

A GUIDE
TO THE IMPLEMENTATION OF
CANADIAN CONSTRUCTION DOCUMENT
COMMITTEE (CCDC)
CONSTRUCTION MANAGEMENT CONTRACTS

FOR USE ON BUILDING PROJECTS IN THE
PROVINCE OF BRITISH COLUMBIA
October 1, 2021

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This Guide relies heavily on a variety of materials from several documents created by the Canadian Construction Document Committee (CCDC). The link to the CCDC website is <http://www.ccdc.org/>

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Purpose and Intent:

The purpose and intent of this guide is to provide the industry with information relating to the use of these CCDC documents for construction management projects.

Construction management is effective for time and cost planning and to control processes and methods where the following is critical to the success of the project:

- Rigorous review of fees.
- More collaboration efforts required between all Project participants and/or stakeholders.

Inexperienced Owner's project managers should seek the advice of senior project managers or legal counsel with experience in this construction area prior to considering a Construction Management project model and entering into CCDC 5A, CCDC 17 or CCDC 5B Contracts.

Owner's project managers are to ensure that all guides and Trade Agreements are adhered to in the management of your construction project.

Please familiarise yourself with the Trade Agreements –NWPTA, NWPTA, CFTA, etc., under General Overview, No. 2, further in this Guide.

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GENERAL OVERVIEW: CONSTRUCTION PROCUREMENT

1. Delivery and Procurement Strategies

At any time in pre-construction, the Construction Manager may provide an advantage to the project. In some cases, selection of the Construction Manager occurs at the projects beginning (before or just after selection of a design consultant). This allows the Owner valuable input from a construction perspective on the project, which is one of the most important advantages of Construction Management.

The experience, wisdom, creativity and technical knowledge of Design Consultant and CM firms are combined at the table with the clients understanding of requirements. Together they command the classic tripod of functional requirements, design and construction. The goal is to be non-adversarial. They collaborate to make decisions.

If part of the owners' requested Services, the CM can review the Design Consultant's drawings and specifications prior to procurement. Their additional area of expertise can resolve inconsistencies and improve coordination, which could reduce the overall project risk.

The CM could also help the team achieve efficiencies in the areas of schedule, costs, serviceability and constructability. The Design Consultant could review the CMs approach to the work, making helpful recommendations.

Procurement Strategy of Construction Contracts

The Procurement Strategy needs to be documented and should identify the rationale on how the construction services are to be procured for the work.

Often times this strategy is developed through a business case for the project. As a result of analysis and exploring options on various topics, a defined strategy can be developed to form the basis of the Project Principles that will guide parties in moving the project forward.

A risk assessment is always part of the business case for any project.

2. Trade Agreements

All Trade Agreements will need to be conformed with, as detailed below:

<https://www2.gov.bc.ca/gov/content/governments/services-for-government/bc-bid-resources/reference-resources/corporate-requirements-and-guidelines/trade-agreements?keyword=trade&keyword=agreements>

The Province of British Columbia is party to a number of trade agreements, including:

1. **national Canadian Free Trade Agreement (CFTA)**

[<https://www.cfta-alec.ca/>]

2. **New West Partnership Trade Agreement (NWPTA)**

[<http://www.newwestpartnershiptrade.ca/>]

Note: New West Trade Agreement Guide can be found at the following link:

[http://www.newwestpartnershiptrade.ca/pdf/13-08-21 Procurement Guidelines final%20for%20distribution.pdf](http://www.newwestpartnershiptrade.ca/pdf/13-08-21%20Procurement%20Guidelines%20final%20for%20distribution.pdf)

And is subject to the provisions of certain other trade agreements, including:

3. **World Trade Organization Agreement on Government Procurement (WTO**

GPA) [https://www.wto.org/english/tratop_e/gproc_e/gp_gpa_e.htm]

4. **Canada-European Union Comprehensive Economic and Trade Agreement (CETA)**

[<https://www.international.gc.ca/trade-commerce/trade-agreements-accords-commerciaux/agr-acc/ceta-aecg/index.aspx?lang=eng>]

Public Sector Owners must abide by the terms and conditions of these trade agreements when undertaking procurements. Private Sector Owners should also attempt to comply with the “spirit and intent” of the trade agreements, where possible.

SECTION A. PLANNING

1. Undertaking a Risk Assessment

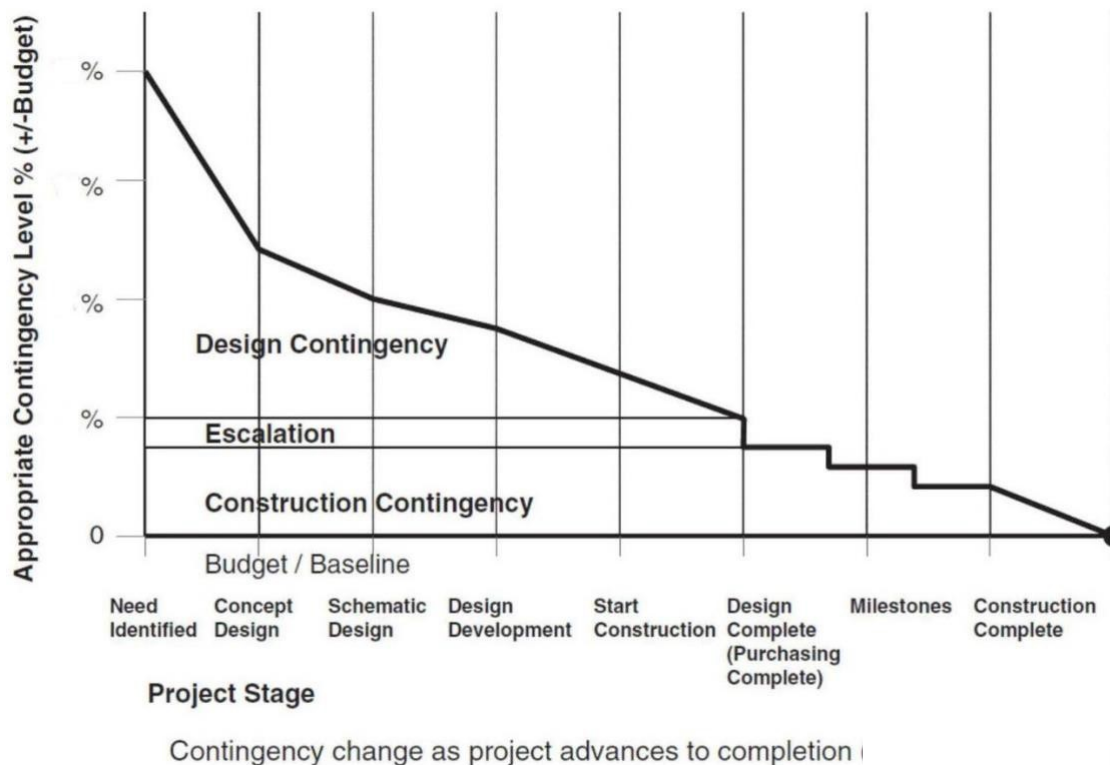
A documented risk assessment is always recommended for each construction project. To best accomplish this task, a Risk Management Plan can be used to assist in identifying and managing risks. A Risk Management Plan is a living document that, once populated, should be revisited at major milestones/prudent junctures during the Project lifecycle. Risks may change at different stages of a project starting off as high then falling to low as time goes on and vice versa. Many

project managers view their Risk Management Plan as a valuable tool in managing project success.

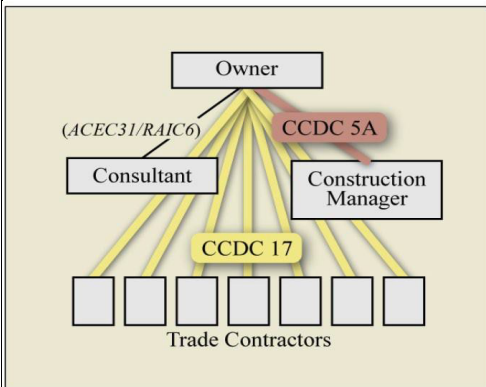
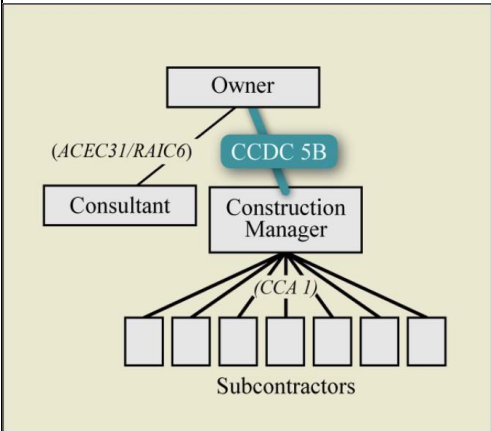
The Risk Management Plan includes a description of the risk, risk owner, impact, likelihood and consequence ratings, priorities, risk response, and status. Refer to the Risk Management Plan when identifying risks within the Project and how they will be addressed and managed.

The use of the risk assessment is helpful on all models but may be particularly helpful in determining if Construction Management is the appropriate procurement/delivery method for a Project. There is a general understanding that many procurement issues in construction management contracts are significantly mitigated where the Owner is experienced in using this model and the related Contract forms. If the Owner is not experienced in this procurement method, the Risk Management Plan can help identify areas of risk, and the areas that may need ongoing attention to mitigate and/or manage issues arising during the Project. This is especially critical in considering the use of the CCDC Construction Management Contracts. Inexperienced construction project managers should seek the advice of senior project managers or legal counsel with experience in this area prior to considering this project model and entering a CCDC 5A (Construction Management Contract – for Services), CCDC 17 (Stipulated Price Contract between Owner and Trade Contractor on Construction Management Projects) or CCDC 5B (Construction Management Contract – for Services and Construction) Contracts.

Considerations for the appropriate contingency level during the planning process:



Summary of CCDC 5 Contracts:

	<u>CCDC 5A</u>	<u>CCDC 5B</u>
<u>Delivery Methods</u>	Construction Management Contract – for Services. Also sometimes known as CM as Agent, Pure CM, CM for Services	Construction Management Contract – for Services and Construction. Also sometimes known as CM at Risk, CM as Contractor, CM converting to other form of contract
<u>Relationship to Owner</u>	<p>This is a commercial relationship and the contracting parties are responsible to look after their own interests.</p> <p>In addition, the CM is acting as a limited Agent of the Owner. An Agent has a fiduciary duty to act in the Owner's best interest within the contract terms.</p>	<p>This is a commercial relationship and the contracting parties are responsible to look after their own interests.</p> <p>There is no Agency relationship between the CM and the Owner. Most commercial relationships are non-agent.</p> <p>CCDC 5B is essentially a cost plus contract, unless converted to Stipulated Price. While the Services may be similar, the relationship, in all instances is fundamentally different from a CCDC 5A contract.</p>
<u>Trades in Contract with</u>	<p>the Owner via CCDC 17 – <u>Stipulated Price Contract between Owner and Trade Contractor on Construction Management Projects</u></p> 	<p>The constructor via CCA 1 – <u>Stipulated Price Subcontract</u></p> 
<u>Payment Certifier for CM</u>	Owner, unless the Owner identifies the Consultant as the Payment Certifier under GC 3.1.1.2 – “scope and terms of the Consultant’s services”	Consultant
<u>Payment Certifier for trade work</u>	Determined by the Owner and identified in Schedule A, Part 2.6 – can be the Owner, Someone Other Than the Construction Manager, or the Construction Manager	Consultant
<u>Additional Details</u>		Initially a cost-plus contract but can convert to a stipulated price
<u>Own Forces</u>	None or very limited	Can be used and can be useful but be aware of the conflict of interest, see Section B, Part 4

2. Indemnification and Insurance Requirements (including Contract Security)

Indemnification and insurance requirements differ for each contract. Ensure your indemnification, insurance and contract security requirements are clear for the procurement strategy that has been approved by your organisation. There may be consideration for contract security for major trade contractors.

CCDC 5A or CCDC 17

For applicable BC Government Risk Management Branch clients using CCDC 5A or CCDC 17, follow the link below to confirm:

<https://www2.gov.bc.ca/gov/content/governments/services-for-government/internal-corporate-services/risk-management/construction-insurance>

CCDC 5B

Standard CCDC provisions for Indemnification, Insurance and contract security provisions are included in CCDC 5B.

For applicable BC Government Risk Management Branch clients using CCDC 5B, please contact the Risk Management Branch, via email at RMB@gov.bc.ca or by phone at 250-356-1794

This may not apply to all public sector organizations.

SECTION B. Construction Management Contracts

Anyone considering using Construction Management as a procurement method (delivery model) should first read CCDC 10 – A Guide to Construction Project Delivery Methods:

<http://www.ccdc.org/document/ccdc10/>

1. Introduction

Construction Management is a project delivery method under which an Owner contracts separately with Consultants to design the Project, and with a firm whose primary expertise is planning, managing and controlling the construction process, and organizing and controlling of construction site operations (the Construction Manager).

The Owner could procure the services of the Construction Manager during the conceptual (pre-design), design, or contract documents drafting phases, depending on the best interest of the project. Earlier involvement allows more opportunity for the Construction Manager to provide advice on cost, schedule, constructability and serviceability input to the design, in addition to managing the actual procurement and the construction process.

2. Where Construction Management May Be Beneficial

While not appropriate for all projects, there are some projects where Construction Management may be beneficial, including:

- **Complex, multi-phased, or renovation Projects** – for these types of Projects, early and ongoing advice from a Construction Manager’s perspective with respect to work sequencing, packaging, and scheduling, as well as site coordination during construction can be very beneficial
- **Time is critical** – when it is essential to attain a completion date earlier than that attainable by the traditional Design-Bid-Build method, or when an earlier completion date will result in significant operational cost savings
- **Extraordinary or innovative design** – early advice on constructability, construction methods, costing, and scheduling is required
- **Unknown needs and requirements** – fast-tracking permits some of the design work for later phases of construction to be deferred
- **Rapidly changing market conditions** – a Construction Manager uses knowledge of market conditions to provide advice on alternative materials and methods.

3. Characteristics

- Inclusion and collaboration of the construction expertise in constructability, budgeting and project scheduling in the design process;

- Provides for the opportunity of concurrent design and construction activities, which can allow for a potential reduction in total project duration (“fast tracking”);
- Allows for sequential tendering of Trade Contractors before overall project design is finalized;
- Relative un-certainty on final cost at the start of construction, but with the flexibility in controlling some of the costs during the construction process;
- Provides the opportunity for extensive Owner’s participation;
- Enhanced design constructability owing to the opportunity for early collaboration between the design and construction teams.

4. Critical Conditions for Effective Use

- Effective time and cost planning and control processes and methods;
- Rigorous planning, understanding and review of fee format that provides transparent and seamless evaluation and selection;
- Inexperienced Owner’s construction project managers should seek the advice of senior project managers, external project managers or legal counsel with experience in this area prior to considering this project model and entering a CCDC 5A, CCDC 17 or CCDC 5B Contracts;
- More collaboration efforts required between all Project participants; and
- A high level of sophistication in the Owner’s representatives (in-house or outsourced) involved in the project

There are two basic forms of construction management:

- 1. Construction Management for Services (CCDC 5A)** where the Construction Manager acts as an Agent and the Owner will enter into, and bear overall responsibility for, future multiple Trade Contracts (CCDC 17) with Trade Contractors (painting, plumbing, electrical, etc.); and where the Construction Manager acts as an advisor to the Owner. This is a “Construction Management Contract - for Services”. Also sometimes referred to in the industry as pure construction management (CM). The CM may also, on the Owner’s behalf, assume responsibility for the administrative coordination of the Trade contracts.
- 2. Construction Management for Services and Construction (CCDC 5B)** starts as a cost-plus contract and allows an option where the Construction Manager can act as a General Contractor under a stipulated price contract.

Recommendation for Public Owners:

Note that two of the options listed in the CCDC 5B under Article A-8 – Options - 8.2 – Guaranteed Maximum Price (GMP) Option and 8.3 – Guaranteed Maximum Price % cost Saving Option – are

not recommended and have been eliminated in the CCDC 5B Supplementary Conditions.

Reasons for this recommendation are that a GMP provided by the Construction Manager will include contingency amounts commensurate with the degree of risks and unknowns. It is a better practice for contingency amounts to remain as a budgetary line item in the schedule of values in the Owner's budget, so that any unused contingency amounts remain with the Owner.

In CCDC 5B the Construction Manager will enter into:

1. Under the Cost Plus portion of the Work: multiple trade contracts with Trade Contractors where the Owner bears overall responsibility for the performance of the Contracts.
2. Under the Stipulated Price portion of the Work (if entered into): multiple trade contracts with Trade Contractors where the Construction Manager bears overall responsibility for the performance of the Contracts.

Although the services to be provided by the Construction Manager during the pre-construction phase are almost identical in both CCDC 5A and CCDC 5B, fundamental differences appear once construction commences and during the warranty period. For this reason, a decision must be made at the outset in selecting the appropriate form of contract, i.e., CCDC 5A or CCDC 5B.

In addition, the Payment Certifier may be different. In CCDC 5A, the Owner determines the Payment Certifier (either the CM, or another party). In CCDC 5B, the Consultant has the responsibility of being the Payment Certifier.

The parties should be aware that the Construction Manager's roles and responsibilities under CCDC 5B can give rise to conflicts of interest. There may be a concern about the potential for conflict of interest when the Construction Manager performs work with its own forces. For instance, if the Construction Manager has quoted hourly rates for the use of his own forces, they may want to use their own forces as much as possible, to enhance their own earnings.

In addition, the roles and responsibilities of the Owner and the Consultant will differ from those under design-bid-build.

5. CCDC 5A – Construction Management Contract – for Services, and CCDC 17 – Stipulated Price Contract between Owner and Trade Contractor for Construction Management Projects

In a project where the Construction Manager is intended to be in an advisory role only (i.e. - not the builder), two separate contracts are needed. One contract is needed between the Owner and the Construction Manager, and another contract is needed between the Owner and each individual Trade Contractor.

Current best practice is to utilize CCDC 5A for conventional (i.e. – as a limited agent) construction management services, as a contract between an Owner and the Construction Manager. CCDC 5A – 2010 Construction Management Contract – for Services is a standard contract between Owner and Construction Manager for which the work is to be performed by Trade Contractors. The

Construction Manager acts as a limited agent of the Owner providing advisory services and administering and overseeing the contracts between the Owner and Trade Contractors.

As part of a conventional construction management project, the CCDC 17 – 2010 Stipulated Price Contract for Trade Contractors on Construction Management Projects is a standard contract form between Owner and each Trade Contractor, to perform the work for a single, pre- determined fixed price, regardless of the Trade Contractor’s actual costs. It is specifically for use where the project is performed under the CCDC 5A Construction Management method of contracting.

<http://www.ccdc.org/document/ccdc17/>

Variations under CCDC 5A - May include:

Variation	Relevant or potential fee format
CM as strictly advisory services during pre-construction and/or design phase	Usually paid on a monthly basis by fixed amounts & reimbursable expenses.
CM brought in to assist in advising on a particular issue	Usually paid as a lump sum.
CM used as the delivery model from pre-construction through completion of the project	Paid on a monthly basis by fixed amounts OR % construction costs <u>and</u> reimbursable expenses <u>and</u> “General Requirements”

In construction management for services using a CCDC 5A, the Construction Manager, on a fee for services basis, acts as a ‘limited’ agent of the Owner, providing *advisory* services, and administering and overseeing the construction contracts between the Owner and Trade Contractors. The Owner retains all contracts and contracting risks inherent in each of the Trade Contracts as though the Owner was the General Contractor.

Characteristics:

- Greater Owner involvement due to the administration of, in both procurement and execution, multiple contracts during construction and post-construction;
- Administration of multiple Trade Contractors’ warranties;
- Design coordination is critical;
- Ability to implement fast track;

Considerations:

- **Payment Certifier** role under this contract is determined by the Owner and identified in Schedule 1A, Part 2.6. The Owner marks either the first column (“Performed by the Owner or Someone Other Than the Construction Manager”), or the second column (“Performed by the Construction Manager”).
- **Prime Contractor:** Owner may be required to assume liabilities under occupational health

and safety legislation. The default position of the BC Workers Compensation Act is that the Owner becomes responsible for health and safety, unless there is a written agreement otherwise.

Benefits:

- Early phases of construction work may proceed while the design is being completed;
- Early construction work can be phased;
- Enhanced management of unknown conditions (i.e. unknown site conditions, seismic upgrades); and
- Budget can be managed on current approved budget where there is fixed funding, as during the construction management process, costs can be managed by altering work extent or scope, to ensure the budget can be met.

In a CCDC 5A, the Owner contracts with the Construction Manager for “Services”. The Construction Manager acts as a “limited” agent (subject to their authority defined in the Contract) and advisor. The Construction Manager acts on the Owners behalf in the administration and coordination of the Trade Contracts, in the best interest of the Owner.

Using a CCDC 17, the Owner contracts directly with each Trade Contractor, where the Trade Contractor acts as a Prime Contractor (only as it applies to a contract between the Owner and the Trade Contractor). The Owner retains all of the contracting risks inherent in each of the Trade Contracts – i.e. - acting as its own General Contractor. The Owner’s project manager should only consider this construction model and agreements if they are experienced at managing Trade Contractors and understand the associated risks.

If an Owner asks the Construction Manager to step in as the general contractor under a CCDC 5A and hire all the Trade Contractors, this could put both the Construction Manager and Owner at increased risk. If this direction is the intent, the Owner should be using a CCDC 5B.

Using Construction Manager’s own forces should be limited to activities stated in Schedule B1- ADDITIONAL SERVICES AND COMPENSATION of the CCDC 5A Contract. Guide Items, Section 3. Attempting to use the CCDC 5A as a hybrid construction contract should be avoided. The Owner must be aware of their obligations under all trade agreements.

Further information can be found at the following link: <http://www.ccdc.org/document/ccdc5a/>

6. CCDC-5A/CCDC-17 Supplemental Conditions

In developing the CCDC 5A contract for services, modifications to this contract need to be done through Supplementary Conditions (SCs). See <https://www2.gov.bc.ca/assets/gov/british-columbians-our-governments/services-policies-for-government/internal-corporate-services/capital-asset-management-framework/supplementary-conditions-construction-management-contract.pdf> for recommended SCs for the Construction Managers Services.

Any requirement for the CM to comply with the Owners Procurement Policy, or Trade Agreements must also be incorporated into the SCs for the CM.

In addition to the Owners SC's for the Construction Manager, the Owner will need to develop Supplementary Conditions (SCs) for the Trade Contract CCDC-17. See link below.

If it is the intention of the Owner to have the CM prepare the Trade Contractors CCDC17 for the Owner's signature, there should be included in the SCs for the CM, the requirement to use CCDC-17 and the following SCs are to be included in the CCDC17 contracts:

Refer to: <https://www2.gov.bc.ca/assets/gov/british-columbians-our-governments/services-policies-for-government/internal-corporate-services/capital-asset-management-framework/supplementary-conditions-stipulated-price-contract.pdf>

7. CCDC 5A – Construction Management Contract – for Services, and CCDC 17 – Stipulated Price Contract between Owner and Trade Contractor for Construction Management Projects

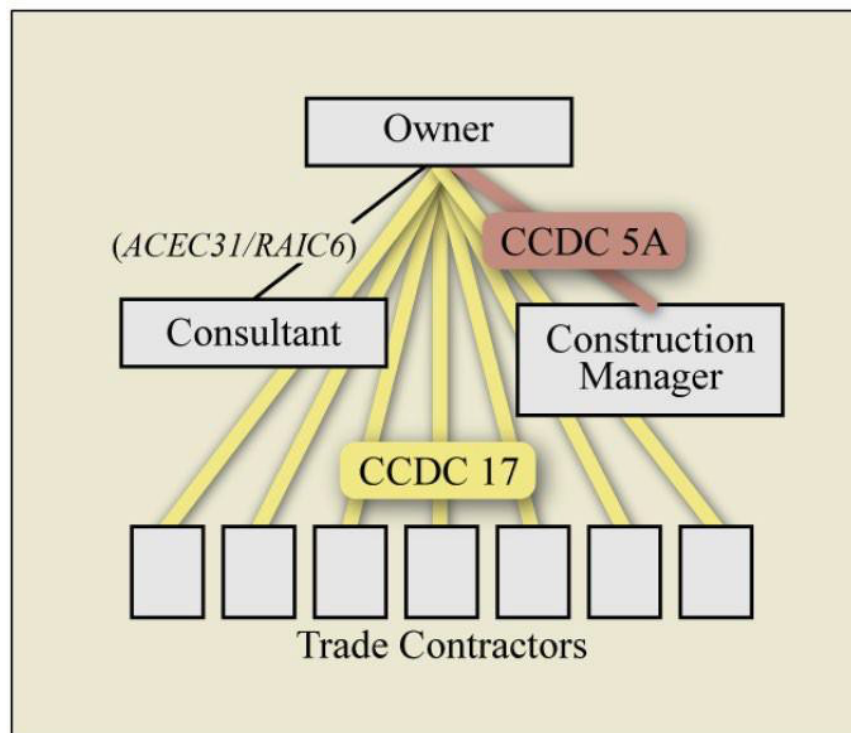


Image from the CCDC Guide 45 & 46

8. CCDC 5B – Construction Management Contract – for Services and Construction

CCDC 5B – 2010 Construction Management Contract – for Services and Construction is a standard contract between Owner and Construction Manager to provide advisory services during the pre-construction phase and ALSO to perform the required work during the construction phase. At the outset, the work is performed on an actual-cost basis, plus a percentage or fixed fee which is applied to actual costs. Article A-8 allows for a conversion into a Stipulated Price Contract.

Note that two of the PRICE options listed in the CCDC 5B under Article A-8 – Options - 8.2 – Guaranteed Maximum Price (GMP) Option and 8.3 – Guaranteed Maximum Price % cost Saving Option – are not recommended for public sector organizations and have been eliminated in the CCDC 5B Supplementary Conditions.

Reasons for that decision are as follows:

- a GMP provided by the Construction Manager will include contingency amounts commensurate with the degree of risks and unknowns. It is a better practice for contingency amounts to remain as a budgetary line item in the schedule of values in the Owner's budget, so that any unused contingency amounts remain with the Owner.

At the end of advisory services during the pre-construction phase, this leaves three options still available:

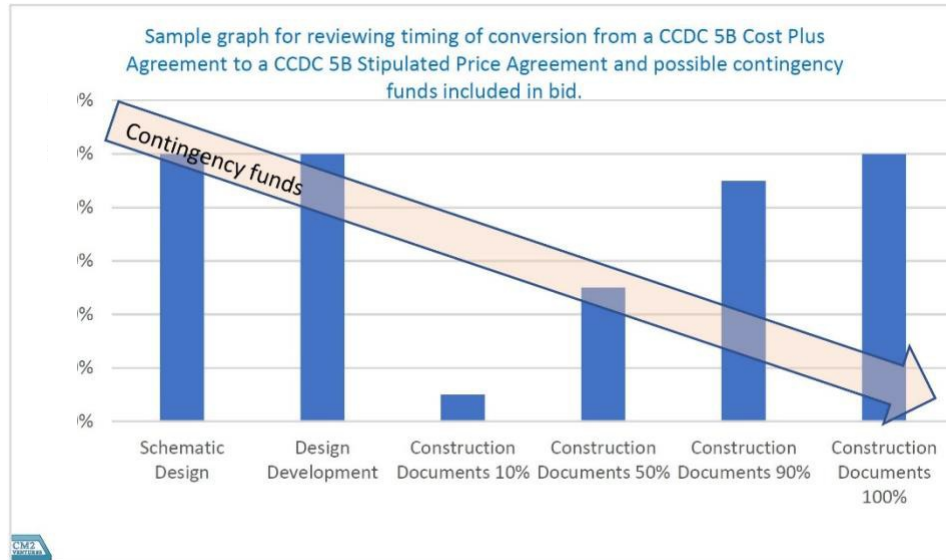
1. terminate the Contract,
2. continue the Contract on a “cost-plus” basis, or alternatively
3. exercise Article 8.4 – the Stipulated Price Option.

These GMP conditions have been removed and updated from the standard contract in the Standardized Supplementary Conditions, and can be found using the following link:

<http://www.bcconstructiondocuments.ca/wp-content/uploads/Supplementary-Conditions-5B-Oct12021-Final-V2.pdf>

Construction Management for Services and Construction is a form of construction management under which, in addition to the services described, the Construction Manager enters into multiple Trade Contracts with Trades. The Construction Manager engages Trade Contractors as sub-contractors and is responsible for their individual performance. At the outset, the Construction Manager initially provides pre-construction advisory services similar to that of the construction management for services delivery method. During construction, the roles and responsibilities of the Construction Manager are similar to those of a General Contractor under design-bid-build project delivery model.

The right “time” to convert to a stipulated price for the work should be given serious consideration by the parties. See the graph below.



Characteristics:

- Administration of single source of warranty obligations

In a CCDC 5B the Owner Contracts with a Construction Manager for Services and Construction, for the work. In addition to providing advisory and coordination services, the Construction Manager will be responsible for all work in a manner similar to a General Contractor under traditional Design-Bid-Build Projects.

Due to the nature of the services required for a project, generally these types of construction manager services are often provided by construction companies because of their capacity in providing general contracting services under the traditional Design-Bid-Build Projects.

The parties should be aware that the Construction Manager’s roles and responsibilities in a CCDC 5B contract can give rise to conflicts of interest. In addition, the roles and responsibilities of the Owner and the Consultant will differ from those under a Design-Bid-Build Contract. In a CCDC 5B Contract, the Construction Manager continues to provide “services” (i.e. - provide advice on cost, schedule, constructability and serviceability input to the design, in addition to managing the actual procurement and the construction process) throughout the Contract. However, in a Design-Bid-Build Contract, the General Contractor provides no such “services”.

Because of the multiple options available to the Owner in the CCDC 5B Contract, it is a very lengthy document – especially when the supplementary conditions are added. This makes an already complex contract even more difficult to interpret. Completing the Risk Assessment and

seeking advice from an experienced project manager or legal counsel will assist in full understanding of the contract and help determine if the CCDC 5B Contract is appropriate for a project.

Further information can be found at the following link: <http://www.ccdc.org/document/ccdc5b/>

9. CCDC 5B – Construction Management Contract – for Services and Construction

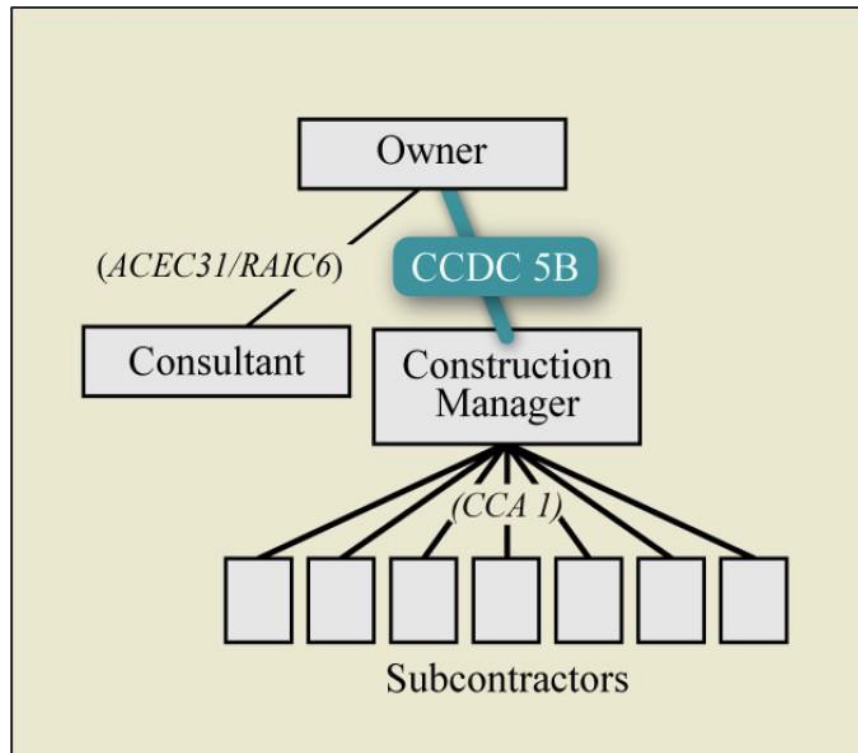


Image from the CCDC Guide 45 & 46

SECTION C. Guide Items

1. Procuring Construction Management Services – use of existing schedules from CCDC5A and CCDC 5B

Both CCDC 5A and CCDC 5B include Schedules to the Agreement - for Services and Compensation, for Reimbursable Expenses, and for Time Based Rates. Under a competitive procurement process for Construction Management services, completed CCDC “Schedules to the Agreement” by the Owner should be included in a Request For Proposal (RFP) to establish the scope and compensation method for the Services. Alternatively, the Schedules can be used by the Construction Manager and Owner as the basis for Contract negotiations.

2. Own Forces by Construction Manager

The Construction Manager may perform construction and/or any temporary work with its ‘own forces’. This could include temporary facilities and services (e.g., hoarding, temporary heat, site office, power, water, security, hoisting, miscellaneous cutting, patching, blocking, site safety, and other similar items not usually included in Trade Contractor’s scope of work). Requiring each Trade Contractor to provide its own services in this regard would be inefficient and impractical, as would retaining a separate Trade Contractor specifically to perform this kind of work.

There may be a conflict of interest that needs to be managed when the Construction Manager performs work with its own forces. Consequently, Owners may choose to not permit this approach or limit the kind or extent of work permitted to be performed by the Construction Manager’s own forces requiring all remaining work to be competitively bid by Trade Contractors and suppliers. Owners may choose to allow the CM Own Forces to complete the work if it is deemed as the best value for the Owner. Owners, or their retained experts, should ensure the RFP or bid documents for the Construction Management services clearly define what work the Construction Manager is allowed to perform with its own forces. If the Owner permits the Construction Manager to do so, the following should be evidenced in the proposal or bid:

- labour rates
- mark-ups on materials
- fixed or percentage costs for overhead and “general conditions” cost items.

Construction Manager should not be permitted to inspect, interpret or certify its own work for acceptance, and appropriate Supplementary Conditions should specify that if the Construction Manager is the successful bidder, the Consultant will assume the role of Prime administrator of the sub-contract, including certification of payments and performance.

Again, hybrids of the CCDC 5A should NOT be used. Caution should be taken if ever permitting a Construction Manager to undertake work. If the Owner is considering allowing a Construction Manager to perform work, this should be narrowed and transparent. If the Owner is looking at this approach, they should consider a CCDC 5B instead to avoid confusion.

Should the Owner find themselves in a situation to have a contract with the construction manager for any part of the “Work” in the construction then they should be signing a CCDC 17 contract for this purpose.

The CCA 26 - 2016: *A Guide to the Construction Management Project Delivery Method* – referenced in Section E – is well worth reading, prior to considering the Construction Manager using his Own Forces. Some key statements in CCA 26 include:

“Publicly Funded Projects”

Apart from the usual risks and responsibilities on any project, publicly funded projects carry with them additional requirements for accountability to the public. Cost efficiency and avoidance of any appearances of impropriety are of paramount importance. As such, the principles of openness, fairness and transparency are essential.”

“Own forces Work By Construction Manager”

This work is typically remunerated on a “cost reimbursable” rather than a “fee” basis, and because it is performed by the Construction Manager’s own forces, is not subject to competitive bidding. The Owner should understand this and the roll of the Construction Manager in it.

Apart from when a CCDC 5B contract based on the stipulated price option is used, there may be a conflict of interest that needs to be managed when the Construction Manager performs work with its own forces. Consequently, some Owners may choose to limit the kind or extent of work permitted to be performed by the Construction Manager’s own forces and require all remaining work to be competitively bid by Trade Contractors and suppliers.”

3. Procuring Construction Management Services under CCDC 5B – two stage solicitation

Apart from the usual risks and responsibilities on any Project, publicly funded Projects carry with them additional requirements for accountability to the public. Cost efficiency and avoidance of any appearances of impropriety are of paramount importance. Procurement for a Construction Manager, whether 5A or 5B, will always require a qualifications-based review as part of the procurement process. As such, the principles of avoiding conflicts of interest, openness, fairness, and transparency and compliance with the Trade Agreement(s) are essential. A separate pre-qualification stage should strongly be considered as part of the competitive process.

Additional information may be gathered from CAMF Recommended Best Practices for Pre-Qualification:

<https://www2.gov.bc.ca/assets/gov/british-columbians-our-governments/services-policies-for-government/internal-corporate-services/capital-asset-management-framework/pre-qualification-general-contractors-consulting.pdf>

Consideration should be given to:

1. The proponents Construction Manager Fee for Pre-construction Services as defined in

CCDC5B Schedule A1 to the Agreement.

2. Any time-based rates for the Construction Managers personnel (plus a percentage amount of administration charge) as in CCDC 5B Schedule A2 and B.

It is generally recommended that all off-site services identified in the Contract be covered under this fee.

All personnel assigned full time to the Project, away from the firm's head office or branch office (salaries and direct salary expenses) and all other costs and expenses incurred by the Construction Manager on account of the Project, should be cost reimbursable.

Owners should be cautious when evaluating bids, in that that lower Construction Manager Fees for Preconstruction Services can sometimes be offset by higher reimbursable expenses.

1. Compensation for Services should be determined in partnership with all contract parties as to the fee structure, i.e., comprised of one or more of the following: a fixed amount, a percentage amount, an amount based on time-based rates.
2. Fixed costs for the Construction Manager's Division 1 General Requirements' expenses to the extent where it is definable. Where costs are unknown or indefinable Owners should be prepared to engage a Professional Quantity Surveyor to ensure a Construction Manager's Division 1 charges are reasonable.

4. Procuring Construction Management under CCDC 5B – use of a Division 1 Schedule, if contemplated, as an option to (sample attached as Appendix II)

CCDC 5B provides an option for the Construction Manager to perform the work on a stipulated price basis. This option is usually only exercised after the Construction Documents, or a large portion of them, are complete, trade procurement is substantially complete, and the Owner desires greater cost certainty by moving from a cost-plus arrangement with the CM to a fixed price for a defined scope of work.

If the Owner is considering this option, it would be beneficial for the Owner to know the Construction Manager's Division 1 rates and costs before award. The Owner could require the proponents to provide this information at the time of the RFP, using a Division 1 Schedule, along the lines of a sample provided in Appendix # II. If the Owner requests this information in their RFP, the Owner must define in the RFP how this (and other) submitted information will be used in the awarding of the work, to insure a fair, open and transparent process.

5. Procuring Trade Contractors under CCDC 17

It is a benefit to note that the CM is on hand and engaged to provide advice to the Owner in selecting and contracting with trade contractors. Owners are required to comply with applicable Trade Agreement when procuring Trade Contractors under the CCDC 17 Contract. The Trade Agreements have threshold requirements that must be met by public Owners for competitive

bidding. This requirement may potentially add to the procurement process timeline requiring bidding for all Trade Contractors over these thresholds and possibly receiving competitive bids for those under. For large complex projects with many Trade Contractors, the use of a CCDC 17 may add additional time to the procurement process versus using a General Contractor in a CCDC 2 or 5B contract. The process by which the Construction Manager solicits bids from, and Contracts with, Trade Contractors should be fair, open and transparent. The practices recommended in *CCDC 23 'A Guide to Calling Bids and Construction Contracts'* should be respected. Any pre-qualification of Trade Contractors should be based on objective evaluation criteria. The Owner should require that:

- all Trade Contractor and supplier sub-contracts must be competitively bid as per the Owner's policies and applicable Trade Agreements and be subject to the Owner's approval prior to award;
- the bidding process, the bids, the sub-contracts and other records of the Construction Manager must be open to scrutiny by the Owner at all times;
- the Construction Manager must discuss with the Owner and obtain Contract security from Trade Contractors to the extent, and for the amounts, approved by the Owner.

Workers Compensation Act

As a reminder to Owners, that as per the definition below in the WCA, they must "enter into a written agreement" in order to transfer the OHS provisions to the other party; otherwise, it remains with the Owner.

For further information on these requirements, please visit the link(s) below:

<https://www.worksafebc.com/en/law-policy/workers-compensation-law/workers-compensation-act>

SECTION D. Clarifications of specific wording in CCDC 5B and its Supplementary Conditions

1. CCDC 5B, Article 8.4 – Stipulated Price Option

The work under the CCDC 5B contract starts under a cost-plus contract. The Owner needs to decide if they are comfortable with this option to start. Article 8.4 of the CCDC 5B contract provides the Owner an option for the Construction Manager to perform the work on a stipulated price basis. The flexibility of CCDC 5B allows consideration of the project risks to determine when a stipulated price option could be exercised. An appendix to CCDC 5B includes a list of supplementary conditions that apply when the parties agree to exercise this option. As stipulated in Article A-8 this option would only come into effective by way of a Change Order.

2. CCDC 5B Supplementary Conditions, GC 5.4.5.4 – Extra Costs borne by the Owner

Supplementary Condition GC 5.4.5 in the CCDC 5B allows the Owner the right to take possession of and use completed or partially completed portions of the work, under certain identified conditions. If this were to occur, GC 5.4.5.4 specifies that the Owner shall be responsible to pay for any extra costs borne by the Construction Manager, as a result of the Owner taking possession of and use of any completed or partially completed portion of the work, prior to certification of Substantial Performance of the Work.

3. CCDC 5B Supplementary Conditions, GC 7.2.6 – Owner’s Right to Suspend the Services or Terminate the Contract Before the Work Commences

Supplementary Condition GC 7.2.6 in the CCDC 5B Contract allows the Owner the right to suspend or terminate the Contract. The decision to suspend or cancel the Contract may arise from a number of reasons, including, (but not limited to), the Project being well over budget, loss of funding, the Project is cancelled because of other options, or even a poor working relationship with the Construction Manager. There are two important caveats in GC 7.2.6 worth noting. First: suspension or termination must occur before the *work* commences at the *Place of the Work*. The Definition of work in CCDC 5B includes “construction,” but does not include Services.

The intent is that suspension or termination could occur during or after the provision by the Construction Manager’s Services (i.e., the initial advisory services), but not after work commences at the Place of the Work. Second, the Owner must pay for all *Services*, and for such other costs that the Construction Manager may have sustained.

4. CCDC 5B Supplementary Conditions, GC 12.3.7 – Renewed Warranties

Supplementary Condition 12.3.7 of the CCDC 5B requires the stipulated warranty and warranty period to be renewed for the specific work being replaced or repaired, where a material, product or installation covered by warranty fails. However, this renewal of warranties does not apply to warranties referred to in GC 12.3.6 – any warranties required to extend beyond the one year warranty period as described in GC 12.3.1. Therefore, any required warranties beyond one year are solely the responsibilities of the warrantor.

SECTION E. Reference Documents

1. The Capital Asset Management Framework, Procurement Chapter
<https://www2.gov.bc.ca/gov/content/governments/policies-for-government/capital-asset-management-framework-guidelines>
2. CCDC 10 - 2018 – A Guide to Construction Project Delivery Methods
<https://www.ccdc.org/document/ccdc10/>
3. CCDC 23 - 2018 - A Guide to Calling Bids and Awarding Construction Contracts
<https://www.ccdc.org/document/ccdc23/>
4. CCDC 45 – 2011 - A Guide to CCDC 5A Construction Management Contract – for Services
<https://www.ccdc.org/document/ccdc45/>
5. CCDC 46 – 2011 – A Guide to CCDC 5B Construction Management Contract – for Services and Construction
<https://www.ccdc.org/document/ccdc46/>
6. CCDC 47 – 2011 - Guide to CCDC 17 Stipulated Price Contract Between Owner and Trade Contractor for Construction Management Projects
<https://www.ccdc.org/document/ccdc47/>
7. BCCA - A Summary Guide for BC Construction Industry Standards & Guidelines
<https://bccasn.com/wp-content/uploads/2021/09/bc-construction-standards-and-guidelines-2019-1.pdf>

Note: To access, download and use any or all of the CCDC documents, you will need to purchase a registration number from a [CCDC document outlet](#).

The above CCDC Guides are available for purchase individually from distributors of CCDCdocuments.

SECTION F. Insurance, Contract Security and Indemnity Risk Provisions, and Supplementary Conditions

For information required to be included by Risk Management, Province of British Columbia for Risk Management client Contact Risk Management Branch for review via email at RMB@gov.bc.ca or by phone at 250-356-1794

It is highly recommended that these Insurance, Contract Security and Indemnity Risk provisions, and Supplementary Conditions, **ARE NOT MODIFIED**

1. CCDC 5A and CCDC 17 Insurance, Contract Security and Indemnity Risk Provisions

The CCDC 5A and CCDC 17 insurance, contract security and indemnity risk provisions are vetted by the CAMF Sub-Committee Working Group with representatives from industry, public Owners and the BC Government's Risk Management Branch. The Owner indemnities require approval under the [Financial Administration Act](#). Once completed, these risk provisions receive final approval by Deputy Minister's Industry Infrastructure Forum (DMIIF). Because of this, no changes to any of these sections should be considered by Owners who are Ministries, and some BC government publicly funded agencies, or government corporations.

<https://www2.gov.bc.ca/gov/content/governments/services-for-government/internal-corporate-services/risk-management/construction-insurance>

2. Supplementary Conditions for the CONSTRUCTION MANAGEMENT CONTRACT – for Services – for use with CCDC 5A, 2010.

<https://www2.gov.bc.ca/gov/content/governments/policies-for-government/capital-asset-management-framework-guidelines/additional-resources>

3. Supplementary Conditions for the STIPULATED PRICE CONTRACT BETWEEN OWNER AND TRADE CONTRACTOR FOR CONSTRUCTION MANAGEMENT PROJECTS – for use with CCDC-17, 2010.

<https://www2.gov.bc.ca/gov/content/governments/policies-for-government/capital-asset-management-framework-guidelines/additional-resources>

4a. Supplementary Conditions for the CONSTRUCTION MANAGEMENT CONTRACT – FOR SERVICES AND CONSTRUCTION – for use with CCDC-5B.

<http://www.bconstructiondocuments.ca/wp-content/uploads/Supplementary-Conditions-5B-Oct12021-Final-V2.pdf>

4b. APPENDIX STIPULATED PRICE OPTION – *Condensed Version* (replaces original 5B Appendix)

This Guide provides a condensed version of the Supplemental Conditions to the Appendix – Stipulated Price Option. The purpose is to provide all parties with a secondary option to achieve similar modifications as those in 4A. For example, instead of amending an entire clause, this version changes only the specific word(s.) These SCs and those shown above (4A) are intended to be equivalent and have the same intent. The Supplementary Conditions to the Appendix in 4A. are longer and based on standard CCDC 5B. It is a modified Appendix - Stipulated Price Option in the style of the original 5B (4A above). They more complex and verbose, so the condensed version was generated for easier reading and plain language. This is for your convenience.

Delete entire existing CCDC 5B Appendix – STIPULATED PRICE OPTION and replace with this version.

<http://www.bcconstructiondocuments.ca/wp-content/uploads/Condensed-Version-Supplementary-Conditions-5B-Oct12021-Final-V2.pdf>

Appendix I Sample Construction Management CCDC 5A Fees & General Requirements Pricing Sheet

**** FOR INFORMATION PURPOSES ONLY
NOT TO BE USED AS A TEMPLATE ****

Fees

1. Construction Manager's Fee for the Services (Article 5.2.1) is comprised of one or more of the following: a fixed amount, a percentage amount, an amount based on time-based rates and shall include all expenses of the Manager related to performance of Phase 1 Pre-construction Services as specified under the RFP		\$

Personnel to be employed by CM for the Work

<u>Position</u>	<u>% time on Project</u>	<u>Monthly Cost to the project</u>	<u>Cost for duration of project</u>
Construction Manager			
Project Manager			
Superintendent			
Foreman			
Project Coordinator			
Project Administrator			
Construction Safety Officer			
Quality Control Officer			
Other			
Other			
Other			
Total Cost to Project (\$)			

Owner's Costs

- Archaeological Assessment / Inspections
- Building Permits
- Rezoning / Development Permit Costs / Misc.
- Development Cost Charges
- Geotechnical Investigations
- Other
- Other

Appendix II Sample Construction Management CCDC 5B Fees & General Conditions Pricing Sheet

**** FOR INFORMATION PURPOSES ONLY
NOT TO BE USED AS A TEMPLATE ****

Fees

1. Construction Manager's Fee for the Services (Article 5.2.1) is comprised of one or more of the following: a fixed amount, a percentage amount, an amount based on time-based rates and shall include all expenses of the Manager related to performance of Phase 1 Pre-construction Services as specified under the RFP		\$
2. Construction Manager's Fee for the Work (Article 5.2.2) for the construction and post construction stages as a percentage of the hard cost of the work		%

Personnel to be employed by CM for the Work

<u>Position</u>	<u>% time on Project</u>	<u>Monthly Cost to the project</u>	<u>Cost for duration of project</u>
Construction Manager			
Project Manager			
Superintendent			
Foreman			
Project Coordinator			
Project Administrator			
Construction Safety Officer			
Quality Control Officer			
Other			
Other			
Other			
Total Cost to Project (\$)			

General Conditions – Quantifiable

<u>Example Item</u>	<u>Cost (\$)</u>
Insurance - Equipment/Site Tools/Vehicles	
Surety Bonding	
General Clean-Up (detail)	
Garbage Disposal & Collection / Disbursement of Recycle bins	
Site Trailer / Storage Bins	
Small Tool Allowance	
Equipment Allowance (be specific)	
Travel / Vehicle Expense, including super truck	
Living Out Allowance	
As-Built Drawings	
Project Close-Out / Maintenance Manuals	
Drawing Reproduction	
Mobilization	
De-mobilization	
Temp Washroom	
Other	
Other	
Other	
Total	\$

Reimbursable Expenses (Unquantifiable at the time of submission)

- Heating and Hoarding/Weather Protection
- Hoisting/Cranes
- Temporary Power
- Site Security
- Construction Security
- Courier / Freight Costs
- Testing and Inspections
- Temporary Utilities
- Other
- Other