

**APPENDIX F**

**DESIGN AND CONSTRUCTION SERVICES  
PROCUREMENT OPTIONS**

The procurement of design and construction services for affordable housing projects funded by BC Housing includes the following three options. The selection of the appropriate option will be governed by program and / or project specific considerations related to scope, schedule and risk.

## **1) DESIGN TENDER**

### **Design Phase**

The design-tender form of project delivery is one of the traditional methods of procurement for construction services used by BC Housing and Non-Profit Societies.

In the Design-Tender process, the Owner hires an Architect to prepare the design, working drawings, and specifications for the project. The Architect brings in a team of design and engineering sub consultants, coordinates the preparation of the construction contract documents, and issues these documents for tender.

### **Tender Phase**

Tenders can be public or invitational (to bidders selected through an open prequalification process). General contractors bidding on the project may tender out to multiple subcontractors for bids on subcomponents of the project. The final bid from the General Contractor is a complete lump sum price for all the work called for in the tender documents. Subject to the satisfactory review of the Owner and the Architect, the project is usually awarded to the lowest bid from a qualified General Contractor. The form of contract is the CCDC2 Stipulated Price Contract amended by the BC Housing Design-Tender Supplementary General Conditions.

### **Construction Phase**

After the project has been awarded and construction started, the construction contract may be amended to incorporate addenda or changes approved or required by the Owner and consultants. The Architect acts as the Owner's agent to review the progress of the work and to issue site instructions, change orders or other documentation necessary to the construction process.

Below is the link to the Design-Tender Supplementary General Conditions to the CCDC2-2008.  
[http://www.bchousing.org/resources/Programs/ILBC/design%20and%20construction%20standards/Appendix\\_A\\_Design\\_Tender.pdf](http://www.bchousing.org/resources/Programs/ILBC/design%20and%20construction%20standards/Appendix_A_Design_Tender.pdf)

## **2) CONSTRUCTION MANAGEMENT AT RISK (CM AT RISK)**

### **Pre construction and Design Phase**

The “Construction Management at Risk” process used by BC Housing and Non-Profit Societies is an addition to the traditional array of construction services procurement options that include design-tender and design-build forms of contracts.

The Construction Management at Risk method involves a preconstruction phase during which time the CM and the Owner enter into a CM Agreement to provide value analysis advice related to the building design and material components. The CM also provides regular construction cost estimates, a construction schedule and design and construction coordination meetings. This input assists in mitigating the risk of cost overruns, schedule delays and unforeseen costs during construction.

### **Tender Phase**

The preconstruction phase culminates with the CM providing the Owner with a complete price for the construction of the project based on competitively tendered sub trade bids. This bid process is open and transparent to the Owner and the Owners’ Quantity Surveyor. The presentation of the complete construction cost to the owner signals the shift to the second phase of the CM at Risk process.

### **Construction Phase**

Subject to receipt of an acceptable price based on the sub trade bids, the Owner has the option of entering into a CCDC -2 Stipulated Price Contract with the CM. By entering into the CCDC-2 Contract, the CM becomes a General Contractor (GC). The trade prices gathered as part of the pre construction tendering process are included in the CCDC-2 contract under the GC.

Below is the link to the BC Housing Construction Management Agreement.

[CM at Risk - Design Tender\CM Agreement template 2009-revised-042009.doc](#)

## **3) DESIGN BUILD**

### **Overview**

Design-build is one of the forms of construction project delivery used by BC Housing and Non-Profit Societies. In contrast to traditional Design Tender, the design and construction aspects of the project are contracted for by the Owner with a single entity known as the design-builder or design-build contractor for a lump sum fixed price. The design professionals are retained directly by the contractor to create shared responsibility and obligations to the Owner in order to deliver the project with price certainty. The form of contract between the Owner and the Design-

Builder is the CCDC2 Stipulated Price Contract amended by the BC Housing Design- Build Supplementary General Conditions.

### **Design Build Process**

The hallmark of a Design/Build project is that one organization is responsible for both design and construction of the project. This form of construction delivery is used to minimize the project risk for an owner and to reduce the delivery schedule by overlapping the design phase and construction phase of a project.

Design-build focuses on combining the design, permit, and construction schedules in order to streamline the project schedule. This does not shorten the time it takes to complete the individual tasks of creating construction documents, acquiring building and other permits, or actually constructing the building. Instead, a design-build firm will strive to bring together design and construction professionals in a collaborative environment to complete these tasks at the optimum time to meet the project schedule.

Below is the link to the Design-Build Supplementary General Conditions to CCDC2 -2008.

[http://www.bchousing.org/resources/Programs/ILBC/design%20and%20construction%20standards/Appendix\\_B\\_Design\\_Build.pdf](http://www.bchousing.org/resources/Programs/ILBC/design%20and%20construction%20standards/Appendix_B_Design_Build.pdf)