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The Housing Agency

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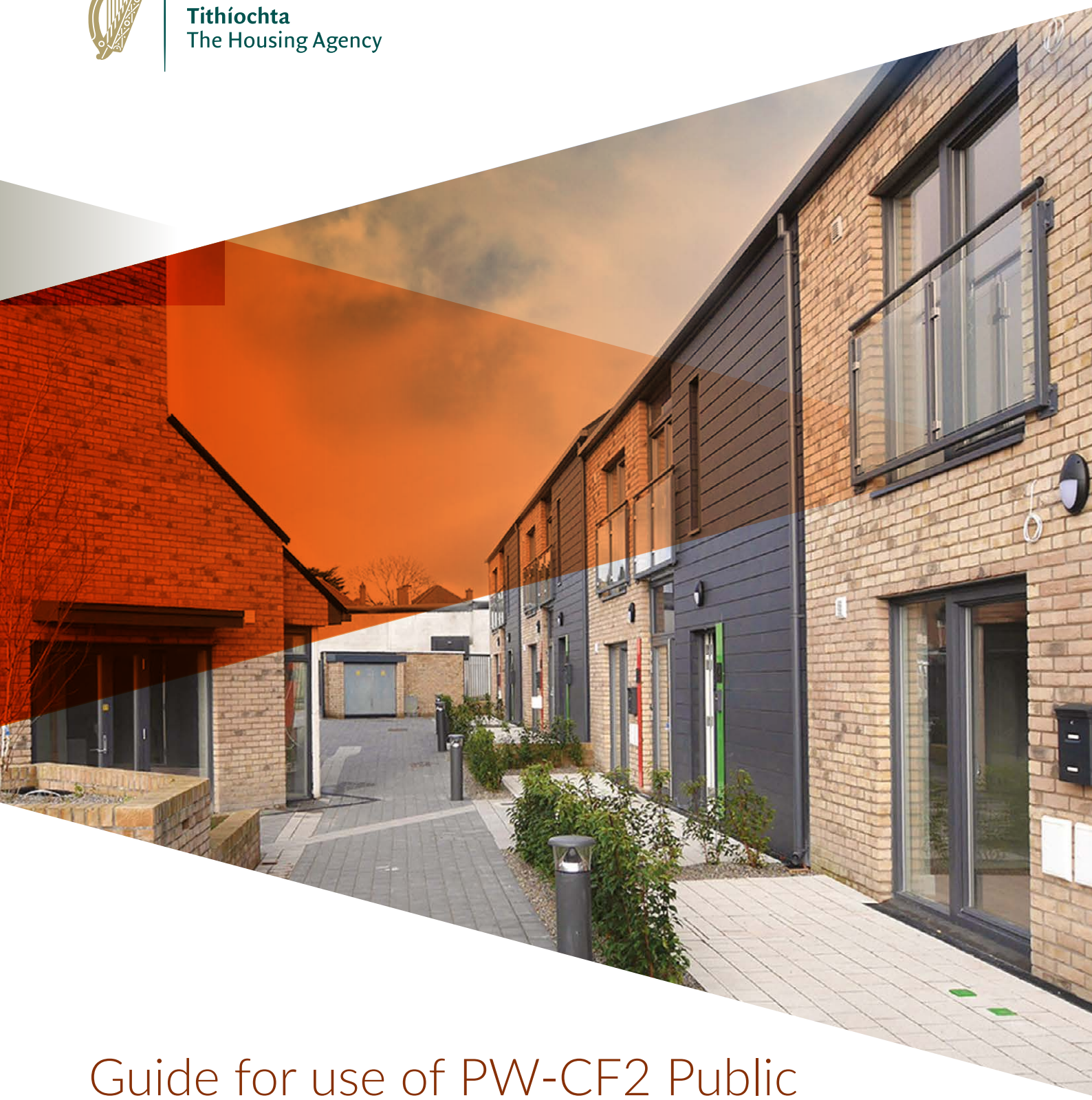


Guide for use of PW-CF2 Public Works Contract for Building Works Designed by the Contractor

For the provision of 'design and build' housing projects using modern methods of construction

Rev A October 2024

Contents

Terminology in this User Guide

CWMF	Capital Works Management Framework. An integrated set of contractual provisions, guidance material, technical templates and procedures which cover all aspects of the delivery process of a public works project from inception to final project delivery and review. Available on Construction Procurement Reform Website. www.constructionprocurement.gov.ie
AHBs	Approved Housing Bodies.
MMC	Modern Methods of Construction. Refer to section 1.3.
BIM	Building Information Modelling (BIM) is a process for creating and managing information on a construction project across the projects lifespan.
Common Data Environment (CDE)	A cloud based space where information from construction projects is stored and is accessible to all project participants.
Sponsoring Agency / Contracting Authority / Employer	The title Sponsoring Agency changes to Contracting Authority once a contract for technical services for a works project is awarded. Contracting Authority changes to Employer when a Works Contract is signed. The term Client is used throughout this guidance note as a generic term to cover the Sponsoring Agency / Contracting Authority / Employer.
CPR	Construction Products Regulation (CPR) aims to ensure that reliable performance-related data is made available, by means of Declarations of Performance, in relation to construction products being placed on the European market.
OGP	The Office of Government Procurement, was established by the Departments of Finance and Public Expenditure and Reform. The OGP together with four key sectors (Health, Defence, Education and Local Government), has responsibility for sourcing all goods and services on behalf of the Public Service. In addition, the OGP also has responsibility for procurement policy and procedures.
PW-CF2	Public Works Contract for Building Works designed by the Contractor.
FTS2	Form of Tender and Schedule for Public Works Contract for use with PW-CF2.
ITTW1a	Instructions to Tenderers for Public Works Contract for use with PW-CF2.
SAQ	Suitability Assessment Questionnaire.
Gateway Sign-Off	This is a process in which the Design and Build Contractor will produce design proposals and a compliance sample for the Employers Design Team to review and approve. (ref Appendix 7).
BCAR	Building Control Amendment Regulations

1.0 Introduction

1.1 Purpose of this User Guide

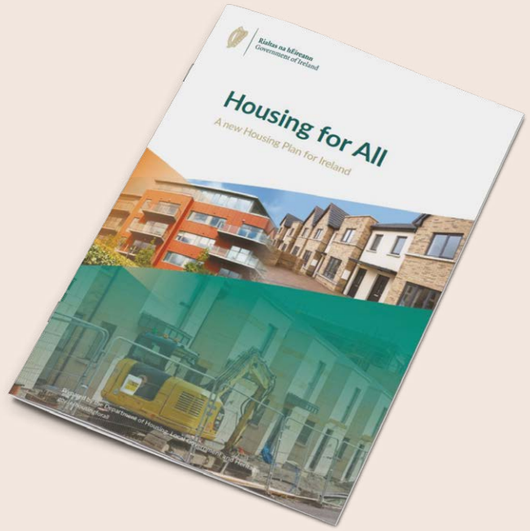
The purpose of this guide is to inform the reader of the procurement options available within the Capital Works Management Framework (CWMF) for enabling Design and Build contracts to facilitate the use of Mordern Methods of Construction (MMC) in construction. It is intended that this guide will enable accelerated delivery of housing by Local Authorities and AHBs that are intending to engage in housing construction projects.

This guide is aimed at those who are working with or advising Local Authorities and AHBs who have a working knowledge and experience of procurement of consultants and Design and Build Contractors using the CWMF.

As a procurement option within the CWMF, the PW-CF2 Public Works Contract for Building Works Designed by the Contractor has been used as a delivery mechanism for housing supply by a number of Local Authorities.

In the case of housing provision, this guide recommends that the Employer progresses the design and specification further than might normally be the case in non-residential Design and Build (D&B) projects, before tendering for a Design and Build Contractor. The level of detail to which the design is developed is dependent on the scale and complexity of the proposed project, with more complex large-scale projects recommended as having a greater level of initial design provided. This approach will give greater clarity to tenderers on the project requirements and reduce the level of risk placed on the D&B Contractor.

Some aspects of this User Guide may be useful to a Sponsoring Agency intending to establish Frameworks of Design Consultants and Design and Build contractors for housing projects, however, it is not intended to specifically deal with tendering from a framework. Guidance on the establishment of such a framework is available from the CWMF.



1.2 Disclaimer

This guidance document is not intended to offer legal advice and users should note that the Sponsoring Agency will be responsible for the management of its projects from inception through to completion, including its own documentation.

It is assumed that Sponsoring Agencies are familiar with traditional procurement processes as set out in the CWMF for procurement of Consultancy Services (Technical) and Building Works where the Employer has design responsibility. Therefore, this guide does not go through each step of procurement which would be considered standard practice.

The capacity of each Sponsoring Agency and the scope and scale of each project will differ. While this User Guide offers general suggestion as to a standard approach, all projects should be examined on a case-by-case basis, considering the experience and relevant in-house competency of the Sanctioning Authority, together with the particular demands of the planned project. CWMF Pillar 4: Guidance, is the primary guidance for all Capital Works Projects.

1.3 Rationale Behind This Document

The objectives contained within the Government's Housing for All plan and the further publication of the Roadmap for Increased Adoption of Modern Methods of Construction (MMC), along with the advances in technology and increased awareness of the potential of MMC within the housing sector have led the Housing Agency to create this guidance document. MMC is developing at pace with many new innovative systems entering the sector along with new manufacturers. The increased use of technology and the development of artificial intelligence will also contribute to the growth of MMC and as such this document has been produced to aid in the utilisation of MMC in housing delivery.

1.3.1 Housing for All

The Government of Ireland published Housing for All, A New Housing Plan for Ireland in 2021, with the aim of accelerating delivery of housing supply.

The plan's overall objective is that 'Everyone in the State should have access to a home to purchase or rent at an affordable price, built to a high standard and in the right place, offering a high quality of life.' A key aim of the plan is the accelerated delivery of housing supply.

Housing for All identified MMC as one of the innovative developments that should be encouraged in the delivery of housing. A number of actions relating to increased use of MMC are included in the plan.

1.3.2 Road Map for Increased Adoption of Modern Methods of Construction in Public Housing Delivery

In support of Housing for All which identified MMC as a means to increase housing delivery, the Department of Enterprise, Trade and Employment and the Department of Housing, Local Government and Heritage published the Roadmap for Increased Adoption of Modern Methods of Construction in Public Housing Delivery in July 2023. This document highlighted the Government's support in increasing innovation and productivity gains through using MMC in housing delivery. Objectives contained within this report include developing alternative procurement approaches to enable MMC, providing training on MMC, strengthening capacity within the National Standards Authority of Ireland (NSAI) to support agrément certification and reviewing the Design Manual for Quality Housing to accommodate MMC.

1.4 The Role of the Housing Agency

The Housing for All plan makes provision for innovations to improve, support and accelerate delivery of housing. In support of this strategy, The Housing Agency's Built Environment Section will supply technical services and supports in the area of MMC.

The Built Environment Section has developed this guidance document to offer authorities a contractual mechanism to encourage the use of MMC through the use of Capital Works Management Framework, PW-CF2 Public Works Contracts for Building Works Designed by the Contractor.

2.0 Modern Methods of Construction (MMC)

2.1 What Is "Modern Methods of Construction"

Modern Methods of Construction (MMC) is used to describe a range of offsite manufacturing and innovative onsite techniques that provide alternatives to traditional construction techniques.

This range of techniques and manufacturing processes are defined under seven different categories as follows.

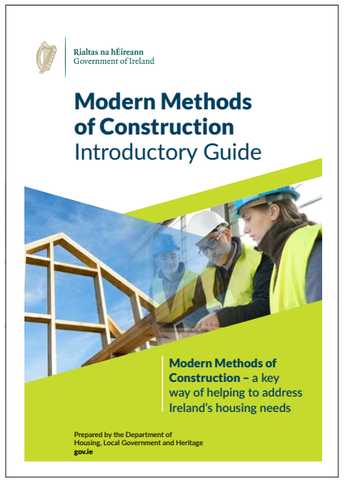
1) 3D Primary Structural Systems
2) 2D Primary Structural Systems
3) Non-Systemised Primary Structure
4) Additive Manufacturing
5) Non-Structural assemblies and Sub-assemblies (eg pods)
6) Traditional building led site labour reduction and productivity improvements
7) Site process-led labour reduction/ productivity assurance improvements

Examples of MMC being used in the construction of dwellings could include, for instance, panelised components made in a factory and assembled on the construction site (e.g. timber frame, light gauge steel frame, or precast concrete), innovative technologies or materials (insulated concrete formwork (ICF)) or completed dwelling units or elements of dwellings manufactured in a factory setting and transported to site as completed modules.

An introductory guide on MMC was published by the Government in July 2023 to increase awareness of these types of construction. This guide is available on the following link. https://www.gov.ie/en/publication/e5e78-modern-methods-of-construction-introductory-guide/

2.2 Introduction of MMC In Contracts

The use of the Design and Build form of Public Works contract encourages increased innovation and the use of MMC in the delivery of social housing. The Design and Build form of contract also transfers the design risk to the Contractor for any specialist design aspects which may be subject to copyright or patent for each specific form of MMC. Appendix 2 shows the contractual arrangement for a Design and Build form of contract compared to Employer design contracts.



2.3 Building Regulations & MMC

All proposed works must comply with the building regulations. All new dwellings must comply with the building regulations, building control requirements and achieve a 60-year durability for all key elements.

It is common that works involving MMC can include systems, products, materials or techniques or equipment, for which published standards[1] do not yet exist. In these instances, framework members / MMC suppliers must provide third party certification demonstrating compliance with Irish Building Regulations and durability[2] requirements.

Such certification may include, in part or in total, a European Technical Assessment or Agrément certification (e.g. NSAI Agreement) or equivalent. Agrément certification applies to those products and processes which do not fall within the scope of existing construction standards, either because they are innovative (modern methods of construction, modular construction) or because they deviate from established norms.

NSAI Agrément assesses submissions, specifies testing, and where appropriate, issues Agrément certificates confirming that new building systems, products, materials, techniques and equipment are safe and fit for purpose in accordance with the Irish Building Regulations and with the terms of the certificate.

NSAI has recently published a Guide to Agrément Certification for Modern Methods of Construction (link included in Appendix 8) and can be contacted with regards to obtaining further information on Agrément Certification.

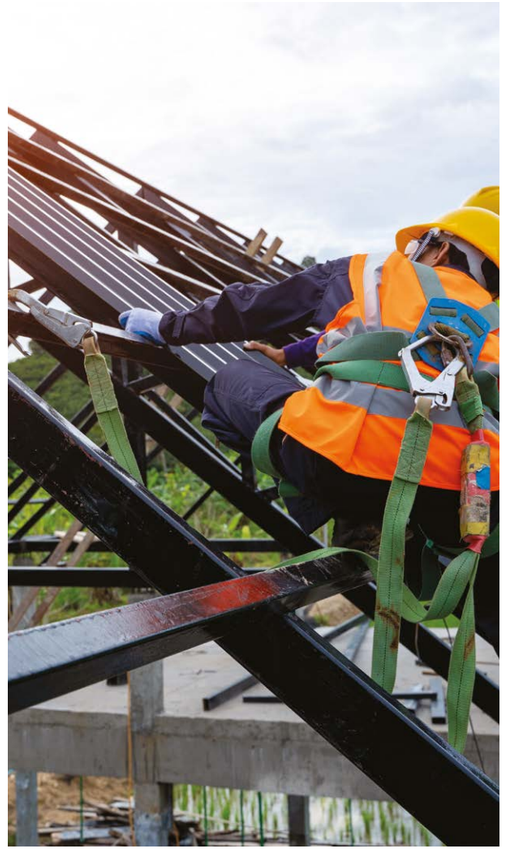
1. Includes national standards transposing European standards and any accompanying national guidance, national standards, national specifications or equivalent.
2. All structural elements including system elements (where used) Floors, Walls, Claddings and Roofs are to have a durability in the order of 60 years with a normal level of maintenance.

2.4 Building Information Modelling (BIM) & MMC

BIM is a process used to improve the efficiency of design, construction, and maintenance of buildings. It is a powerful tool that enables better communication and collaboration between stakeholders, including design team members and facility managers.

The implementation of BIM adds efficiencies to information sharing, approvals, recording of information and the future maintenance of the dwellings.

When utilised on projects which include MMC, BIM facilitates improved communication between designers and between contractors. This will allow for more streamlined development at all stages of construction and will reduce some of the risks associated with the adoption of new products and processes.



2.5 BIM and Statutory Obligations

The Office of Government Procurement issued a mandate in July 2023 requiring BIM to be adopted on public works contracts. From January 2024 consultants engaged to design and oversee the construction of public works contracts with a value in excess of €100m must have Building Information Modelling (BIM) requirements included in their scope of service.

Over a period of four years these requirements will be extended as detailed in Table 2-1 below to include the engagement of consultants and contractors down to projects with a value less than €1m. At that point all public works projects will have BIM requirements incorporated.

It is important that agreed BIM levels and information sharing protocols are put in place at an early stage of the project and accepted by relevant stakeholders. The implementation of these BIM requirements should be clearly identified when tendering for Consultants or Design and Build Contractors and the timeframes should be factored into the tender documents for proposed frameworks.

Further details on the BIM mandate are available at the following link: https://constructionprocurement.gov.ie/bim/

Table 2.1: Deadlines for Obligatory Implementation of BIM

Project Value	Design Team	Contractor
€100m & above	Jan 2024	Jan 2025
€20m & above	Jan 2025	July 2025
€10m & above	July 2025	Jan 2026
€5m & above	July 2026	Jan 2027
€1m & above	Jan 2027	July 2027
< €1m	July 2027	Jan 2028

2.6 MMC, Green Procurement and Reducing Embodied Carbon

Under the Climate Action and Low Carbon Development (Amendment) Act 2021, Green Procurement and an emphasis on decreasing embodied carbon within construction projects is a national objective.

Construction industry emissions are estimated to account for nearly 10% of the national total of Greenhouse Gas (GHG) emissions. The construction sector has been given the target to reduce industry emissions by 20% by 2025 and 35% by 2030.

MMC is seen as a means to help achieve these targets through the use of low carbon construction materials and through improved manufacturing efficiencies within a controlled factory setting.

Further details can be found at gov - Green Public Procurement Strategy and Action Plan 2024- 2027 (https://www.gov.ie/en/publication/7b1f8-green-public-procurement-strategy-and-action-plan-2024-2027/)

3.0 Procurement Strategy

3.1 Procurement Options Under CWMF Including PW-CF2

The CWMF was first published in 2007 and the PW-CF2 form of contract has been available for Works Contracts since that time. However, the PW-CF2 form of contract has had limited use for construction of social housing. Some of the reasons for this may include the fact that the traditional form of Employer design contracts is a more familiar 'tried and trusted' form and the prospective Employer wants to have a more active role in the eventual outcome of the project than a standard Design and Build contract would normally offer.

This guide is intended to assist Employers in the procurement of housing using the Design and Build contract for Building Works Designed by the Contractor. Whilst this guide is intended to promote the use of MMC, the PW-CF2 form of contract can be used for more traditional construction methods in the delivery of social housing.

3.2 PW-CF2 Form of Contract - Potential Benefits

3.2.1 Reduction in Time

Using the PW-CF2 offers the potential for a reduction in time for the delivery of housing units. However, this depends on the approach of the Sponsoring Agency.

To achieve this reduction, it is recommended that the Employer brings the project through to planning stage in consultation with their design professionals. This removes the risk of Design and Build Contractor programme delays during the planning process and therefore risk of claims.

A reduction in programme can be achieved in the detailed design stages of the process when the successfully appointed Design and Build Contractor has an opportunity to reduce the programme compared to Employer designed contracts in various areas.

For example:

- Enabling works, substructures, and site services works can commence as the prefabricated elements are being manufactured, windows and doors can be pre-ordered based on sizes confirmed on fabrication drawings and wet trades can be significantly reduced.
- The Design and Build Contractor has the facility to use materials, labour and methodologies that will enable them to bring the maximum efficiencies to the project.
- The Design and Build Contractor has full responsibility for programming of detailed design and construction allowing them a greater opportunity to achieve reductions in both areas.

3.2.2 Utilise Contractor's Expertise

The PW-CF2 offers an opportunity to utilise the Design and Build Contractor's expertise in the detailed design stages. The Employer's requirements and performance specification set the criteria regarding quality and standard required, however the PW-CF2 contract encourages innovation by the Design and Build Contractor and their design team and the use of their expertise in overall constructability of the project. These design benefits may be achieved in all aspects of architectural detailing, engineering and building services design.

3.2.3 Potential Reduction in Costs

Whilst there is potential for increased value for money, this should not be a singular deciding factor. It is expected that through the Design and Build Contractor's programming, use of expertise, products and details, the overall construction costs may result in reductions compared with Employer designed contracts. However, the engagement of a design team acting on behalf of the Employer as technical advisors, and also a contractor appointed design team producing detailed design, may result in increased consultancy costs. In order to minimise the design costs it is important that a clearly defined set of Employer's requirements along with a well-defined performance specification are used to reduce overdesign by the technical advisors acting on behalf of the Employer.

3.3 PW-CF2 Form of Contract - Potential Risks

There are risks associated with every building project and every contract entered into. The specific risks associated with the use of this particular contract may include but are not limited to the following:

- Where the Employer's requirements and performance specification are not adequately detailed, Design and Build Contractors are entitled to use products and processes which are unsatisfactory to the Employer and result in Employer changes and subsequent claims. Suggested checklists for both the Employer's requirements and performance specification are included within Appendices 5 & 6.
- Where the procurement documentation produced by the Contracting Authority is not consistent throughout the process, this may give rise to delays or claims being generated at implementation stage.
- Contracting Authorities designing the project to such an extent beyond planning application stage that Design and Build Contractors do not have an opportunity to use their experience and innovation to use alternative products and processes. This can result in the programme and costs increasing due to the restricted scope of the Design and Build Contractor's design team and limitations imposed by overly prescriptive design options. Likewise, there is also the potential risk on larger scale more complex projects where design is underdeveloped which could give rise to ambiguity and in turn contractors' proposals not in line with the Contracting Authorities' design intent or brief for the project.
- If there is reference to named products in the procurement documentation either in Employer's Requirements, Performance Specifications or drawings, the Design and Build Contractor may have grounds for claims.
- In order to encourage innovation from the Design and Build Contractor, Contracting Authorities need to carefully consider their works requirements. This documentation should clearly identify performance requirements, certification and standards which will be deemed acceptable.

The Department of Housing, Local Government and Heritage (DHLGH) has produced the Employer's Requirements on Detail Design of Quality Housing. This document sets out the general quality of materials, finishes and fittings to be provided in a social or affordable housing / apartment development, funded in whole or in part by the DHLGH. It is intended for use by LAs or AHBs to brief design teams and should inform the Project Specific Employer's Requirements and Performance Specification documents for each project.

3.4 Role of the Design Teams

3.4.1 Initial Design Team

As noted above, it is recommended that the Employer brings the project through to planning stage in consultation with their design team. This initial design team may be retained by the Employer after award of the works contract in a technical advisory role for inspection and oversight purposes until issue of the defects certificate. This gives continuity of expertise from initial design through to the completion of the project.

As with Employer designed building contracts, an independent Assigned Certifier is required to be appointed by the Contracting Authority. It is essential that this role is adequately resourced. Refer to Appendix 2 for proposed contractual arrangements.

After the initial design development from planning to tender stage, the role of the technical advisors is to inspect and comment on the Design and Build Contractor's design and construction to ensure it is in line with the Employer's requirements and performance specification.

3.4.2 Novation

The PW-CF2 Form of Contract allows the option of the Employer's design team to be novated over to the Design and Build Contractor, however, in housing projects, if this option was to be pursued the tender and contractual appointment documents for the design team / technical advisors should clearly state that novation will take place. Novation of the Design team may be a consideration on larger scale more complex projects where the design expertise the consultants have gained in working on a project from inception can be transferred to the D&B Contractor to enable a smoother detailed design stage for the contractor.

The Employer should carefully consider whether or not they have the necessary in-house technical and contractual expertise in all disciplines, and adequate resource capacity to allow for the proper oversight and management of the design and build contract. It may also be the case that the Employer's Design Team would not be willing to accept this arrangement, and this may limit interest in providing such a service. Another consideration is that the Design and Build Contractor may have their own specialist designers and such an arrangement would not appeal to them.

The role of Assigned Certifier and QS are not novated and remain direct appointments to the client. This will ensure the project is inspected and valued by professionals independent from the D&B Contractor.

The steps as set out in Appendix 1 suggest a pathway for progressing a project from initial inception to completion of works. It uses PW-CF2 Public Works Contract for Building Works Designed by the Contractor, while promoting the use of MMC by tendering Design and Build Contractors.

3.5 Procurement Procedure Options

The CWMF offers two differing procedures for procurement of both technical services (initial design team) and Design and Build Contractors, the Restricted Procedure and the Open Procedure. While either procedure can be used for Employer and Contractor designed projects, additional considerations regarding the procedures should be given to contractor design projects.

This guidance recommends the use of a Restricted Procedure for the procurement of Design and Build Contractors. However, it is acknowledged that a single-stage Open Procedure may be preferred in some instances.

3.5.1 Open Procurement Procedure/Single Stage

The Open procedure (single stage) asks Tenderers to submit the selection documentation specified in the Suitability Assessment Questionnaires (SAQs) at the same time as the tender documentation as set out in the Instructions to Tenderers. For design team procurement, the volume of documentation required may be limited by the use of declarations and stipulated restrictions on quality criterion responses.

In preparing the SAQs clearly defined minimum standards for contractor qualification should be detailed and these should be in line with the project scale. These should not be overly restrictive on smaller scale projects to encourage small and medium sized enterprise (SME) participation, however on larger scale projects these should be more developed and restrictive in order to ensure that only contractors capable and competent of delivering the works tender for the project.

However, Employers should note that for Design and Build Contractors the volume of documentation and the costs, both financial and in terms of time to prospective tenderers in producing these submissions is considerable. For this reason, prospective tenderers may be unwilling to invest in this process in an open competition where there is the potential for numerous tenderers varying in size and capability.

3.5.2 Restricted Procurement Procedure/Two Stage

The restricted procurement process is divided into two separate stages, the selection process and the award process.

The first stage is the selection process where the Contracting Authority advertises through the appropriate means for expressions of interest. SAQs for the main Design and Build Contractor and their associated design team are issued.

The responses from applicants are evaluated both on a pass/fail and qualitative basis. A shortlist of applicants is selected, and these are then asked to tender for the proposed project at stage two.

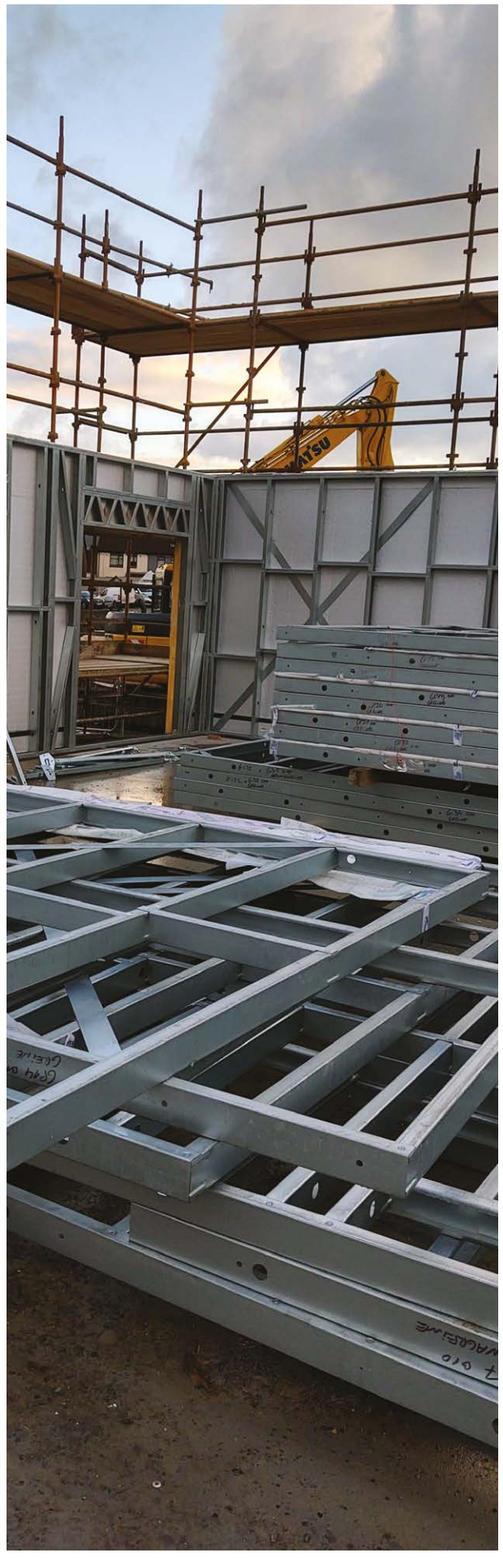
Stage two, the award process, is specific to the proposed project, whereby the tender submissions from the suitably qualified Design and Build Contractors are assessed on a qualitative and most economically advantageous tenderer basis, (both price and technical merit of submission are evaluated).

The shortlisting and selection of a large number of qualifying tenderers may discourage Design and Build Contractors from tendering given the costs involved in preparing a tender submission under a design and build tender competition. The maximum number of tenderers to be shortlisted must be published at the selection stage (stage one). This number should be carefully considered, depending on the size and complexity of the project (between four and eight would ordinarily be considered reasonable).

If using an existing framework, stage one as described above has already been completed and therefore only stage two is required, however framework parameters and rules must be considered and complied with.

3.6 Frameworks

A framework is a mechanism for awarding contracts of a repetitive nature without having to advertise each contract individually. A framework agreement can be established between one or more contracting authorities and one [single-operator] or more [multi-operator] contractors for a set stated duration, generally for no longer than four years (two years with two options to extend for 12 months). The establishment of frameworks for works and services is permitted under procurement law in accordance with the prescribed advertising and procedural rules.



Frameworks deliver administrative savings for contracting authorities and contractors arising from reduced duplication of tendering, securing best value for money, assisting programme delivery by reducing time for tendering mini-competitions, and offer contractors a pipeline of future work.

Frameworks are best established where there is a reasonable expectation of a continued flow of work over a period of time. Frameworks can be established where a number of local authorities or approved housing bodies can use the framework.

Each contracting authority should be identified in the documents establishing the framework.

A lead Contracting Authority should also be identified or nominated to account the total spend and duration of the framework, and also to manage and issue letters with regard to Contractor performance.

Estimated total budget for the likely number of projects to be procured during the course of a framework should be carefully considered, as once the advertised budget has been met during the course of the framework contract, the contractual agreement may be deemed complete and a new framework may need to be procured.

The CWMF suite of contract documents includes PW-CF9 Framework Agreement for Construction Work, which can be used for the establishment of the Framework.

4.0 Considerations In Selecting PW-CF2 Contract - Design & Build For Housing

4.1 Size of Project

For PW-CF2 in a single Design and Build Contract the project value is suggested to be in excess of €5 million, this is in line with CWMF Guidance. However, as there is no specific form of contract available under CWMF for Contractor Design projects below €5 million the PW-CF2 form of Contract should be used for all Design and Build contracts. The potential advantage in the use of Design and Build for a project is not determined by the value of the works but rather the ability to repeatedly use the same layout for multiple units.

Careful consideration must be given to the capacity of a Design and Build Contractor where projects are expected to be below this threshold. In some instances, it may be an option for Contracting Authorities to group a number of smaller scale projects together under a single tender competition to make the works more economically attractive to tenderers. Standardised design of units across multiple sites would also increase the attractiveness to contractors. Design and Build Contractors' capacity to coordinate design, manage programme and risk allocation needs to be evaluated. Normally only larger contractors have the above capacities, so consideration should be given to Department of Housing circulars Circular 10/10 and 10/14 regarding SMEs.

4.2 Nature of Building Type

The adoption of the PW-CF2 form of contract to enable the use of MMC in the provision of housing is most effective with relatively simple house and/or apartment construction projects. Housing proposals that have a high degree of repetition and standardisation are very suitable for MMC where the requirements can be clearly defined regarding sizes, durability, function and maintenance. This allows contractors and manufacturers to maximise efficiencies in terms of production and ease of assembly.

The Employer's Design Team (Technical Advisors) should ensure that there is a high level of repetition and standardisation in the building layouts and that the layout is suitable for multiple different forms of MMC. Further considerations would include simplification of the design and maximising buildability including potential for delivery to site of off-site manufactured components or elements.

Where the Sponsoring Agency requires a high level of input into all levels of the design of a project this form of contract may not be the most suitable.

4.3 Nature of Site

The conditions and location of the site is also an important factor to be considered. For straightforward greenfield or brownfield sites this form of contract can offer the most benefits. Where the site is very constrained, may have archaeology, unidentified existing services, is in an area that requires significant enabling works, or has potential complexities in terms of site development works, then the traditional Employer design contracts may be more suitable in terms of risk, programme, quality, and cost. In such a scenario, Employers could also consider the use of enabling works contracts which could be procured and completed under a traditional arrangement to address site issues or constraints prior to the procurement or award of the Design and Build Contract.

Employers should provide detailed site information such as site investigation reports, archaeological and environmental screening reports, land contamination surveys, topographical surveys, existing services surveys and the like, as part of a robust set of works requirements documents at tender stage to enable the Design and Build Contractors to have a clear understanding of the site and ground conditions likely to be encountered, and cost for this accordingly within the tendered bid. This will also remove the potential for claims for delay or compensation due to unforeseen items or lack of information. It should also be noted that within the Form of Tender and Schedule (FTS-2) Part 1K items nr 19 & 20 with regards to unforeseen items underground are not used within the Design and Build Contract.

5.0 Procurements/Appointments of Employer's Construction Professionals

5.1 Employer's Construction Professionals (Technical Advisors)

5.1.1 Design Team Services

As with traditional building contracts, the Contracting Authority will require construction professionals to act on its behalf for Design and Build Contracts in the form of a Design Team. The Design Team's role includes the initial exemplar design, planning approval, preparation of the tender documentation necessary for procurement of a Design and Build Contractor, assessment and evaluation of tender returns, through to contract award, contract administration, inspection of the building works on site and final completion of the contract. The role of the Employer's construction professionals changes to a technical advisory service following the award of the D&B contract with the D&B contractor assuming design responsiblity for the project.

Depending on the particular circumstances of the Contracting Authority, these consultants can be either in-house or independent. All external professional design consultants who are brought in by the Contracting Authority to provide this service need to be procured in accordance with CWMF, refer to chart in Appendix 2 showing contractual arrangements for an external design team with Design & Build Contractor.

The services provided by construction professionals will differ to the services normally provided for traditional Employer design contracts. These services would be expected to include:

- **Project Manager:**
  A Project Manager should be appointed as soon as possible after the decision is made to pursue this type of contractual arrangement for the delivery of homes. The Project Manager should have a knowledge of MMC and the variety of material options available, together with a knowledge of CWMF and the Design and Build Contract. The Project Manager will be responsible for producing and delivering the programme; coordination of the design team information and tender documentation; ensuring the contractor appointment is progressing and that the design, construction, programme and cost information is being reported to the Contracting Authority on time. The Project Manager may also prepare documentation for the Sponsoring Agency on behalf of the Contracting Authority.

  The Project Manager may be the Contracting Authority's inhouse personnel, a member of the consultancy team or independently appointed, this will depend on the technical capacity and availability of resources within the Contracting Authority and the scale and complexity of the project. A BIM/ Information Coordinator may be provided within the scope of Project Manager or appointed independently depending on the scope of works.

- **Employers Representative (ER):**
  An ER will need to be appointed from the time the contract is awarded to the Design and Build Contractor. The ER may be a member of the original design team retained for the duration of the works contract. However significant experience of administration of works contracts under the CWMF is essential, and it is important that the ER is sufficiently resourced. The role of ER in PW-CF2 works contracts designed by the contractor is a contract administrative role.

  The form of contract sets out in detail the duties and obligations of the role of the ER. The ER may delegate powers to named representatives and may subsequently revoke any delegation following the procedures set out in the contract. The Employer may replace the ER at any time following the procedures set out in the contract.

- **Designers:**
  It is recommended that at a minimum housing projects would be brought through the planning process by the Contracting Authority's designers before tendering to Design & Build Contractors. This facilitates design input from the Employer while eliminating the contractual risks associated with the planning process. The designers will be required to produce the Employer's Requirements, Performance Specification and Works Requirements which allow for options of MMC for the tender process.

  The designers should also be retained by the Contracting Authority for the duration of the works in a technical advisory capacity with a dedicated and clearly identified resource for the review of the contractor's proposals, compliance sample review and inspection of works (both on site and at off-site manufacturing locations), to ensure that the Employer's requirements and performance specification are delivered. The designers / advisors will include: Architect, Civil and Structural Engineers and Building Services Engineers, with Fire Engineering Services and Access Consultants also required for some developments.

5.1.2 Design Teams Responsibilities

It is desirable that both the Employer's Design Team / Technical Advisors and the Design and Build Contractors Design Team have BIM capability as noted within section 2.4. The use of a Common Data Environment should also be provided to facilitate the sharing of information and collaboration throughout the course of the project. The Employer's Design Team / Technical Advisors should set the appropriate standards that will be compatible with industry norms in delivery of MMC.

Architect: Responsible for initial site layout, limited number of unit types, with standardised internal layouts, elevation treatment, external and site development works design and all sufficient information to satisfy the planning process. The Architect will also assist with the compilation of Employer's Requirements and Performance Specification documentation. In the interest of promoting innovation and contractor engagement, designs should allow for ease of adoption of a number of MMC solutions including 2D panelised, 3D 'volumetric', etc.

Engineer, Civil and Structural: Responsible for exemplar design and setting minimum standards in the performance specification for all structural and civil engineering components. Civil Engineer to coordinate the mains water and drainage infrastructure design and also make Uisce Éireann connection applications as necessary to reduce risk of delays to contractor programme.

Engineer, Building Services: Responsible for exemplar mechanical and electrical layouts and performance specification, ensuring that the layouts are compatible for different forms of MMC. Building Services Engineer to coordinate site services design drawings and make remaining services connection enquiries (eg electrical, telecom, etc) and applications as necessary to reduce the risk of delays to the contractor's programme. This scope may also include advising on sustainability and renewable energy installations along with lift performance specification where required.

PSDP: The Project Supervisor Design Process is required to be appointed to coordinate the Health and Safety aspects of the project from an early stage in accordance with the Safety, Health and Welfare at Work (Construction) Regulations 2013. The Contracting Authority will need to make this appointment at the commencement of outline design. There are different approaches to the appointment of PSDP for Contractor Designed projects and Employers are advised to carefully consider this before appointment. The PSDP will be appointed by the Employer at an early stage and with the condition that the PWCF2 form of contract is being used. The appointment of the Employer's PSDP terminates following project award to the D&B Contractor. All selected Design and Build Contractors will be informed of the PSDP at tender stage and the PSDP's Provisional Health and Safety Plan and Design Risk Assessments will form part of the Additional Information in the tendered documents. Each tendering Design and Build Contractor should have a health and safety coordinator appointed who will coordinate the Design and Build Contractor's specific design proposals pre-tender. When the Design and Build contractor is appointed, the Contractor takes on the role and responsibility of PSDP as well as PSCS. Both are subject to separate appointments by the Contracting Authority. The project health and safety file will be transferred to the Design and Build Contractor's PSDP following contractor appointment.

Quantity Surveyor (QS): A QS is required by the Contracting Authority throughout all stages of the project. The QS will be responsible for preparing all cost estimates and reports as required by the Contracting Authority. The QS will prepare tender pricing documents. On straightforward projects this may be an elemental schedule of works. The quantified price submission is then prepared by the Design and Build Contractor as part of their tender submission. On larger more complex projects the Contracting Authority as part of their risk management plan may elect to have their Consultant QS produce a more detailed quantified pricing document to aid tenderers in submitting a bid and reduce the costs involved in tendering.

The QS will have a role in assessing the Pricing Document and the Design and Build Contractor's submissions at award stage. The QS will also have a significant role throughout the construction works with preparation of recommendations for interim payments, valuation and recommendations of compensation events and final account settlement. It should be noted in the tender documentation, prior to acceptance of tender, that the apparently successful tenderer must submit a full breakdown of the pricing document sufficient for the Employer's QS to review and utilise for interim payments and contract administration throughout the project.

Assigned Certifier: The Assigned Certifier must be appointed by the Employer in accordance with the Building Control Amendment Regulations 2021 and as such be independent from the Design and Build Contractor. Design Certifiers and Ancillary Certifiers will be appointed through the Design and Build Contractor and will submit relevant certificates to the Assigned Certifier as required. It is essential that this role is clearly scoped and the extent of inspections (both on and offsite) are outlined within the briefing documents.

The Project Board: The Project Board will generally be required to be established when using the PW-CF2 form of contract. Before tender the Contracting Authority states on the Form of Tender Schedule 1A how many members are on the board from each party. This can vary from one member to three members from each party. Names of members are not disclosed until decision to appoint has been made but are inserted before appointment. There is guidance as to who these members should be in the CWMF GN 3.1.1. (they should be fully independent of the ER).

Standing Conciliator: A Standing Conciliator may also be agreed prior to appointment, this is mandatory for projects in excess of €10 million. The option to appoint a conciliator for each dispute is available for projects below this value. The costs for the Standing Conciliator should be finalised and reserve sum removed from the contract sum and replaced with agreed Standing Conciliator costs prior to appointment, refer to CWMF FTS2. Standing Conciliator to be appointed by joint agreement.

Employer's On-site Agent: Whilst not contractually mandatory, the appointment of an on-site agent is recommended in some capacity with particular regard to larger / more complex schemes. This may be a Clerk of Works, Resident Engineer or other Employer's personnel. This position will not be involved with certifying, approving or instructing works in any way. They will, however, record works as they are being done and observe that the works are being carried out in accordance with the Works Requirements and agreed design. This agent will report to the Employer's Representative, but, should not be a delegated approval role from the ER. The authority and role of any Employer's on site agent will need to be clearly defined and explained to the ER, Contractor, and on site agent. Experience of various forms of MMC should be a minimum requirement for the site agent.

5.2 Procurement Process for Appointment of Consultants (Technical Advisors):

5.2.1 Procurement Options

For the appointment of a full or partial consultancy design team, consideration should be given to various procurement options available to Contracting Authorities depending on the nature of the proposed project, the likelihood of similar projects over a four-year period, and the availability of internal resources to manage design teams. The following options may be considered:

1) An established framework of consultants. This may be used where the contracting authority has permission to use it, and where the proposed project is within the scope of the framework parameters.

   Contracting Authorities may set up frameworks of consultants and include other interested Contracting Authorities as potential users of the framework, this could include other Local Authorities or Approved Housing Bodies for example.

2) An Integrated design team, procured directly by the Contracting Authority or through a framework.

   This option provides for a simplified procurement process for the Contracting Authority. However, it also increases the risk for the tendering consultant as they carry responsibility for performance and cost of all sub-consultants as well as themselves. This approach may be best suited to relatively small and straightforward projects.

   The integrated design team procurement for use in Design and Build contracts may not suit the Contracting Authority as the performance of all disciplines is critical to the successful delivery of the project. The lead consultant may not be providing the services of Project Manager, Quantity Surveyor and Employer's Representative. In this scenario an option available to Contracting Authorities is to procure an integrated team and appoint each member of said team individually under the conditions of engagement. This approach will facilitate design teams who have experience of working together, remove the administrative and insurance burden on the lead consultant and also give the contracting authority a direct contractual arrangement with each appointed consultant. For Guidance refer to CWMF GN 1.1.2 Section 3.1

   Collateral Warranties will be required between the Contracting Authority and all subconsultants.

3) Appoint consultants for each discipline separately either through a framework or directly.

   This approach will require more intense procurement processes at the initial stages of the project, however once appointed the Employer also has a direct contractual agreement with each consultant. This approach allocates the risk of consultant performance with each consultant, as each must report directly to the Employer. This approach allows the Contracting Authority to have greater control over the selection of each consultant.

5.2.2 Procurement Processes

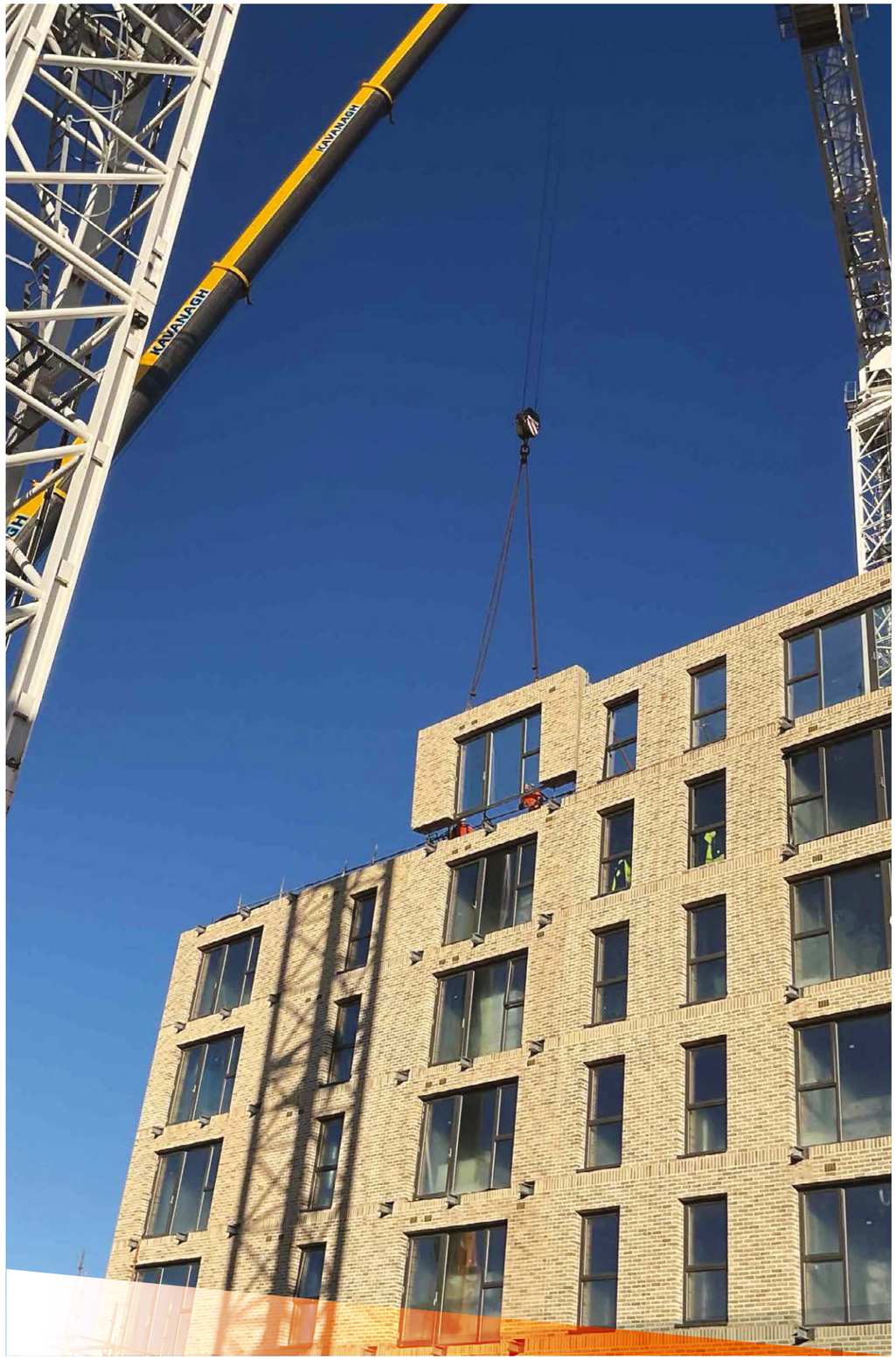
Consideration should be given on the procurement process of consultants. This will depend on complexity of project and scope of service required as above.

Restricted Procedure: for complex projects where assessment of applicant's suitability at selection stage is required. A shortlist of consultants are formed and requested to make submissions during the consultant award process in terms of price and technical merit. This approach is more suitable where large amounts of detail are required at award stage. Reference CWMF GN 1.6.1.

Open Procedure: combines both selection and award process into a single procurement. The Selection Criteria is met through minimum qualifying criterion. The contract is then awarded to the most economically advantageous tender (MEAT). Reference CWMF GN 1.6.2

The Contracting Authority should include a comprehensive detailed project brief and scope of service document in each consultant tender to ensure the various consultants are fully aware of the duties and responsibilities expected of them under a Design and Build contract. These documents should clearly identify pre, during and post construction service requirements, remove ambiguity and help avoid claims for increased fees.

For guidance refer to CWMF GN 1.6 Procurement Process for Consultancy Services (Technical). Refer to Appendix 3 Documents required for Procurement of Design Team. This assumes an open procurement process.



6.0 Procurement and Appointment of Design and Build Contractor

6.1 Tender Stage 1 - Selection Process of Design and Build Contractor

Note: Where the Sponsoring Agency does not have an existing Framework for Design and Build Contractors, the following information will be required for the Stage 1 selection process of a restricted procedure.

1) **Employer's Requirements:**
   Design Brief: This document is project specific. It should be sufficiently detailed to allow the Design and Build Contractor to understand the scope of works which will be required of them. Refer to Appendix 5 for a typical checklist of headings.

2) **Suitability Assessment Questionnaire:**
   The QW1 & QC1 from CWMF should be used to establish the minimum requirement for selecting Contractors and their design team onto a restricted list.

- The QW1 is used as the main Suitability Assessment Criteria for the Design and Build Contractor. If there are any Works Specialists that require minimum Suitability Assessment, then the QW3 can be used for these.
- For Design and Build contracts where the PW-CF2 is proposed then the Designers should also be assessed. The QC1 should be used for the primary Design Service provider. This would normally be the Architectural services. Sub-consultants can be identified on the QC1 for other services required from the Design and Build Contractor for the design. Typically, this may include but is not limited to: Civil & Structural Engineers, Building Services Engineers, Quantity Surveyors, PSDP. Additional QC1 forms may be used for subconsultant design service providers where more specific detail is required regarding this specific service than can be accommodated as a subconsultant within the main QC1.
- The QW1 Supplements 3.4.1 and 3.4.2 should be used for assessment of Health and Safety Competence the Design and Build Contractor and Health and Safety Competence of PSCS.
- The economic and financial minimum requirement will include the insurance requirements. Minimum levels of Professional Indemnity Insurance should be specified for both Design and Build Contractor and each design consultant.
- Previous experience of the Contractor in Design and Build contracts should be included in the technical criterion of the assessment. Refer to CWMF guidance notes 1.6.3.

3) **Marking scheme:**
   It is essential that the Contracting Authority considers and finalises the marking scheme for the selection process before it is advertised. The financial and economic standing of the applicants is marked on a pass/fail only basis and not qualitatively assessed. Ensure guidance is followed regarding levels of turnover, levels of insurances required and the like. This is detailed within the CWMF Guidance Notes 1.6.3 and 2.3.1.

4) **Technical Capability:**
   Technical Capability can be marked qualitatively. Table 23 of the QW1 should be completed regarding the total amount of marks being awarded for each criterion for the Design and Build Contractor, Specialist Services (construction professionals/design team) and Specialist Design and Build Contractor. Ensure that the marks given for Specialist Services and Specialist Works are

transferred to the appropriate QC1 and QW3 Suitability Assessment Form. If the marks given in Table 23 are intended to be further subdivided in marking specific criterion, this subdivision needs to be stated in the detail of that criterion. It should be noted that all criterion requiring applicant submission should be in relation to their current or past Financial, Economic or Technical Capability. This Selection process should not ask for information regarding the proposed or other future projects.

5) **Selection assessment panel:**
The Contracting Authority will need to have a selection panel in place for assessing and marking the applicant submissions. It is recommended that this panel is selected prior to invitations being published and certainly prior to the return of submissions. It would be ideal that the selection assessment panel would have an input into the marking scheme prior to its completion. The selection assessment panel should be made up of no fewer than 3 members and have at least one member independent from the Employer or their agents. The selection panel should keep records of the assessment and its results. The reasoning for particular marking with reference to the required criterion should be recorded for feedback in letters to applicants. The selection panel should ideally include at least one member with appropriate technical expertise in the design and delivery of MMC and Design & Build projects.

6.2 Tender Stage 2 - Award Process for Design and Build Works Contract

Note that only documentation submitted at tender stage can be used for evaluation purposes. Only documentation submitted before the award of contract can be used as a contract document. These are included in the contract documents as Volume D. Documentation required as a Works Proposal after award of contract should be provided in sufficient time before works commence to allow the Employer's Technical Advisors time to assess and comment on the proposals.

Documentation required in Tender Stage 2 - Award Process include the following:

1) **Invitation to Tender:**
Templates for the Invitation to Tender letter and Instructions to Tenderers (ITT-W1a) are both provided on the CWMF website.

2) **Instructions to Tenderer, ITT-W1a:**
Ensure the most recent versions available on the CWMF website are being used for all documentation. The Particulars section should be completed with care, sufficient time should be given to candidates to complete their tender documentation, as this will include project specific qualitative documentation. Interviews are not recommended, however, if this is included by the Contracting Authority care must be taken to ensure all applicants are treated equally and full records are maintained.

In accordance with CWMF the marking scheme and qualitive questions are identified within the particulars section of ITT-W1a. This would include award criteria for both the Design and Build Contractor and their Design Team. Refer to section 5.4 below for further guidance.

Appendix 4 of ITT-W1a should be completed for the appointment of the Health and Safety Coordinator and Appendix 5 to calculate the comparative cost of tenders.

3) **Works Requirements - Volumes A:**
Outline Design documentation: 'Exemplar Design'. All completed design information should form part of the Works Requirements; this would include the planning documentation which may be developed to include any specific Employer requirements. The risk of Employer over-design at this stage has previously been noted.

However, the Employer may wish to add additional information over and above the planning drawings to set parameters for the required project. Examples of additional information might include cross-section drawings, indicative floor levels, minimum floor to ceiling heights, indicative site levels and preliminary services layouts. This listing is indicative only and not intended to be complete.

As previously noted these outline design documents should be designed in accordance with the project scale and complexity and not be over designed or specified and should allow scope for the contractor to innovate and bring their own expertise to the construction process.

Employer's Requirements: Refer to Appendix 5 for a suggested checklist of information to be provided.

Detailed Performance Specification: This document should give performance detail of every aspect of the project. Material specification should only be included where the Contracting Authority specifically requires a particular finish within the Employer's Requirements document. Performance specification may include, durability, energy rating, life duration, end of life disposal and replacement, heat and sound insulation, etc., or any other specific aspect beyond current European Union harmonised technical specifications 'EN' and Building Regulation requirements. The Employer is not permitted to specify named products, or to so narrowly define the specification that only one product may be used. Refer to Appendix 6 Performance Specification outline checklist.

Preliminaries: A preliminaries section of Works Requirements is also required. This will be as per the Pricing Documents Preliminaries but without the pricing element. Some of these elements may also be included in the Performance Specification.

4) **Form of Tender and Schedule FTS2 - Volume B:**
The Schedule Part 1 B should be completed by the Employer before tender documents are issued.

Schedule Part 1 B require schedules of documents to be included in the Works Requirements. These include Pricing Documents, Works Proposals and items that will be novated to the Design and Build Contractor.

In the PW-CF2 form of contract Works Proposals including employers requirements and performance specification are of utmost importance.

The Form of Tender and Schedule also includes two appendices to the Price Variation clause which are appropriately filled in by the client. In a traditional Employer designed contract the Employer may invite tenderers to comment on the Employer's nominal percentages and weightings, in accordance with the Instructions to Tenderers. Any revisions to the nominal percentages and weightings that the Employer wishes to make should be circulated not later than the time stated in the Particulars under the relevant section of the Instructions to Tenderers. For D&B Contracts (ie PW-CF2), Employers may consider whether,

a) to specify the nominal percentages and weightings for all Tenderers to use; or

b) to permit Tenderers to specify in their tender nominal proportions and weightings related to their design.

Please refer to Guidance Note 1.5.2 within the CWMF for further details.

5) The Works Proposals should consist of a complete schedule of all documentation that is expected from the Design and Build Contractor. The schedule should specify when the documentation is to be submitted for example, as part of the tender documentation for assessment, as part of tender documentation for review, as part of submissions before award of contract or as part of submissions after award of contract with a duration for submission attached.

The Works Proposals should include:

a) Schedule of all drawings and specifications to be produced by the Design and Build Contractor.

b) Contractor's Programme which clearly details the contractor's detail design period, client review and approval process, suppliers' manufacturing leads, production of 'Compliance Sample', Gateway Sign-Off (Refer to Appendix 7), and on site construction works.

c) Proposed Contractor Design Team for this project, the structure and the lines of communication.

d) Bills of Quantities / Pricing Documents.

e) Required certification / reports / documentation in support of the contractor's design proposals.

f) Contractor's technical submittals on materials proposed including clearly identified items which do not comply or deviate from the Employer's performance specification. Such items are to be presented in such a manner that comparisons with the performance specification are provided to enable a balanced assessment of the submission to be made.

g) Cashflow projections sufficiently detailed to allow for Employer assessment and budgetary management.

6) Schedule Part1 F(i)

Collateral Warranties, should include a listing of all Design and Build Contractor's design professionals. Collateral Warranties should also be considered for offsite fabricators of MMC; insurances on the storage and transport of offsite materials should also be considered, along with advance payments bonds and vesting certificates for materials fabricated off site which the Employer may consider paying for prior to incorporation into the works.

7) Schedule Part 1 G

Dates for Substantial Completion, Sections, Liquidated Damages, Retention; if programme is one of the evaluation criteria for the award of contract the 'Date for Substantial Completion' should not be completed here by the Contracting Authority. Rates for liquidated damages should be proportionate to potential costs or losses to the Employer.

8) Pricing Documents - Volume C:

Prepared by the Contracting Authority's QS. This document, as previously noted, may be in the form of Bills of Quantities or a schedule of works with summary costs for the dwellings and associated site works.

This document will also include a detailed preliminaries section which takes into consideration the Employer's requirements and a section in which professional fees for the contractor's design team can be submitted. The Pricing Document should be sufficiently detailed to allow the pricing be assessed in terms of being balanced, and not abnormally low.

The percentage of fees to be paid at the various stages of the project can also be included. Employer should consider how the Design Team is to be paid. Design fees may be paid on a pro-rata basis as a percentage of the works completed. However, since the majority of the design works should be completed at the early stages of the works, it may be more appropriate to specify in the pricing documents what maximum percentage will be paid at each stage.

Where a schedule of works has been issued as part of the tender documents a more detailed quantified Contractor's Pricing Document should be provided by the apparently successful contractor for review prior to issue of letter of intent as the tendered schedule of works will not be sufficient for a Contracting Authority's QS to assess interim claims for payment.

9) Additional Information

Specific site information may be included as Additional Information where this has not been prepared for the purpose of the project eg. utility layouts, site surveys, site investigation reports, preliminary traffic management plans, ecological screening reports, preliminary health and safety plan, design risk assessments etc. Model form documentation intended for use i.e. collateral warranty (MF1.12)/ vesting certs (MF1.14) / copy of the contract (PWCF2) etc. should be included in this Additional Information.

6.3 Tender Period for Design and Build Contractor

The normal rules of tender apply in respect of design and build contracts, but it would be prudent to give sufficient time so that the applicants can properly and fully prepare a competitive tender for the works. The time allowed will depend on the size and scope of project and the quality and detail of the tender documentation issued including the pricing documentation and the detail of the required response in terms of design proposals and qualitative criteria. If detailed design documents are required specific to the project, then additional time should be given for this preparation.

When using eTenders for notice and documentation and where no Prior Identification Notice is given for a Restricted Procedure, a minimum of 37 days should be allowed for the Selection process and thereafter for Award process a minimum of 40 days for the shortlisted tenderers, all assuming that Official Journal of EU will be used. Notwithstanding these minimum periods, Contracting Authorities are advised to take cognisance of the amount of time needed by contractors to review the tender documents fully and to submit a competitive tender for the works. Insufficient tender periods could have the effect of discouraging tenderers from submitting a bid or lead to uncompetitive bids due to time constraints.

6.4 Procurement Documentation - Considerations

Risk allocation

The general principle of risk allocation is that risk should be allocated to the party best placed to manage that risk. Risks should not be transferred in order to reduce workload or with the intention to reduce possibility of claims. The key principles behind using the PW-CF2 form of contract, in achieving value for money and reducing programme should be considered when allocating risk.

While Schedule 1K details the allocation of risk regarding delay events, and compensation events, there are only two options for the Employer to change risk regarding compensation events and no option regarding delay events. In both options Schedule 1K18 and 1K21 the events relate to underground archaeology and utilities that are unforeseeable. If these risks are at all 'foreseeable' the Employer cannot transfer these risks. Contracting Authorities are advised to review the risks as allocated in Schedule 1K with a view of ensuring that they reduce these risks insofar as possible for the project.

Programme

When using PW-CF2 form of contract for Design and Build Contractors in housing, project programme should be considered as a qualitative criterion as opposed to prescriptive. If programme is qualitative then marks will be allocated to the best programme. This should not necessarily be on the shortest programme, but the most comprehensive and demonstratively achievable programme.

The Design and Build Contractor's Programme should show design and review, off-site manufacture and construction processes. It should also allow for production of 'Compliance Sample' and Gateway Sign-Off (Refer to Appendix 7). The programme can also consider non-BCAR works which can start at contract award stage in conjunction with the contractor's design stage. These, for example, can include site set-up, demolition and site clearance. Allocation of marks for programme detail and duration must be objective and explained in the I TT-W1a whereby the best programme receives the most marks.

The successful Design and Build Contractor should be made aware before entering the contract that the Employer is obligated under the contract to deduct liquidated damages should they become due. Programme Contingency should be administered in accordance with Clause 9.4 of PW-CF2 conditions.

The completion FTS Schedule 1K 'first and second threshold, of site working days for delay caused by Compensation Events should be carefully considered. These thresholds should not be excessive and should be in line with the project scale. These contingency thresholds should also be shown on the tenderer's programme submission.

MEAT

The MEAT (Most Economically Advantageous Tenderer) evaluation process is used for award of contracts using the PW-CF2 form of contract, with the addition of the tendering contractors submitting responses to Technical Merit criterion. The programme can be assessed as both MEAT and Technical Merit. When evaluating the programme as part of a MEAT assessment, the benefits accruing from the early delivery of the completed project will be included as part of the MEAT calculation. A worked example of the mechanism that could be used to calculate the MEAT score for Programme is set out in the document 'Employer's Requirements for Detail Design of Quality Housing' - 'Appendix 4'. Link below in Appendix 8, Guidance Documents, Regulations and Standards for reference.

Indicative Award Criteria Breakdown:

- Price
- Programme
- Design / Innovation / Quality
- Methodology / Proposed MMC / Certification
- Design Team.

Marking scheme

The marking scheme should be set out in the ITT-W1a Particulars. Technical Merit criteria should be carefully considered. Clearly defined objective criteria should be used here together with the means of evaluation clearly described. To promote MMC, programme and innovation should attract the highest marks. Innovation can include areas of design, manufacturing and construction. Other technical merit criteria may include;

- Architectural proposals and details,
- Structural civil engineering proposals,
- Building services proposals,
- Health and Safety proposals,
- Detailed designs, or calculations may also be requested.

These submissions become part of the contract documents and are binding on the Design and Build Contractor. As referred to above the marking formula for qualitative assessments may be extracted from the services ITTW1a as required. Additional marks should not be given for named products which may be perceived to be superior to other named products which meet the specification of the works requirements.

Award assessment panel:

The award assessment panel members should be carefully selected and may be the same people as the selection assessment panel. The panel should have input into the Criteria being set and should have a competence to assess and mark the submissions. Ideally, members of the panel will have experience in procurement, contract administration, MMC and design. Records of marks and reasons for marking with references to specific criterion should be maintained as these will be used in letters to nonsuccessful tenderers.

6.5 Before Entering Into Contract

It is recommended that a formal minuted meeting is held with the apparently successful Design and Build Contractor in advance of entering into a contract. Items to note:

- The purpose of this meeting is to confirm the common understanding of both parties and to clarify any outstanding issues.
- The pre-contract meeting is not to be used for renegotiation of the tender.
- It is important to note that any proposal in relation to product or material suggested by the apparently successful Design and Build Contractor at the pre-contract meeting may not be subsequently enforced in the event that at construction stage the Design and Build Contractor proposes an alternative which meets the requirements of the issued works documentation.
- Programme and implications of delay and application of liquidated damages should be stated. The programme should clearly define the contractor's design and construction stages of the works separately. The design stage should allow sufficient time for the contractor's design team to produce construction stage drawings and for the Employer's Technical Advisors to review and approve the proposals. Once the contractor's design proposals have been approved it will enable a BCAR commencement notice to be lodged for the project and works can then proceed to site in accordance with statutory timeframes. Non BCAR elements of the works such as site set-up, demolition, site clearance etc which could commence at contract award stage and be ongoing during the contractor's design phase should also be considered in order to streamline the works and achieve programme gains.

The Letter of Acceptance, which forms the contract should not be issued until the following are complete:

- Letters to all tenderers should be issued in accordance with CWMF MF 1.2 with the required standstill period prior to issuing of Letter of Acceptance.
- All insurances must be in place.
- Funding available: The Contracting Authority should not under any circumstances award a contract through issuance of a Letter of Acceptance until it has written approval from the Funding Authority to award the contract with assurance that funds will be made available to complete the project.
- The performance bond has been received in the required format from an approved surety. Reference CWMF MF 1.6 Performance Bond.
- A completed detailed pricing document has been provided.
- Form of Tender and Schedule Part 3 has been duly completed with the project board named, a conciliator agreed and named specialists also confirmed.

The Contracting Authority / Employer must allocate resources to do the following:

- The issue of a letter of acceptance with supporting documentation, this defines the date on which a contract is formed.
- Availability to review / approve design change proposals: The Contracting Authority should retain their design team professionals in a Technical Advisory role to assess and advise on possible changes proposed by the Design and Build Contractor. The Design and Build Contractor has a right to propose alternatives and value engineering solutions provided the quality or performance meets that required in the Performance Specification. The Employer has an obligation to assess these proposals objectively and approve or otherwise, which is communicated through the Employer's Representative.
- The Contracting Authority must appoint an Employer's Representative to administer the contract. However, in the FTS2 the Contracting Authority should have a named person who has authority to approve changes or additional funding should it be required where it is outside the limit of the ER's authority as set out in the FTS2 document.
- Ability to accept completed project at Substantial Completion stage: On completion of the project the Contracting Authority should have made provision to take possession of the completed works, this will include the insurance and maintenance of the works. Where early or phased completion is a selected option available to the Design and Build Contractor in the FTS2, the Contracting Authority should be able to accept any such early completion or part thereof.

It is advisable in housing projects that the houses are occupied as soon as practicable after substantial completion is reached. Contract documents should reflect this where it is an option and provision should be made in the Design and Build Contractor's construction programme which should clearly detail the site development works and services needed in order to achieve this.

6.6 Contract Management

The management of the design and construction stages need to be adequately resourced. The Employer's Representative role in administering the PW-CF2 contract in accordance with the conditions is critical, and the Employer, technical advisors and site agent must all ensure that communications are correctly channelled through the ER. Similarly the Design and Build Contractor's engagement with the Employer's Technical Advisors with regard to compliance and approvals etc, should be through the ER.

The process during the design stage of the works is set out in Appendix 1 and in more detail in Appendix 7.

The Employer and technical advisors must ensure they can assess and respond to contractor's proposals in a timely manner as set out within the Preliminaries. All approvals or requests for information must be clearly communicated. Clear Gateway stage approval and sign-off is critical. Interim payments at these early stages must be in accordance with the pricing documents.

During construction stage the contractor will continue to produce detailed design proposals for the Employer's Technical Advisory team to assess. Regular inspections will be required on site to ensure the Works Requirements and the works as demonstrated on the accepted compliance sample are being delivered on site. Regular site meetings must be held and recorded by the Employer's Representative.

The Programme should be monitored by the Employer's Representative on a regular basis and any deviation on the programme highlighted to both contractor and Employer, noting the effects of liquidated damages from an early stage where appropriate.

Payment certificates must be issued in accordance with the contract, and care should be taken that advance payment bonds and vesting certificates are in place as appropriate for payment for any goods or materials off-site or on-site prior to inclusion in the works. Payment for such unfixed materials is covered under clause 11.2 of PWCF2. It should also be noted that the payment for such items is at the Employer's Representative's discretion. As previously noted advance payment bonds and vesting certificates should be executed prior to payment for any material stored off site. Insurance for materials in transit should also be in place and reviewed accordingly.

Regular cost reports should also be prepared for the Employer highlighting any potential claims or risks of dispute. The Employer is obliged under the contract to pay for work certified by the Employer's Representative.

The Employer must ensure that technical advisors and site agent are adequately resourced to properly carry out and report on on-site and off-site inspections to ensure the quality of the housing delivery at all stages.

The duties of the Assigned Certifier must be fulfilled in submission of documents for Building Control prior to commencement notice and in collating documentation to enable Building Control approval upon completion. Inspections should be ongoing throughout the course of the project.

6.7 Defects Period and Handover

Upon reaching Substantial Completion the contractor is entitled to be issued with a Certificate of Substantial Completion. After the Defects Period as defined in the Schedule 1 of the Form of Tender, the Defects Certificate will be issued.

Prior to Substantial Completion the Contractor should submit the following in the required format:

- Health and Safety File, including operation and maintenance manuals and all "as constructed" drawings.
- BIM model for the completed scheme where applicable.
- All documentation required by the Assigned Certifier to complete the requirement of Building Control.
- Within the period of time stated, submit a Final Statement.
- All other documents required by the Employer in the preliminaries which may include operation and maintenance manuals and simple user guides for residents.

Prior to Defects Certificate the Contractor should submit the following in the required format:

- Confirmation that all defects have been completed as identified in the Employer's Defects Register.
- Any servicing or maintenance items as required within the contract documents.
- All adjustments to the Health and Safety File.

The Employer should maintain all project files and archive.

Appendix

Appendix 1 - Project Process Pathway using Design & Build Contractor

STEP 1 — Desktop Study

- Analysis of Housing need, Sustainablity of community, Distance to amenities, Availablity of Utilities, Archaeology, Flood Risk, Land Zoning, Land Title, Potential Development Density, Road/Site Access, Site Abnormalities etc.

STEP 2 — Initial Design

- Initial Site Layout; Clear Boundary Demarcation; Road Safety Audit/Speed Survey
- Site Investigations, Topographical Surveys, Archaeological Investigations, Ecological Screening Reports, Demolition (Asbestos) Survey, Existing Services, Utility Connections, etc.

STEP 3 — Pre-Planning

- Pre-Stage 1 Consultation with Architectural and Cost Advisor
- Develop Preliminary Concept & Scheme design for Stage 1 Application. Design to give consideration to suitability for adoption of MMC at the earliest stage of design development
- Develop initial planning drawings and begin local consultation process

STEP 4 — Stage 1 Approval

- Prepare and Submit Stage 1 Application (where approval in principle has not already been awarded) based on Preliminary Design and Investigative Reports
- Procure Design Team (DT) to bring design through Planning and to Appointment of D&B Contractor. DT retained as advisor to Employer and to monitor D&B contractor to completion of project

STEP 5 — Stage 2/Planning

- DT Develop Standardised Design suitable for adoption of MMC for Submission to Planning Authority
- Submit Stage 2 Application based on Developed Design and Associated Costs
- Submit Planning Application
- Prepare Planning Report and Responses
- Approval of Planning

STEP 6 — Tender Pack & Assessment of D&B Contractor

- DT Prepare tender documentation including employer's requirements and performance specification. (Note: process can run concurrently with planning period to streamline programme)
- Members of DT advise Employer with Tender Process and Assessment of D&B Contractor (scope included when procuring service of DT member)
- Modern Methods of Construction (MMC) Encouraged to Reduce Programme Delivery
- Issue notice of Intention to Tender D&B Contract
- Tender Report & Recommendation of Appointment

STEP 7 — Stage 4 Approval

- Submit Stage 4 Application based on the Tender of Preferred Tenderer
- Issue Letter of Intention to Successful Tenderer and letters to Unsuccessful Tenderers
- Letter of Acceptance on receiving Stage 4 approval
- Employer appoints 'Employer's Representative' (ER) and 'Assigned Certifier' directly and independent of the D&B Contractor

STEP 8 — D&B Design Development

- D&B Contractor to Develop Design In-line with Planning Requirements and Employer's Performance Specification and Requirements
- Employer's DT Monitor and Advise Employer as Design is developed
- Employer's DT Advise and Sign-Off on Contractors Design Proposals
- D & B Contractor to produce compliance sample, Employer's DT to review and confirm satisfaction to enable works to proceed to construction stage (also known as "Gateway Sign-Off")

STEP 9 — Design & Build

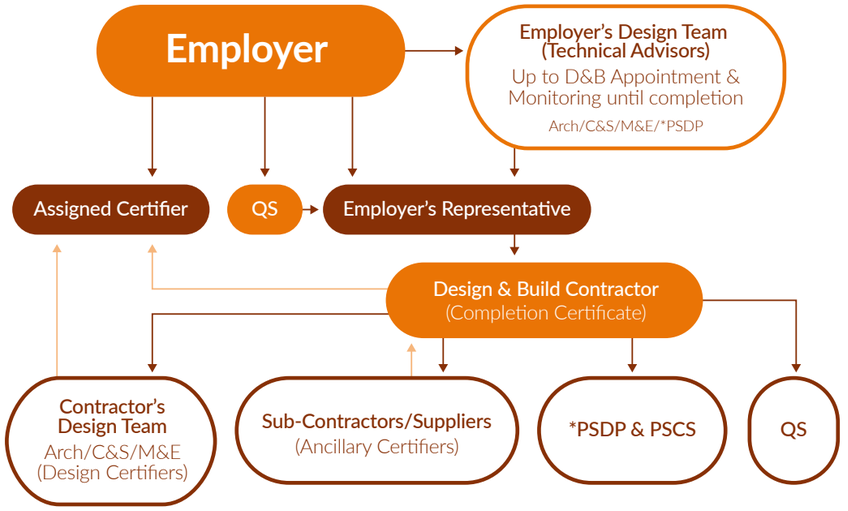
- D&B Contractor engages MMC Specialist Contractors
- Commence Construction works (enabling works, ground works, siteworks, substructures),
- D&B Contracts enables the Contractor to commence works while aspects of the design work is progressed by the DT
- Construction works including MMC proposed and approved by Employer's DT ongoing to completion
- D&B Contractor to submit all design and ancillary certificates to independent 'Assigned Certifier'
- Independent 'Employer's Representative' to administer the construction phase of the project in accordance with the CWMF

STEP 10 — Completion

- Completion and handover on issue of 'Substantial Completion Certificate' by ER
- D&B Contractor to handover completed Safety file
- Design and ancillary certificates issued to 'Assigned Certifier'
- Final certification of the works issued by ER at end of defects period and when defects addressed to satisfaction

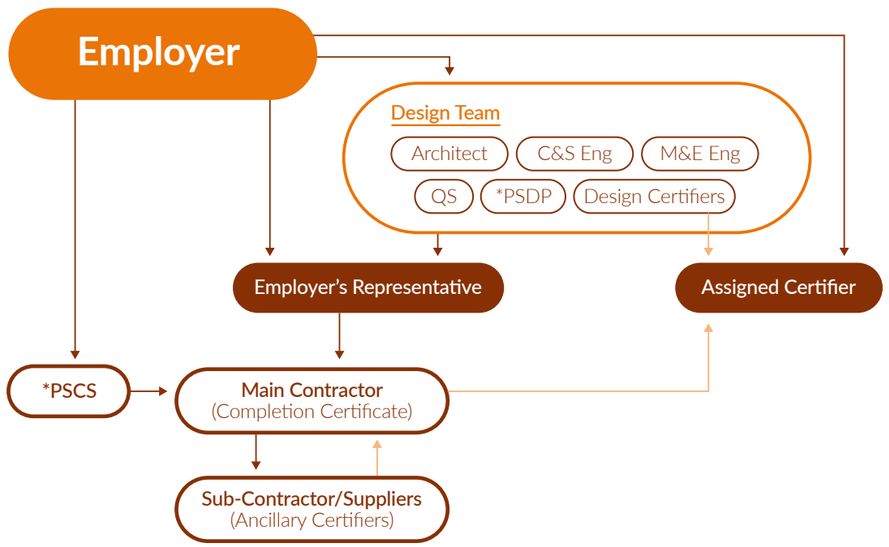
Appendix 2 - Design and Build v Typical Employer Designed Contractual Arrangement

Design & Build Contractual Arrangement



*The PSDP and PSCS are appointed by Employer

Typical Employer Designed Contractual Arrangement



*The PSDP and PSCS are appointed by Employer

Appendix 3 - Documents for Procurement of Design Team (Stage 1, 2, and onward monitoring to Completion of D&B Contract on behalf of Employer) Assuming Open Procedure

Selection and Award process

1. **Invitation to Tender.**

2. **ITTS Instruction to Tenderers - (latest version for Appointment of Consultants).**

3. **Suitability Assessment Questionnaires (required unless using a framework).**
   - QC2 - Part 1 & 2 for Design Consultants.
   - QC Appendices.

4. **FTS9 Tender & Schedule - (latest version when using 'Standard Conditions of Engagement for Consultancy Services (Technical)).**

5. **Project Brief and Description of Service.**
   - Contracting Authority name and status, general information.
   - Description of proposed project- number of units, accommodation requirements, other - known requirements.
   - Location of site, overall size, brief description of topography, boundaries, special features etc. Maps can be appended.
   - Description of Service required of Consultant, through the 5 stages of the project (Stage 1 - Preliminary; Stage 2 - Planning & Design; Stage 3 - Tender; Stage 4 - Construction; Stage 5 - Defects.
   - Timeline to Planning (Stage 2), and timeline for onward advisory/support service to Employer through stages 3, 4 and 5 of the Design & Build Contract.
   - Details of the intention to procure D&B Contractor (PW-CF2) and using Modern Methods of Construction (MMC).

6. **Pricing Schedule - Consultant Requirements through Stage 1 - 5 for fee breakdown.**

7. **Health and Safety Compliance.**
   - Health & Safety Compliance Declaration by General Service Providers (MF-2.4).
   - Health & Safety Compliance Declaration by PSDP/HSC (MF-2.5).

8. **Additional Information: Reference documents, information on the site or proposal.**
   - Documentation for appointing Design Team consultants.
   - Letter of Intent & Acceptance - MF 2.2 (latest version).
   - Form of Tender and Schedules (Signed) - FTS9 (latest version).
   - Conditions of Engagement for Consultancy Services Technical COE1 (latest version).
   - Pricing Schedule - Consultant Fee Breakdown Stage 1 - 5.
   - Instructions to Tenderers - (As issued at Tender Stage).
   - Project Brief and Description of Services - as per document at selection stage.
   - Collateral warranties from sub-consultants.

Appendix 4 - Documents for Procurement of Design & Build Contractor (Assuming Restricted Process)

Stage 1 Invitation for Expressions of Interest - Selection Process

1. **Invitation to Tender (not standard letter, inviting candidates to apply to be shortlisted).**

2. **Suitability Assessment Questionnaires.**
   - QW1 - Works Contractor Suitability Assessment Questionnaire.
   - To Include QW1 Supplements 3.4.1 and 3.4.2.
   - QW3 - Contractor's Specialists SAQ - if required.
   - QC1 - Contractor's lead design consultants SAQ.
   - QC1 - Contractor's additional design consultants SAQ.

3. **Project Brief Checklist.**
   - Contracting Authority name and status, general information.
   - Description of proposed project: number of units, accommodation requirements, other known requirements.
   - Site: Location, overall size, brief description of topography, boundaries, special features etc. Maps can be appended.
   - Works Requirements - All information available at time of tender.
   - Contractual information - Design & Build Contract (PW-CF2).
   - Project Management - Contract Monitoring.
   - Timeline (proposed) for delivery of works, with disclaimer regarding funding availability and Contracting Authority right to cancel or prolong process.

4. **Preliminary Health and Safety plan by Employer PSDP.**

Stage 2 - Tender Stage - Award Process (tender from Restricted List)

1. **Invitation to Tender - ITTW1a (latest version).**

2. **Instruction to Tenderers - ITTW1a (latest version).**
   a) Particulars.
   b) Quality criteria details.
   c) MEAT evaluation details.

3. **Supplemental details of Quality Criteria and Marking Process (may be added to assist tenderers).**

4. **Works Requirements - Volume A.**
   a) Up-to-Date Project Information - Planning Drawings and Reports, Surveys/Investigation Reports, etc.
   b) Project Brief - Employers's Works Requirements, Detailed Performance Specification, Exemplar Document.
   c) Preliminaries.

5. **Form of Tender & Schedule - FTS2 - Volume B.**

6. **Pricing Schedule - Volume C.**
   - Preliminaries including cost of providing compliance samples.
   - Pricing Document - Schedule.
   - Design Fee Breakdown.
   - General Summary.

7. **Additional Information:** Model Forms, Planning application documents together with approvals and conditions / restrictions; other information not generated for this process, but which may assist in assessment of works.

Documentation for Award of Contract to Design and Build Contractor

- Letter of Acceptance - MF 1.4.
- PW-CF2 Public Works Contract Designed by the Contractor.
- Works Requirements as per above issued - (Volume A).
- Collateral Warranties from Contractors Design team and specialist suppliers
- Form of Tender and Schedules (Signed) - FTS2 (Volume B).
- Pricing Schedule as per above issued - (Volume C).
- Works Proposals - Contractor's tendered works proposals (Volume D).

Appendix 5 - Employer's Requirements Checklist

Section	Description
Outline of the project	Introduction, Nature of the works, Accommodation brief to include the total number of and type of units required, General Description of the works to include the Standards, Regulations and Guidelines which require compliance (as suggested in Appendix 8).
	Site Details - Location, Ecological, Archaeological, Conservation, Topography, Site Investigation works, existing services, arrangements for viewing and any site working restrictions.
Scope of Work	Details on what is to be constructed, the Proposed Contract, Bonds and Insurance requirements, Collateral Warranties, Certification of Products (CE, NASI, DoP's), Building Energy rating required, Compliance Samples (if required) and Client sign-off.
	Project Information - Details on drawings and surveys already prepared, planning information. Proposed timeframe for the works including Programme requirements expected from the tenderer detailing the expected timeframes for design, review, compliance sample provision if required, client sign-off and the construction phase. Emphasis on fast-track project delivery.
Design Team requirements	Details on the information the tenderer is expected to provide and when, taking into consideration design phases and timeframes including client review and sign-off. This could include. Design & Construction drawings, details and specifications from the - Architect - Civil / Structural Engineer - Services Engineer - Fire & DAC Consultant - BER Consultant Other information to be provided could include. The priced BoQ / Schedule of Works.
	H & S Legislation requirements including the role of the PSDP and PSCS, Risk Assessments, Health & Safety Plans, Temporary Works Design if required.
Design & Construction	Expected number and type of units including storey height, site layout, minimum design requirements with regards open spaces, amenity areas, dwelling critical dimensions, Reference to the design standards requiring compliance (as suggested in Appendix 8).
	Expected lifespan of the development including the various elements of the building fabric, Building Regulation Compliance.
	Materials, Finishes and Fittings guidance on preferred finishes and materials for items such as roof finishes, windows and external doors, flooring, internal doors and screens, internal wall performance, stairs, fittings and fixtures and storage provision. (Performance Specification Checklist included in Appendix 6)
	Certification required, DAC, Fire Safety, BC(a)R, Air tightness, Acoustic performance, Sustainability and Energy performance including U values.
Building Services	Mechanical standards and regulations to be complied with, location of meters, service runs, access provision, ducting and casing requirements, water storage, isolation and cut-off valve requirements. Preferred heating option, type and finish of radiators where required, heat pump lifespan, minimum warranty, performance, location, and servicing arrangements.
	Electrical standards and regulations to be complied with, the desired fire detection system, internal and external lighting requirements including switching arrangements, location of consumer panel and meter cabinet, expected number of power and data points per room including desired location, renewable installations desired, provision for future lifetime homes installations where required.
	Communication Services - Desired broadband requirements, infrastructure and ducting required within the building and externally to facilitate the technology expected to be used in the dwelling. Provisions required to future lifetime homes installations where required.
Site Development & External Works	Taking in charge requirements, road and paths design and construction standards to be met, site levels taking into consideration gradients, Building Regulation compliance, parking and footpath requirements, existing utilities and services, connection applications and charges, stormwater attenuation and SUDS, external landscaping, site boundary treatments, amenity spaces, waste management provision, renewable installations if required, such as car charging ports.
Handover and Commissioning	Testing and Commissioning regimes and certification required to safely handover the dwellings, the handover file and what is to be included therein, BC(a)R sign-off and certification. Details on spare parts to be provided if required.

Appendix 6 - Performance Specification checklist

Section	Item	Description
A	Preliminaries / General Conditions	Project Particulars. Management of the Works. Contractor's general cost items. Temporary Works. Site Security. Plant and Machinery. Work by Statutory Authorities. Provisional Works (may be issued as a separate document).
B	MMC Specification	Performance requirements with respect to lifespan, thermal and acoustic performance, air tightness, structural performance and BER. Compliance sample provision for review and sign-off. Requirements in respect of fabrication and erection on site.
C	Demolition / Alteration	Demolishing Structures. Shoring. Alteration Works.
D	Ground Works	Ground Investigation Works. Site Clearance. Excavation and Filling. Piling.
E	Concrete work	In-Situ Concrete. Formwork. Joints and Sundries. Reinforcement. Worked Finishes. Precast Concrete. Large Precast Concrete Units.
F	Masonry	Brickwork & Blockwork. Ancillaries / Sundries to Brick/Blockwork. Stonework. Cills / Lintels / Copings.
G	Structural / Carcassing Metal / Timber	Structural Steel Framing. Structural Aluminium framing. Isolated Structural Members. Carpentry / Timber Framing / First Fixing. Metal Profiled Sheet Decking. Prefabricated Timber Unit Decking.

Section	Item	Description
H	Cladding / Covering	Curtain Walling / Patent Glazing. Rigid Sheet Cladding. Fibre Cement Profiled Sheet Cladding / Covering. Metal Profiled / Flat Sheet Cladding / Covering. Plastic Profiled Sheet Cladding / Covering. Natural Stone Cladding / Covering. Concrete Roof Tiling. Fibre Cement Slating. Lead Sheet Coverings / Flashings. Zinc Sheet Coverings / Flashings.
J	Waterproofing	Mastic Asphalt Tanking / Damp Proof Membranes. Flexible Sheet Tanking / Damp Proof Membranes. Gas Retardant Membranes. Built Up Felt Roof Coverings. Single Layer Plastic Roof Coverings. Proprietary Roof Decking.
K	Lining / Sheathing / Dry Partitioning	Plasterboard Dry Linings / Sheeting / Linings. Rigid Sheet Flooring / Decking / Linings / Casings. Timber Board Flooring / Linings / Casings. Demountable Partitions. Plasterboard Fixed Partitions / Inner Walls / Linings. Framed Panel Cubicle Partitions. Suspended Ceilings.
L	Windows / Doors / Stairs	Windows / Rooflights / Screens / Louvres. Doors / Shutters / Hatches. Stairs / Walkways /Balustrades. General Glazing.
M	Surface Finishes	Sand / Cement Screeds / Flooring. Trowelled Latex Levelling Screeds. Plastered / Rendered / Roughcast Coatings. Metal Mesh Lathing / Reinforcement for Plastered Coatings. Insulation with Rendered Finish. Sprayed Mineral Fibre Coatings. Stone / Concrete / Quarry / Ceramic Tiling. Wood Block / Composition Block Flooring. Rubber / Plastic / Linoleum / Carpet Flooring. Painting and Finishing.
N	Furniture	General Fixings / Furnishings / Equipment. Domestic Kitchen Fittings. Sanitary Appliances / Equipment. Signs / Notices.

Section	Item	Description
P	Building Fabric Sundries	Sundry Insulation. Foamed / Fibre / Bead Cavity Wall Insulation. Fire Stopping Systems. Unframed Isolated Trims / Skirtings / Sundry Items. Ironmongery. Builders work in connection with services / Trenching / Ducting / Attendances.
Q	Paving / Planting / Fencing / Site Furniture	Stone / Concrete / Brick Kerbs, Edgings, and Channels. Hardcore / Crushed Rock Bases / Sub-Bases to Roads and Paths. In-Situ Concrete Roads and Paths. Coated Macadam / Asphalt Roads and Paths. Interlocking Brick / Block Roads and Paths. Slab / Sett / Cobble Pavings. Special Surfaces / Pavings for Sport. Landscaping / Seeding / Turfing / Planting. Fencing, Railings, Gates, Bin Storage. Site / Street Furniture / Equipment.
R	Disposal Systems	Rainwater Pipework / Gutters. Above Ground Drainage Systems. Below Ground Drainage Systems. Sewage Treatment / Pumping / Maceration Systems.
S	Mechanical Installations (spec prepared by Building Services Engineer)	Piped Water Supplies. Fire Protection Systems. Ventilation / Air Conditioning Installations. Heating Installations. Renewable Energy Installations. Plant And Equipment. Insulation.
V	Electrical Installations (spec prepared by Building Services Engineer)	General and Emergency Lighting. Power and Telecon Installations. Fire Detection and Alarms. Equipment and Control Gear. Renewable Energy Installations. External Services and Lighting. Access Control and Automation. Security / CCTV Installations. Earthing and Lightning Protection Installations.
X	Lift Installations	Lifts.

Appendix 7 Gateway Sign-Off Procedure

Client ("Gateway") Sign-Off Procedure

Employer's Design Stage

- Employer's Requirements set out the procedure for client sign-off, this will include the production of detailed design submittals by the D&B Contractor, the production of a compliance sample and the client review / approval process.
- The proposed programme / timeframe for this process should be identified within the Employer's Requirements.
- Note: Under no circumstances should the D&B Contractor be allowed to proceed to the construction stage of BCar related works without the approval of the Employer / Technical Adviser team of the contractor's design proposals and compliance sample. Employers may consider allowing the contractor to begin site set-up and non-BCar related works during the design stage to facilitate programme gains.

D&B Contractor Design Stage following tender competition and identification of the successful bid

- The D&B Contractor's quality submission as part of their tender should include a detailed programme which clearly identifies all stages of their design process allowing time for client review and approval. D&B contractor's tender submittal should also include details on the materials proposed and clearly identify items which deviate or do not comply with the performance specification.
- The development and production of the compliance sample should also be clearly identified within the tender submission.

- D&B Contractor produces design proposals.
- Timeframe dependent upon project scale.

- Employer's Technical Advisors Review and Issue approval of proposals in accordance with the Works Requirements.
- Design Certifer role will be carried out by the Contractor's DT and certification issued accordingly to the Employer's Representative and Assigned Certifier.
- Timeframe for review procedure dependent upon project scale.
- Note: The design proposals must be deemed to be in accordance with the Works Requirements by the Employer's Technical Advisors / ER prior to being approved to progress with compliance sample.

Gateway 1

Approval of Design Proposals Proceed to Compliance Sample Stage

- Following approval of the contractor's design proposals, the manufacture and erection of the compliance sample can begin. This can be done off-site on the Contractor's premises.
- During this process critical inspection stages shall be identified by the Assigned Certifier and detailed inspections carried out by the Employer's DT to verify compliance of the detailing and construction methods as proposed by the contractor and approved by the Design Certifier.
- Timeframe dependent upon project scale.

- Upon completion of the Compliance Sample the Contractor and their DT shall provide certification to the ER and Assigned Certifier confirming the sample has been constructed in accordance with the approved design proposals.
- The Employer's DT shall then carry out a detailed inspection of the completed sample and if satisfied confirm acceptance of same to allow the works to proceed to construction stage.
- Note: The Compliance Sample must be approved and deemed to be in accordance with the Works Requirements by the Employer's Technical Advisors prior to the D&B contractor progressing to construction stage.

Gateway 2

Approval of Compliance Sample Proceed to Construction Stage

Construction Stage

- Following Approval and Certification of the D&B Contractor's Design proposals and Compliance samples, BCAR commencement notice can be lodged and works can proceed to site in accordance with statutory timeframes.
- Note: The approved compliance sample shall remain in place on the contractor's property for the duration of the works.

Appendix 8 - Guidance Documents, Regulations and Standards for reference

Housing for All - a New Housing Plan for Ireland 2021 published by the Department of Housing, Local Government and Heritage: - gov.ie - Housing for All - a New Housing Plan for Ireland (www.gov.ie)

Capital Works Management Framework: -
Capital Works Management Framework | Construction Procurement Reform

Technical Guidance Documents: - gov.ie - Technical Guidance Documents (www.gov.ie)

Energy Performance of Buildings, published by the Department of Housing, Local Government and Heritage: - gov.ie - Energy Performance of Buildings (www.gov.ie)

Design Manual for Quality Housing published by the Department of the Housing, Local Government and Heritage: - https://www.gov.ie/en/publication/b3e02-design-manual-for-quality-housing/

Quality Housing for Sustainable Communities Design Guidelines 2007 published by the Department of the Housing, Local Government and Heritage: - 2007-Quality-Hsing-for-Sustainable-Communities-1.pdf (opr.ie)

Employer's Requirements for Detail Design of Quality Housing - General Quality of Materials, Fittings and Finishes for Social and Affordable Housing and Apartment Developments, including Guidance on Preliminary Items Revision 1 - September 2020: - gov.ie - Employer's Requirements for Detail Design of Quality Housing (Revision 1 September 2020) (www.gov.ie)

Building for Everyone, A Universal Design Approach 2012: -
Building for everyone: A universal design approach

The Department of Housing Code of Practice "Fire Safety in Community Dwelling Houses" Sept 2017: -
gov.ie - Code of Practice for Fire Safety in New and Existing Community Dwelling Houses (www.gov.ie)

The Design and Public Realm Code and Design Manual for Urban Roads and Streets Version 1.1: -
gov.ie - Design manual for Urban Roads and Streets (www.gov.ie)

Modern Methods of Construction report published by the CIF 2021: -
1271-CIF-Modern-Methods-of-Construction-Report-v4.pdf

RIAI Design for Manufacture and Assembly (DfMA) Guidance 2022: -
RIAI__DFMA_Report_2022_v5_04Oct22.pdf

NSAI Guide to Agrément Certification for Modern Methods of Construction (MMC): -
https://www.nsai.ie/certification/agrement-certification/modern-methods-of-construction-certification/

Roadmap for Increase Adoption of MMC in Public Housing Delivery
https://www.gov.ie/en/publication/414cd-roadmap-for-increased-adoption-of-mmc-in-public-housing-delivery/

DHLGH Modern Methods of Construction – Introductory Guide
https://www.gov.ie/en/publication/e5e78-modern-methods-of-construction-introductory-guide/

Appendix 9 - Comparison of PW-CF1 Employer Designed v PW-CF2 Contractor Designed Public Works Contracts (PW-CF1 v2.8 01/05/2024 & PW-CF2 v2.7 01/05/2024)

Clause	PW-CF1	PW-CF2	Comment
1	The Contract		
1.1	Definitions		
	Novated Design Document		
		Specifications, drawings and other documents identified as Novated Design Documents in the Schedule part 1B, that have been made by a designer whose contract is or is to be novated to the Contractor.	This additional wording is included in the D&B contract to define documentation which could be novated to the contractor.
	Sub-contractor		
	a person to whom the execution of part of the Works is subcontracted [by the Contractor or another Sub-contractor].	a person to whom the design of all or part of the Works or the execution of part of the Works is subcontracted [by the Contractor or another Sub-contractor].	Definition is expanded to cover persons the contractor may engage to carry out design works.
	Inconsistencies		
1.3.4.	Inconsistencies between the Works Requirements and the Pricing Document shall be resolved by an instruction from the Employer's Representative under sub-clause 4.4.1(1) of the contract. Where inconsistencies are found to exist between the Works Requirements and the Pricing Document the Works Requirements take precedence with respect to the Works to be completed and a compensation event shall arise in accordance with the Schedule, Part 1K (17).	The Employer's Representative may issue a direction to resolve any inconsistency within the Works Requirements, or between the Works Requirements and other parts of the contract, and the direction shall be conclusive.	The wording regarding inconsistencies within the D&B contract removes the reference to quantities as the pricing document under this contract is prepared by the contractor and is his document.

Clause	PW-CF1	PW-CF2	Comment
1.7	**Work Requirements**	Additional definition added to cover works requirements within the D&B Contract.	
		Works Requirements 1.7.1 The Contractor has satisfied itself before entering the Contract of the adequacy of the Works Requirements. 1.7.2 The Contractor is fully responsible for the adequacy of the Works Requirements, but is not liable to the Employer for either of the following: (1) statements of intended purpose of the Works or parts of them (2) criteria for testing or performance of the completed Works or part of them 1.7.3 The Employer is not liable to the Contractor for the Works Requirements.	This definition puts an onus on the contractor to review the works requirments and satisfy itself of their adequacy before entering contract (note Fitness for Purpose Obligation). The employer is not liable to the contractor for the works requirements.
2	The Law		
2.5	**Safety Health and Welfare at Work Act 2005 and Safety, Health & Welfare at Work (Construction) Regulations 2013**	**Safety Health and Welfare at Work Act 2005 and Safety, Health & Welfare at Work (Construction) Regulations 2013**	
2.5.1	The Contractor shall [without limiting other obligations] ensure, so far as is reasonably practicable, that the Works are constructed to be safe and without risk to health, and that the Works comply in all respects, as appropriate, with the relevant statutory provisions.	The Contractor shall [without limiting other obligations] ensure, so far as is reasonably practicable, that the Works: (1) are designed and are capable of being constructed to be safe and without risk to health and (2) are constructed to be safe and without risk to health and (3) can be maintained safely and without risk to health during use and (4) comply in all respects, as appropriate, with the relevant statutory provisions.	Additonal wording added to cover the design and maintenance of the works. The role of Project Supervisor is also expanded upon within clause 2.4 of the D&B contract to include Project Supervisor for the Design Process.

Clause	PW-CF1	PW-CF2	Comment
2.5.2	The Contractor represents and warrants to the Employer that the Contractor is, and will, while performing the Contract, be a competent person for the purpose of ensuring, so far as is reasonably practicable, that the Works are constructed to be safe and without risk to health and that they comply in all respects, as appropriate, with the relevant statutory provisions.	The Contractor represents and warrants to the Employer that the Contractor is, and will, while performing the Contract, be a competent person for the purpose of ensuring, so far as is reasonably practicable, that the Works: (1) are designed and are capable of being constructed to be safe and without risk to health and (2) are constructed to be safe and without risk to health and (3) can be maintained safely and without risk to health during use and (4) comply in all respects, as appropriate, with the relevant statutory provisions.	Additional wording added placing a responsibility on the contractor to engage persons who are competent to design the works.
3	**Loss, Damage and Injury**		
3.1	**Loss, Damage and Injury Employer's Risks of Loss and Dmage to the Works**		
	Item 6: Design of the Works by the Employer or Employer's Personnel, but not if the design is covered by insurance required under the Contract.	Omitted	Contractor assumes design responsibility under the Design and Build contract.
4	**Management**		
4.5	**Instructions**		
	Clause 4.5.4	Clause omitted	
	The Employer's Representative shall give an instruction that is, in the Employer's Representative's opinion, necessary for the completion of the Works. If, in the Employer's Representative's opinion, it is physically impossible or contrary to Legal Requirements to complete the Works in accordance with the Works Requirements, the Employer's Representative shall give a Change Order. The Employer's Representative shall give an instruction required under this sub-clause 4.5.4 within the time required by sub-clause 4.11.		Clause omitted in the Design and Build contract as the Employer's Requirements are in the ownership of the contractor following appointment.

Clause	PW-CF1	PW-CF2	Comment
4.6	**Works Proposals**	**Works Requirements, Works Proposals and Novated Design Documents**	
4.6.2	If any Works Proposals do not comply with the Contract or the Works Requirements or Legal Requirements or are physically impossible to comply with, the Contractor shall propose a change to the Works Proposals as necessary. [There shall be no extension of time or adjustment to the Contract Sum for this.] If the Works Proposals need to be changed because of a change to the Works Requirements, the Contractor shall propose a change. The Contractor shall submit any change to the Works Proposals to the Employer's Representative.	"If any Works Requirements do not comply with the Legal Requirements or are physically impossible to comply with, the Contractor shall propose a change to the Works Requirements as necessary. If any Works Proposals do not comply with the Contract or Legal Requirements or are physically impossible to comply with, or otherwise need to be changed, the Contractor shall propose a change to the Works Proposals as necessary. In either case a change shall not take effect unless and until it has been agreed by the Employer's Representative. [There shall be no extension of time, use of programme contingency under sub-clause 9.4, or adjustment to the Contract Sum for changes or actions under this sub-clause 4.6 or their consequences.]"	Clause has been expanded to include works proposals.
4.6.3		Additional clause 4.6.3	
		The Contractor adopts the Novated Design Documents as Works Proposals, and is fully responsible for them. [The Contractor shall submit any changes to the Novated Design Documents to the Employer's Representative.]	Additional clause to cover the novation of design documents the employer has prepared.
4.8	**Value Engineering**		
4.8.1	The Contractor may give to the Employer's Representative a written value engineering proposal that will, if adopted, either: (1) reduce the Contract Sum or (2) accelerate the execution of the Works, or otherwise be of benefit to the Employer, with no increase to the Contract Sum.	The Contractor may give to the Employer's Representative a written value engineering proposal that will, if adopted, either (1) reduce the Contract Sum or (2) accelerate the design, execution of the Works, or otherwise be of benefit to the Employer, with no increase to the Contract Sum.	Wording added to cover the design aspect of the contract and how value engineering to accelerate this will be considered
4.8.4	If the proposal includes a change in the design of the Works, unless otherwise agreed, the Contractor shall undertake and be liable to the Employer for that design and any other Consents.	Clause omitted	Wording omitted as contractor has responsibility for the design under PW-CF2

Clause	PW-CF1	PW-CF2	Comment
5	**Contractor's Personnel**		
5.4	**Sub-contractors and Specialists**		
5.4.3	If the Schedule, Part 3B names a Specialist, the following apply; (i) where the Specialist's contract with the Employer is to be novated to the Contractor, (novated Specialist), and the Works Requirements includes a copy of that contract, the Contractor shall accept the novation, and the Parties shall, at the same time as entering the Agreement, enter the novation agreement. In the case of novated Specialists who were required to obtain a performance bond by the Employer, once the novation agreement is executed by the parties, the Employer shall write to the surety who has provided the performance bond to the novated Specialist informing them that they are assigning the benefit of that bond to the Contractor. (ii) where the Contractor is to enter a sub-contract with a named Specialist, (Reserved Specialist), the Reserved Specialist sub-contract shall be an unamended form of sub- contract as identified in Schedule Part 1F(iii) and the Contractor shall enter into the sub- contract with the Reserved Specialist before the Starting Date.	If the Schedule Part 3B names a Specialist whose contract with the Employer is to be novated to the Contractor, and the Works Requirements include a copy of that contract, the Contractor shall accept the novation, and the Parties shall, at the same time as entering the Agreement, enter the novation agreement in the Works Requirements.	Wording simplified in the PW-CF2 to reflect that novation under the D&B contract will most likely be Design Team members. Reference to reserved specialist removed.

Clause	PW-CF1	PW-CF2	Comment
7	**The Site**		
7.1	**Lands Made Available for the Works**		
7.1.1	The Employer shall allow the Contractor to occupy and use each part of the area identified in the Works Requirements to be provided by the Employer (the Area Provided by the Employer) from a date on or before the latest of the following: (1) the Starting Date (2) the day after the Contractor has done what sub-clause 9.1 requires the Contractor to do before the Starting Date (3) the date stated in the Works Requirements, if any (4) the day after the Contractor has submitted its programme according to sub-clause 4.9 (5) the date stated for work to start on that part in the Contractor's current programme (6) the date the Contractor actually requires the part in accordance with its actual progress.	The Employer shall allow the Contractor to occupy and use each part of the area identified in the Works Requirements to be provided by the Employer (the Area Provided by the Employer) from a date on or before the latest of the following: (1) the Starting Date (2) the day after the Contractor has done what sub-clause 9.1 requires the Contractor to do before the Starting Date (3) the date stated in the Works Requirements, if any (4) the day after the Contractor has submitted its programme according to sub-clause 4.9 (5) the date stated for work to start on that part in the Contractor's current programme (6) 10 working days (or another period stated in the Works Requirements) after the Contractor has informed the Employer's Representative that it is ready to start executing the Works on the Site (7) the date the Contractor actually requires the part in accordance with its actual progress (8) 10 working days after the Contractor has obtained all the Consents it needs to start executing the Works on the Site and given copies to the Employer's Representative.	Additional clauses added which cover the lead-in time required for periods which include the design stage and obtaining consents such as planning, Bcar etc.
7.1.7		Additional clause The Employer has no responsibility or liability for the Area Provided by the Employer being sufficient for the Works.	Clause added which places the onus on the contractor to design the works taking into full consideration the proposed work area.
7.6	**Other Contractors**		
	Where so stated in the Works Requirements, the Employer may arrange for work to be executed on the Site by Employer's Personnel. The Contractor shall co-operate with such Employer's Personnel and shall as far as practicable co-ordinate their activities with the execution of the Works.	Where so stated in the Works Requirements, the Employer may arrange for work to be executed on the Site by Employer's Personnel. The Contractor shall co-operate with such Employer's Personnel and shall as far as practicable co-ordinate their activities with the design and execution of the Works.	

Clause	PW-CF1	PW-CF2	Comment
7.7	**Setting Out the Works**		
	The Contractor shall set out the Works by reference to the points, lines and levels of reference in the Works Requirements. The Contractor shall be responsible for the correct positioning of all parts of the Works and shall rectify any errors in the positions, levels, dimensions or alignment of the Works. Before setting out the Works the Contractor shall make all reasonable efforts to verify the accuracy of the setting out information in the Works Requirements.	The Contractor shall be responsible for the correct positioning of all parts of the Works and shall rectify any errors in the positions, levels, dimensions or alignment of the Works.	Clause reduced and simplified to reflect the contractor's responsibility for the design and the works requirements.
8	**Quality, Testing and Defects**		
8.1	Standards of Workmanship and Work Items.		
	The Contractor shall ensure all of the following: (1) that the Works are executed and completed (i) in accordance with all the requirements in, and reasonably inferred from, the Contract [including, where so required by the Contract, in accordance with Contractor's Documents that have been submitted to the Employer's Representative] and (ii) in a proper and workmanlike manner and using good practice (2) that all Works Items [whether or not the Contractor is required to select them] (i) comply with the Contract and the Legal Requirements and (ii) are of good quality and, unless the Contract provides otherwise, new (3) that all materials and goods that are Works Items [whether or not the Contractor is required to select them] are fit for the purpose for which they are normally used (4) that all Works Items selected or designed by the Contractor [including by any Specialist] are fit for their intended purpose in the Works.	The Contractor shall ensure all of the following: (1) that the Works are designed, executed and completed (i) in accordance with all the requirements in, and reasonably inferred from, the Contract [including, where so required by the Contract, in accordance with Contractor's Documents that have been submitted to the Employer's Representative] and (ii) in a proper and workmanlike manner and using good practice (2) that all Works Items [whether or not the Contractor is required to select them] (i) comply with the Contract and the Legal Requirements and (ii) are of good quality and, unless the Contract provides otherwise, new (3) that all materials and goods that are Works Items are fit for their intended purpose in the Works (4) that the completed Works are fit for their intended purpose as stated in or to be inferred from the Works Requirements.	Clause amended to reflect the design reponsibility on the contractor. Fitness for Purpose obligation for the completed works placed on the contractor.

Clause	PW-CF1	PW-CF2	Comment
8.3	**Inspection**		
8.3.1	The Contractor shall ensure that the Employer's Representative, Assigned Certifier, and anyone authorised by the Employer's Representative, is able at all reasonable times to have access to all places where the Works are being executed [whether or not at the Site] and any place where any Works Items are produced, stored, extracted or prepared, or any other obligation of the Contractor under the Contract is being performed, and are able there to inspect, test, observe and examine all such items and activities.	The Contractor shall ensure that the Employer's Representative, Assigned Certifier, and anyone authorised by the Employer's Representative, is able at all reasonable times to have access to all places where the Works are being designed or executed [whether or not at the Site] and any place where any Works Items are produced, stored, extracted or prepared, or any other obligation of the Contractor under the Contract is being performed, and are able there to inspect, test, observe and examine all such items and activities.	
9	**Time and Completion**		
9.1	**Starting Date**		
9.1.1	The Contractor shall set the Starting Date, giving the Employer's Representative at least 15 working days notice, or any shorter period the Employer's Representative may agree, or any different period stated in the Works Requirements. The Starting Date shall, unless otherwise stated in the Works Requirements, be no more than 20 working days after the Contract Date.	The Contractor shall set the Starting Date, giving the Employer's Representative at least 15 working days notice, or any shorter period the Employer's Representative may agree, or any different period stated in the Works Requirements. The Starting Date shall, unless otherwise stated in the Works Requirements, be no more than 20 working days after the Contract Date. The Contractor shall give the Employer at least 20 working days' notice prior to the date the Contractor intends to commence constructing the Works.	This clause has additional wording included for the D&B route for notification of when the construction works will begin on site. This reflects that following contract award, a design stage will be undertaken and the actual construction works on site will follow on after the design works are completed. Dependant on the project, in some instances this may be a significant time frame. There is also the potential that site clearance and other enabling works could commence following contract award. This clause therefore puts a requirement on the D&B contractor to notify when works will begin on site.

Clause	PW-CF1	PW-CF2	Comment
9.1.2	Before the Starting Date [unless already given by the Contractor before the Contract Date, for example in response to a letter of intent] the Contractor shall give the Employer all of the following, all executed, as relevant, by the relevant persons: (1) the Agreement (2) a performance bond, if required by the Contract (3) any Reliance Documents, if required by the Contract (4) if the Works Requirements state that the Contractor or the Contractor's nominee is to be appointed as project supervisor for the construction stage, the required appointment, and the developed safety and health plan required by the Construction Regulations (5) evidence that the insurances required by the Contract are in effect (6) any collateral warranties required by the Contract (7) copies of signed agreements and unamended form of sub-contract as identified in Schedule Part 1F(iii) However, collateral warranties may be given on a later date that the Employer's Representative has agreed to.	Before the Starting Date [unless already given by the Contractor before the Contract Date, for example in response to a letter of intent] the Contractor shall give the Employer all of the following, all executed, as relevant, by the relevant persons: (1) the Agreement (2) a performance bond, if required by the Contract (3) any Reliance Documents guarantee, if required by the Contract (4) if the Works Requirements state that the Contractor or the Contractor's nominee is to be appointed as project supervisor for the construction stage or the design process or both, the required appointment, and the developed safety and health plan required by the Construction Regulations (5) evidence that the insurances required by the Contract are in effect (6) any collateral warranties required by the Contract However, collateral warranties may be given on a later date that the Employer's Representative has agreed to.	Sub-clause 7 omitted within the Design and Build contract to remove reference to named specialists.

Clause	PW-CF1	PW-CF2	Comment
10	**Claims and Adjustments**		
10.2	**Contractor to Pay Employers Cost of Checking Quantities**		
	The Contractor shall pay the Employer's cost of having a check done if the Contractor calls for an adjustment to the Contract Sum because of a difference between the Contract value of the Works according to the quantities and descriptions in a Bill of Quantities (if any) in the Pricing Document and the Contract value of the Works according to the Works Requirements (when this is a Compensation Event), and it is found that no increase is to be made to the Contract Sum.	Sub-clause omitted.	Clause omitted within the Design and Build contract as contractor is fully responsible for preparing their own quantities.
10.6	**Adjustments to the Contract Sum**		
10.6.4	Instead of sub-clauses 10.6.1, 10.6.2 and 10.6.3 applying, the Employer's Representative may conclusively direct that additional or substituted work required as a result of a Compensation Event be determined (in full or in part) on the basis of the cost of performing the additional or substituted work, compared with the Contractor's cost without the Compensation Event, determined as follows:	Instead of sub-clause 10.6.1, 10.6.2 and 10.6.3 applying, the Employer's Representative may conclusively direct that additional or substituted work required as a result of a Compensation Event be determined (in full or in part) on the basis of the cost of performing the additional or substituted work, compared with the Contractor's cost without the Compensation Event, determined as follows:	

Clause	PW-CF1	PW-CF2	Comment
	(1) the number of hours worked or to be worked by each category of work person engaged on the work to which the Compensation Event relates, on or off the Site, multiplied in each case by the basic hourly rate of pay for the relevant category of worker in an applicable sectoral employment order implemented under the Industrial Relations Acts 1946 – 2015 to which is applied the percentage addition to costs of labour as stated in the Schedule, part 2D. Where the additional or substituted work includes named Specialist Works, the percentage addition to costs of labour tendered by the respective named Specialist in Appendix part 2C of their sub-contract is applied (If the category of work person is not covered by an applicable order made in accordance with the Industrial Relations Acts 1946 – 2015 the Employer's Representative will determine the most appropriate basic hourly rate based on the category of work person's skills and experience) and (2) the cost of materials used in that work, taking into account discounts and excluding VAT, plus the percentage adjustment tendered by the Contractor and stated in the Schedule, part 2D. Where the additional or substituted work includes named Specialist Works, the percentage addition to costs of materials tendered by the respective named Specialist in Appendix part 2C of their sub-contract is applied (But if the percentage adjustment tendered is negative or blank it will be read as 0%) and	(1) the number of hours worked or to be worked by each category of work person engaged on the work to which the Compensation Event relates, on or off the Site, multiplied in each case by the basic hourly rate of pay for the relevant category of worker in any applicable sectoral employment order implemented under the Industrial Relations Acts 1946 - 2015 to which is applied the tendered percentage addition to costs of labour in Schedule, part 2D. Where the additional or substituted work includes named Specialist Works, the percentage addition to costs of labour tendered by the respective named Specialist in Appendix part 2C of their sub-contract is applied. (If the category of work person is not covered by an applicable order made in accordance with the Industrial Relations Acts 1946 – 2015 the Employer's Representative will determine the most appropriate basic hourly rate based on the category of work person's skills and experience) and (2) the cost of materials used in that work, taking into account discounts and excluding VAT, plus the percentage adjustment tendered by the Contractor and stated in the Schedule, part 2D. Where the additional or substituted work includes named Specialist Works, the percentage addition to costs of materials tendered by the respective named Specialist in Appendix part 2C of their sub-contract is applied. (But if the percentage adjustment tendered is negative or blank it will be read as 0%) and	

Clause	PW-CF1	PW-CF2	Comment
	(3) the cost of plant reasonably used for that work, whether hired or owned by the Contractor, at the rates in the document listed in the Schedule, part 1K (as that document may be modified according to the Schedule, part 1K) plus or minus the percentage adjustment tendered by the Contractor and included in the Schedule, part 2D Where the additional or substituted work includes named Specialist Works, the percentage addition to costs of plant tendered by the respective named Specialist in Appendix part 2C of their sub- contract is applied. (But if the percentage adjustment tendered is a deduction of more than 50% it will be read as a deduction of 50% or if the entry is blank it will be read as 0%). If the document listed in the Schedule does not give a rate for a plant item, a market rental rate shall be used, plus or minus the percentage adjustment.	(3) the cost of plant reasonably used for that work, whether hired or owned by the Contractor, at the rates in the document listed in the Schedule, part 1K (as that document may be modified according to the Schedule, part 1K) plus or minus the percentage adjustment tendered by the Contractor and included in the Schedule, part 2D. Where the additional or substituted work includes named Specialist Works, the percentage addition to costs of plant tendered by the respective named Specialist in Appendix part 2C of their sub-contract is applied. (But if the percentage adjustment tendered is a deduction of more than 50% it will be read as a deduction of 50% or if the entry is blank it will be read as 0%). If the document listed in the Schedule does not give a rate for a plant item, a market rental rate shall be used, plus or minus the percentage adjustment.	
		(4) the cost of design, at the tendered rates in the Pricing Document.	Additional clause added which takes into consideration the design costs the contractor will incure in a compensation event under a D&B Contract.

Clause	PW-CF1	PW-CF2	Comment
10.7	Delay Cost		
10.7.1	If the Date for Substantial Completion of the Works has been extended because of a Compensation Event [and not otherwise, and subject to sub-clause 10.7.2], there shall be added to the Contract Sum an amount for delay cost, either (whichever it says in the Schedule, part 1K) (1) the expenses [excluding profit and loss of profit] unavoidably incurred by the Contractor as a result of the delay to the Date for Substantial Completion of the Works caused by the Compensation Event in respect of which that date has been extended under the Contract or (2) for each Site Working Day for which the Date for Substantial Completion of the Works has been extended because of the Compensation Event, the daily rate of delay cost tendered by the Contractor in the Schedule, part 2D [and to the extent that named Specialists' Works are delayed by a Compensation Event under the Contract between the Employer and Contractor, the tendered rate of delay costs for the respective named Specialists in Appendix part 2C of their sub-contract shall be used to determine the delay cost].	If the Date for Substantial Completion of the Works has been extended because of a Compensation Event [and not otherwise, and subject to sub-clause 10.7.2], there shall be added to the Contract Sum an amount for delay cost, either (whichever it says in the Schedule, part 1K) (1) the expenses [excluding profit and loss of profit] unavoidably incurred by the Contractor as a result of the delay to the Date for Substantial Completion of the Works caused by the Compensation Event in respect of which that date has been extended under the Contract. or (2) for each Site Working Day for which the Date for Substantial Completion of the Works has been extended because of the Compensation Event, the daily rate of delay cost tendered by the Contractor in the Schedule, part 2D.	Sub-clause 10.7.1.2 amended with the reference to delay to named specialists works removed in the Design and Build contract.

Clause	PW-CF1	PW-CF2	Comment
11	**Payment**		
11.1	**Interim Payment**		
11.1.2	The instalment of the Contract Sum that the Contractor shall be entitled to be paid on an interim basis shall be (1) the Contract value of the Works properly executed by the Contractor [according to the Pricing Document, as a portion of the Contract Sum] and (2) any amount the Employer's Representative considers proper under sub-clause 11.2 and (3) amounts for adjustments to the Contract Sum for Compensation Events, as determined under the Contract and (4) any amount to be paid according to clause 15 and (5) amounts included in the Pricing Document for Contractor's Documents properly completed and supplied as required by the Contract.	The instalment of the Contract Sum that the Contractor shall be entitled to be paid on an interim basis shall be (1) the Contract value of the Works properly designed and executed by the Contractor [according to the Pricing Document, as a portion of the Contract Sum] and (2) any amount the Employer's Representative considers proper under sub-clause 11.2 and (3) amounts for adjustments to the Contract Sum for Compensation Events, as determined under the Contract and (4) any amount to be paid according to clause 15 and (5) amounts included in the Pricing Document for Contractor's Documents properly completed and supplied as required by the Contract.	Allowance made for the contractor's costs incurred in designing the works.
12	**Termination**		
12.1	**Termination on Contractor Default**		
12.1.1	The Employer may, without limiting any other right or remedy, terminate the Contractor's obligation to complete the Works by notice to the Contractor if any of the following occurs: (1) the Contractor fails to comply with its obligations under the Contract, and, if the failure can be cured, the Employer's Representative has directed the Contractor to put the matter right, and the Contractor has not done so within 14 days after receiving the direction (2) the Contractor abandons or, except where required or permitted by the Contract, suspends the execution of the Works (3) the Contractor fails to proceed regularly and diligently with the execution of the Works.	12.1.1 The Employer may, without limiting any other right or remedy, terminate the Contractor's obligation to complete the Works by notice to the Contractor if any of the following occurs: (1) the Contractor fails to comply with its obligations under the Contract, and, if the failure can be cured, the Employer's Representative has directed the Contractor to put the matter right, and the Contractor has not done so within 14 days after receiving the direction (2) the Contractor abandons or, except where required or permitted by the Contract, suspends the design or execution of the Works (3) the Contractor fails to proceed regularly and diligently with the design and execution of the Works.	Sub-clause 12.1.1.3, wording added to cover the design aspect of the works.

Clause	PW-CF1	PW-CF2	Comment
12.4	**Termination by the Contractor**		
	The Contractor shall be entitled to terminate the Contractor's obligation to complete the Works by notice to the Employer if any of the following occur: (1) the Contractor has suspended the execution of the Works for 15 working days in accordance with sub-clause 12.3, and the Employer has still not paid (2) work has been suspended by direction of the Employer's Representative under sub-clause 9.2 and a right to terminate has arisen under that sub-clause (3) the execution of the Works or a substantial part of the Works has been suspended for a period of at least 3 months as a consequence of loss or damage that is at the Employer's risk under sub-clause 3.1 (4) an event or circumstance outside the control of the Parties makes it physically impossible or contrary to Law for the Contractor to fulfil its obligations under the Contract for a period of at least 6 months.	The Contractor shall be entitled to terminate the Contractor's obligation to complete the Works by notice to the Employer if any of the following occur: (1) the Contractor has suspended the design and execution of the Works for 15 working days in accordance with sub-clause 12.3, and the Employer has still not paid (2) work has been suspended by direction of the Employer's Representative under sub-clause 9.2 and a right to terminate has arisen under that sub-clause (3) the execution of the Works or a substantial part of the Works has been suspended for a period of at least 3 months as a consequence of loss or damage that is at the Employer's risk under sub-clause 3.1 (4) an event or circumstance outside the control of the Parties makes it physically impossible or contrary to Law for the Contractor to fulfil its obligations under the Contract for a period of at least 6 months.	

Clause	PW-CF1	PW-CF2	Comment
12.5	**Termination at Employers Election**		
	The Employer shall be entitled to terminate the Contractor's obligation to complete the Works at its election on 20 working days notice to the Contractor.	12.5.1 The Employer shall be entitled to terminate the Contractor's obligation to complete the Works at its election on 20 working days notice to the Contractor.	
	12.5.2 The Employer may not terminate the Contractor's obligation to complete the Works under this sub-clause 12.5 for the purpose of retaining another contractor to execute the Works, except where termination is permitted pursuant to clause 12.5.4.	12.5.2 The Employer may not terminate the Contractor's obligation to complete the Works under sub-clause 12.5.1 for the purpose of retaining another contractor to design and execute the Works, except where termination is permitted pursuant to clause 12.5.5.	
	12.5.3 The Employer shall return any performance bond required under this Contract to the Contractor on termination under this sub-clause 12.5.	12.5.3 If the Contractor has not obtained any particular Consent by a date specified in the Works Requirements, the Employer may terminate the Contractor's obligation to complete the Works [and, if it so wishes, retain another contractor to design and execute the Works]. In this event the Employer's only liability to the Contractor will be to pay for design completed by the Contractor and given to the Employer any amount stated in the Pricing Document for that design.	Additional wording added in under clause 12.5.3 in the Design and Build Contract to cover obtaining consents such as planning. This clause gives the employer the ability to terminate a contractor's obligation if a consent hasn't been obtained by a predetermined fixed date.
	12.5.4 The Employer shall be entitled to terminate the Contractor's obligation to complete the Works where: (1) the Contract should not have been awarded to the Contractor in view of a serious infringement of the obligations under the European Treaties and Directive 2014/24/EU or Directive 2014/25/EU that has been declared by the Court of Justice of the European Union in a procedure pursuant to Article 258 of the Treaty on the Functioning of the European Union; or (2) in the opinion of the Employer, the Contract has been subject to a substantial modification which would have required a new procurement procedure pursuant to Regulation 72 of SI 284 of 2016 or Regulation 97 of SI 286 of 2016."	12.5.4 The Employer shall return any performance bond required under this Contract to the Contractor on termination under this sub-clause 12.5.	

Clause	PW-CF1	PW-CF2	Comment
		12.5.5 The Employer shall be entitled to terminate the Contractor's obligation to complete the Works where: (1) the Contract should not have been awarded to the Contract in view of a serious infringement of the obligations under the European Treaties and Directive 2014/24/EU or Directive 2014/25/EU that has been declared by the Court of Justice of the European Union in a procedure pursuant to Article 258 of the Treaty on the Functioning of the European Union; or (2) in the opinion of the Employer, the Contract has been subject to a substantial modification which would have required a new procurement procedure pursuant to Regulation 72 of SI 284 of 2016 or Regulation 97 of SI 286 of 2016".	
12.6	**Consequences of Termination by Contractor or at Employer's Election**		
12.6.3	The Contractor shall, as soon as practicable, give the Employer's Representative a statement of the total of the following (the termination sum): (1) the unpaid value of the parts of the Works completed to the date of termination in accordance with the Pricing Document, disregarding any provision limiting the Employer's obligation to pay for partially completed work (2) the Contractor's reasonable costs of removal from the Site as a consequence of the termination (3) all other amounts due to the Contractor under the Contract but not damages.	The Contractor shall, as soon as practicable, give the Employer's Representative a statement of the total of the following (the termination sum): (1) the unpaid value of the parts of the Works completed to the date of termination in accordance with the Pricing Document, disregarding any provision limiting the Employer's obligation to pay for partially completed work (2) the Contractor's reasonable costs of removal from the Site as a consequence of the termination (3) all other amounts due to the Contractor under the Contract but not damages. On a termination under sub-clause 12.5.3, the termination sum shall be any amount due under that sub-clause.	Additional wording added to this clause to cover termination under clause 12.5.3 where a consent hasn't been obtained by a specified date.

Clause	PW-CF1	PW-CF2	Comment
15	**Price Variation**		
15.8	**Revisions of Index Figures**		
	If an Index Figure used for a Material Category or a Fuel Category is subsequently revised by the Central Statistics Office prior to the issue of the Final Certificate, any adjustments in accordance with this Clause shall be recalculated on the basis of the revised Index Figures.	If an Index Figure used for a Material Category or a Fuel Category or the Consumer Price Index in relation to Non-Reusable Temporary Works is subsequently revised by the Central Statistics Office prior to the issue of the Final Certificate, any adjustments in accordance with this Clause shall be recalculated on the basis of the revised Index Figures.	Wording added to cover non-reusable temporary works.
	Note: It should also be acknowledged that the Design and Build Contract PW-CF2 puts an obligation on the contractor and the design team they have engaged that the completed works should be ""**Fit for Purpose**"" as identified in the employers requirements. This is a higher standard or duty than that of ""**Reasonable Skill and Care**"" which is placed upon designers under the Employer designed contract PW-CF1. The **Fitness for Purpose** obligation is implied in such Design and Build contracts unless it is specifically excluded within the contract documents."		

The Housing Agency acknowledges the assistance and advice of the Department of Housing, Local Government and Heritage, Office of Government Procurement and Housing Delivery Co-ordination Office.

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Front Cover photograph Age Friendly Development in Templeogue by South Dublin County Council. Page 12 Bradys Court, Page 21 & 24 Innovation Square Apartments, Tallaght, panelised wall construction, all courtesy of South Dublin County Council. Page 28 Hawkstown Park, Wicklow. Courtesy of Wicklow County Council.

An Ghníomhaireacht Tithíochta
The Housing Agency

The Housing Agency

3-54 Mount Street Upper,
Dublin, D02 KT73, Ireland

Phone: +353 1 656 4100

Email: info@housingagency.ie

housingagency.ie