authority limits are updated on an annual basis and are specific to each division. Refer to the current year's signing authority schedule. In general:
 - Costs up to \$10,000 may be signed off by a Project Lead
 - Costs up to \$25,000 may be signed off by a Senior Project Lead
 - Costs up to \$50,000 may be authorized by the Unit Manager
 - Costs up to \$100,000 may be signed off by the Director

- Costs greater than \$100,000 to the limit of the approved PO may be approved by the Chief Engineer and Executive Director
- 6. If the cost for the Change in the Work requires additional funding, confirm if it is available. As this will increase the PO value, completion of a PO Amendment form and accompanying briefing note are required (the form and report template are available on the [PMMD Bylaws, Policies and Procedures intranet site](#)). The approval and documentation requirements are described in the *Purchase Order or Blanket Contract Amendment(s) Procedure*, also available on the [PMMD Bylaws, Policies and Procedures intranet site](#)
- 7. Obtain sign off by all appropriate Client Divisions on the need for the Change in the Work
- 8. Confirm with the External Service Provider in writing. A sample letter authorizing additional Scope of Work pertaining to external study / design services assignment is provided in Document ECS-CWP-54
- 9. Maintain a summary spreadsheet of the Changes in the Work authorized as in Document ECS-CWP-55 for Consultant projects, or ECS-CWP-65 for linear projects
- 10. Update the project deliverable checklist where necessary

Once a Change Directive or Change Order has been issued, the Project Lead should inform the Inspector to ensure that all parties are aware of the changes to the contract.

7.9. Exceedance in Change Order Value

As the total costs associated with a CO/CD may not always be known or accurate, the existing CO/CD must be revised and re-issued once the original estimate or quote is expected to be exceeded. The appropriate delegated signing authority must be obtained based on the revised total cost of the Change in the Work.

7.10. Invoices for Changes in the Work

Invoices are not required for overruns on existing unit rate items. However, Contractors are required to submit invoices for new items of

work performed under a CO for payment based on unit quantities, lump sum, or time and material. Tracking work performed under a CO separately from original base contract items will ensure that the total cost of the CO is known, and that the appropriate level of delegated signing authority is obtained. Clearly separating the additional costs will highlight the reason for the CO instead of being paid through the original contract line items, which could result in the original contract exceeding the approved budget.

If the invoice contains errors, requires corrections or if the final amount of work performed is different from the invoice provided, the Contract Administrator must advise the Contractor of the corrections required, and an updated invoice must be submitted by the Contractor. The Contract Administrator must not make manual adjustments to invoices since it increases the risk of fraud and can potentially result in overpayments.

The following are the typical payment mechanisms used to address Changes in the Work:

- **Lump Sum:** If the work extends over more than one payment period, partial payments shall be made as the work progresses.
- **Time and Material (T&M):** For Changes in the Work carried out on a T&M basis, issue a CD with an estimated amount approved by the appropriate delegated signing authority. Once the work is finalized, issue a CO that reflects the actual costs. If the work extends over more than one payment period, partial payments shall be made as the work progresses.
- **Unit Rate:** Contract and negotiated unit rates are used in a CD with estimated quantities and an estimated total approved by the delegated signing authority. A CO is issued at the completion of the work that captures the final quantities. If the work extends over more than one payment period, partial payments shall be made as the work progresses.

7.11. PO Amendment Procedure

When the proposed contract change will result in an increase in the awarded PO value, a PO Amendment must be processed prior to carrying out the changes. As soon as the Project Lead is aware that contract value is approaching the PO amount, management and the Client Division should be notified so that preparations can be made for a PO Amendment if required.

Payment for the changes cannot be made without a PO Amendment.

Under exceptional circumstances when time is of the essence and the changes must proceed without delay, the Project Lead may proceed once authorization, via email, has been received from the Director. The Director will then proceed to immediately notify the Division Head of the requirement of a POA. A Change Directive/Order must be issued under proper authorization for the work to proceed while a PO Amendment is being initiated or processed. In which case, the reasons must be clearly stated in the PO Amendment documentation.

Following are procedures to process a PO Amendment:

1. Obtain funding commitment from the Client Division(s) prior to issuance of Change Order. If the contract changes involve cost sharing with 3rd parties, their written confirmation should be forwarded together with the copy of approved forms to CT&P.
2. The Project Lead will complete the PO Amendment form and briefing note (form and report template are both available on the [PMMD Bylaws, Policies and Procedures intranet site](#)) and / or Standing Committee report according to the *Purchase Order or Blanket Contract Amendment(s)* procedures posted at insideto.toronto.ca/purchasing/policies&procedures.htm
3. The briefing note and Standing Committee report should include the details of the work and clear rationale as to why it is needed.
4. Obtain approval from appropriate delegated signing authority. The delegated signing authority limits are updated on an annual basis and are specific to each division.
5. For linear and Toronto Water projects, CT&P will forward the approved PO Amendment form and required documentation to PMMD with a request that the sender be notified upon approval of the PO Amendment. Should the Project Lead wish to receive a copy of the approved PO Amendment, PMMD should be advised. For facility projects, the aforementioned tasks are performed by the Project Lead.
6. The Project Lead will forward the approved PO Amendment to the Contractor (note that supporting items of documentation are not to be provided to the Contractor).

Chapter 8: Project Closure

8.1. Introduction

This section discusses the forms and certificates that must be completed as part of the project closure process.

8.2. Substantial Performance

Substantial Performance is defined in the Construction Act. Generally, it is achieved when a contract is near completion. A Certificate of Substantial Performance is issued once the Contractor has met the requirements for Substantial Performance, as defined under the Construction Act.

Section 6.5.17 details tasks that the Project Lead shall complete upon receipt of the Contractor's application for Substantial Performance. This includes evaluating the estimated value of defective and remaining work against the monetary threshold set out in the Construction Act. The Project Lead / Contract Administrator must also determine if the completion of the contract is delayed or not, and if so, whether a claim for Liquidated Damages is warranted. The Project Lead must document the result of the review in a memo to file identifying rationale for either assessing or not assessing Liquidated Damages. If a Consultant is overseeing the construction phase, recommendations are required from the Consultant in determination of Liquidated Damages.

The Project Lead / Contract Administrator should complete a Contractor Performance Evaluation prior to issuance of the Certificate of Substantial Performance.

When Substantial Performance has been achieved, a Certificate of Substantial Performance must be issued to the Contractor (Form 9). The Contractor is then required to publish in a construction trade newspaper as defined in the Construction Act.

8.3. Project Completion

8.3.1. Linear Projects

At the completion of linear contracts, a Completion Certificate (ECS-CWP-56) shall be issued in accordance with GC 8.02.03.06 after an

inspection of the works. For External Services Provider led projects, the Project Lead should obtain their recommendation to certify or not to certify.

If the Contractor had not previously applied for the Certificate of Substantial Performance, it may be necessary to undertake such certification as described in Section 6.5.17.

The Completion Certificate is not to be issued until the Contract Administrator has verified that the contract has met the requirements for Completion as set out in section 2(3) of the Construction Act. Advise the Contractor of what actions need to be taken, such as rectifying key deficiencies, before the Completion Certificate can be issued. Sample wording for this correspondence is available in ECS-CWP-18.

As described in Section 8.8, the Project Lead / Contract Administrator should complete the final Contractor Performance Evaluation prior to issuance of the Certificate of Completion.

The Project Lead shall notify the Client Divisions of the completion and acceptance of the works (a template is provided in ECS-CWP-57). If there is no objection from the Client Divisions, a Completion Certificate is to be issued to the Contractor indicating the date of Completion and the start date of the warranty period. As noted in ECS-CWP-57, Client Divisions are requested to contact the Project Lead / Contract Administrator should any defects be discovered during the warranty period.

Project Leads should be aware that there can be multiple warranty periods depending on when the components of the project are placed into operational use. Refer to Section 8.6 for information on warranty monitoring.

The Completion Certificate should be copied to the Client Divisions and provided to the Contractor within 7 days. Document ECS-CWP-58 is a template letter accompanying the Completion Certificate to the Contractor.

8.3.2. Vertical Projects

For vertical (facility) projects, the determination and subsequent application of Liquidated Damages must be performed prior to the release of statutory holdbacks at Substantial Performance (Form 6, available at <http://ontariocourtforms.on.ca/en/construction-lien-act-forms/>). In general, the warranty period is also based on the date of

Substantial Performance. The Project Lead should be aware that there can be multiple warranty periods, depending on when a component of a facility is placed into operational use (see Section 8.6).

8.4. Completion Payment and Statutory Holdback Release

The processing of a completion payment is similar to the processing of a progress payment, as described in Section 6.5.8. If there is any claim for Liquidated Damages (this would have occurred at Substantial Performance, prior to the release of the statutory holdbacks – see also Section 6.5.17), the amount is to be deducted from the completion payment. If the claim for Liquidated Damages exceeds the amount of the completion payment, the Project Lead should ensure that any shortfall after the deduction from the completion payment is recovered from the Contractor in a timely manner. Refer to sections 6.5.13 and 6.5.17 for information on Liquidated Damages.

The statutory holdback release payment is due 46 days after the Completion Certificate is issued. Submission of the following documents in accordance with GC 8.02.03.07.03 is required prior to releasing the statutory holdback release payment:

- A release and waiver from the Contractor (form CP-1 in Document ECS-CWP-59)
- A statutory declaration by the Contractor (form CP-2 in Document ECS-CWP-60)
- WSIB Clearance Certificate for the General Contractor (as mentioned in Section 6.5.9)

In addition, the Project Lead should ensure that all warranty documentation, where applicable, is submitted and forwarded to the Client Divisions.

For Linear Infrastructure projects, the Project Lead will first provide to the Contractor a draft payment certificate together with a letter (ECS-CWP-61) requesting their review and response by a set deadline. The letter also notifies the Contractor to submit the required documents.

8.5. Document Submission – Toronto Water Projects

On Toronto Water projects, the Project Lead must ensure that specific items of documentation are submitted to Toronto Water. This section outlines the documentation required. Any additional submission

requirements should be confirmed with Toronto Water at the project initiation stage.

At the completion of a linear infrastructure project, the Project Lead must ensure that the following documents are submitted to Toronto Water as applicable:

- Water / Sewer Service Cards – submit to Manager, Watermain Asset Planning or Sewer Asset Planning (Metro Hall, 18th Floor)
- All pre- and post-CCTV inspections of existing sewers, manholes, and laterals are to be carried out as per NASSCO PACAP/MACP/LACP standard. Digital copies of the inspection database and videos – submit to Manager Sewer Asset Planning (Metro Hall, 18th Floor)
- Tracer wire certification – submit to Manager, Program Maintenance
- Disinfection Plan (signed), Disinfection Record / Checklist and sample results (ECS-FSM-115) including all bacteriological test results – submit to Manager, Program Maintenance
- Hydrostatic Leak Test Record (ECS-FSM-116) – submit to Manager, Program Maintenance

For Linear Asset projects the following must be submitted to Toronto Water WIM and District Operations prior to acceptance, and within 6 months of completion from construction:

- Redline or as-built drawings in MicroStation, Auto-CAD, or as agreed-upon native format, and in PDF format
- Design sheet in Excel or PDF format (if available)

For construction of stormwater management facilities and / or other non-linear infrastructure, the following must be submitted to Toronto Water WIM and District Operations at acceptance of services:

- As-built drawings reflecting any changes made during the warranty period, in the agreed upon native format and in PDF format
- Environmental Compliance Approval (ECA) with proponent name transferred to the City of Toronto, in PDF format

- O&M manual (if not already submitted at substantial performance) and monitoring report (if available) in PDF format, if applicable
- Notification of acceptance or assumption

8.6. Warranty Monitoring

The commencement and expiry dates of warranties must be monitored to ensure any known defects are corrected prior to the expiry of the warranty period. Document ECS-CWP-62 is a spreadsheet that can be used for such warranty monitoring. It includes the basic contract information, commencement date (i.e. date of substantial performance) and expiry date of warranty as well as a proposed warranty inspection deadline as well as proposed deadlines for issuing letters to the Contractor and bonding company regarding defects and deficiencies and final acceptance.

According to GC 7.15 / CCDC2 12.3 + SC 3.40, the City's 24-month standard warranty period commences from the date of Substantial Performance. However, the warranty provision for "certain equipment, materials or components of work" may vary for any of the following reasons:

- Equipment manufacturer's standard warranty provisions
- Contract requires extended warranties
- Commencement of the warranty period for certain component is advanced because its beneficial use has been initiated; this is especially applicable on facility type contracts

In cases where there are multiple warranty expiry dates, the Project Lead shall:

- Secure all individual warranty documents from the Contractor
- Prepare a summary list of warranty commencement and expiry dates for all applicable equipment, materials and components of the work. Document ECS-CWP-62 is a spreadsheet that may be used to summarize this information.
- Update the summary list where necessary
- Provide the updated summary list to the Client Division

On vertical projects, whenever a facility is occupied or major piece of equipment is put into operation, the summary sheet should be provided to Insurance & Risk Management. This is done to ensure that the facility or equipment is added to the City's insurance policies, and to ensure that the appropriate insurance coverage has been identified for the facility and/or equipment.

With linear projects, GC 7.15 requires the Contractor to promptly correct any defects or deficiencies during the 24-month period and the Project Lead / Contract Administrator to give written notice to the Contractor of any observed defects or deficiencies. For vertical projects, this requirement is stipulated in the contract documents.

For additional information regarding roles and responsibilities pertaining to warranty monitoring in the field, refer to the *Field Services Manual*.

8.6.1. Delays in Warranty Work and Bonding / Insurance Extensions

In situations where warranty work is delayed such that it is performed after the warranty period is over, insurance and bonding extensions must be obtained. For example, a scenario can develop where the expiry of the warranty period coincides with the onset of inclement weather/winter season, such that the correction of deficient work or completion of remaining work will be impacted. This may cause the Contractor to request completion of the work under the warranty period to occur in the spring.

Delayed warranty work can be performed beyond the warranty expiration date based on the following criteria being met:

- Contractor to request a time extension to the contract in accordance with GC 3.07 or CCDC 6.5.6
- Request for time extensions to encompass insurance and liabilities requirements; and
- Contractor to obtain a bonding extension/amendment to both the Performance and Payment Bonds Payment and Labour Bonds at no additional cost to the City

If there is a delay by the Contractor in completing warranty repair work, even after the warranty has expired, it is good practice to keep bonding companies apprised of such delays to protect the City's interests. The

Contract Administrator should notify the bonding companies of any such delays.

8.6.2. Design & Construction – MI Projects

The general duties of the Project Lead during the warranty period include:

- Monitoring of multiple warranty expiry dates
- Inspection and reporting of the works every 6 months and at least 90 days prior to the expiry of the warranty - the inspection is to be carried out by all parties concerned including the Project Lead, designer, Contractor and the Client Division
- Prepare a list of deficiencies and forward to the Contractor in a timely manner
- Coordinate with the Contractor so that the rectification work is inspected
- Ensure the identified deficiencies are rectified by the Contractor to the City's satisfaction
- Upon completion of satisfactory rectification, notify the Contractor in writing, that all of its contractual obligations under the terms of the warranty have been fulfilled

In situations where the City could make a claim on a performance bond (any scenario where the Contractor is not in compliance with the contract, including significant delays that are the Contractor's fault), the Project Lead should consult Legal for direction on whether or not to include the bonding company on warranty-related correspondence. In such situations, the deficiency list should be copied to the bonding company when it is forwarded to the Contractor. This will ensure that the bonding company has advance notice of a potential claim against the performance bond. The bonding company should also be copied on correspondence to the Contractor upon completion of satisfactory rectification of the deficiencies.

8.6.3. Design & Construction – LUI and TI Projects

All works must be inspected at least once prior to the expiry date of the warranty period. The warranty inspection should be initiated and set up by the Contract Administrator with an invitation to representatives from

internal and external Client Divisions, as appropriate. Site reviews are typically conducted jointly by Construction Inspection staff and Client representatives to identify deficiencies. Refer to the *Field Services Manual* for detailed information on warranty inspections. A complete list of all defects and deficiencies shall be provided to the Project Lead at least 90 days prior to the expiry date.

A letter, "Warranty Letter No. 1" under the manager's signature, requesting the Contractor to correct the defects and deficiencies should be issued to the Contractor at least 60 days before the warranty expiry date. Legal Services has advised that this letter should not be routinely copied to the bonding company unless there is a particular reason to do so. A template for this letter is provided in Document ECS-CWP-63.

If the defects and deficiencies remain outstanding 30 days after the issuance of Warranty Letter No. 1, the bonding company should be notified by "Warranty Letter No. 2" (sample in Document ECS-CWP-64) advising that the Contractor has not corrected all defects and deficiencies as requested. The letter is to be issued under the Manager's signature.

8.7. Final Acceptance

At the expiry of the warranty and after all known deficiencies have been corrected, a final acceptance letter should be issued in accordance with GC 8.02.05 (see Document ECS-CWP-66). The letter should state the date the warranty expired, and advise the Contractor that the contract is considered complete. CT&P, the bonding company and the Client Divisions should be advised of the final acceptance by a copy of the letter.

8.8. Performance Evaluations

For Consultant's performance evaluations, the Professional Services Performance Evaluation (PSPE) form, available on the [ECS intranet site](#), is to be used. Detailed instructions on how to complete the form can be found on the "PSPE Instructions" tab of the worksheet.

For Contractor's performance evaluations, the Contractor Performance Evaluation form found on the PMMD site (http://insideto.toronto.ca/purchasing/cpe_tool.htm) is to be used. Information on the Contractor's performance evaluation can be found on the "User Instructions" page of the form.

Refer to Section 3.7 for additional discussion on performance evaluations.

Chapter 9: File Retention

9.1. Introduction

This chapter summarizes how the files are to be stored and which files are to be retained at the end of each project.

Information must be properly classified and stored so it can be retrieved when needed. File retention is required to preserve the integrity of the procurement process, meet audit requirements, and to complete contract administration requirements by maintaining accurate records from the design, tendering, construction, and warranty phases of a project.

Information held by the City is expected to be public, except for limited and specific reasons, such as protecting the privacy of individuals.

9.2. Types of Files

9.2.1. General Files

All correspondence related to a project undertaken by the City should be kept except in certain circumstances, for example when correspondence is considered to be transitory. Transitory records are those with temporary usefulness that do not need to be kept. Transitory records may include convenience duplicate record copies for personal reference and records that have no bearing on the City's functions, activities, and transactions.

Additional clarification on transitory records can be found at:
http://insideto.toronto.ca/clerks/cims/transitory_records.htm

9.2.2. Procurement Files

Both PMMD (Corporate Buyer) and ECS are responsible for retaining documents from the call stage of the procurement process. The procedure *Level of Documentation Required to Support Procurement Decision and Responsibility for Retention*, available on the [PMMD Bylaws, Policies and Procedures intranet site](#), details the items to be retained from the call process by PMMD as well as the project delivery group.

For ECS projects, the Project Lead is expected to retain the following, for eventual transfer to CT&P for archiving (see Appendix I):

- Evaluation records for all bidders/engineering Consultants
- Drafts of specifications, reports, contracts, agreements and other key documents in competitive bidding processes.

9.2.3. Design Files – Consulting Assignments

On design projects delivered by External Service Providers (Consultants), all project documentation inclusive of documentation during the pre-design phase is to be turned over to the City Project Lead at the conclusion of the detailed design phase of the project, before the final payment is processed. All materials and goods purchased in connection with the project and paid for by the City should also be turned over to the Project Lead. The Project Lead should take necessary steps to deduct from the final payment any cost of materials and goods that were not turned over to the City. Examples of types of files generated during a consulting assignment are listed in Section 2.5.1.

Refer to Chapter 4 for additional information on the management of external study and design services.

9.2.4. Design Files – Internally Designed Projects

For internally-designed projects working drawings, draft documents, preliminary estimates should all be kept as well as any correspondence related to decisions made regarding the design. Examples of types of files generated during the internal design process are listed in Section 2.5.2.

Refer to Chapter 5: Internally Designed Projects for additional information on the steps undertaken for projects designed in-house.

9.2.5. Construction Files

All documents related to a project should be filed during the various phases of a construction project. Examples of types of files generated for a construction project are listed in Section 2.5.3.

Refer to Chapter 6 for additional information on the management of construction projects.

9.3. Centralized Filing

Within ECS, project files are stored within ProjectWise and/or in hardcopy format. Refer to Section 2.4 for information on project filing.

Once final payment is completed and the PO is closed, the project files are to be transferred to CT&P. This process is detailed in Appendix I: Centralized Filing.

9.4. Off-Site Storage

Off-site storage may be used for paper records that have not reached the end of their retention period, but are no longer needed on a regular basis. These are referred to as inactive records, and are stored at central records centres. Responsibility for stored records remains with the Division that transferred them.

Documents sent to off-site storage can be retrieved by contacting the records management for your area. Generally two business days are required for delivery. If there is an emergency need or if the records are needed for a freedom of information request, the Project Lead is to inform records services staff. Contact information for the Records Centres are available at <http://insideto.toronto.ca/clerks/cims/offsite.htm>.

Documents sent to off-site storage must be labelled with the appropriate Record Classification System (RCS) Code so that the appropriate measures are taken for file retention. Appendix J contains the most commonly used RCS codes for capital works projects and the full list of codes can be found at: [Record Classification System Codes](#).

Once a file has reached the end of the retention period as specified by the RCS code, then files are either transferred to archives or destroyed. As such it is important that the appropriate RCS code is used. For example, Final Engineering Drawings should always be categorized separately from the construction documentation as the retention period for the Final Engineering Drawings is permanent whereas the retention period for construction documentation may be as little as seven years.

Final Engineering Drawings may also be filed within ECS for quick and easy access reference for future and adjacent projects that may have the need of the drawings. This will also facilitate updating the drawings with changes that may be necessary in the future.

Appendixes

Appendix A: Glossary of Terms

The following definitions apply to the Capital Works Procedures Manual:

As-built drawing: documentation created by or based solely on information provided by a third party that reflects the installed, constructed, or commissioned conditions of a device, machine, equipment, apparatus, structure, system, or other outcome of an engineering project. Since the engineer has not verified that the information is complete or accurate, as-built drawings must not be sealed (see **Record drawing**).

Base Contract Value: The value of the contract excluding the contingency amount and provisional items.

Bid Award Panel: An administrative committee that awards contracts under limits established by Council and set out in Municipal Code Chapter 195.

Call Document: Solicitation from the City to external Suppliers or providers to submit a tender, quotation, proposal, pre-qualification submission or expression of interest

Capital Projects: Infrastructure replacements, rehabilitations or installations that are planned and coordinated by ICU through the Coordinated Capital Program.

Capital Works Program: The list of planned capital projects assembled by ICU (with input from various divisions within the City) that are to take place each year. ECS delivers projects on the Capital Works Program through design, procurement, project management, and contract administration.

Cash Allowance: An amount of funds within a contract that is used to cover work that is known to be required, but the exact specifications and the value of work are not specified during tender. The Contractor is entitled to the associated overhead and profit of the work covered by Cash Allowance.

Change in the Work: The deletion, extension, increase, decrease or alteration of lines, grades, dimensions, quantities, methods, drawings, changes in the character of the Work to be done or materials of the Work or part thereof, including changes in geotechnical, subsurface, surface or other conditions.

Client, Client Division - Unit or agency that represents funded programs that impact infrastructure within the City's right-of-way, such as Toronto Water, Transportation Services, Solid Waste, TTC, and BIA. In most cases, the Client

is accountable to identify and update project limits, scope, budget, and delivery year through the life of projects.

Also referred to as the Asset Owner.

Construction Inspection Supervisor – On internally inspected projects, Construction Inspection Supervisors are responsible for supervising, motivating, training, and the day to day management of construction inspection staff. The Construction Inspection Supervisor provides daily functional direction to the Construction Inspection staff as well as assisting with Inspectors site and contract issues.

For additional details, refer to the *Field Services Manual*

Consultant – The Consultant is the person or entity engaged by the City and identified as such in the formal contract agreement. The Consultant can be the architect, engineer, or business entity licensed to practise in the province or territory of the place of the work. The term Consultant means the Consultant or the Consultant's authorized representative.

The Consultant may provide study, design, engineering services, and Contract Administration services for City projects, as stated in the agreement.

Contingency Allowance: When specified, the Contingency Allowance is a percentage of the overall bid specified in the Contract documents intended to cover increases in cost for Changes in the Work. As these changes are not defined, the cost requirements for this Work cannot be expected to be known in advance. Work performed under a Contingency Allowance is authorized and conducted through change management procedures.

Contract Administrator – On internally managed projects, the Contract Administrator provides functional direction to the Inspector and is accountable for all matters related to the project, including managing the project's scope, budget, schedule, maintaining contract documentation, and reporting progress to their manager as well as all Clients or Stakeholders. The role involves overseeing the various project states from pre-construction to completion, reviewing Inspector's reports, contract changes and authorizing payments.

When an External Service Provider, typically a Consultant, is involved in the project, they take on the role of Contract Administrator. On these projects, the Consultant must work with the City's Project Lead throughout the project as defined in the agreement.

Details of roles and responsibilities are outlined in the Call Document and consulting services agreement for the project or program. Generally, the City

Project Lead is responsible for decisions related to scope, schedule, budget and design impacts, and ensuring that the project is delivered on time and on budget while meeting the City's requirements. The External Service Provider makes recommendations to the City's Project Lead on a variety of items such as Contractor payments and Contract changes.

For both internally and externally managed projects, the Contract Administrator shall be familiar with all submissions, additional approvals, and other items specific to the Contract that are to be completed to the satisfaction of the City at various stages of the construction phase.

See also "Project Lead."

Contract, Agreement: A Contract or Agreement is an undertaking between two or more parties for an exchange of goods or services, or to refrain from performing a specific action. See also definitions in the General Conditions used prior to October 1 2019 (Linear and CCDC), as well as the post-October 1 2019 General Conditions.

Contractor - The person or business that enters into a contract to furnish supplies or perform work at a certain price or rate and with a certain schedule. When in a binding agreement with the City, the Contractor is required to fulfill the obligations as outlined in the contract documents and specifications within a given schedule and price. All City contracts place the onus on the Contractor for complying with all applicable bylaws, statutes, and regulations and for carrying out the works in such a manner so as not to unnecessarily or unreasonably inconvenience the public. The Inspector (for internally managed projects) must assure that the quality of materials and workmanship is not compromised during the Contractor's due process. Any deviation from the contract design or specifications must be approved by the City prior to being implemented.

It is the Contractor's responsibility to direct their staff and subcontractors.

Deliverable: A tangible or intangible product or service produced as a result of the project. Examples of deliverables include drawings, reports, and design documents.

Design Supervisor – For linear internally designed projects, Design Supervisors are responsible for supervising the designers and draftspersons as they complete the design, as per the scope of work and schedule

Division Head – Reports directly to the Deputy City Manager and is responsible for setting the overall strategic direction of their division by establishing its goals and objectives. Also responsible for establishing

effective working relationships with other departments such as Corporate Services, Finance, Economic Development Culture and Tourism, City Planning, as well as Suppliers, union officials and the community to achieve mutual objectives. In regards to the processes described in this manual their role is to review and approve projects within their delegated signing authority. For ECS, this is the Chief Engineer and Executive Director. For Toronto Water and Transportation Services, this is the General Manager.

Earned Value: A performance measurement that integrates scope, time, and cost data. As work is accomplished, it is “earned” and compared with actual cost and the planned value. A variance to the plan is noted as a schedule or cost deviation. This type of analysis can also be applied to the review of the Contractor's billing.

Environmental Assessment Study: Proposed municipal transportation or water related projects may, by law, require an environmental assessment study. These studies assess the possible positive and negative impacts a project may have and determine a preferred option. This process is governed by the Environmental Assessment Act, R.S.O. 1990.

External Service Provider – A person or entity engaged by the City to provide services including but not limited to consulting, design, and contract administration.

See also "Consultant", "Contract Administrator". **Fairness Consultant –** A third party retained to assess the procurement process and provide assurance that all components and/or proponents on a call were evaluated objectively and in accordance with approved and required procedures.

Field Ambassador - The Field Ambassador is the dedicated point of contact for the general public during program delivered construction projects, such as the Basement Flooding Protection Program. In a typical project, the Contract Administrator is the main point of contact for the general public, and the Inspector directs on-site communications. When a Field Ambassador is involved in a project, their role is to provide direct and timely response to issues from the public, reducing the amount of involvement between the public and the Contractor and construction delivery staff.

General Contractor – The person or business who contracts for and takes responsibility for completing a construction project. The General Contractor also hires, supervises, and pays all subcontractors and Suppliers.

Inspector – The Inspector leads all inspection activities on site and works directly with the Contract Administrator. The Inspector also documents field activities completed by the Contractor. For further detail, refer to the *Field Services Manual*.

Linear Projects: Construction projects involving roads, bridges, retaining walls, sewers, watermains, and sidewalks. Contracts for linear projects are usually based on unit price, although certain contracts (such as those for trunk watermains and sewers) can be based on a lump sum price.

Vertical Projects: Construction projects involving buildings and facilities. Contracts for vertical projects are usually based on a lump sum price.

Liquidated Damages: A per-day, project-specific sum of money set by the City at the time of tendering. This sum represents an estimate of the direct costs that would be incurred by the City for each day the contract is delayed beyond the completion date.

Lump Sum Contracts: Contracts that establish a single, pre-determined fixed price, or lump sum, for work performed, regardless of the Contractor's actual costs.

Milestone: A tool used in project management to mark specific points during the course of a project, serving as project markers. These points may signal events such as a project start and end date, a need for external review or input and budget checks, among others. In many instances, milestones do not impact project duration.

Notice of Intended Procurement: A written notice published by the City, inviting interested Suppliers to submit a bid in response to a solicitation. Includes a detailed description of an intended procurement project and its planned date of publication.

Operations Lead – On Major Infrastructure and Facilities projects, this is the Operations staff member who is the single point of contact for Operations. The Operations Lead is assigned to assist the Project Lead by assembling an Operations review team for Operability and Maintainability review of the new Capital Project.

Program Management: The management of multiple, related projects.

Program Manager - When a collection of projects are being delivered under a Program Management structure by External Service Providers, the financial and strategic aspects of the program are overseen by a Program Manager. The Program Manager also works in conjunction with Project Leads, who manage the day-to-day activities of the individual projects

Project Charter: A document that formally authorizes the existence of a project, and provides the Project Lead with the authority to apply organizational resources to project activities. The Project Charter serves as the contract between the Client Division and the Project Lead. It is a high-

level planning document with a general description of project scope, timeline, costs and risks.

Project Lead – The Project Lead is the project engineer, project manager, senior project engineer, or senior project manager who is accountable for ensuring the completion of the project from pre-design to the end of the warranty period.

While a contract is in the pre-design, design, and tender stages, responsibilities of the Project Lead include confirming the scope with the various internal Clients, liaising with internal and external Stakeholders, overseeing the completion of the design (overseeing the Consultant through completion of design, in some cases), obtaining all necessary approvals, as well as developing, reviewing and tendering the contract documents.

After an internally managed contract has been awarded, the role of Contract Administrator is taken on by the Project Lead. Responsibilities include overseeing the construction phase, managing the approval of change orders, managing the approval of monthly payment certificates and ensuring final acceptance of the work at the various stages of construction.

After an externally managed contract has been awarded, the Consultant is usually assigned the role of Contract Administrator and reports to the City Project Lead. The City Project Lead provides support and oversight on items such as payments and contract changes, upon receipt of recommendations from the Consultant Contract Administrator. The Project Lead works with the Consultant to ensure that the projects are designed and constructed within budget, schedule, as per City and applicable standards, and meet the expectations of the Clients.

On both internally and externally managed contracts, final authorization on payments is provided at manager level. Authorization of Changes in the Work are determined by signing authority, in accordance with the Financial Control By-law. The Project Lead liaises with internal and external Clients or Stakeholders and is the single point of contact for the Client Division.

See also "Contract Administrator."

Project Scope: The work that needs to be accomplished to deliver a product, service, or result with the specified features and functions. The boundaries of a project, responsibilities for each team member, and required deliverables are documented in the Project Scope.

Proper Invoice: An invoice to the Owner that meets the requirements of the Construction Act and the General Conditions.

See also Schedule D – General Condition 5.3.7

Provisional Item, Provisional Allowance, Provisional Sum: Used for items of work that can be specified with enough detail at time of tender to request a price, but whether or not the item will actually be used is unknown. Provisional Items/Sums/Allowances can be cancelled at any time during a project. Work done under a Provisional Item/Sum/Allowance must be authorized through a Change Order.

Purchase Order: an official document for a buyer to commit to pay a seller for a specific product, service or work to be delivered and/or performed.

Record Drawing: A document created to accurately reflect as-constructed, as-built, or as-fabricated conditions and that has been sealed by a Professional Engineer after verifying that the document is accurate. Record drawings are usually retained to meet business or regulatory requirements.

Request for Supplier Qualifications: A solicitation that is issued to gather submission information on Supplier capabilities and qualifications with the intention of creating a list of pre-qualified Suppliers for future selective solicitations, including a one-time future solicitation or a multi-use list for solicitations of a predefined scope and duration. Refer to Chapter 195 of the Toronto Municipal Code for further information.

Roster Captain: The Roster Captain acts as the point of contact between vendors and the City, and is responsible for administering and maintaining the roster of vendors. Additionally the Roster Captain will work with Divisional staff in the preparation of required documentation for the issue of a Purchase Order.

Shop Drawings: Drawings, diagrams, illustrations, schedules, performance charts, brochures, product data, and other data which the Contractor provides to illustrate details of portions of the Work. Shop drawings are typically provided at the start of a project.

Stakeholders – The units, groups, or individuals that may affect, be affected by, or perceive themselves to be affected by a decision, activity, or outcome of a project.

Standing Policy Committee: Also referred to as Standing Committee. There are seven Standing Policy Committees within the City, each discussing specific services and issues, making recommendations to City Council. For example, the Public Works and Infrastructure Committee's primary focus is on infrastructure, with a mandate to monitor, and make recommendations on Toronto's infrastructure needs and services.

Summary Notice: A written notice published by the City, that summarizes the information contained in a Notice of Intended Procurement as required by applicable trade agreements.

Supplier: A legal entity, being a person, partnership, Joint Venture, or firm that submits a bid in response to a formal solicitation and “Suppliers” shall have a corresponding meaning.

Unit Price Contracts: Contracts in which completed work is paid according to a pre-determined, fixed amount for each specified unit of work performed. The total price is determined by multiplying the unit price by the actual, measured quantity of work performed for each specified unit.

Appendix B: Acronyms and Abbreviations

ABC's: Agencies, Boards and Commissions

BIA: Business Improvement Area

CA: Contract Administrator

CAAF: Capital Project Contract Award Authorization form

CADD: Computer Aided Design and Drafting

CCDC: Canadian Construction Documents Committee

CD: Change Directive

CETA: Canada-European Union Comprehensive Economic and Trade Agreement

CFTA: Canadian Free Trade Agreement

CNR: Canadian National Railway

CO: Change Order

COR: Certificate of Recognition

CPO: Chief Purchasing Officer

CS&IMPM: Customer Services & Issues Management Program Manager

CSO: Combined Sewer Overflow

CT&P: Contracts Tenders & Payments

DIN: Design Initiation Notice

DPO: Divisional Purchase Order

EA: Environmental Assessment

EASR: Environmental Activity and Sector Registry

ECA: Environmental Compliance Approval

ECS: Engineering & Construction Services

FAT: Factory Acceptance Test

GC: General Conditions of Contract

IAM&P: Transportation Infrastructure Asset Management & Programming unit

ICU: Infrastructure Coordination Unit

IHSA: Infrastructure Health and Safety Association

LD: Liquidated Damages

MCEA: Municipal Class Environmental Assessment

MI: Major Infrastructure

MECP: Ministry of the Environment, Conservation and Parks

OHSA: Occupational Health and Safety Act

O&M: Operations and Maintenance

PCS: Process Control System

PCU: Public Consultation Unit

PCN: Process Control Narrative

PHSR: Pre-Start Health and Safety Review

PMMD: Purchasing Materials Management Division

PO: Purchase Order

PPFA: Policy, Planning, Finance & Administration

PSPE: Professional Services Performance Evaluation

PTP: Project Tracking Portal

RACS: Road Allowance Control System

RCS: Record Classification System

REOI: Request for Expression of Interest

RFI: Request for Information

RFP: Request for Proposal

RFQ: Request for Quotation

RFT: Request for Tender

RoDARS: Road Disruption Activity Reporting

RTP: Request to Pre-qualify

SAT: Site Acceptance Test

SC: Supplementary Conditions to CCDC 2 Stipulated Price Contract

SGQ: Soil and Groundwater Quality Unit

SLD: Single Line Diagrams

SUE: Subsurface Utility Engineering Investigation

TCAF: Transportation Capital Authorization Form

TI: Transportation Infrastructure

T&M: Time and Material

TRCA: Toronto and Region Conservation Authority

TPUCC: Toronto Public Utilities Coordinating Committee

TTC: Toronto Transit Commission

WIM: Water Infrastructure Management

WMS: Work Management System

WSIB: Workplace Safety & Insurance Board

Appendix C: List of Forms, Templates, and Samples

The documents listed below are available for download at
<http://insideto.toronto.ca/ecs/ess/cptemplates.htm>:

Document Description	Prior to July 1, 2018	July 1, 2018 to September 30, 2019	On or After October 1, 2019
Initiation Meeting	ECS-CWP-01	ECS-CWP-01	ECS-CWP-01
Pre-Construction Meeting - Linear	ECS-CWP-02a	ECS-CWP-02a	ECS-CWP-02a-CA2
Pre-Construction Meeting - Vertical	ECS-CWP-02b	ECS-CWP-02b	ECS-CWP-02b-CA2
Pre-Design Report	ECS-CWP-03	ECS-CWP-03	ECS-CWP-03
LD Calculation Spreadsheet	ECS-CWP-04	ECS-CWP-04	ECS-CWP-04
Pre-Tender/Pre-Procurement Approval Form	ECS-CWP-05	ECS-CWP-05	ECS-CWP-05-CA2
Tender Document Checklist - unit rate	ECS-CWP-07	ECS-CWP-07	ECS-CWP-07a-CA2 (RFT's) ECS-CWP-07b-CA2 (RFP's)
Tender Document	ECS-CWP-08	ECS-CWP-08	N/A – unit rate and lump sum contracts both

Document Description	Prior to July 1, 2018	July 1, 2018 to September 30, 2019	On or After October 1, 2019
Checklist - lump sum			use ECS-CWP-07a
Sample addendum	ECS-CWP-09	ECS-CWP-09	ECS-CWP-09
Sample Memo of Recommendation and review of mathematically unbalanced bid items	ECS-CWP-10	ECS-CWP-10	ECS-CWP-10
Sample memo of recommendation, consulting project, single PO – up to \$500k	ECS-CWP-11a	ECS-CWP-11a	ECS-CWP-11a
Sample memo of recommendation, consulting project, single PO – above \$500k	ECS-CWP-11b	ECS-CWP-11b	ECS-CWP-11b
Sample memo of recommendation, consulting project, multiple POs	ECS-CWP-12	ECS-CWP-12	

Document Description	Prior to July 1, 2018	July 1, 2018 to September 30, 2019	On or After October 1, 2019
Template, letter of acceptance - LINEAR	ECS-CWP-13a	ECS-CWP-13a-CA	ECS-CWP-13-CA2
Template, letter of acceptance - VERTICAL	ECS-CWP-13b	ECS-CWP-13b-CA	ECS-CWP-13-CA2
Additional Terms and Conditions for PO's to 3rd Parties	ECS-CWP-14	ECS-CWP-14	
Sample memo to PMMD requesting issuance of RFP	ECS-CWP-15	ECS-CWP-15	n/a – not required as sourcing requests are done through Ariba
Sample Project Deliverable Checklist	ECS-CWP-16	ECS-CWP-16-CA	ECS-CWP-16-CA
Letter approving consultant staff change	ECS-CWP-17	ECS-CWP-17	ECS-CWP-17
Sample wording	ECS-CWP-18	ECS-CWP-18	ECS-CWP-18

Document Description	Prior to July 1, 2018	July 1, 2018 to September 30, 2019	On or After October 1, 2019
Final Statutory Declaration for Consultants	ECS-CWP-19	n/a	n/a
Survey Request Form	ECS-CWP-20	ECS-CWP-20	ECS-CWP-20
Utility Design Initiation Notice	ECS-CWP-21	ECS-CWP-21	ECS-CWP-21
SGQ Form 1 and Form 2	ECS-CWP-22	ECS-CWP-22	ECS-CWP-22
Pre-Award Checklist	ECS-CWP-23	ECS-CWP-23	ECS-CWP-23-CA2
Template, follow-up letter for execution of documents - CTP DOC	ECS-CWP-24	ECS-CWP-24	ECS-CWP-24-CA2
Memo to Finance, below \$500k	ECS-CWP-25a	ECS-CWP-25a	ECS-CWP-25a-CA2
Memo to Finance, above \$500k	ECS-CWP-25b	ECS-CWP-25b	ECS-CWP-25b-CA2
Pre-Pave Meeting	ECS-CWP-26	ECS-CWP-26	ECS-CWP-26

Document Description	Prior to July 1, 2018	July 1, 2018 to September 30, 2019	On or After October 1, 2019
Sample Notice of Project	ECS-CWP-27	ECS-CWP-27	ECS-CWP-27
Order to Commence Work Checklist - Vertical	ECS-CWP-28	ECS-CWP-28	ECS-CWP-28
Order to Commence Work - Contractor as Constructor	ECS-CWP-29	ECS-CWP-29	ECS-CWP-29
Order to Commence Site Work	ECS-CWP-30	ECS-CWP-30	ECS-CWP-30
Notification of Watermain Project Start	ECS-CWP-31	ECS-CWP-31	ECS-CWP-31
Holdback Release and PO Closure Form	ECS-CWP-32	ECS-CWP-32-CA	ECS-CWP-32-CA
Payroll Burden - Vertical	ECS-CWP-33	ECS-CWP-33	ECS-CWP-33
Payroll Burden	ECS-CWP-34	ECS-CWP-34	ECS-CWP-34

Document Description	Prior to July 1, 2018	July 1, 2018 to September 30, 2019	On or After October 1, 2019
Time and Material Summary	ECS-CWP-35	ECS-CWP-35	ECS-CWP-35
Sample bond status form with disclaimer	ECS-CWP-36	ECS-CWP-36	ECS-CWP-36
Lien Holdback	ECS-CWP-37	ECS-CWP-37-CA	ECS-CWP-37-CA
Letter approving extension of contract time	ECS-CWP-38	ECS-CWP-38	ECS-CWP-38-CA2
Letter, applying LD	ECS-CWP-39	ECS-CWP-39	ECS-CWP-39-CA2
Show Cause request letter	ECS-CWP-40	ECS-CWP-40	ECS-CWP-40-CA2
Release and Waiver, Subcontractor - subcontract stat hb release	ECS-CWP-41	ECS-CWP-41-CA	ECS-CWP-41-CA
Statutory Declaration, Subcontractor - subcontract stat hb release	ECS-CWP-42	ECS-CWP-42	ECS-CWP-42

Document Description	Prior to July 1, 2018	July 1, 2018 to September 30, 2019	On or After October 1, 2019
Release and Waiver, Contractor - subcontract stat hb release	ECS-CWP-43	ECS-CWP-43	ECS-CWP-43-CA
Statutory Declaration, Contractor – Subcontract stat hb release	ECS-CWP-44	ECS-CWP-44	ECS-CWP-44
Substantial Performance spreadsheet	ECS-CWP-45	ECS-CWP-45-CA	ECS-CWP-45-CA
Result of delay assessment (follows from "Show Cause" letter)	ECS-CWP-46	ECS-CWP-46	
Cover letter re. Certificate of Substantial Performance	ECS-CWP-47	ECS-CWP-47-CA	ECS-CWP-47-CA2
Certificate of Substantial Performance	Form 9	Form 9	Form 9
Release and Waiver, Contractor -	ECS-CWP-48a	n/a	n/a

Document Description	Prior to July 1, 2018	July 1, 2018 to September 30, 2019	On or After October 1, 2019
Linear - Substantial Performance stat hb release			
Release and Waiver, Contractor - CCDC - stat hb release	ECS-CWP-48b	n/a	n/a
Statutory Declaration, Contractor - stat hb release	ECS-CWP-49	n/a	n/a
Change Directive Form	ECS-CWP-50	ECS-CWP-50	ECS-CWP-50-CA2
Change Order Form	ECS-CWP-51	ECS-CWP-51	ECS-CWP-51-CA2
Change Order Checklist	ECS-CWP-52	ECS-CWP-52	ECS-CWP-52
Routing Form	ECS-CWP-53	ECS-CWP-53	ECS-CWP-53
Letter authorizing additional consulting work	ECS-CWP-54	ECS-CWP-54	ECS-CWP-54

Document Description	Prior to July 1, 2018	July 1, 2018 to September 30, 2019	On or After October 1, 2019
Change Order Summary - Consulting Assignments	ECS-CWP-55	ECS-CWP-55	ECS-CWP-55
Completion Certificate	ECS-CWP-56	ECS-CWP-56-CA	n/a
Completion and Acceptance of Work	ECS-CWP-57	ECS-CWP-57	ECS-CWP-57
Cover letter for Completion Certificate	ECS-CWP-58	ECS-CWP-58	n/a
Release and Waiver, Contractor - Completion Payment statement release	ECS-CWP-59	n/a	n/a
Statutory Declaration, Contractor - Completion Payment	ECS-CWP-60	n/a	n/a
Cover letter for Draft Completion Payment Certificate	ECS-CWP-61	ECS-CWP-61-CA	ECS-CWP-61-CA2

Document Description	Prior to July 1, 2018	July 1, 2018 to September 30, 2019	On or After October 1, 2019
Warranty tracking table	ECS-CWP-62	ECS-CWP-62	ECS-CWP-62
Warranty Letter No. 1 - Outstanding deficiencies	ECS-CWP-63	ECS-CWP-63	ECS-CWP-63
Warranty Letter No. 2 - Remaining deficiencies	ECS-CWP-64	ECS-CWP-64	ECS-CWP-64
Contract Change Summary	ECS-CWP-65	ECS-CWP-65	ECS-CWP-65
Final Acceptance Certificate	ECS-CWP-66	ECS-CWP-66	ECS-CWP-66

Appendix D: CT&P Processes

<<placeholder for SLA flowchart>>

Appendix E: Design Milestones for Watermain, Sewer and Road Projects

This appendix contains sample design milestones for the 30%, 60%, 90% and 100% stages of development for watermain, sewer and road projects. These Milestones are to be used as a guide, and are not to be considered an exhaustive list of the design details required.

Appendix E1: Sample 30%, 60%, 90% and 100% Design Milestones for WATERMAIN Projects

	30%	60%	90%	100%
Watermain Projects	Base plan drawings to be established in plan & profile with all existing information including utilities. Ensure information from Utility Circulation & Survey is incorporated. Identify and show size and material of existing mains, water services and valve chambers and show fire hydrants	Resolution of outstanding issues from 30% design review to be resolved and comments implemented	Resolution of outstanding issues from 60% design review to be resolved and comments implemented	Final drawings to be printed on film and stamped / signed by Engineer
	Complete Surround (title block). Show property lines, street names, chainage/stationing, north arrow, key plans	Final horizontal alignment determined	Final vertical alignment established	Final prints to be ordered
	Finalize project limits	Preliminary vertical alignment established	Drawing notes completed	Final quantities required
	Identify borehole information on plan	Confirm whether by-pass is required	Drawings finalized. Confirm match lines, title blocks, sheet numbers., bar scales, datum elevations, stationing, watermain profile, connection details, elevations (WM invert), minimum cover, bedding / cover/backfill details, type and class of pipes, vertical and horizontal bends, encasing pipes, removals or plugging abandoned infrastructure, protect existing utilities, identify sensitive pipelines/utilities	
	Evaluate curve radii per City guidelines	Identify / show service connections to be upgraded	Paper copies available to submit for final review and approvals.	
	Analyze horizontal alignment based on 5 watermain design criteria choices	Show all proposed watermain, valves, tees, chambers, hydrants, water services (specify size and material)	Forward to Construction Supervisor for final review allowing 2-3 weeks for comment.	
	Preliminary horizontal alignment to be established with 1 or 2 alternatives	Show removal / relocation of any existing hydrants, water services, watermain	Forward to alternate Project Lead for peer review allowing 2-3 weeks for comment.	
	Confirm property requirements have been satisfied, such as widenings and easements	Confirm fire hydrant coverage		
	Identify any conflicts with Utilities and confirm any utility relocation plans	Confirm valve and box spacing		
	Make initial submission to approval agencies for comments (MOE, TRCA, MTO, CPR, CNR, Pipeline Crossing permits, etc.)	Confirm whether drain and air chambers are required at any low points		
		Identify horizontal and vertical bends		
		Confirm alignment and controls (stationing, offset, N/E)		
		Show all proposed adjustments (valve chambers and water valves)		
		Label and show crossings in profile. Confirm connection details		
		Label all existing chambers and proposed chambers plan/profile		
		Label either crown or centreline of WM in profile		
		Second submission to Utilities		

Appendix E2: Sample 30%, 60%, 90% and 100% Design Milestones for SEWER Projects

	30%	60%	90%	100%
Sewer Projects	Base plan drawings to be established in plan & profile with all existing information including utilities. (Ensure information from Utility Circulation & Survey is incorporated, Identify and show size and material of existing mains, service connections (i.e. leads), manhole and catch basin chambers)	Resolution of outstanding issues from 30% design review to be resolved and comments implemented	Resolution of outstanding issues from 60% design review to be resolved and comments implemented	Final drawings to be printed on film and stamped / signed by Engineer
	Complete Surround (title block), Show property lines, street names, chainage/stationing, north arrow, key plans	Final horizontal alignment determined	Final vertical alignment confirmed	Final prints to be ordered
	Finalize project limits	Preliminary vertical alignment established	Drawing notes completed	Final quantities required
	Identify borehole information on plan	Confirm design criteria	Drawings finalized. Confirm match lines, title blocks, sheet nos., bar scales, datum elevations, stationing, sewer profile, elevations (sewer invert), minimum cover, bedding/cover/backfill details, type & class of pipes, encasing pipes, removals or plugging abandoned infrastructure, protect existing utilities, identify sensitive pipelines/utilities	
	Evaluate curve radii per City guidelines	Identify high points	Paper copies available to submit for final review and approvals.	
	Preliminary horizontal alignment to be established with 1 or 2 alternatives	Layout CB and low points for secondary drainage	Forward to Construction Supervisor for final review	
	Confirm property requirements have been satisfied, such as widenings and easements	Layout manholes based on manhole placement criteria.	Forward to alternate Project Lead for peer review	
	Identify any conflicts with Utilities and confirm any utility relocation plans	Design calculations to size pipes, determine slope, bedding, backfill		
	Stormwater management review (quantity and quality) and identification of drainage area	Confirm whether by-pass is required (sanitary)		
	Sanitary servicing requirements	Identify/show service connections to be upgraded (CB leads, sanitary laterals)		
	Make Initial submission to Approval agencies for comments (i.e. MOE, TRCA, MTO, CPR, CNR, Pipeline Crossing permits, etc.)	Show all proposed sewers, services (specify size and material), manholes and catch basins (show ID numbers)		
		Show sewer sizes and flow arrows		
		Show any ditches and flow arrows		
		Show any culverts (station, size, type, class)		
		Show any headwalls and grates		
		Show any rip rap (include dimensions)		
		Show all proposed adjustments (MH, CB)		
		Label and show crossings in profile		
		Label all existing chambers and proposed chambers on plan/profile		

Appendix E2: Sample 30%, 60%, 90% and 100% Design Milestones for SEWER Projects

	30%	60%	90%	100%
		Label either crown or centreline of roadways in profile, or centreline of sewer in profile		
Sewer Projects (con't.)		Show removals of all sewers, services, manholes, etc.		
		Alignment and controls (stationing, offset, N/E).		
		Second submission to Utilities.		
		Drainage <ul style="list-style-type: none">o Confirm drainage area and prepare plano Confirm secondary drainageo Confirm drainage outletso Confirm any storm water management controls (i.e. quality, quantity)		

Appendix E3: Sample 30%, 60%, 90% and 100% Design Milestones for ROAD Projects

	30%	60%	90%	100%
Road Projects	Base plan drawings to be established in plan & profile with all existing information including utilities. (Ensure information from Utility Circulation & Survey is incorporated)	Resolution of outstanding issues from 30% design review to be resolved and comments implemented	Resolution of outstanding issues from 60% design review to be resolved and comments implemented	Final drawings to be printed on film and stamped / signed by Engineer
	Complete Surround (title block), Show property lines, street names, chainage / stationing, north arrow, key plans	Final horizontal alignment determined	Final vertical alignments confirmed	Final prints to be ordered
	Finalize project limits	Preliminary vertical alignment established	Final driveway replacement limits confirmed accounting for any grade changes	Final quantities required
	Identify borehole information on plan	Confirm alignment (horizontal and vertical) meets design criteria	Drawing notes completed	
	Evaluate curve radii per City guidelines	Show proposed curb, sidewalk, subdrain and pavement	Drawings finalized including pavement marking drawings. Confirm match lines, title blocks, sheet nos., bar scales, datum elevations, stationing, profiles, typical cross sections, removals or plugging abandoned infrastructure, protect existing utilities, identify sensitive pipelines / utilities	
	Preliminary horizontal alignment to be established	Cross sections showing existing and proposed road grades and match points	Paper copies available to submit for final review and approvals	
	Confirm property requirements have been satisfied, such as widenings and easements	Generate top of pavement, gutter and top of curb elevations	Forward to Construction Supervisor for final review	
	Identify any conflicts with Utilities and confirm any utility relocation plans	Confirm vertical clearance at any structures	Forward to alternate Project Lead for peer review	
	Make initial submission to approval agencies for comments (i.e. MOE, TRCA, MTO, CPR, CNR, Pipeline Crossing permits, etc.)	Prepare 'typical' cross sections showing depths of new pavement structure		
		Identify limits of cut and fill		
		Show any proposed retaining walls		
		Confirm limits at sidestreets		
		Show any guide rail requirements or modification to existing (confirm length, end treatment and barrier selection)		
		Identify any fencing requirements or modification to existing fence		
		Identify erosion and sediment controls if required (i.e. location of silt fence, check dams, etc.)		
		Confirm all lane configuration requirements, lane widths, storage lengths, tapers		
		Confirm layout based on design speed		
		Identify Traffic Signals work required and prepare signal design/layout drawings		

Appendix E3: Sample 30%, 60%, 90% and 100% Design Milestones for ROAD Projects

	30%	60%	90%	100%
Road Projects (con't.)		Check turning radii		
		Show removals (curb, sidewalk, road, etc.).		
		Show all proposed adjustments (e.g. manholes, utility valves, etc.)		
		Label and show any crossings in profile		
		Label either crown or centreline of roadways in profile		
		Second submission to Utilities		

Appendix F: Health and Safety

Appendix F: Health and Safety

A.1 Introduction

The City is committed to providing and maintaining safe and healthy working conditions for all members of the Toronto Public

Service. It has committed to a continuous safety improvement program with a goal of Targeting ZERO Together – achieving a zero injuries workplace.

Making health and safety a top priority while Targeting ZERO

Together, the Engineering & Construction Services (ECS) division has developed a comprehensive health and safety program committed to improving the safety of all staff, regardless of the type of work carried out or where the work is completed.

The ECS Health & Safety & Emergency Planning webpage provides division-specific H&S strategies, policies, procedures, best practices, guidelines, forms and various tools to help support employees in performing their duties safely and effectively.

A.2 Purpose

The purpose of this appendix is to guide staff involved in the procurement, delivery, or support of capital works as to what health and safety documentation is required during the procurement and delivery of a capital works project. For health and safety considerations to be made by staff working in the field, on construction sites, facilities, or areas of similar nature, refer to Appendix H in the *Field Services Manual*.

All employees are responsible for familiarizing themselves with and fully complying with applicable legislation, the City's and

ECS's health and safety policies, procedures, guidelines or best practices, as well as the site specific health and safety requirements of the constructor.

For additional and more in depth information, ECS comprehensive Health and Safety Program is available on the City's intranet at <http://insideto.toronto.ca/ecs/index.htm>.

F.1 WSIB Clearance Certificates

A WSIB Clearance Certificate confirms that a Contractor or Subcontractor is registered with the WSIB and that its account(s) is/are in good standing. A WSIB Clearance Certificate is valid for 90 days.

For all contracts a WSIB Clearance Certificate is required prior to the commencement of any construction.

In addition contracts tendered pre-July 1, 2018 require a WSIB Clearance Certificate prior to the release of:

- every progress payment (vertical contracts only)
 - Subcontract statutory holdback release payment– a WSIB Clearance Certificate relating to the subcontract
 - Substantial Performance statutory holdback release payment (GC 8.02.03.05.04.c) – WSIB Clearance Certificate is required for the General Contractor.
- Completion statutory holdback release payment (GC 8.02.03.07.03c) - a WSIB Clearance Certificate is required for the General Contractor only.

Post-July 1, 2018 contracts, WSIB Clearance Certificates are not required for any payments or release of holdbacks, however subcontractors will have to provide a WSIB Clearance Certificates upon request.

It is the responsibility of the Project Lead to ensure that the Contractor's WSIB Clearance Certificate is valid throughout the course of a contract. Validity can be checked with each progress payment; however, if the time that passes between invoices exceeds 90 days, the Project Lead must request a copy of the WSIB Clearance Certificate from the contractor, or check with the WSIB office.

A WSIB Clearance Certificate can be requested at any time from the WSIB office (<http://www.wsib.on.ca>) by providing the Contractor's account number. WSIB has also provided an online *eClearance* service for obtaining the clearances anytime.

Details of using the service can be found on the the WSIB website at www.wsib.on.ca/en/community/WSIB by selecting *eWSIB* from the menu.

Appendix G: Change Management Flowchart

1.0 - Monitoring Effect of Changes in Work on Contract Expenditures – Project Lead

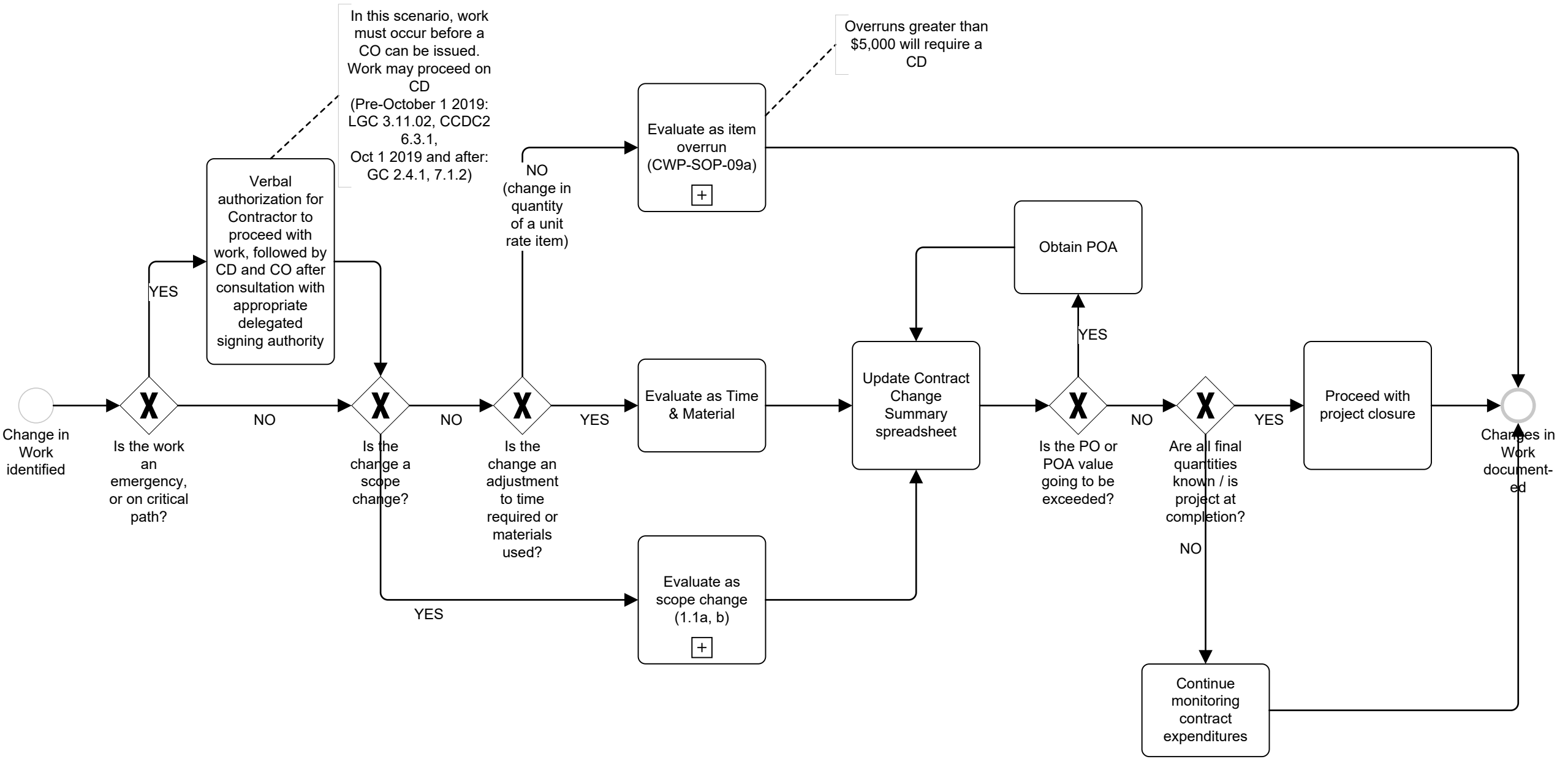
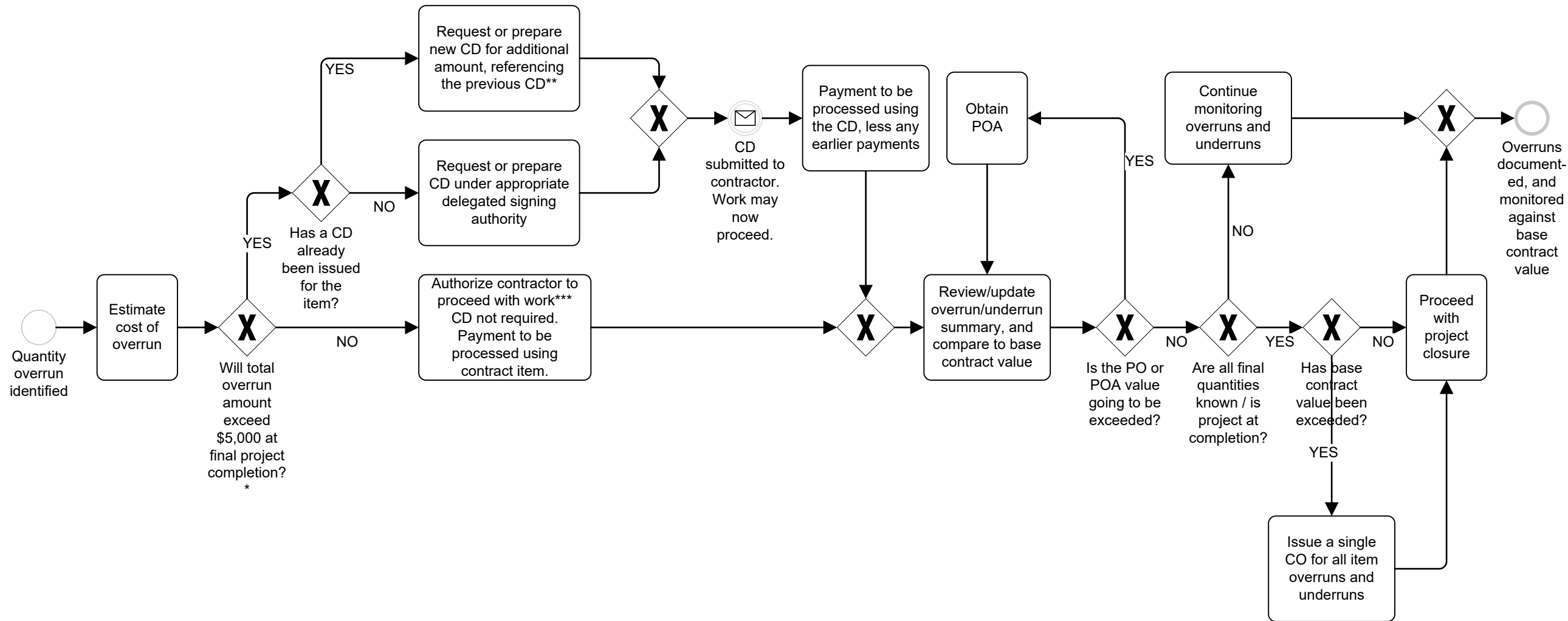


Figure 1 - Evaluating Quantity Overruns



* Over the course of a project, an item can be overrun to a maximum of \$5,000 without the issuance of a Change Directive. Once the total item overrun exceeds the threshold, a CD is to be prepared.

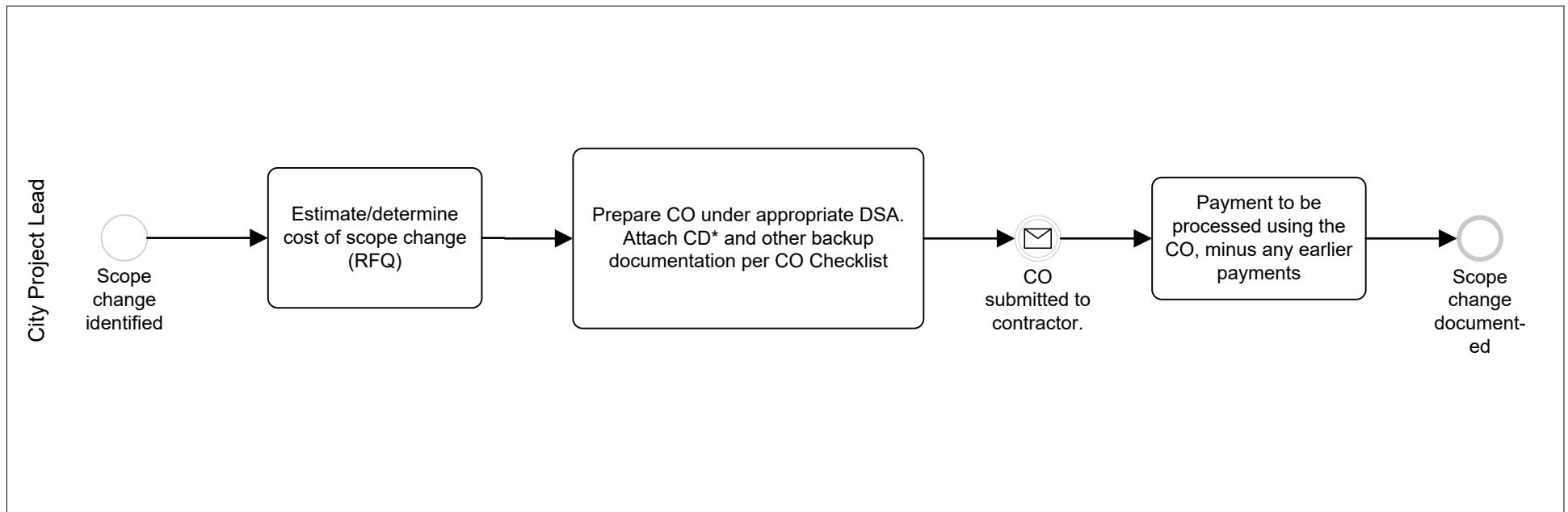
** CD will be for additional amount, but approval will be based on cumulative amount

***If the Contractor requests a CD for sub-threshold work, the Project Lead is to comply with their request.

1/26/2021 | 3:37:04 PM

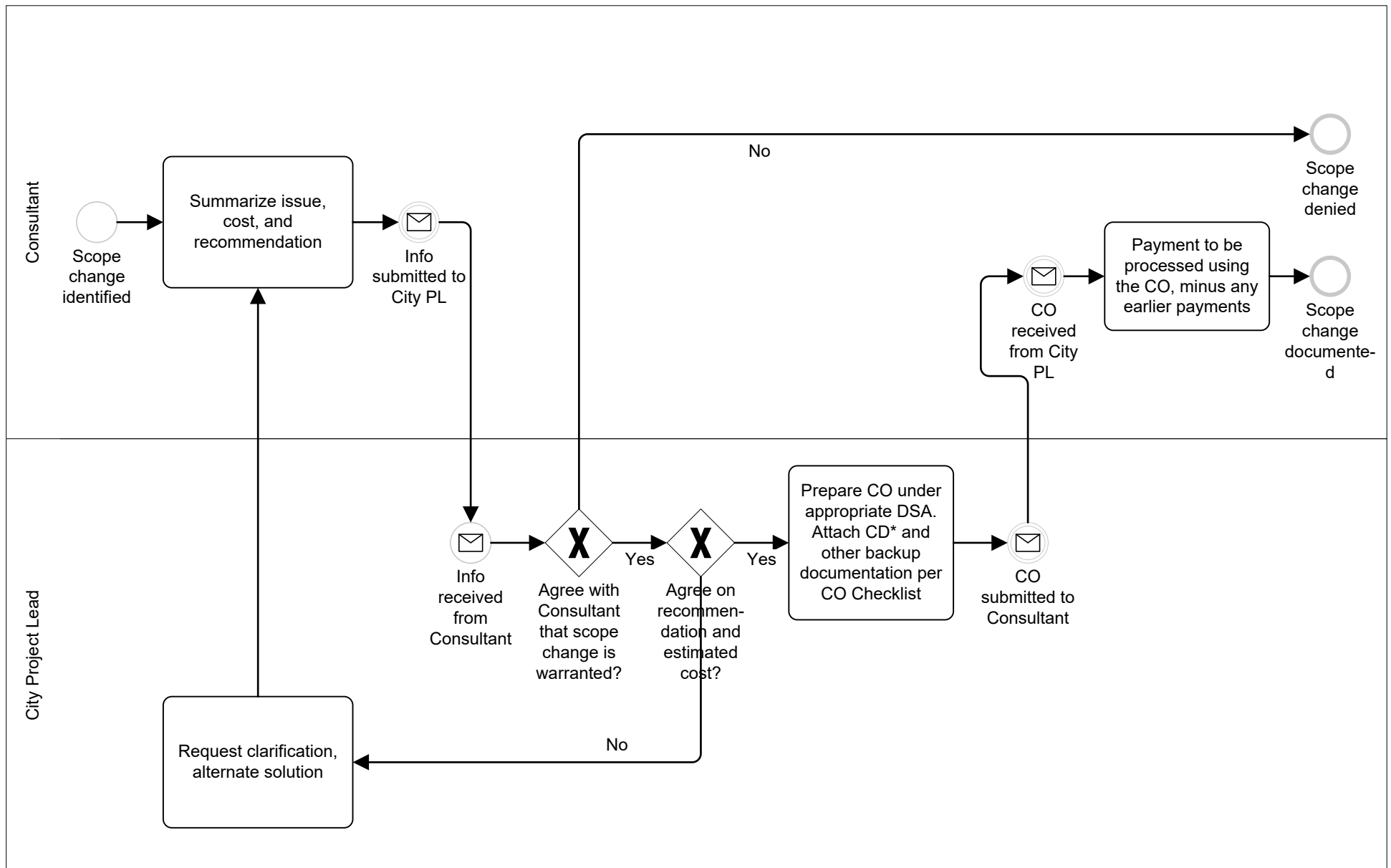
Rev. December 2017

1.2a - Evaluating Changes in Scope: Issuing CO's and Authorizing Payment – Internally Managed Project



*A CD would already have been issued, authorizing the Contractor to proceed, if the Change in Work (scope change) was an emergency or on the critical path (see 1.0)

1.2b - Evaluating Changes in Scope: Issuing CO's and Authorizing Payment – Externally Managed Project



*A CD would already have been issued if the Change in Work (scope change) was an emergency or on the critical path (see 1.0)

**Appendix H: Change Order Management Quick Reference
Guide**

Change Management – Construction Contracts

Job Aid

Revision Date: December 2021

Document No: CWP-Job Aid-02

1. Purpose

To summarize the main points of what must be reflected in documentation associated with a Change Order, as well as to highlight where Change Management content is located in the various General Conditions of Contract.

2. Applicability and Scope

This job aid is applicable to ECS staff who are involved in the delivery of Capital Works projects. Specifically, it discusses the main areas that must be reflected in documentation associated with a Change Order. It also provides excerpts from the various General Conditions of Contract used on construction projects. A checklist ([ECS-CWP-52](#)) is available on the intranet that can assist staff with Change Order preparation.

3. Information to Include

1. WHAT – Scope of Work for the Change

- a) Provide, in general terms and easy to understand plain language, a concise description of the Change, along with the responsibility of each of the following parties to effect the Change:
(i) the contractor; (ii) the consultant; and, (iii) the City.
- b) Explain the full effort required from all parties to complete the Change.

2. WHY – Why it is essential to complete the Change under the contract

- a) Justify the Change: is it required to comply with health & safety; functionality; future maintenance; efficiency; updated regulations or legislation; etc.?
- b) Describe the reason(s) why the Change must be carried out under the contract (and not be the subject of a separate contract).
- c) Explain, in detail, why the Scope of Work for the Change was not included in the original scope of work for the contract, e.g., unexpected conditions; could not fully inspect certain areas to identify issues during design; existing documentation that was used was inaccurate or incomplete; situation was missed during design; issues were identified after the design was completed, etc.

3. HOW – How is the Scope of Work for the Change going to be performed

- a) Detail the sequence of events leading to the need for a Change Order, including RFQ; RFI; quotations (indicate lump sum, or time & materials, etc.); prior Change Directive(s); etc.
- b) Provide a brief description of how the Work covered by the Change is proposed to be delivered.

4. IMPACT – How will this Change affect Cost / Schedule / Other Contract Impacts

- a) It is necessary to fully understand and describe the impact of the Change on the critical path and associated risks.

- b) It is preferable that an impact delay analysis be done as quickly as possible and included in the Change Order. If this is not possible, a best estimate for the impact to the schedule should be provided along with a statement that the time analysis impacts of the Change cannot be fully assessed at the time the Change Order is submitted.
- c) Previous Change Directives or Change Orders approved for the same contract should be identified.
- d) If future Change Directives or Change Orders are expected to be required to adjust and/or complete the work under the subject Change Order, these should be identified.

5. VALUE – What is the cost to complete the Change to the Scope of Work

- a) Show the full amount of the Change Order without HST, the value of the HST, and the total value of the Change Order.
- b) Identify the payment source for the funds to pay for the Change. Conversely, if the Change is for a credit, identify where the funds should be directed.
- c) Explain any negotiated reductions or credits, over the initially quoted cost, if applicable.

In addition to the Change Order form, attach and make reference to supporting documentation, such as City Letter(s); Consultant Letter(s); Change Order Summary Sheet; Contractor documentation as applicable; any previous documents leading to the Change in the Scope of Work; etc.

4. General Conditions – References

4.1. Stipulated Price Contract – CCDC 2 – 2008 (vertical contracts procured prior to October 1, 2019)

1. Change Directive

A *Change Directive* is a written instruction prepared by the *Consultant* and signed by the *Owner* directing the *Contractor* to proceed with a change in the *Work* within the general scope of the *Contract Documents* prior to the *Owner* and the *Contractor* agreeing upon adjustments in the *Contract Price* and the *Contract Time*.

2. Change Order

A *Change Order* is a written amendment to the *Contract* prepared by the *Consultant* and signed by the *Owner* and the *Contractor* stating their agreement upon:

- a change in the *Work*;
- the method of adjustment or the amount of the adjustment in the *Contract Price*, if any; and
- the extent of the adjustment in the *Contract Time*, if any.

Refer to Part 6 – Changes in the Work for further details

4.2. General Conditions of Contract – Linear Infrastructure – December 2013 (linear contracts procured prior to October 1, 2019)

GC 1.04 – Definitions

- **Change Directive** means a written instruction signed by the Owner, or by the Contract Administrator where so authorized, directing the Contractor to proceed with a Change in the Work.
- **Change Order** means a written amendment to the Contract signed by the Owner, or the Contract Administrator where so authorized, and the Contractor, covering contingencies, a Change in the Work, and establishing the basis for payment and the time allowed for the adjustment of the Contract Time, if any.
- **Change in the Work** means the deletion, extension, increase, decrease or alteration of lines, grades, dimensions, quantities, methods, drawings, changes in the character of the Work to be done or materials of the Work or part thereof, including changes in geotechnical, subsurface, surface or other conditions.

GC 8.01.02 – Variations in Tender Call

.01 Where it appears that the quantity of Work to be done and/or Material to be supplied by the Contractor under a unit price Tender Call item will exceed or be less than the Tender Call quantity, the Contractor shall proceed to do the Work and/or supply the Material required to complete the Tender Call item and payment will be made for the actual amount of Work done and/or Materials supplied at the unit prices stated in the Tender Call except as provided below:

- a) In the case of a Major Item where the quantity of Work performed and/or Material supplied by the Contractor exceeds the tender quantity by more than 30%, the City shall have the right, in its sole discretion, to require that the portion of the Work performed and/or Material supplied which exceeds 130% of the tender quantity be paid as Work on a Time and Material Basis, in accordance with GC 8.02.04.

Refer to GC 3.11 – Changes in the Work for further details

4.3. Construction Agreement – Vertical and linear contracts procured on or after October 1, 2019

Schedule C – Definitions

- **Change Directive** – A Change Directive means a written instruction, which shall be deemed incorporated into and forming part of the Agreement, prepared by the Contract Administrator and signed by the Owner directing the Contractor to proceed with a change in the Work prior to or in the absence of the Owner and the Contractor agreeing upon adjustments in the Contract Price and the Contract Time.
- **Change Order** - A Change Order means a written amendment to the Agreement, which shall be deemed incorporated into and forming part of the Agreement, prepared by the Contract Administrator and signed by the Owner and the Contractor stating their agreement upon:
 1. A change in the Work;
 2. The method of adjustment or the amount of the adjustment in the Contract Price, if any; and
 3. The extent of the adjustment in the Contract Time, if any

Schedule E – Valuing Changes in the Work

1. Changes in the Work Based on Unit Prices Set Out in the Agreement

1.1 Notwithstanding that the number of units of an item of Unit Price Work to be performed shall exceed or be less than the Estimate of Units for Completion, subject to section 1.2 of this Schedule E, the Contractor shall proceed to perform the applicable Unit Price Work and payment shall be made for the final quantities of total units for such item in accordance with GC 5.3.5.2.

1.2 When the number of units of a Major Item of Unit Price Work exceeds the Estimate of Units for Completion for such item by more than 30%, the Contractor shall not proceed with the portion of such Major Item of Unit Price Work in excess of 130%, but the Owner shall have the right, in its sole discretion, to require that the portion of the applicable Unit Price Work for such Major Item which exceeds 130% of the Estimate of Units be performed and paid for as a T&M Change in the Work, in accordance with Section 3 of this Schedule E and if the Owner so elects, the Contract Administrator shall issue a Change Directive pursuant to GC 7.3 – CHANGE DIRECTIVE, or the parties shall sign a Change Order pursuant to GC 7.2 – CHANGE ORDER, reflecting the change for this portion of the Unit Price Work

2. Changes in the Work on a Negotiated Fixed Price or Negotiated Unit Price Basis

2.2 The negotiated fixed price for a change in the Work or negotiated unit price(s) for the components of a change in the Work, as the case may be, shall be the sum of the following:

- 2.2.1 the negotiated fixed price or negotiated unit price(s), as applicable, for the portions of the change in the Work to be carried out by the Contractor's Personnel, without markup by the Contractor;
- 2.2.2 the negotiated fixed price or negotiated unit price(s), as applicable for the portions of the change in the Work to be carried out by the Subcontractors, Suppliers or Sub-

subcontractors, without markup by the Contractor, Subcontractor, Supplier or Sub-subcontractor; and;

2.2.3 markup calculated as follows:

- .1 multiplying the negotiated amount set out in section 2.2.1 of this Schedule E by the percentage amount described in row B.1 of the Information Sheet; and
- .2 multiplying the negotiated amount set out in section 2.2.2 of this Schedule E by the percentage amount described in row B.2 of the Information Sheet.

3. Changes in the Work on a Time and Material Basis

Schedule E provides language for TWO approaches to valuing T&M work:

1. Vertical Approach and
2. Linear Approach.

Only ONE approach is to be included in the finalized Agreement; ensure that the unnecessary language is deleted from Schedule E, and indicate the selected approach in Row B.7 of the Information Sheet.

Refer also to Schedule D "General Conditions", GC 7 – Changes in the Work for further details

5. Related Documents and Procedures

- Capital Works Procedures Manual
- <http://insideto.toronto.ca/ecs/ess/cwp/>
- Field Services Manual
- <http://insideto.toronto.ca/ecs/ess/fsm/>

Appendix I: Centralized Filing

Engineering & Construction Services Guideline Document

Centralized Contract Filing

Purpose:	ECS wants to ensure there is a consistent and complete contract file for soft/hardcopy that is maintained in a centralized location so that files are up to date and available. We will gradually be moving to a paperless environment with some hard copies of materials to be retained for legal purposes.
Background:	The Centralized Contract Filing working group with representation from each of the ECS Sections has met several times and developed an interim filing system to be used until the ECS IT Strategic Plan Document Management is implemented.
Centralized Filing:	<p>From project initiation to design & construction up to final payment, the CWD Units shall maintain a centralized hardcopy file as noted below. CT&P will be responsible for maintaining a centralized hardcopy file from tendering to final payment for their files. Once final payment is completed and the PO is closed, all files shall be given to CT&P for filing in the MH 20th Floor filing room so they are available during warranty. Following final acceptance, CT&P will archive the contract file with central records.</p> <p>For all 2017 contracts and all prior years where the PO has not been closed, CWD units shall maintain a centralized hardcopy file. For all 2010 to 2016 contracts with a closed PO, CT&P is in the process of hiring a team of students to retrieve and assemble files for storage and archiving.</p>
Soft Copy Files:	<p>The former MWF Section will continue to use the ProjectWise vertical folder structure and a new folder structure has been developed for linear along with training that was completed on June 30. All 2017 linear contract documents shall be saved in ProjectWise. Main categories are as follows:</p> <p><u>CWD Contract Files</u></p> <ul style="list-style-type: none"> ▪ Studies & EA's ▪ Pre-Design/Design ▪ Construction ▪ Post Construction <p><u>CT&P Contract Files</u> (sub-structure within CWD)</p> <ul style="list-style-type: none"> ▪ Tender/RFP ▪ Award ▪ Execution ▪ Construction ▪ Insurance/WSIB <p><i>For a complete detail of soft structure, see ProjectWise</i></p>

<p>Hard Copy Files:</p>	<p>Hard copy files shall be maintained in the following folder structure for contracts and consultants:</p> <p><u>CWD Contract Files</u></p> <p>Contract</p> <ul style="list-style-type: none"> ▪ Correspondence – progress meetings, letters ▪ Contract Documents – pricing form, estimate, Specials ▪ Design – scope, meeting minutes ▪ Approvals & Permits ▪ Daily Work Reports & Weekly's ▪ Contractor Deliverables – schedules, H&S, mix designs ▪ Change Orders – briefing notes, change directives, back-up, summaries ▪ Notices & Public Consultation ▪ Completion – substantial, final ▪ Claims ▪ Warranty <p>Consultant</p> <ul style="list-style-type: none"> ▪ Correspondence ▪ RFP & Award Documents ▪ Agreement – execution documents ▪ Financials - payments ▪ Change Orders – briefing note ▪ Consultant Deliverables <p><u>CT&P Contract Files</u></p> <p>Contract/Consultants</p> <ul style="list-style-type: none"> ▪ Tender/RFP – tender documents, checklists ▪ Award – contract award, memo to PM, bids, proposals ▪ Execution – execution package ▪ Construction <ul style="list-style-type: none"> ○ Documents – order to commence, fair wage ○ Payments – pay activity ▪ Insurance & WSIB – correspondence, renewals
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Appendix J: RSC Codes

Appendix J

Commonly Used Record Classification Codes for ECS

RCS Code	Record Title	Description	Retention Period
F1541	Purchasing of Goods and Services	Records relating to the procurement and acquisition of goods and services from external contractors and vendors. May include information on manufacturing requirements and delivery time frames. Documents may include purchase orders, purchase requisitions, requests for proposals (RFPs), quotation requests, vendor proposals, and tenders.	7 Years after File closed upon termination or expiry of agreement, Then Destroyed
W0019	Property and Titles Reference Materials	Records relating to duplicate copies of legal information pertaining to engineering projects. This material is kept strictly for reference purposes, for both City and non-City (i.e., private companies) engineering projects. Includes copies of land titles, copies of land transactions, and copies of notices of applications and plans.	Current Year then Destroyed
W0023	Road Closures - Temporary	Records relating to temporary road closures for purposes of construction and events such as parades and movie filming. Includes applications for road closures, complaints, and correspondence.	7 Years after File closed upon expiration of granted order, Then Destroyed
W0024	Road Construction	Records relating to road construction projects. This includes the design and planning of new roads; road and intersection improvements; and resurfacing, reconstruction, and widening of existing roads. May include copies of contracts, plan approvals, consultant reports, land surveys, and geotechnical surveys. Original Engineering Drawings related to this classification must be file under W0110 - Engineering Drawings	15 Years after File closed upon completion of construction project, Then Destroyed, Subject to Archival Review
W0030	Traffic Signs and Signals Equipment	Records relating to the manufacture, installation, and inspections of traffic signs and signals equipment. May include inspection reports, copies of vendor brochures and catalogues, product specifications, copies of purchase orders, and error reports.	15 Years then Destroyed
W0032	Street Lighting	Records relating to the types, installation, inspection, and repairs of lighting devices used to illuminate streets and pedestrian crossovers. Documents include complaints, safety reports, requests for additional lighting, and correspondence.	7 Years then Destroyed
W0033	Street Naming and Street Numbering	Records relating to the processes by which names and/or numbers are assigned to City streets. This includes City roads, avenues, thoroughfares, expressways, and cul de sacs. Includes requests for changes to street names and numbers, complaints concerning current names, and correspondence.	7 Years after File closed upon completion of project or notice of decision, Then Destroyed, Subject to Archival Review
W0035	Streetscape and Design	Records relating to streetscaping and design, which refers to improvements made to the areas surrounding City streets for aesthetic and visual purposes. May include information on noise barriers, improved building entrances, and tree and flower planting. Documents include requests for streetscaping and design, complaints, diagrams, and engineering plans.	7 Years after File closed upon completion of project or notice of decision, Then Destroyed, Subject to Archival Review
W0036	Traffic Control	Records relating to the control of City traffic, which includes all motorized road vehicles and bicycles. Methods of control include traffic signals, speed humps, stop and yield sign intersections, vehicle speed restrictions, vehicle load limitations, and pedestrian crossover signals. May include parking, accident, and collision statistics; traffic count registers; copies of engineering drawings; and traffic studies.	7 Years then Destroyed, Subject to Archival Review
W0038	Utility Applications and Plans	Records relating to applications for the installation of utilities on land properties and sites. This includes the routing of fiber-optics, phone lines, cable, power, and gas lines. Documents include construction reference drawings, applications, completed approval forms, utility permits, and copies of notices of hearings.	Permanent Storage (File closed upon completion of project or notice of decision)
W0040	Bridge Construction	Records relating to the construction and restoration of City bridges. This includes bridges over roadways (overpasses) and bridges over waterways. Includes project reports and drawings, action plans, geotechnical surveys, consultant reports, and correspondence.	7 Years after File closed upon completion of construction project, Then Destroyed, Subject to Archival Review

Appendix J
Commonly Used Record Classification Codes for ECS

RCS Code	Record Title	Description	Retention Period
W0044	Engineering Development and Planning	<p>Records relating to the development and planning of engineering projects within City boundaries. This includes projects undertaken both by the City and private sector organizations. Includes copies of site specific engineering drawings, engineering proposals, application reviews, copies of agreements and contracts, and engineering studies.</p> <p>NOTE: This primary classification does not contain information on engineering work beyond the planning stage, such as actual construction and maintenance work. For engineering project construction and maintenance information, refer to the specific subject (e.g., roads, sidewalks, bridges, etc.).</p> <p>Original Engineering Drawings related to this classification must be file under W0110 - Engineering Drawings.</p>	7 Years after File closed upon completion of project, Then Destroyed, Subject to Archival Review
W0054	Sewers Design and Construction	<p>Records relating to the design and construction of sanitary and storm sewers. Documents include activities reports, land surveys, consultant reports, and correspondence. Records relating to individual sewers are classified at the secondary level.</p> <p>Original Engineering Drawings related to this classification must be file under W0110 - Engineering Drawings.</p>	21 Years after File closed upon completion of construction project, Then Destroyed, Subject to Archival Review
W0058	Water Main Construction Projects	<p>Records relating to the planning, design, and construction of water mains, which are pipelines that transport water. Includes construction plans and drawings, pipe-laying plans and schedules, consultant reports, and correspondence. Coding of individual water mains is performed at the secondary classification level and will depend on the system and naming convention used by each section.</p> <p>Original Engineering Drawings related to this classification must be file under W0110 - Engineering Drawings.</p>	Permanent Storage (File closed upon completion of construction project)
W0064	Central Maintenance - Water Supply System	<p>Records relating to the maintenance of the City's water supply system. This refers to the whole of the water supply system, not simply water mains or trunks. May include information on electrical, mechanical, building, and ground maintenance; carpentry; and instrumentation. Documents include reports, studies, and engineering plans and drawings.</p>	16 Years after File closed upon completion of statistical reporting, Then Destroyed, Subject to Archival Review
W0075	Pumping Stations	<p>Records relating to the operation and maintenance of pumping stations, which pump water to water filtration plants. Includes information on safety inspections and disinfection of pumps. Documents include operations reports, water pumpage volume statistics, and copies of contracts. Individual pumping stations will be classified at the secondary level.</p> <p>Original Engineering Drawings related to this classification must be file under W0110 - Engineering Drawings.</p>	7 Years after File closed upon completion of statistical reporting, Then Destroyed, Subject to Archival Review
W0091	Water Trunk Mains - Maintenance and Operations	<p>Records relating to repair and maintenance services supporting the City's trunk water main system. Trunk mains are much larger than regular water mains, do not supply water directly to homes or businesses, and are designed to feed water into regular water mains. May include information on water trunk main breaks, relocations, valves, disinfection, inspections, and properties associated with trunk mains.</p>	21 Years after File closed upon completion of maintenance or maintenance inspection reports, Then Destroyed, Subject to Archival Review
W0093	Water Treatment Plants and Operations	<p>Records relating to the treatment of water and waste water after it has been tested. Water may be treated using separation and aeration processes, as well as the addition of chemicals, such as chlorine. May include daily chemical logs, monthly operations reports, raw sludge reports, and copies of environmental audits. Records relating to the day to day operations and maintenance of individual treatment plants will be classified at the secondary level.</p> <p>Original Engineering Drawings related to this classification must be filed under W0110 - Engineering Drawings.</p>	21 Years then Destroyed, Subject to Archival Review

Appendix J
Commonly Used Record Classification Codes for ECS

RCS Code	Record Title	Description	Retention Period
W0096	Engineering Standards, Policies, and Quality Assurance	Records relating to standards, policies, and quality assurance for engineering projects. May include standards and best practices related to engineering design, construction and consulting, research and development, management, landscape architecture and streetscape improvement, infrastructure, major facilities, and engineering business processes and practices. Original Engineering Drawings related to this classification must be filed under W0110 - Engineering Drawings.	Permanent Storage
W0097	Water Filtration Plants Operations	Records relating to the daily operations and maintenance of City water filtration plants, which remove pollutants, sediments, and other particulate matter from drinking water. Water filtration is conducted prior to water testing and treatment. Includes information on instrumentation and control features, chemical feed equipment, and valves maintenance. Documents include consultant and engineering reports, control valve inspection reports, release forms concerning persons who attended guided tours of the plants, and newspaper clippings. Individual filtration plants will be coded at the secondary classification level. Original Engineering Drawings related to this classification must be filed under W0110 - Engineering Drawings.	15 Years after File closed upon completion of maintenance or maintenance inspection reports, Then Destroyed, Subject to Archival Review
W0101	Landfill Sites Construction	Records relating to the construction of City landfill sites, which are used for the disposal of routine and hazardous waste materials. Includes plan approvals, copies of contracts and agreements, consultant reports, land surveys, engineering reports and drawings, and correspondence. Original Engineering Drawings related to this classification must be file under W0110 - Engineering Drawings.	Permanent Storage (File closed upon completion of construction project)
W0105	Sidewalks Construction	Records relating to the construction of City sidewalks. Includes engineering plans and drawings, requests for replacement of missing sidewalk sections, contractors' reports and payments, copies of contracts and agreements, and correspondence. Original Engineering Drawings related to this classification must be file under W0110 - Engineering Drawings.	20 Years after File closed upon completion of construction project, Then Destroyed
W0108	Bridge Maintenance	Records relating to the routine and ongoing maintenance and repairs of City bridges. This includes bridges over roadways (overpasses) and bridges over waterways. May include complaints, engineering plans and drawings, copies of contracts and agreements, and correspondence.	Permanent Storage
W0110	Engineering Drawings	Records relating to the production, use, and storage of master copies of engineering drawings. Engineering drawings demonstrate design solutions and define instrumentation requirements. They are used to manufacture, test, and procure equipment and repair parts for systems, subsystems, and components. May include information on drawing systems, computer-aided design (CAD), engineering drawing control, and engineering symbols. NOTE: Use for specific engineering design and construction projects such as bridges and roads, works facilities such as water and wastewater plants, solid waste and storm water management (sewers and water mains).	Permanent storage (until superseded with permanent retention)

Appendix K: Assembling a Request for Tender

The Request for Tender (RFT) template is made up of the following parts:

- Part 1: Request for Tenders Process
- Part 2: Construction Agreement
- Part 3: Drawings and Specifications
- Part 4: Submission Forms
 - Form A – Bid Submission Form
 - Form B – Bid Bond
 - Form C – Experience and Qualifications
 - Form D – List of Subcontractors Form
- Part 5: Instructions to Pricing

Details on how to complete the various parts of the tender template are provided below. The assembly process is illustrated in Appendix M.

RFT Part 1: Request for Tenders Process

Part 1 of the RFT template is comprised of two documents. The first document, "Client Division Form for RFT Part 1" is where detailed information on the RFT, such as deadlines for bid submissions, questions from Suppliers, and anticipated award date, is to be entered by ECS staff. Note that some information is to be entered by the PMMD Buyer. The form includes instructions as to how to complete the entry fields.

The second document, "Part 1 – Request for Tenders Process" is to be filled out by the PMMD buyer, using information supplied in "Client Division Form for RFT Part 1". It includes the following information:

- General instructions for Suppliers on how to navigate the RFT process and how to submit a bid;
- The procurement process terms;
- How bids will be evaluated and how certain situations will be approached (tied bids, materially unbalanced bids, and abnormally low bids);

- What actions will be required to execute a contract;
- How unsuccessful Suppliers will be notified and how to request a debriefing

Each Supplier should review the terms and conditions to understand the rules related to the Tender Call process.

RFT Part 2: Construction Agreement

Part 2 of the RFT contains the Construction Agreement that the successful Supplier will be signing, should they be awarded the contract. The Agreement is not required to be completed as part of the RFT submission.

Additional guidance and additional information on completing the "Construction Agreement", is provided in the document "Tip Sheet Before RFT Issuance", available on the [PMMD intranet site](#).

The Construction Agreement is supported by a series of Schedules, which are described below.

Schedule A: Information Sheet

The Information Sheet is where contract-specific information referenced in the General Conditions (Schedule D) is specified, including things such as contact information, Liquidated Damages, modifications to default insurance requirements, and markup percentages. References to the Information Sheet rows within the General Conditions can be thought of as "pointers" towards this contract-specific data.

By containing all contract-specific information within the Information Sheet, the need for specifying (and sometimes re-specifying) detailed information throughout the contract documents is reduced, along with the risk of accidentally having conflicting information.

It is important that contract drafters and project delivery staff are aware that information entered into the Information Sheet feed directly into the Construction Agreement. As such, it is critical that project delivery staff understand what how to enter items into the Information Sheet, as well as how the entry items impact the agreement. Instructional/sample text is included in the Information Sheet to assist in this respect. Further, tip sheets on completing the Information Sheet at RFT stage as well as at execution are available on the PMMD intranet page.

Schedule B: Pricing Form

At RFT stage, Schedule B is a placeholder for the Pricing Form, which is generated from Ariba and inserted as Schedule B after award. Additional pricing schedules, such as "Schedule A: Schedule of Prices for Changes in the Work", if included in the Agreement, are to be included as part of Schedule B.

NOTE: If "Schedule A: Schedule of Prices for Changes in the Work" is included, indicate as such in row B.8 of the Information Sheet.

Schedule C: Definitions

This schedule contains definitions to terms used throughout the Construction Agreement. A number of the terms cross-reference the Information Sheet. In these cases, the contract drafter is meant to specify values (dates, percentages, contract-specific descriptions, titles, etc.) for these terms in the Information Sheet.

Schedule D: General Conditions

Schedule D to the Agreement contains the General Conditions, which sets out the rights and responsibilities of the parties to the contract. These include how the contract/agreement will be administered, how the work will be executed, how payments will be made, how changes in the work will be managed, how disputes may be resolved, and what insurance coverage will be required on a project. Approvals by Legal Services and the ECS Chief Engineer and Executive Director are required for any amendment to the provisions in the General Conditions.

Many of the clauses in the General Conditions are to be defined or modified by the Project Lead through the Information Sheet (Schedule A to the Agreement). These clauses are all cross-referenced to the Information Sheet.

Schedule E: Valuing Changes in the Work

Schedule E details the different methods used to evaluate the cost of Changes in Work that may arise during the course of a project:

- 1) on a unit price basis, using prices set out in the Agreement
- 2) on a negotiated fixed price, or negotiated unit price
- 3) on a time and material (T&M) basis

a) vertical approach

b) linear approach

Two approaches to valuing T&M work are provided: a vertical approach, and linear approach. The vertical approach has its roots in the CCDC General Conditions of Contract, and is generally suited to fixed price work. The linear approach originated from the Linear General Conditions of Contract, and is generally suited to unit price work.

The contract drafter is to select ONE of the T&M approaches, and ensure that the unnecessary language is **deleted** from the finalized document. In the event that both approaches are required, Legal Services is to be consulted.

If the vertical approach is selected, note that markup percentages must be specified in rows B.3 and B.4 of the Information Sheet (Schedule A). If the linear approach is selected, "Not Applicable" is to be entered in Rows B.3 and B.4, as the linear approach does not require markup percentages to be specified.

Schedule F: Owner's Policies, Procedures, By-laws and Other Requirements

This schedule references the policies and procedures of the Owner and the by-laws of the City of Toronto, as may be amended, supplemented or replaced from time to time, that the Contractor and any Subcontractors, Suppliers, or Sub-subcontractors are required to comply with. These include:

- City of Toronto Municipal Code
- Accessible Customer Service Training Requirements
- Declaration of non-discrimination policy
- Fair Wage Policy
- Contractor Performance Evaluation Procedure
- Workforce Development Plan

Schedule G: Forms

Schedule G is comprised of the following forms required for the tender:

- Sample Proper Invoice

- Certificate of Insurance
- Tax Statutory Declaration and
- Notice of Ajudication.

Additional forms can be added with the consultation of PMMD and Legal Services.

Schedule H: Drawings and Specifications

At RFT stage, Schedule H is a placeholder for the Drawings and Specifications associated with the project, which are housed under Part 3 of the RFT. After award, the contents of Part 3 are moved to Schedule H, to form part of the agreement.

RFT Part 3: Drawings and Specifications

This part contains the drawings and specifications describing and showing the Work that is part of the Agreement. Standard Specifications, Standard Drawings, Special Specifications and Material and Finishing Schedule are included here. At the Tender stage, the Drawings and Specifications are under Part 3 of the RFT template. Bidders review this Part in detail to fully understand what they are bidding on.

The document "Part 3 – Drawings and Specifications.docx" included in the RFT template (.zip file) is **blank**, and is meant to be organized and populated with information by Divisions. It is recommended that the blank document be **deleted** and **replaced** with the "Part 3: Drawings and Specifications – Sample Baseline Content" document found on the PMMD intranet site (<http://insideto.toronto.ca/purchasing/templates.htm>). This Baseline Content document provides the following framework for organizing the technical content:

- Summary of the Work
- General Specifications
- Technical Specifications
- Special Specifications
- Divisional Specifications

The Baseline Content document also includes starter content that is applicable to most construction projects, which is to be placed under "General Specifications" and "Divisional Specifications". Only language applicable to your contract should be included; any unnecessary language provided in the Baseline Content document is to be deleted.

Starter content for the "Summary of the Work", "Technical Specifications", and "Special Specifications" is available in an ECS-specific version of this document, available on the ECS intranet site:

<http://insideto.toronto.ca/ecs/ess/tender/index.htm>.

The "Summary of the Work" section is meant to provide a high-level narrative describing the project, and provide general information to be supplemented by the drawings and specifications. For vertical projects, a high-level narrative is often included within Division 1 "General Requirements"; as such, this section of the Specifications may be deleted, or populated with a reference to Division 1 under the "Technical Specifications".

The "Technical Specifications" section is a placeholder for content typically provided on vertical projects ("Division 1: General Requirements", Division 2: Site Work", etc.). If the contract is for a linear project and technical specifications are not required, leave the heading in place and indicate "n/a".

The "Special Specifications" section is meant to contain language typically used on linear projects. If the contract is for a vertical project and special specifications are not required, leave the heading in place and indicate "n/a".

The ECS-specific document contains instructions as to which Special Specifications are mandatory. In addition to the mandatory items, only content relevant to your contract should be included in Part 3.

Terms and conditions of tendering process or contract must not be included in this section.

Upon award, the contents of Part 3 will comprise the contents of Schedule H to the Construction Agreement, "Drawings and Specifications".

RFT Part 4: Submission Forms

Part 4 of the RFT template sets out the standard submission forms. If other submissions are required, please work with PMMD. The forms included are as follows:

- Form A – Bid Submission Form

- Form B – Bid Bond
- Form C – Experience and Qualifications Form
- Form D – List of Subcontractors Form

Form A - Bid Submission

Bids are submitted electronically through the City's online procurement system. Form A, "Bid Submission Form", is included in the RFT template for information purposes only when drafting an RFT.

This form is to be completed by Suppliers as part of their RFT submission. The bid submission includes a Supplier's contact information, acknowledgment of the Procurement Process, confirmation of their ability to provide work detailed in the RFT as well as confirm acknowledgement that the submitted pricing in RFT is binding. Additionally the Supplier acknowledges receipt of any addenda and agree to the City Policies (<https://www.toronto.ca/business-economy/doing-business-with-the-city/understand-the-procurement-process/purchasing-policies-legislation>).

Form B - Bid Bond

Form B is to be completed by the Suppliers with their RFT submission. Contract drafters are to specify the percentage that Suppliers are to use to calculate the amount of their Bid Bond.

Form C – Experience and Qualifications Form [revised. Nov. 2023]

If the project requires Suppliers to have specific experience and qualifications, the contract drafters are to specify them in this Form. Experience and qualification criteria should be set for each individual contract. Since projects throughout the City have a wide variety of requirements, there is no standard or template defining experience and qualifications.

Project Leads are reminded to carefully consider mandatory requirements in each case and tailor them to the project. Experience and qualification requirements must be justified as a legitimate business objective and must not demonstrate any preference or bias. Experience requirements must be worded as a clear pass/fail requirement so that there is no ambiguity as to what constitutes a pass or a fail.

For projects subject to the requirements of the Excess Soils Regulation (Ontario Regulation 406/19), a version of "Part 4 Form C" is available at <http://insideto.toronto.ca/ecs/er/excess-soil.htm> that includes the requirement for Contractor Qualified Persons (QP) qualification.

Project Leads are also reminded to observe the Comprehensive Economic and Trade Agreement (CETA) thresholds when drafting experience requirements, as construction and consulting contracts exceeding the specified values must be open to Suppliers outside of North America. In other words, on contracts where CETA applies, experience requirements cannot be limited to North American work or suppliers. Details on the impact of CETA to the City's purchasing and procurement procedures can be found on the Purchasing By-law and Procurement Processes Policy intranet site.

Experience and qualifications requirements must be set out carefully, using neutral language as much as possible. Overly specific requirements (for example, "coordination with municipal operations and tie-in with existing systems...") can suggest a preference for Contractors that have a history with the City, rather than genuinely neutral qualifications.

Experience and qualification requirements must be relevant, and must be applied to all Suppliers in a uniform manner to ensure a fair and balanced evaluation of all bid submissions. Uneven application of criteria gives the appearance of bad faith, and can put the City at the risk of claims.

Form D – List of Subcontractors Form

Suppliers will complete this form as part of their RFT submission. This form lists what subcontractors will be employed and what type of work that each subcontractor will be doing. If work is to be expected to be done with the Supplier's own staff, the Supplier is to indicate this work with "OWN FORCES".

If there is a maximum amount of work that can be subcontracted, it must be specified in Row E.2 of the Information Sheet.

RFT Part 5: Instructions to Pricing

Part 5 is where instructions for Suppliers to follow when completing the Pricing Form using the City's Online Procurement System, Ariba, are set out.

The structure of the pricing form will vary based on type of contract. The structure and content of the Pricing Form is prepared for each RFT in the using information provided by CT&P and the Project Lead.

Appendix L: Assembling a Request for Proposal

The tender template is made up of the following parts:

- Part 1: RFP Process
- Part 2: RFP Agreement Terms and Conditions
- Part 3: Requirements for Deliverables
- Part 4: Instructions for Bid Submissions
- Part 5: Instructions to Pricing

Information on how to complete the various parts of the proposal are below, and are illustrated in Appendix M. Detailed information on preparing an RFP can also be found in the "RFP Guide", available on the [PMMD intranet site](#).

RFP Part 1: RFP Process

Part 1 of the RFP template is comprised of two documents. The first document, "Part 1 – Form for Client Divisions" is where detailed information on the RFP, such as deadlines for bid submissions, questions from Suppliers, and anticipated award date, is to be entered by ECS staff. Note that some information is to be entered by the PMMD Buyer. The form includes instructions as to how to complete the entry fields.

The second document, "Part 1 – RFP Process", includes instructions and terms and conditions that govern the RFP process, and is completed by the PMMD buyer using information provided in "Part 1 – Form for Client Divisions". Part 1 outlines the interactions between Suppliers and the City until an award is made.

Part 1 is divided into three main sections:

- Section 1 – RFP Specific Process and Submission Instructions: instructions for Suppliers on how to navigate the RFP process and how to submit a proposal;
- Section 2 – Evaluation, Acceptance and Execution: how bids will be evaluated and how certain situations will be approached, and information on the award and execution of an agreement;

- Section 3 – General RFP Terms and Conditions: the terms and conditions of the bidding process

Each Supplier should review the terms and conditions to understand the rules related to the Tender Call process.

RFP Part 2: RFP Agreement Terms and Conditions

Part 2 of the RFP contains the Agreement Terms and Conditions. For RFPs that are subject to the provisions of the Construction Act, Project Leads / contract drafters must ensure that the "RFP Agreement Terms and Conditions" included by default in the RFP template is **deleted** and **replaced** with the "Consulting Agreement for Engineering Services for Construction", which can be found on the [PMMD intranet site](#).

Project Leads are to consult with Legal Services if any modifications to the Agreement Terms and Conditions or the Consulting Agreement for Engineering Services for Construction are required.

Additional guidance and additional information on completing the "Consulting Agreement for Engineering Services for Construction", is provided in the document "Tip Sheet Before RFP Issuance", available on the [PMMD intranet site](#).

RFP Part 3: Requirements for Deliverables

Part 3 details the Requirements for Deliverables, the majority of which is the Client Division's (ECS) responsibility to draft. Part 3 is made up of two sections:

- Section 1 – The Deliverables: information pertaining to deliverable requirements should be included here, such as drawings, specifications, reports, technical requirements, etc.
- Section 2 – Information for Suppliers: information providing context around the work to be done should be included here, such as a brief background of the project, general information about the City, the Division or system the project is associated with, as well as information on programs/policies to be followed as part of the project (for example Supplier Diversity).

Section 2 includes sample subheadings that may be used to categorize the deliverable requirements. The contract drafter is to adjust the subsections accordingly to meet RFP needs.

There is a placeholder for project reference material at the end of Part 3. ECS-specific appendixes detailing services required as part of the pre-design, detailed design, construction, commissioning, post-construction, and warranty phases of a project may be referenced in this part. These appendixes are found on the [ECS intranet site](#).

Detailed information on preparing Part 3 of an RFP can be found in the document "RFP Guide", available on the [PMMD intranet site](#).

RFP Part 4: Instructions for Bid Submission

Part 4 of the RFP template sets out the standard submission forms. If other submissions are required, please work with PMMD. Part 4 is made up of two forms, as follows:

- Form A – Bid Submission Form
- Form B – Technical Proposal and Qualifications

Form A – Bid Submission

Bids are submitted electronically through the City's online procurement system. Form A, "Bid Submission Form", is included in the RFP template for information purposes only when drafting an RFP.

The bid submission includes a Supplier's contact information, acknowledgment of the Procurement Process, confirmation of their ability to provide work detailed in the RFP, as well as acknowledgement that the submitted pricing in RFT is binding. Additionally the Supplier acknowledges receipt of any addenda and agree to the City Policies (<https://www.toronto.ca/business-economy/doing-business-with-the-city/understand-the-procurement-process/purchasing-policies-legislation>).

Form B – Technical Proposal and Qualifications Form

Form B is made up of the following three sections:

- Section 1 – Mandatory Technical Requirements: any mandatory technical requirements that Suppliers must demonstrate with respect to deliverables are to be listed in this section. Refer to Chapter 3 of this manual for further information on mandatory technical requirements.
- Section 2 – Technical Proposal: information for Suppliers on what needs to be included in their technical proposal is provided in this section. The

template includes sample information, which is to be modified as necessary to suit the circumstances of the project.

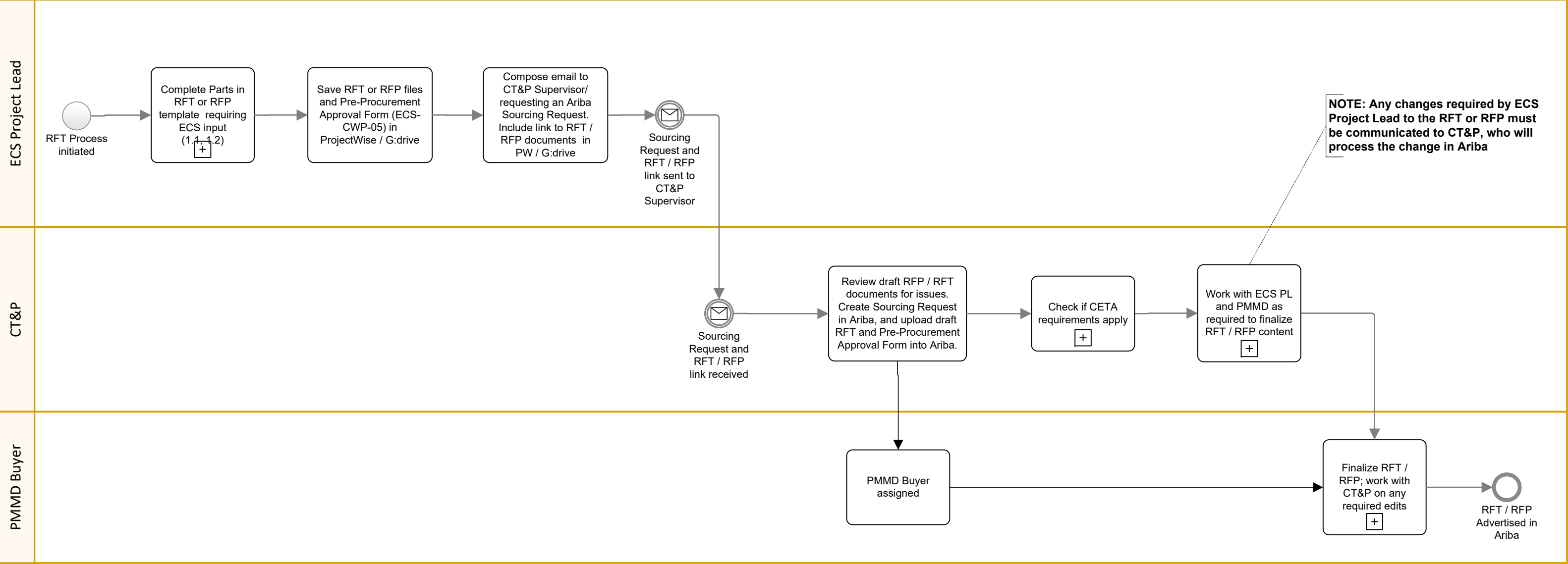
- Section 3 – Rated Criteria: the categories, weightings and descriptions of the rated criteria for the RFP are set out in this section. The template includes a sample evaluation table, which is to be modified as needed for each RFP. Further details on the scoring and evaluation process can be found in the document "RFP Guide", available on the [PMMD intranet site](#).

RFP Part 5: Instructions to Pricing

Part 5 contains instructions for Suppliers to follow when completing the Pricing Form using the City's Online Procurement System. The structure of the pricing form will vary based on type of contract. The structure and content of the Pricing Form is prepared for each RFP in the SAP City's online procurement system by PMMD buyers using information provided by CT&P and the Project Lead. If there are any additional instructions or information for the RFP, it should be included on the "Instructions to Pricing Form"

Appendix M: RFT and RFP Assembly Flowchart

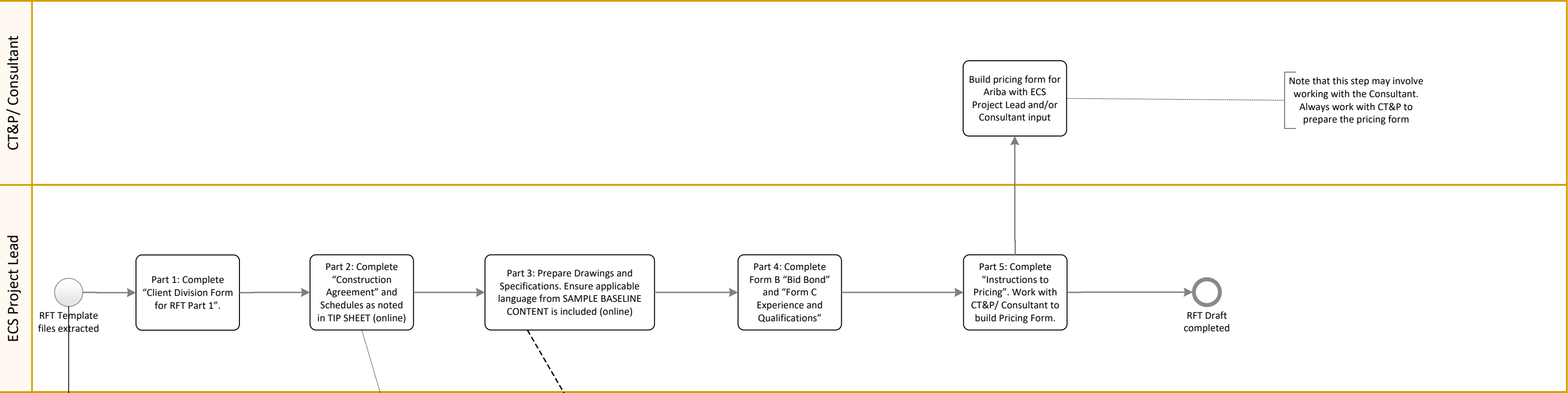
1.0 - Prepare an RFT or RFP for Ariba



NOTES

- Always download a new template from the PMMD intranet site: <http://insideto.toronto.ca/purchasing/templates.htm>
- This flowchart is meant to illustrate the process at a high level. Communications between the ECS Project Lead, CT&P, and the PMMD Buyer will likely be happening on a regular basis throughout the process, not just at the points suggested in the flowchart.

1.1: Complete RFT Parts requiring ECS Input

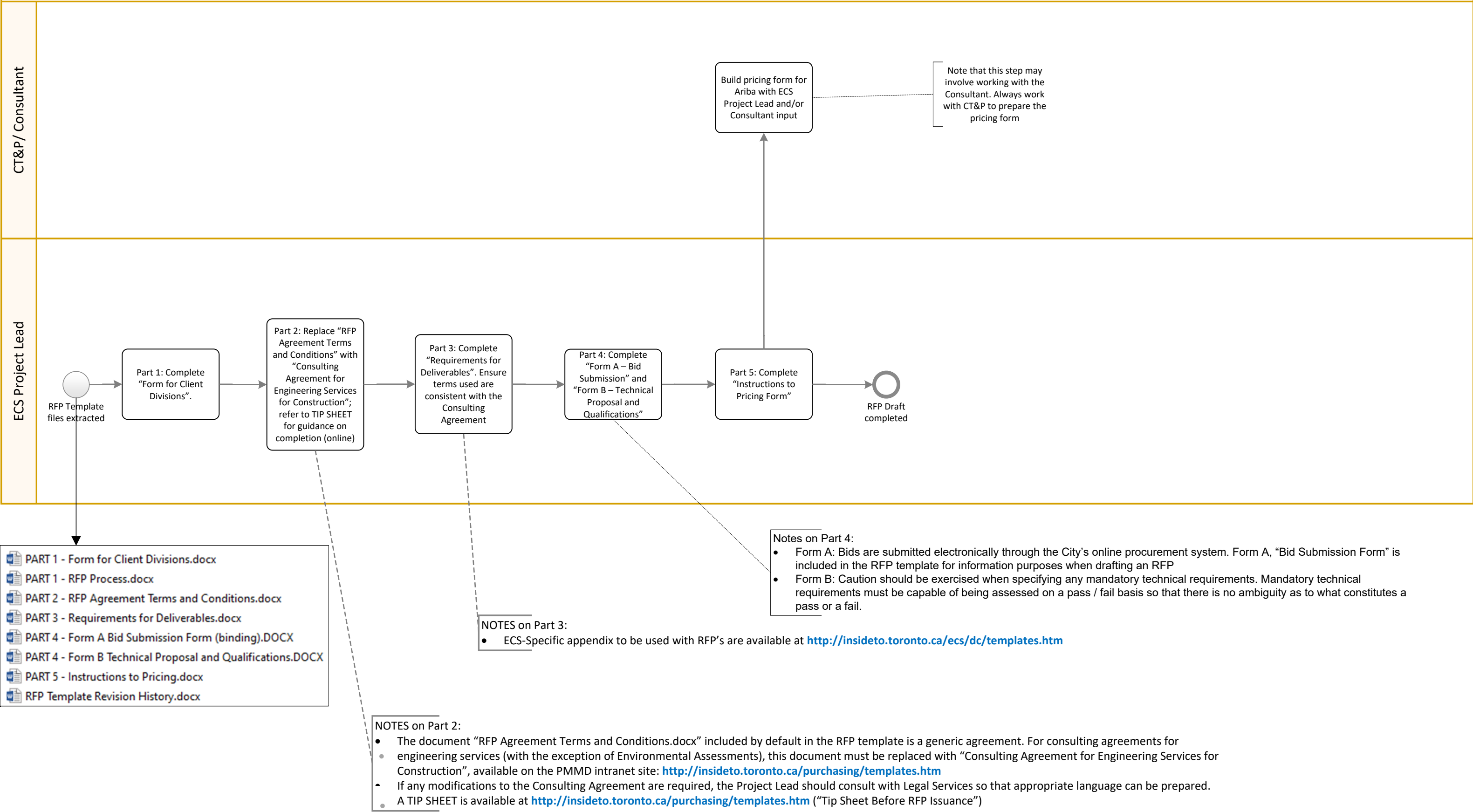


- Client Division Form for RFT Part 1.docx
- Part 1 - Request for Tenders Process.docx
- Part 2 - Construction Agreement.docx
- Part 3 - Drawings and Specifications.DOCX
- Part 4 - Form A Bid Submission Form FOR INFO ONLY.DOCX
- Part 4 - Form B Bid Bond.DOCX
- Part 4 - Form C Experience and Qualifications.DOCX
- Part 4 - Form D List of Subcontractors Form.DOCX
- Part 5 - Instructions to Pricing.DOCX
- RFT Template Revision History.docx

- NOTES on Part 3 "Drawings and Specifications":**
- This is a **BLANK PAGE** in the RFT template. Start building your content by replacing this document with the **ECS-Specific version**, available on the ECS intranet page at <http://insideto.toronto.ca/ecs/ess/tender/index.htm> titled "Part 3 Drawings and Specifications"
 - The **ECS-SPECIFIC version of PART 3** has been pre-structured to include the following sections:
 - Summary of the Work (standard text included; Project Lead to fill in blanks as required)
 - General Specifications (placeholder; see final bullet point under this list)
 - Technical Specifications (placeholder for Divisions 1 – 16; if not applicable, indicate "n/a")
 - Special Specifications (formerly section 4A) – include mandatory items and other applicable items as required. If not required, indicate "n/a"
 - Divisional Specifications (placeholder; see final bullet point under this list)
 - To populate the General Specifications and Divisional Specifications, download the document "**Tender Part 3: Drawings and Specifications - Sample Baseline Content**", available at <http://insideto.toronto.ca/purchasing/templates.htm>. Use content to populate the following placeholder sections of the **ECS-Specific version of Part 3**:
 - General Specifications: technical language that used to reside in the General Conditions (formerly section 5). Include the required language.
 - Divisional Specifications: technical language that used to reside in the Specific Conditions of Contract (formerly section 5A). Include content relevant for your contract.

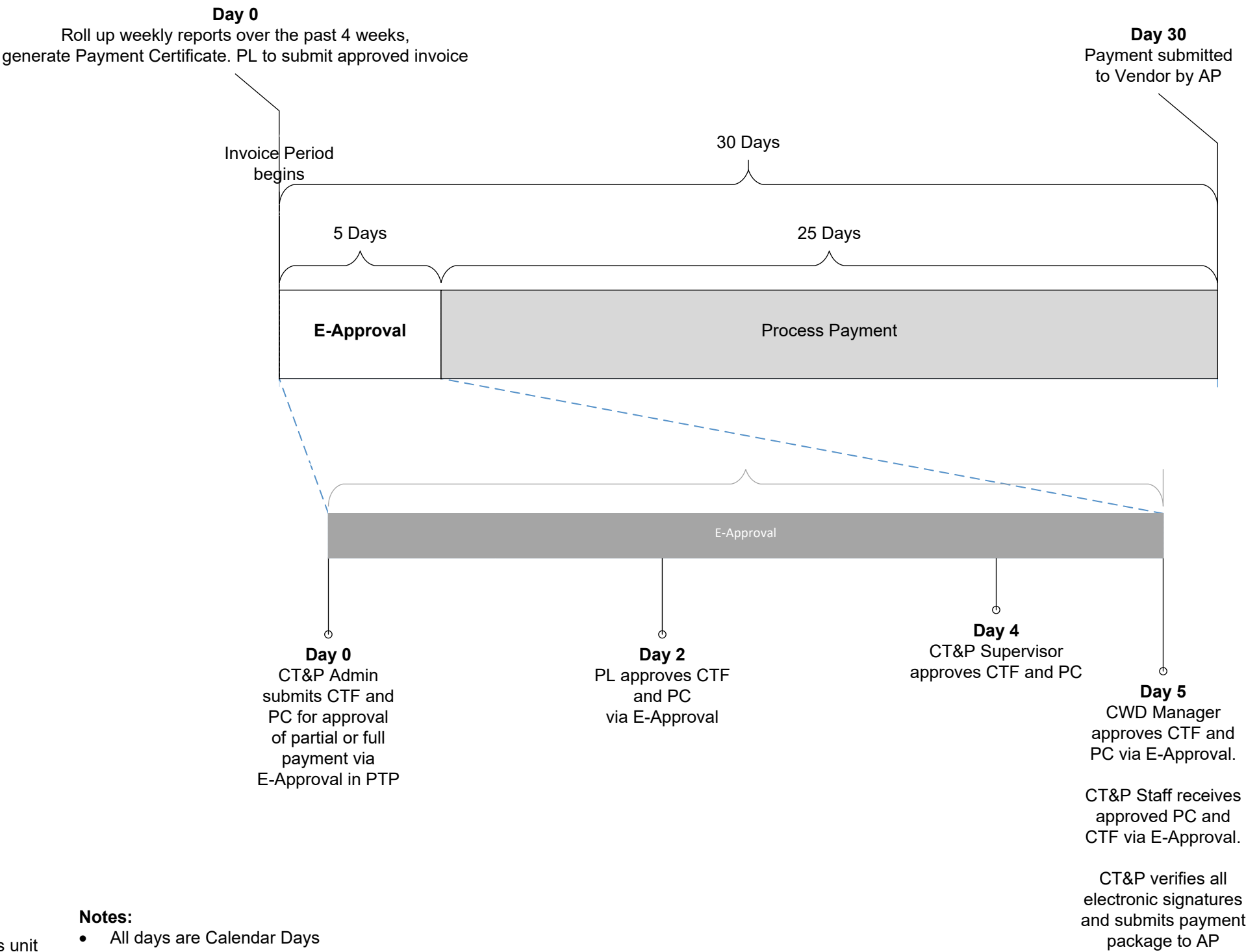
- NOTES on Part 2 "Form of Construction Agreement":**
- Prior to Award, Part 2/Construction Agreement shows Suppliers what they will be signing if they are awarded the contract
 - Complete the associated schedules as required. Refer to the **TIP SHEET**, available at <http://insideto.toronto.ca/purchasing/templates.htm> (see "Tip Sheet Before RFT Issuance"), for reminders as to what to modify:
 - Schedule A, Information Sheet: Note that some rows are to completed AFTER award / BEFORE execution
 - Schedule B, Pricing Form: At RFT stage, this is a PLACEHOLDER for the completed pricing form that will come out of Ariba
 - Schedule C, Definitions: No edits required
 - Schedule D, General Conditions: Make edits as noted in "Notes to Finalization" and as indicated in the **TIP SHEET**
 - Schedule E, Valuing Changes in the Work: Remove the language on linear or vertical mode on page 118.
 - Schedule F, Owner Policies, Procedures, By-Laws and Other Requirements: Work with PMMD Buyer to ensure appropriate content is included
 - Schedule G, Forms: Insert fillable PDF's as required
 - Schedule H, Drawings and Specifications: At RFT stage, this is a PLACEHOLDER. To be filled with "Part 3 – Drawings and Specifications" AFTER award / BEFORE execution
- After award, the contents of Part 3 will comprise Schedule H, and the bid submission (extracted from Ariba) will comprise Schedule B. **Until then, Schedules B and H are PLACEHOLDERS for future information.**

1.2: Complete RFP Parts requiring ECS Input



**Appendix N: Payment Timeline (for contracts
tendered before October 2019)**

ECS Payment Timeline: E-Approval and Process Payments (pre-October 1, 2019 contracts)

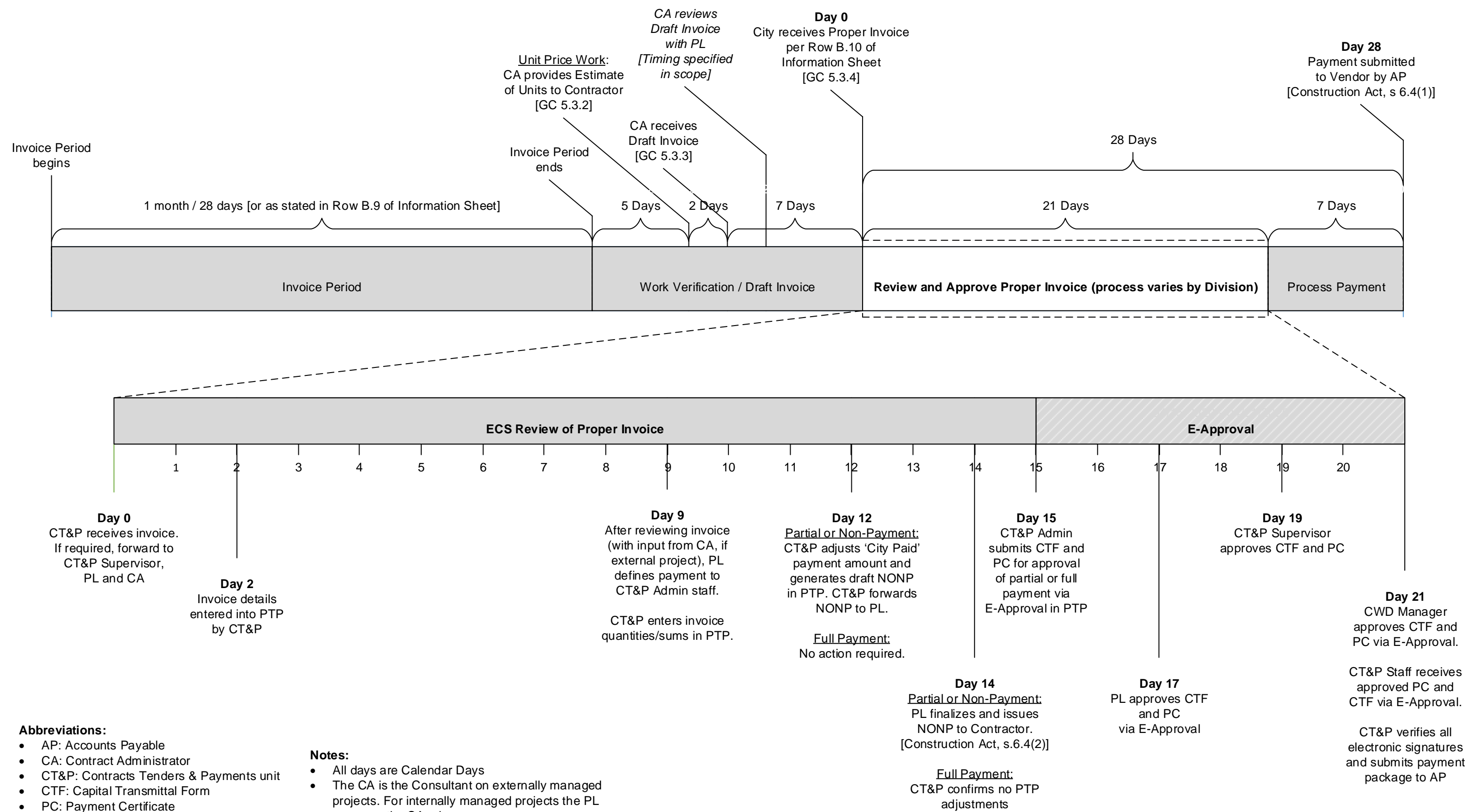


- Abbreviations:**
- AP: Accounts Payable
 - CA: Contract Administrator
 - CT&P: Contracts Tenders & Payments unit
 - CTF: Capital Transmittal Form
 - PC: Payment Certificate
 - PL: Project Lead
 - PTP: Project Tracking Prtal
 - NONP: Notice of Non-Payment (Form 1.1)

- Notes:**
- All days are Calendar Days
 - The CA is the Consultant on externally managed projects. For internally managed projects the PL assumes the CA role.
 - **Dates indicated illustrate *maximum duration*; tasks may take less time than allotted on this timeline.**

**Appendix O: Payment Timeline (for contracts
tendered on/after October 1, 2019)**

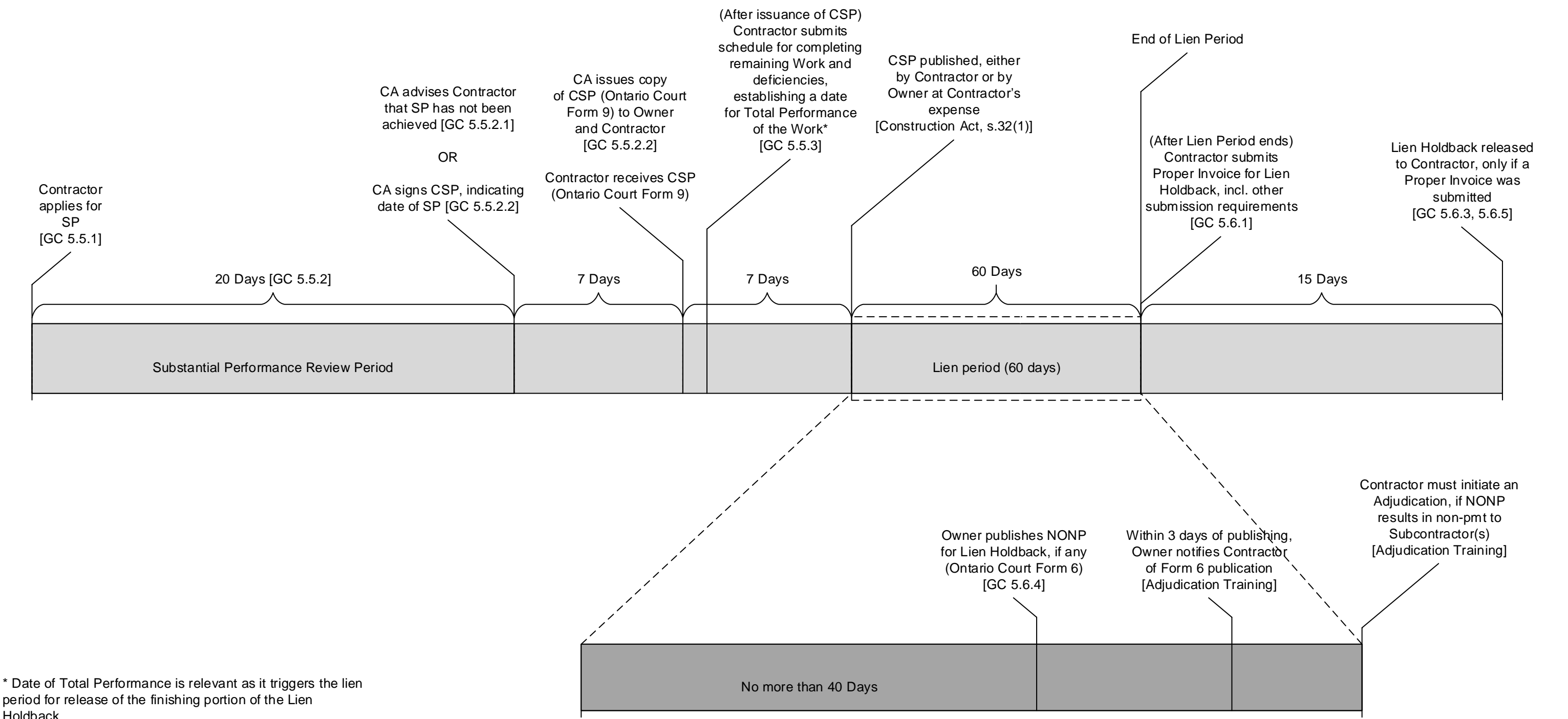
ECS Payment Timeline: Draft Invoice, Prompt Payment and E-Approval



- Abbreviations:**
- AP: Accounts Payable
 - CA: Contract Administrator
 - CT&P: Contracts Tenders & Payments unit
 - CTF: Capital Transmittal Form
 - PC: Payment Certificate
 - PL: Project Lead
 - PTP: Project Tracking Prtal
 - NONP: Notice of Non-Payment (Form 1.1)

- Notes:**
- All days are Calendar Days
 - The CA is the Consultant on externally managed projects. For internally managed projects the PL assumes the CA role.
 - **Dates indicated illustrate maximum duration; tasks may take less time than allotted on this timeline.**

Substantial Performance Timeline

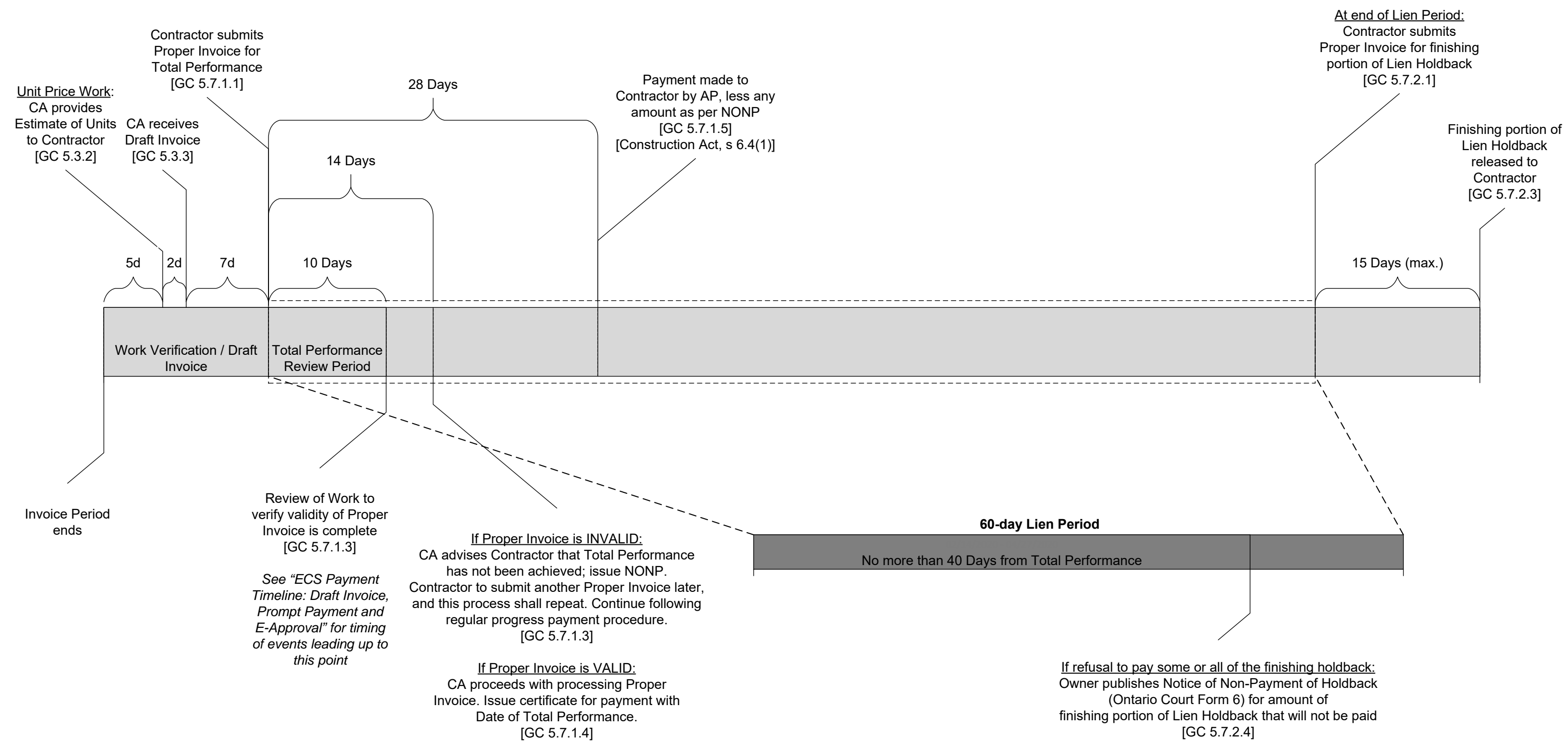


* Date of Total Performance is relevant as it triggers the lien period for release of the finishing portion of the Lien Holdback

- Abbreviations:**
- CA: Contract Administrator
 - CSP: Certificate of Substantial Performance
 - GC: General Conditions of Contract
 - PL: Project Lead
 - NONP: Notice of Non-Payment (Form 1.1)

- Notes:**
- All days are Calendar Days
 - The CA is the Consultant on externally managed projects. For internally managed projects the PL assumes the CA role.
 - Dates indicated illustrate *maximum duration*; tasks may take less time than allotted on this timeline.

Total Performance Timeline (for finishing work completed after Substantial Performance)



Abbreviations:

- CA: Contract Administrator
- GC: General Conditions of Contract
- PC: Payment Certificate
- PL: Project Lead
- NONP: Notice of Non-Payment (Form 1.1)

Notes:

- All days are Calendar Days
- The CA is the Consultant on externally managed projects. For internally managed projects the PL assumes the CA role.
- Dates indicated illustrate *maximum duration*; tasks may take less time than allotted on this timeline.

Option to use ECS-CWP-61-CA2