

UNIVERSITY COLLEGE CORK

Establishment of a Multi Supplier
Framework of Construction
Consultancy Services for Small &
Minor Projects for the Buildings &
Estates Office, UCC

Capital Projects Office
Design Team Procedures



UCC

Coláiste na hOllscoile Corcaigh
University College Cork, Ireland

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1.0 INTRODUCTION

This Design Team Procedure has been developed to ensure that University College Cork (hereinafter called UCC) service requirements for the completion of a commission are clearly understood by the service providers and is mutually agreed between UCC and the service provider.

The document is based upon the Department of Education and Skills Design Team Procedures and augmented to suit the specific needs of University College Cork. It applies to all design team members, regardless of whether they are part of a single point design team, an integrated design team or directly procured by UCC.

The term Design Team Leader applies to both the Single Point Design Team Leader (SPDTL) and the Integrated Design Team Leader (IDTL). The term integrated Design Team member has the same meaning in for both a single point design team member and the integrated design team member. The term design team member refers to a design team member procured directly by UCC.

Where the commission relates to a single point design team appointment, the term Integrated Design Team Lead (IDTL) shall be replaced with Design Team Lead, and Integrated Design Team (IDT) with Single Point Design Team.

The procedure has been developed in a generic format to facilitate its use for all UCC capital developments. While it provides a comprehensive statement of UCC's service requirements, design team members must also ensure that their proposals include all other actions typically required to complete the commission.

This document is to be read in conjunction with the following documentation

- UCC's Capital Projects Office Schedule of Services
 - Schedule of Services Architecture
 - Schedule of Services Civil & Structural Engineering
 - Schedule of Services Mechanical and Electrical Engineering
 - Schedule of Services Quantity Surveying
 - Schedule of Services Project Supervisor Design Stage (PSDP)
 - Schedule of Services Employers Representative
 - Schedule of Services for Fire Engineering
 - Schedule of Services for Planning Consultant
- Relevant standards, Codes of Practice, recognised best practice and EU Directives
- All other Relevant Documents

1.1 CLIENT

For this commission the client is University College Cork

1.2 CONTRACTUAL ARRANGEMENTS

For this commission the client shall appoint single point design team and Section 1.2.2 below applies.

1.2.1 Integrated Design Team (IDT)

The Client shall appoint an integrated design team (“the Design Team”) comprising of the following principal service providers (PSP).

- Architect and associated specialist skills providers
- Civil & Structural Engineer and associated specialist skills providers
- Mechanical and Electrical Engineer and associated specialist skills providers
- Project Supervisor Design Process.

A principal service providers may be requested to provide a specialist skills provider (SSP), as described in the Suitability Assessment Questionnaire and ITT. A PSP may provide these services as in-house or engage the services of an external consultant. Where an external consultant is used to provide these services, then the PSP shall enter into a sub-consultancy agreement with their respective specialist service. These agreements are to be furnished to UCC prior to completion of Stage 1. A Collateral Warranty will be completed between the Employer and all sub consultants using model form 2.3 latest revision.

UCC reserves the right to withhold payment of services until the executed Collateral Warranty and Sub-consultant agreements have been received by UCC.

In most cases, the Architect will be nominated as the integrated design team lead (IDTL), however for civil engineering projects, the Civil & Structural Engineer may be nominated as the design team lead and will be clearly defined in the Definitive Project Brief.

Each member of the Integrated Design Team shall enter into a direct contract with the Client under their respective Conditions of Engagement, but all parties shall operate as an Integrated Design Team, collaborating and coordinating their services in accordance with these integrated design team procedures, the relevant schedule of services and all other contract documents.

The IDTL shall also be responsible for coordinating and integrating the work of any other consultants appointed directly by the Employer who are not members of the Integrated Design Team, including but not limited to:

- Quantity Surveyor,
- Carbon Co-ordinator,
- Energy Efficient Designer; or
- Any other such consultants engaged by the Client for the Project.

The IDTL’s role in managing these additional consultants shall include:

- Programme and Interface Management: Ensuring alignment of deliverables and design information with the Integrated Design Team,
- Information Coordination: Incorporating their outputs into the overall design and documentation; and
- Communication Management: Acting as the primary point of coordination between such consultants and the Integrated Design Team.

The Integrated Design Team shall collectively adopt and implement an Integrated Working Protocol, covering:

- Agreed procedures for design coordination,
- Common Data Environment (BIM),
- Risk management processes,
- Collaborative decision-making and reporting structures; and
- Regular coordination meetings.

Each integrated design team member remains responsible for the performance of their own services under their Conditions of Engagement, including compliance with Building Control (Amendment) Regulations 2014 and all statutory obligations.

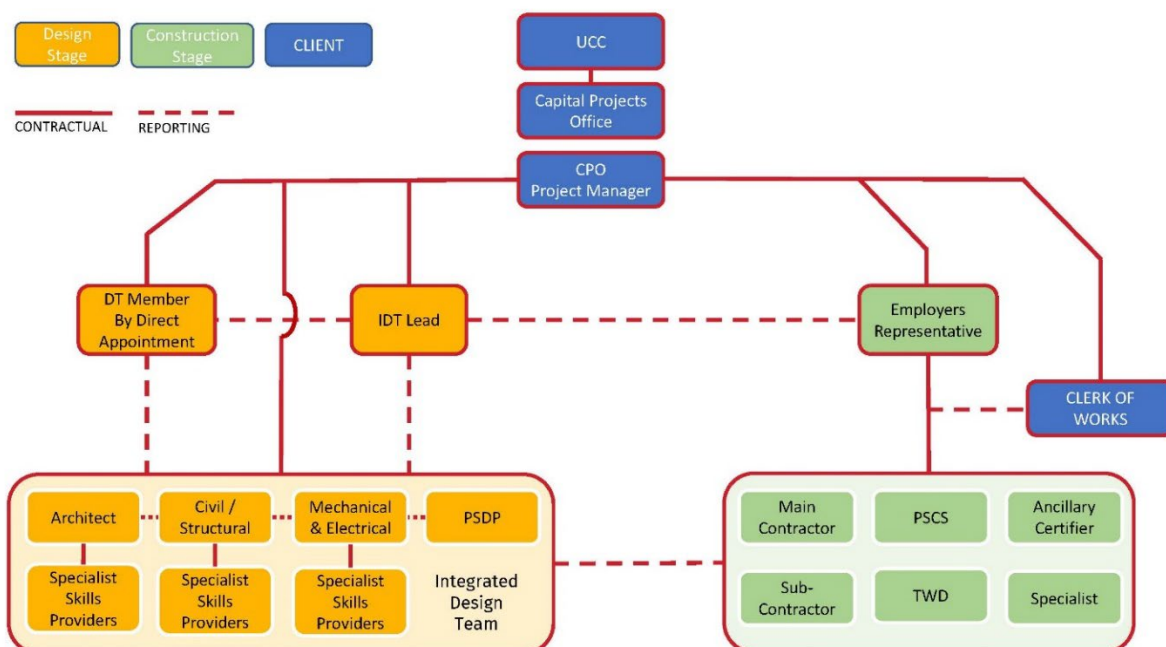


Figure 1.2.1 Integrated Design Team Reporting Structure

1.2.2 Single Point Design (SPDT)

The employer will enter into a contract with the Single Point Design Team Leader who is identified as the Architect for this project. The Architect will enter into a sub consultancy agreement with the other consultants i.e. Civil & Structural Engineer, Mechanical & Electrical Engineer, Quantity Surveyor, PSDP, ER, Design Certifier, Assigned Certifier etc.

These agreements are to be furnished to UCC prior to completion of Stage 1. A Collateral Warranty will be completed between the Employer and all sub consultants using model form 2.3 latest revision.

UCC reserves the right to withhold payment of services until the executed Collateral Warranty and Sub-consultant agreements have been received by UCC.

Where identified in the Definitive Project Brief, some disciplines may not form part of the single source provider and shall be procured by direct appointment by UCC. In this instance the Design Team Lead and all other design team members shall accept this discipline as an active member of the overall Design Team.

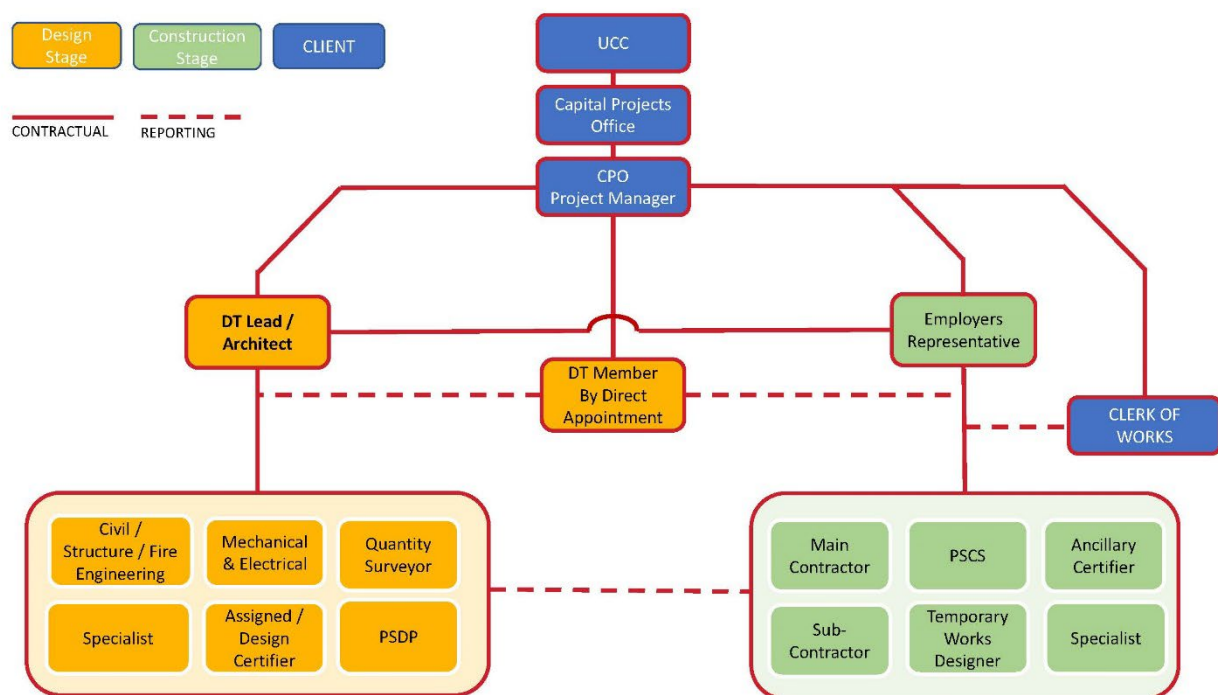


Figure 1.2.2 Single Point Design Team Reporting Structure

1.3 THE SCOPE OF SERVICES

The terms of engagement for design team members are the Office of Government Procurement Standard Conditions of Engagement current at the time of the appointment. (available at <https://constructionprocurement.gov.ie/standard-conditions-of-engagement/>)

The scope of services is as set out in this document and the associated schedule of services for each discipline and associated specialist skill provider where applicable.

The scope of service includes all work required to design and construct the project in a competent and professional manner (whether expressly stated or not); prepare all documentation and reports required by these procedures; obtain all necessary approvals whether UCC or statutory approvals, all in accordance with the above documents or as otherwise modified by the briefing information. All work

required to comply with the Building Control (Amendment) Regulations 2014 is included in the scope of service, including the roles of Design Certifier and Assigned Certifier to be carried out by the IDTL.

Consultation with UCC and UCC's end users is an on-going process during the stages and is included as part of the Service. In particular, the service includes for repeat submissions (where required), meetings and such other communications as may be needed to complete the Project or Stage.

Design team members are responsible for printing, reproducing or purchasing of all documents, drawings, maps, photographs and other records for the proper performance of the service.

Delays caused by the main contractor resulting in prolongation of the contract are not a cause for additional fees in accordance with the Conditions of Engagement.

2.0 PROJECT MANAGEMENT AND CO-ORDINATION

2.1 DESIGN TEAM LEADER

The design team leader (DTL) is the Architect, unless otherwise noted in the Definitive Project Brief.

The following duties apply to the DTL (for all Stages) in addition to the duties relevant to his/her professional discipline:

- Overall Management /Coordination of Project Stages and Programme including ensuring that any information, communications and/or Stage Submissions are channelled through the Design Team Leader.
- Chair and record Design Team Meetings, Site Meetings, third parties and stakeholder meetings as necessary.
- Prepare and submit monthly reports on progress, quality, cost and Health & Safety in relation to the development with the assistance of the other Design Team members in such form as UCC may reasonably require.
- Ensure that the Design Team comply with UCC procedures and SOP's as they may apply to building design and construction to include fully co-ordinated plans, room data sheets and elevations of all rooms
- Develop and provided fully co-ordinated room data sheets for each room to the level of detail as outlined in examples provided in Appendix A, Room data sheets are to identify and locate all fixture and fittings placed on the walls, floors, ceilings and reflected ceiling plans, but also all fixed and loose furniture. In addition, all M&E equipment within ceiling and wall voids are to be indicated ensuring that access hatches are located such that all necessary plant that needs to be maintained can be easily accessed. The room data sheets are to be extracted from the fully co-ordinated federated BIM model, where BIM is a requirement of the project.
- The Design Team Leader is responsible for reviewing all documentation (from whatever source or discipline), carrying out a quality check on that information and ensuring that all drawings and documents are co-ordinated between the disciplines.
- The Design Team Leader must also ensure effective communications between the relevant IDT disciplines, and, where such communications or responses are not effective, implement corrective action including (if required) UCC notification.
- In addition, the Design Team Leader is required to act as Design Certifier and Assigned Certifier unless otherwise noted in the Definitive Project Brief and the Suitability Assessment Questionnaire in accordance with the requirements of the Building Control (Amendment) Regulations 2014 and the associated Code of Practice for Inspecting and Certifying Buildings and Works.
- The Design Team Leader shall monitor and review the progress of the project in line with the approved project program and budget and shall report any divergences, with recommendations to mitigate any further deviations to the employer. The Design Team Leader in conjunction with design team members shall ensure that inflation is accounted for in their design and budget management.

- The Design Team Leader shall monitor and review the progress and performance of its design team members and report any divergences, with recommendations to mitigate any further deviations to the employer
- The Design Team Leader in so far as is reasonable possible is responsible for ensuring compliance with UCC Schedule of Services, for all disciplines forming part of the Integrated Design Team, including their own. Refer to the following Schedule of Services for the following roles:
 - Architectural Engineering Services.
 - Civil & Structural Engineering Services.
 - Mechanical & Electrical Engineering Services.
 - Project Supervisor Design Process (PSDP).
- For the construction period the Design Team Leader will act as the UCC's representative in line with schedules A & B of the Standard Conditions of Engagement. The Design Team Leader must ensure that the completed design meets the budgetary requirements. The Design Team Leader must ensure that the completed design of the project fulfils the programme requirements.

2.2 OTHER DESIGN TEAM MEMBERS

The other Design Team (DT) members, including those directly appointed by the Client are responsible for all work (relevant to their discipline) required to design and construct the project in a competent and professional manner (whether expressly stated or not).

The other design team members are required to co-operate with each other and Design Team Leader and provide (in a timely manner) all information and documentation needed to permit the other disciplines to complete their work.

All Design Team members are also required to review, quality control and co-ordinate all information and Stage documentation with other DT members and ensure compliance with UCC's Schedule of Services.

In addition, all Design Team members (with the exception of the Quantity Surveyor), including any special skills provider that may be employed and relied upon for elements of the design, will be required to provide ancillary certificates for their elements of work for which they are responsible in accordance with the requirements of the Building Control (Amendment) Regulations 2014.

A member of the team will be required to fulfil the role of Employers Representative (ER) for the project in accordance with the requirements of the CWMF. The role of the ER is a dedicated specialist skills provider role and the individual must not have any other function (design or otherwise) for the project. The ER can be independent of the other members of the design team i.e. a separate individual or company or can be chosen from within one of the participating team members. The role of ER should be fulfilled by the same candidate for stages i to v.

2.3 RECENT CHANGES TO CONTRACTS & LEGISLATION

Circular 01/16: Construction Procurement – Implementation of Interim Measures to adjust Public works contracts – revision of arrangements for the procurement of public works projects will apply to this tender.

The Construction Contracts Act 2013 has been signed into law which introduces statutory adjudication into construction contracts of certain value. The effective date for contracts is 25th July 2016 and therefore will apply to tenders under this commission.

2.4 UCC’S PROJECT MANAGER

UCC’s assigned Capital Project Office Project Manager is UCC’s interface with the Design Team Leader and Design Team Members. All queries, correspondence etc should be directed through him / her only.

All email queries directed to the Project Manager is to have the agreed project title within the subject line.

2.5 BUDGETARY COMPLIANCE AND COST CONTROL

The Infrastructure Guidelines and the Capital Works Management Framework place a clear obligation on all contracting authorities to ensure value for money in the delivery of publicly funded projects.

In support of this obligation, all design team members both collectively and individually are responsible for ensuring that all design and consultancy services are delivered within the approved project budget. This responsibility applies across all project stages and must be demonstrably upheld through proactive cost planning, rigorous cost control, and continuous budget monitoring. Key responsibilities include:

2.5.1 Budget Alignment

All design proposals must be developed in strict alignment with the Definitive Project Brief and the approved budget. The Design Team Leader shall work closely with the quantity surveyor and ensure that the design solution is viable, cost-effective, and capable of delivery within the financial parameters set by UCC. For budget development throughout the project, please refer to Guidance Note 1.3 Budget Development.

2.5.2 Cost Planning and Control

The Design Team shall implement the cost planning and control procedures outlined in GN 2.2 Planning & Control of Capital Costs, including the preparation of Outline Cost Plans, Developed Cost Plans, and Pre-Tender Cost Checks. Costs plans shall be presented utilising the prescribed templates provided on Office of Government Procurements Capital Works Management Framework website. These documents must be submitted at each relevant stage and reviewed in conjunction with UCC’s Capital Projects Office.

2.5.3 Risk and Contingency Management

The Design Team shall identify and manage cost-related risks throughout the design process. Where risks materialise, mitigation strategies must be proposed and documented. Any drawdown from client contingency funds must be justified and approved in writing by UCC and appropriately recorded.

2.5.4 Change Management

No changes to the scope or design that impact the budget shall be made without prior written approval from UCC. All proposed changes must be accompanied by a detailed cost impact analysis and a recommendation for corrective action or budget transfer, as appropriate.

2.5.5 Value Engineering

The Design Team shall undertake value engineering exercises at each stage to optimise cost efficiency without compromising quality, performance, or compliance. Where the Pre-Tender Estimate exceeds the approved budget, the Design Team shall be responsible for identifying and implementing cost-saving measures to bring the project back within budget.

2.5.6 Accountability:

Any cost overruns arising from incomplete design, inadequate detailing, or failure to apply reasonable skill and care shall be the responsibility of the Design Team. UCC reserves the right to seek recompense through the Design Team's Professional Indemnity Insurance for substantive costs or delays incurred.

The design team's attention is drawn to Clause 12 Budgetary Control of the Standard Conditions of Engagement where returned tenders exceed the excess percentage as stated in Schedule A of the Form of Tender and Schedule. Should this occur, UCC will seek to impose this clause.

2.6 CONTRACTORS INSURANCES.

A strategy for the insurance requirements must be determined at the early stages of the project i.e. Stages (2a).

The Design Team will undertake an initial assessment of the insurance requirements with a focus on the following areas:

- Level of Public Liability Insurance,
- Level of Employers Liability Insurance,
- Professional Indemnity Insurance requirements for Contractors or Specialists,
- Insurance requirement for Existing Buildings,
- Partial or Phased Handover or Possession of Existing Buildings or the Works,
- Additional or Optional Insurance requirements specific to the project,
- Contractors All Risk –Strategy; and
- Guidelines for Checking Insurance.

This initial assessment is required to be reviewed and agreed or amended by UCC during stage (2a) of the project.

The value of Public & Employers Liability insurances will be determined based on the scale of the project and the likely risk to be incurred. The minimum levels required will be inserted to Schedule 1D and the prequalification documentation.

Professional Indemnity Insurance will be required if the Contractor or a Specialist has an element of design input for the project, the level of insurance required will be determined based on the level of design input. The required duration for the Professional Indemnity Insurance also needs to be determined; generally, the insurance will be required to be in place for a period of six years after

substantial completion. The minimum requirements for Contractors will be inserted into Schedule 1D and the prequalification documentation. The minimum requirements for Specialists will be inserted to Schedule 1F and the prequalification documentation.

Main Contractor to have a minimum Level of PI Insurance of circa €1m (or higher if the need arises) for all **Employer Designed** contracts with estimated construction value exceeding €2.5m.

In relation to Insurance of Existing Facilities or Partial or Phased Handover or Possession of Existing Buildings or the Works please note the following.

- If clause 3.8 does not apply the employer **shall not** have the risk for loss or damage to its existing facility –
- The contractor is responsible for all insurances to the existing facility up the limit noted in schedule 1d
- If clause 3.8 applies the employer **shall** have the risk for loss or damage to its existing facility to the extent that–
- The employer is responsible for the insurance for the normal perils as noted in clause 3.8.
- The contractor is responsible for insurances to the existing facility to the extent caused by their negligence up to the limits of their el & pl as clause 3.6.1.

The Limit of Insurance for an existing facility to be inserted in Schedule 1D will be determined based on the latest available valuation for the re-instatement of the building for insurance purposes. This valuation will be provided by UCC insurance providers.

UCC default position is that Clause 3.8 applies and UCC shall retain the risk of loss or damage to its existing facilities. UCC Insurance Brokers should be informed if there is any variance from the default position.

Given the nature of the University Building stock the minimum indemnity limit for **Public Liability Insurance** is to be set at €25 million where the works are undertaken in an existing building.

In the case of Contractors All Risk Insurance, the following are the minimum requirements:

- Contract Value (plus VAT).
- + 15% for Professional Fees (plus VAT).
- + 20% for Demolitions (plus VAT).
- + 20% for Inflation (plus VAT).

In the case of Partial or Phased handover or possession of an existing facility an appropriate valuation will need to be determined and agreed with the insurance provider in writing.

In the case of Partial or Phased handover or possession of the works an appropriate valuation will need to be determined by the Design Team and agreed with the insurance provider in writing.

Additional or Optional Insurance requirements will need to be assessed on a case by case basis for each project. Any additional requirements will be inserted to Schedule 1D

An IBA Questionnaire is to be completed by all contractors, this questionnaire is to be issued with Letter to the Successful Tenderer. Once received, copies to be forwarded to UCC broker's for

comment. If contractors insurance cover expires during the course of the contract, an updated IBA questionnaire should be completed by the Contractor and furnished to UCC.

A Risk Control Questionnaire is required to be completed by the successful contractor for all projects with a contract value in excess of €5 million before work commences on the project.

2.7 BUILDING INFORMATION MODELLING

It is a requirement that the design of the project is to be executed using Building Information Modelling (BIM) and that all Design Team members would have BIM capability & BIM compatible software to implement this requirement. Refer to UCC's BIM Employers Information Requirements.

2.8 ENERGY PERFORMANCE

Outline energy philosophy and operational concept on lighting, heating, cooling, water usage, electrical metering and ventilation.

The Mechanical & Electrical Consultant is the Lead consultant for the BREEAM Certification & BER rating and shall provide all specialist services in this regard, however there will also be significant input required from the Architect and other Design Team members.

Unless otherwise advised all new buildings and extensions will be designed to achieve a minimum Buildings Energy Rating of A3 and comply with Technical Guidance Document Part L - Buildings other than Dwellings 2019.

It is intended that for all new building projects, to be delivered a carbon neutral.

Life Cycle Costing exercises used in the determination of products for Building Envelope /systems & Finishes/Cost Optimisation, and presented utilising the Cost and Carbon templates provided by the CWMF.

BER and energy performance of refurbishments and fit outs will be specified on a case by case basis.

In conjunction with the Architect ensure that the provisions of SI 151 of 2011 (Triple E Register) are incorporated as appropriate into the services design. (www.seai.ie).

The Mechanical / Electrical Consultant is to assist UCC in the application of achieving grant funding for sustainability.

Evaluate operational energy performance of the building in accordance with CIBSE: TM54/TM54: Evaluating Operational Energy Performance of Buildings at the Design Stage.

2.8.1 BREEAM

The BREEAM rating for the project is as per that stated in the Definitive Project Brief, if no such rating is provided, then a BREEAM "Excellent" building shall be provided.

The Lead consultant for the delivery of BREEAM shall be the Mechanical and Electrical Consultant; however both the architect and civil & structural engineers shall have significant input into the BREEAM process and shall assist the M&E consultant (or any agent engaged by the M&E Consultant with respect to BREEAM) in all aspects of delivering a BREEAM "Excellent" building throughout all stages of the project.

The Lead M&E Consultant shall include for all services, specialist or otherwise to deliver a BREEAM "excellent" building, including design, inspection, testing and commissioning throughout all stages of the project, including producing any reports necessary.

This will include but not limited to:

- A qualified Advisory Professional (AP) as defined in "BREEAM Professionals – A guide to Understanding their Roles",
- Specialist Commissioning Manager,
- Seasonal Commissioning,
- Sustainability Champion for Design and Monitoring Progress; and
- All necessary reports required to provide a BREEAM "Excellent" building.

All team members involved in the delivery of BREEAM i.e. Mechanical and Electrical Consultant; Architect and Civil & Structural Engineers shall jointly complete a Gap Analysis prior to the teams tender submission to ensure all required services associated with the delivery of BREEAM are covered in the overall Fee bid.

Any additional fee claims for services, reports or otherwise related to the delivery of a BREEAM rated building will not be considered, and all consultants are reminded to ensure that they have fully included for the delivery of a BREEAM rated building as part of their tender price.

2.9 UCC POLICY IN RELATION TO THE USE OF PRODUCT NAMES

Specifications should be drawn up in terms of functional and performance requirements where possible.

Technical specifications and national standards may be referred to (i.e. EN BS, DIN etc.) in accordance with the order of preference set out in the EU Directive (Article 23a), as long as they are accompanied by the words 'or equivalent'.

Specific product names or sources should not be included, other than in strictly exceptional circumstances where a sufficiently clear description of what is required is not possible, and then only where the name/source is accompanied by the words 'or equivalent.' It should be made very clear that there is not a direction to use the named product / system, but that it is merely an example of something that meets the specification.

Where a technical specification/standard is referred to, or where (exceptionally) a product name is included, a tender cannot be rejected for failing to comply with the specification once the tenderer has proven that its solution satisfies in an equivalent manner the underlying requirements of UCC.

There will be limited circumstances where UCC will have products that are intended to be uniform throughout the Estate. Examples would be certain Data networks, Access Control, Telephones, Legionella Control, & BMS systems. In this case alternative systems must have proven that they are capable of fully integrating and are compatible with the existing systems from both an installation and maintenance contract and to have the parts readily available.

If there are exceptional circumstances where the Design Team have to use product names this need to be formally approved in writing by UCC.

2.10 VALUE ENGINEERING

The Design Team Leader has overall responsibility for the delivery of the project within the approved budget throughout all stages of the project. At each of the project stages, the Design Team is to allow for value engineering to keep the project within approved budget. Any value engineering decisions shall be taken in conjunction with UCC representatives without comprising on performance.

If the pre-tender estimate exceeds the budget, then the design team is responsible for all Value Engineering to align to Pretender estimate with approved budget, and the following is to be noted.

Works that are essential should not be omitted if they will have to be re-introduced at a later stage after contract award. Even with the removal of non-essential work (or any works) the question in relation to compliance with the procurement rules and staying with the existing procurement procedure will turn on if such omissions materially alter the contract that was originally advertised. Even post-award variations are subject to this analysis.

In the Presse text case, the Court of Justice held that changes to a public contract may amount to the award of a new contract requiring a new call for competition if those changes are sufficiently material to demonstrate an intention by the parties to re-negotiate the essential terms of the contract. Therefore, any amendments to remove non-essential works must not materially amend the contract that was originally advertised. Factors that could be considered materially might be

- (i) the value of the contract and the value of the work being removed,
- (ii) whether there is any amendment to the duration of the contract (this can only happen by agreement),
- (iii) whether there is any amendment to the start date (this should not happen),
- (iv) whether the removal of the non-essential works would favour some bidders over others,
- (v) whether the removal of the non-essential works would make a difference to the overall result in the competition i.e. to the identity of the successful tenderer. If the Employer feels that the removal of non-essential work in a particular case would constitute a material change and therefore not be consistent with EU procurement rules and if there is no additional funding available, the process should be brought to a halt and a new procurement procedure embarked on; and
- (vi) If, having re-examined the project costs, the Employer/Design Team forms the opinion that there is no room for bringing project costs back within the approved budget, the Employer should either seek funding from other sources or consider initiating a new procurement procedure.

2.11 GROSS INTERNAL FLOOR AREA

The areas identified within the Schedule of Accommodation for the works is the Gross Internal Area (GIA) as defined in the Society of Chartered Surveyors Ireland Measuring Practice Guidance Notes, a copy of which is located [here](#).

3.0 STAGE PROCEDURES

3.1 STAGE 1 – PRELIMINARY DESIGN

3.1.1 Objectives

The objectives for Stage 1 Preliminary Design are to:

- Review all information provided whether as part of the brief or otherwise and satisfy themselves that the project is viable,
- Establish an analysis all site factors and constraints which may impact on the location for the proposed works and the design and cost implications of each viable option / location,
- Where the project is in part or in total the repair/replacement of a building element(s), or a refurbishment project, to fully determine the scope and extent of the works necessary,
- Exclude impractical and unviable options/locations, collaboratively explore and assess the remaining options/locations available for meeting the project brief, and demonstrate by comparison with the other options, that the recommended option achieves an acceptable balance between the design (architectural, engineering and health & safety), educational, and economic requirements of the project; and
- Identify all project risks and their associated mitigating measures to eliminate / reduce the risk.

3.1.2 Project Progression

In normal circumstances (i.e. unless otherwise instructed by UCC) once a Design Team has been appointed, the **project should be progressed expeditiously** to the completion of Stage 2b (i.e. the preparation of Tender Documents). In particular the Design Team is required to meet the delivery targets set at tender and appointment stage.

Immediately on appointment (within 2 weeks) a draft **Detailed Project Programme** must be prepared by the Design Team Leader in consultation with the rest of the Design Team.

This programme will detail a number of con-current actions by the Design Team members each of which must be progressed simultaneously. Once this draft detailed Project Programme has been agreed, the Design Team Leader should confirm the date and time set for a Pre-Stage 1 meeting, or if necessary, arrange an alternate date.

The Detailed Project Programme is to indicate project deliverables and the Design Team Leader is to report on progress at each Design Team Meeting.

Review, quality control and co-ordinate all information and stage documentation with other design team members and ensure compliance with the Schedule of Services for each discipline.

3.1.3 Review of the Brief

Depending on the Project, the brief may be well-defined (with an existing Site analysis or Feasibility Report) or limited to a schedule of Accommodation and cost limits. Whether the Brief is well defined or not, the Design Team are required to review all the information provided (including any drawings or Technical Reports from any source) and satisfy themselves that the information presented is

substantially correct and that where the information is not accurate that such inaccuracies will not materially affect the viability or cost of the Project.

The Schedule of Alterations to existing Accommodation (if applicable) and provisional schedule of essential remedial works (if applicable) are both based on the presumption that such alterations and remedial works are economically viable in relation to the equivalent new build cost and that no insurmountable Health and Safety issues pertain.

Where the Design Team is satisfied that some or all of the information provided is not accurate and that such inaccuracies will materially affect the viability or cost of the Project, including the possibility that the Schedules of New Accommodation and the Schedule of Future Use for Existing Accommodation will have to be re-assessed, the Design Team are required to notify UCC.

3.1.4 Options for Meeting the Brief

Having identified and recorded the site factors and constraints, the DT should be in a position to exclude a number of options for the layout and location of the building project on site. The excluded locations and the reasons for their exclusion should also be recorded for later inclusion in the summary stage 1 report.

The remaining options / locations should now be assessed collaboratively by the Design Team to determine which option achieves the best balance between the design (architectural, engineering and health & safety), educational, and economic requirements of the project.

It is recommended that the major site issues (e.g. Traffic Management, H&S, access to services, external site layout, and capacity for expansion) be accorded a high level of importance.

At this stage the Design Team will have a maximum of 3 viable options which all to a greater or lesser extent meet the brief requirements.

3.1.5 Initial Sketch Design

Outline sketch design proposals (in compliance with the brief and area limits) should be prepared for these options sufficient to identify the relative merits, demerits and costs applicable to each option. The area of each option and the applicable abnormal costs (if any) should be identified at this stage.

The circulation routes should be considered so that the circulation will work effectively if the building is further expanded. The building services (M&E) and other services routes should be so positioned as to allow for such expansion without major disruption to the fabric of the building.

Where lifts are required, the design team is to review the possibility of providing a fire evacuation lift, within the overall budget constraints. Should the provision of a fire evacuation lift exceed the budget, then the Design Team Leader in conjunction with the design team is to provide a report to UCC outlining the various options considered and the associated additional costs.

Where the project is an extension to an existing building, the overall circulation on the site, and within the existing buildings, shall also be taken into account.

A proposed location for the Contractor's compound and a safe methodology for access and egress of Construction traffic must form part of the sketch proposals

In the context of both safety and durability, the Design Team should consider the choice of materials and methods of construction carefully and make preliminary choices which will ensure that the building is easy to build and safe (both during construction and in use).

An initial cost review for each of these (otherwise viable) options should now be carried out. Design options with excessive cost should be excluded.

Arising from these initial design proposals and the cost review, a preferred option will emerge which achieves the best balance between the design (architectural, engineering and health & safety), educational, and economic requirements of the project.

The reasons for the exclusion of the other otherwise viable options (not to be further developed) should be recorded for later inclusion in the Stage 1 report.

3.1.6 Risk Register

Within one month of the Consultant's appointment, the design team shall prepare a detailed and comprehensive **Risk Management Plan**, (with contributions from all design team members) which will identify all significant risks associated with the project, analyse / rate the risks, set out proposals to manage the risks and set out plans to review the risks.

The Consultant shall assist UCC in developing appropriate risk management strategies for dealing with and managing risk throughout all stages of the project. The Risk Management Plan shall examine all risks that could affect the projects safety, cost, programme or quality. Each risk is to be rated and scored, assigned an owner and provided with a mitigation strategy to minimise its impact on the project. The Risk Management Plan shall be updated on a two-monthly basis.

3.1.7 Procurement of Investigative Surveys.

In order to inform the design, the Design Team may need to procure a number of differing investigative surveys such as Topographical Surveys, Geotechnical Investigations, Below Ground Utility Surveys etc.

It is envisaged that these surveys will likely fall below the National Threshold of €50,000.00 plus VAT, however the Design Team shall in the first instance evaluate the likely costs of any survey to determine the appropriate procurement strategy.

Where it is envisaged the works will be below the national threshold, then the relevant member of the design team should prepare tender documents (using the **Public Works Short Investigation Contract** where appropriate) and forward to UCC for prior approval before seeking tenders.

The Design team shall seek a minimum of at least 5 quotes in writing or by email.(from suitable contractors so that a minimum of 3 written quotations can be obtained detailing the scope of work (including making good where appropriate).

Upon receipt of Tenders, the Design Team member responsible for the tender shall record on a Tender Opening Sheet, all tenders received. If the lowest suitable price is such that the Design Team (as a group) is satisfied that all intrusive surveys can be completed within the tendered amount, & subject to UCC authorisation, the Design Team Leader may proceed to appoint the contractor on behalf of UCC.

In the event that it is envisaged that the proposed investigative survey exceeds the max. threshold of €50,000.00 to obtain direct quotations, then the relevant design team member shall prepare all necessary tender documentation in line with the Capital Works Management Framework for advertising the works on E-Tenders. Refer to [Section 3.4](#) for further guidance.

In all cases, the Design Team member shall submit to UCC a Tender Report. This report is to include as a minimum the following information:

- Introduction.
- Scope of Work.
- Procurement Method and rationale.
- Invited Tenders.
- Tenders Received.
- Summary of Tenders.
- Award Criteria.
- Conclusions & Recommendation.
- Appendices.
 - Tender Opening Sheet.
 - Tender Documentation Issued.
 - Successful & Unsuccessful Letters.
 - Letter of Acceptance / Signed Form of Tender & Schedule.

The cost of necessary surveys will be borne by UCC, on receipt of an invoice sent through the Design Team Leader to UCC's appointed Project Manager with a cover note from Design Team Leader recommending payment on the basis that the work has been satisfactorily completed and the appropriate procurement process was carried out for the work.

3.1.8 Stage 1a Report

Once the design has been developed, the Design Team shall prepare a Stage 1 (summary) Report to record the evaluation/assessment process and the design decisions taken, and to provide a written record. It should be a brief summary report typically 10-15 pages long.

The report should be prepared and assembled by the Design Team Leader in consultation with the other Design Team members (including the Project Supervisor Design Process) and with contributions from those other Design Team members where appropriate.

The extent and detail of the report will vary from project to project, but will always include a review of the project brief and an assessment of its viability, an evaluation of the site, an overview of the options, especially the preferred option, and an analysis of the cost implications both of the site and location factors and the design proposals being adopted.

In the case of refurbishment/ repair works it is necessary to include an evaluation of scope of essential Work to Existing Buildings with an assessment of the viability of those works within the scope of the brief in the context of the overall condition of the building and the relative condition of other elements.

The report will typically follow the following format:

- A short summary of the project brief (including approved amendments),
- A brief overall project viability assessment,
- A brief review of the site factors and constraints (including site conditions {both sub-soil and above ground}, archaeology, existing services, access, traffic management etc),

- Summary of the scope of essential remedial / alteration works to existing buildings (within the scope of the brief),
- Short summary of consultations with the Statutory Authorities (and their requirements),
- Summary of Hazards and Risks, and measures to eliminate, mitigate and control such risks,
- A review of the options for meeting the project brief,
- Next the remaining viable options which all to a greater or lesser extent meet the brief requirements listed with the relative merits and demerits (including cost implications) noted.,
- The reasons for the exclusion of the other otherwise viable options (not to be further developed) should be recorded,
- The reasons for the selection of the preferred option,
- Short account of the development of the preferred option (post Pre-Stage 1 meeting) including the general design concept and how it meets the brief within area and cost limits with a summary of the cost implications of the proposed design solution,
- Location Plan, Site Plan, Block Drawings (Plans, Sections and Elevations) and thumbnail sketches (all on A4 or A3 sheets) sufficient to show the design concept (included in the body of the document),
- Preliminary specifications describing materials and methods of construction,
- Summary of the proposed mechanical and electrical systems, the thermal performance of the building, the fuel strategy and the hot water strategy (including all existing systems and their capacities),
- A4 or A3 Services distribution drawings indicating the proposed services distribution strategy/zones which will be developed as the design progressed,
- Preliminary completed TGD006 Energy Information Form,
- Written confirmation that the preferred option is capable of development to Tender stage within the agreed cost and area limits in accordance with the agreed Schedules of Accommodation, and Design Guidelines.,
- An Outline Cost Plan including detailed schedule of Abnormal Costs with each abnormal identified, justified, and cost planned; and
- A Completed Area Re-Conciliation Sheet.

The Design Team must submit the completed report to the Client and discuss it in detail with the Client making sure that its contents are fully understood, and its recommendations fully supported.

The Design Team are not authorised to proceed to Stage 2a unless they are satisfied that the project complies with the brief, is in accordance with the recommendations made at the Pre-Stage 1 meeting and can be constructed safely within the area and cost limits.

As soon as the Design proposals and Stage 1 Report have been signed off (in writing) by UCC, the Design team should proceed to Stage 2a.

3.1.9 Pre-Stage 1 Stake-holder Meeting

Nearing completion of Stage 1 the Design Team should be ready for the Pre-Stage 1 meeting. To ensure a productive meeting it is important that the Design Team has carried out the initial assessment of the project and is sufficiently informed of the constraints and issues including cost implications.

For all viable options it is necessary to identify the total area and to list the abnormal costs for each option (together with the anticipated cost for each abnormal)

Where adequate information is provided at the meeting, the project issues and constraints can be discussed, and agreement can be reached to develop a specific design option through to Stage 2a without delay (with an interim Stage 1 summary report to UCC).

UCC may also make comments and suggestions which should be taken into consideration as the project progresses.

The Design Team should also ensure that all relevant issues are raised at this meeting which will affect the progression of the project through to completion of Stage 2a.

Where detailed intrusive surveys will be required (at Stage 2a), the nature and extent of the investigative surveys should be signalled.

The meeting outcome will be a record of the preferred option, and (if applicable) a list of suggestions / comments for consideration as proposed by UCC.

Where adequate information is not provided, and a preferred option cannot be arrived at, the Design Team will be asked to develop the project further and re-convene the meeting when such information is available. The process will be repeated until a satisfactory outcome can be achieved

3.2 STAGE 2A – DEVELOPED DESIGN

3.2.1 Objectives

The objectives for Stage 2a Developed Design are to:

- Develop the design and accurately cost the option agreed with the UCC at Stage 1, which best meets the design (architectural and engineering and Health & Safety) educational and economic requirements of the project.
- Prepare and submit all statutory approvals including but not limited to:
 - Planning Permission
 - Fire Certificate Submission
 - Disability Access Certificate Submission

3.2.2 Project Progression

Upon written approval from UCC the project is to be progressed expeditiously to the completion of stage 2a.

In particular the Design Team is required to meet the delivery targets set at tender and appointment stage and the Detailed Project Programme agreed with UCC and the end users.

3.2.3 Intrusive Surveys (existing buildings only)

In normal circumstances intrusive surveys should not be necessary. However in special circumstances further investigation may be required to satisfy the Design Team as to the detailed scope and nature of the works, such that when detailed design is commenced, the works can be fully described and specified (P.C. sums and provisional sums are not permitted).

Where such intrusive surveys are required, the nature and extent of the investigative surveys is to have been signalled at the Pre-stage 1 meeting.

The relevant member of the design team should prepare tender documents (using the **Public Works Short Investigation Contract** where appropriate) and seek a minimum of at least 5 quotes in writing or by email (from suitable contractors so that a minimum of 3 written quotations can be obtained detailing the scope of work (including making good where appropriate).

On receipt of these written tenders, if the lowest suitable price is such that the Design Team (as a group) is satisfied that all intrusive surveys can be completed within the tendered amount, & subject to UCC authorisation, the Design Team Leader may proceed to appoint the contractor on behalf of UCC.

In the event that it is envisaged that the proposed opening up exceeds the max. threshold of €50,000.00 to obtain direct quotations, then the relevant design team member shall prepare all necessary tender documentation in line with the Capital Works Management Framework for advertising the works on E-Tenders.

The cost of necessary intrusive surveys will be borne by UCC, on receipt of an invoice sent through the Design Team Leader to UCC's appointed Project Manager with a cover note from the Design Team Leader recommending payment on the basis that the work has been satisfactorily completed and the appropriate procurement process was carried out for the work.

3.2.4 Health & Safety Assessment

In developing the sketch designs, Designers must ensure that Health and Safety is taken into account at all times. All designers must both individually and collectively identify any hazards and risks that may arise, and address and resolve all health and safety issues identified at Stage 1.

As in Stage 1, where possible, the risks should be eliminated or reduced, and where they cannot be eliminated provision should be made for control of those risks, and the transfer of the necessary information on those control measures and any outstanding risks together with any design assumptions to the Project Supervisor Design Process [PSDP].

As with Stage 1, where any such hazards and risks present any insurmountable H&S issues such as to make the project unviable, the DT are required to notify UCC.

3.2.5 Developed Sketch Scheme

The Developed Sketch Scheme should evolve from the option agreed at the Pre-Stage 1 meeting and agreed with UCC on completion of Stage 1. It must not vary substantively in design, form, layout or area from that previously agreed proposal.

It should consider all aspects of the developed design in an integrated manner. In particular, where a project is being undertaken within the University campus site, the Developed Sketch Scheme needs to have due regard for the day to day operation of the existing educational facilities and the implications for the proposed construction programme, including phasing, examinations, temporary accommodation, UCC Standard Operation Procedures etc.

The sketch scheme shall at all times comply with the written Project Brief (and any agreed amendments), the agreed Schedules of Accommodation, the approved cost limits.

As required at Stage 1, the Building Services and structure must be so designed as to ensure the efficient distribution of services in a cost effective and flexible building, and the materials and method of construction should be appropriate to the design and to the cost limits. Materials should be durable and low-maintenance and appropriate to the function.

3.2.6 Basis of Design

The Design Team Leader is to provide to UCC in a format prescribed by UCC a Basis of Design Report for the project.

This report shall have input from all design team members and contain the following information:

- General Project Description, Intent and Sustainability Approach.
- Design Parameters and Space Requirements.
- Energy Impact Assessment.
- Mechanical System Components.
 - Incorporation of Covid-19 mitigating measures.
 - Process flow diagrams
- Electrical System Components.
- Plumbing System Components.
- Legionella
- Gases Components.
- Air Conditions Components.

- Fire Project / Alarm System Components.
- Control & System Integration.
- Applicable Codes & Standards.
- Design Standard / Guidelines Deviation List.
- Interior Conditions Table.
- One-line Diagram (Mechanical/Electrical/Plumbing).
- Energy Philosophy and operational concept on lighting heating, cooling, water usage, electrical metering and ventilation.
- Energy Model Output.
- Controls and Sequence of Operations.
- Evaluate operational energy performance of the building in accordance with CIBSE: TM54TM54: Evaluating Operational Energy Performance of Buildings at the Design Stage

3.2.7 Cost Review

A more detailed cost review is to be carried out to ensure that the project will not exceed the project budget.

In particular the basic building cost, specialist services, external works, fixed furniture and associated fittings, abnormal costs, capital contributions, professional fees and other specialist services, equipment costs, ICT/AV Data & Comms, BMS access control and fire-fighting etc, loose furniture, contingency, and works to existing (if applicable) agreed at pre stage 1 meeting must be considered.

Where cost difficulties, not previously agreed, arise in developing the agreed scheme, the Design Team, via the Design Team Leader, must notify UCC prior to proceeding with the completion of stage 2a.

A final Stage 2a Check on project viability is to be carried out by the Design Team as a whole. On completion of Stage 2a, and prior to UCC consultation, the Design Team should be satisfied that the design proposals (including works to the existing buildings) as developed can be constructed safely within the area and cost limits previously agreed.

3.2.8 Stage 2a Stake-holder Meeting

As soon as the Design Team has reasonable certainty that the Stage 2a design (and associated cost information) will be substantially complete in time for the pre-arranged Stage 2a meeting, the Design Team Leader (through UCC) should confirm the date and time set for the meeting (or if necessary arrange an alternate date).

At this meeting the Design Team will present the design proposals, cost implications and any other relevant issues to UCC.

The Design Team should ensure that sufficient information is available to fully explain the developed design and should have copies of the relevant information available for distribution at the meeting.

The level of information is that appropriate to a Stage 2a report including electronic presentations, drawings, specifications and supporting information as required. Distribution copies can be A3 as long as they are legible, and one copy of any large drawings is available if required.

The Design Team should also ensure that all relevant issues are raised at this meeting which will affect the progression of the project through to completion of Stage 2b.

Where adequate information is provided at the meeting, the project issues and constraints can be discussed, and agreement can be reached to progress to Statutory Approvals. Upon UCC written instruction the Design Team may proceed to Stage 2b – Detailed Design

UCC may also make comments and suggestions which should be taken into consideration as the project progresses. Any agreed amendments to the proposals arising from this meeting should be incorporated into the project documentation prior to completion of Stage 2a.

3.2.9 Stage 2a Report.

Once the Stage 2a Stakeholder meeting has taken place and agreement has been reached to progress to Stage 2b and all agreed amendments to the proposals arising from that meeting have been incorporated, the Design Team need to prepare a Stage 2a (summary) Report. This report will be substantially the same information and documentation provided at the Stage 2a meeting and that needed for Statutory Approvals

The report should be prepared and assembled by the Design Team Leader in consultation with the other Design Team members (including the Project Supervisor Design Process) and with contributions from those other Design Team members where appropriate.

The main report should be brief, typically 15 – 20 pages long (in A4 Portrait format), with drawings of sufficient scale to show the necessary information attached as an appendix. It should contain an Executive Summary, and a report from each Consultant all bound as a single document. The report and all attachments must be labelled, with the document or drawing title and the Stage number clearly visible.

The report will typically follow the following format:

- A short summary of the project brief (including approved amendments) and the decisions agreed at the Pre- Stage 1 meeting together with any variations to the brief since then.
- An update on Project viability with a summary of project cost compared to the last agreed project cost limits including any cost variations
- An updated Project Programme (including the Construction programme) indicating the time (in weeks) required by the Design Team for each of the remaining stages compared with the Project Programme agreed at the Pre-stage 1 meeting.
- Stage 2a Completion Certificate signed by all Design Team members.

The Architect Section

- Brief written commentary on how the Developed Design considers all aspects of the developed design in an integrated manner (within area and cost limits) and (if applicable) how the existing building and campus will continue to operate including any implications for Health and Safety, the proposed construction programme, traffic management, phasing, examinations, temporary accommodation, etc.
- For work to existing, definitive proposals for the essential remedial/ alterations works agreed at Stage 1 with written commentary on how the existing educational facilities will continue to operate during construction (as above)

- Brief Health & Safety report on any residual hazards and risks and the measures being taken to eliminate, mitigate or control those hazards/risks.

The Civil Structural Engineer's Section:

- Report on the Civil/Structural Engineering proposals for the building and the site, (including main drainage and water-main layouts) and how they facilitate the safe and economic construction of the project.
- Reference to how the design of the structure ensures the efficient distribution of services in a cost effective and flexible manner.
- Report on the Traffic and Transportation proposals for the development including traffic impact assessments, mobility management plan, preliminary traffic management plans for all stages of the project
- Report on the flood risk analysis of the development and proposed mitigating measures.

The Building Services Engineer (M&E) Section:

- Commentary on any design developments/changes that have occurred particularly (i) any variations from that agreed at Stage 1 Report and (ii) any cost sensitive items
- Detailed description of the proposed mechanical and electrical systems including existing system capacities.
- Details of the thermal performance of the building design.
- A control strategy section outlining the method of control and operation of all of the proposed services. This should be particularly detailed with respect to the heating and lighting services.
- Completed TGD006 Energy Information Form

The Quantity Surveyors' Section:

- A report on the cost implications of the developed Sketch Design with particular reference to any cost sensitive items (arising during Developed Sketch Design). Any increased or additional costs should be accompanied by a detailed explanation and justification with supporting evidence from other Design Team members as required.
- Completed Cost Plan.
 - The Cost Plan shall include an itemised list and description of the extent, scope and cost of all abnormal works and works to existing buildings as agreed at the Planning & Development Meeting. Costs arising from anticipated Planning or Fire safety Certificate conditions should be included.
 - The Cost Plan must be supported by detailed estimate including quantities and rates.
 - Work to existing buildings must be costed separately with the relevant floor area clearly identified and the cost of this work analysed by reference to this floor area.
- A reconciliation between the Cost Plan and the Outline Cost Plan (produced at Stage 1) including explanation of any deviations. If the scope of abnormal works or other costs exceed that previously agreed, a detailed explanation must be provided

The Appendixes will typically include:

Architectural:

- Site Plan (with North point) to not less than 1:500 scale showing site boundaries, building, boiler-house, sub-station, full site development, including contours, finished levels, entrances, roads, paths, parking, play areas, external yard and all utilities including foul and surface water drainage.
- Dimensioned floor plans to 1:100 scale indicating the layout of furniture and equipment. The area of all spaces together with the space names in accordance with the Schedule of Accommodation must be indicated. The north point and the direction of the prevailing winds shall also be indicated. (For existing buildings highlight sections where work will be carried out and clearly show any alterations and amendments.)
- Dimensioned sections and elevations to 1:100 scale showing floor and ceiling levels, the structure, window openings and the main services routes. The pitch of the roof shall be indicated.
- Roof Plan to 1:100 scale. Roof pitch or falls to be indicated including location of rainwater outlets, etc.
- Sections to 1:50 scale through selected portions of the building illustrating the proposed method of construction, natural lighting and ventilation, integration of services, finishes, etc.

Civil/Structural:

- General arrangement drawings, (including plans, and sections of the buildings to a suitable scale not less than 1:100), indicating Civil/Structural Engineering proposals for the building and the site, including main drainage, water-main layouts, parking, roads and auto-tracking.

Building Engineering Services:

- Drawings to not less than 1:100 scale indicating the heating services, hot and cold water, ventilation services, soil and waste services (above ground), lighting and general electrical services including ICT. The proposed ceiling finishes shall be indicated by way of a symbol on each room and an explanatory legend on all layout drawings. Equipment positions and associated services routes shall be indicated. Primary services distribution sizes should be detailed.
- Sections (2 minimum) to 1:50 scale (through the full building) in the most heavily serviced areas. These sections should include all of the M&E services distributions i.e. both primary and secondary and all equipment relative to the areas indicated, along with the ceiling tile type, service ducts and access to same. The interaction between the building form, the structure and the services must be clearly shown
- Schematic layouts including controls for the heating, hot and cold water, gas, main power distribution and ventilation services including ventilation fans and ducts from fume cupboards (where applicable).
- A services distribution drawing indicating the proposed services distribution strategy/zones as developed from Stage 1

- A Site Plan to not less than 1:500 scale showing the site services

The Design Team are required to submit the completed report to UCC and discuss it in detail with UCC's representatives making sure that its contents are fully understood, and its recommendations fully supported.

The Design Team must also be satisfied that the project can be constructed safely within the area and cost limits and that the project complies with the brief requirements (including any amendments thereto).

The Design team should proceed to Stage 2b as soon as the Developed Sketch Designs and Stage 2a Report have been signed off (in writing) by UCC.

3.3 STAGE 2B – DETAILED DESIGN

3.3.1 Objectives

The design team objectives for Stage 2b Developed design are to:

- Ensure that the project is fully designed and detailed before going to tender and that all the information necessary to complete the construction is included in the Tender Documents, including
 - Preparation of detailed design drawings and specifications for the design within the agreed project budget, incorporating any conditions arising from statutory approval, to enable the preparation of a Bill of Quantities (or other agreed tender documentation) based on full and complete design.
 - Preparation of the Bill of Quantities and all other tender documentation required.
- Prepare an accurate pre-tender cost estimate not more than 1 month before the issue of request for tenders.

3.3.2 Project Progression

In normal circumstances (i.e. unless otherwise instructed by UCC) once a Design Team has been appointed, the **project should be progressed expeditiously** to the completion of Stage 2b (i.e. the preparation of Tender Documents). In particular the Design Team is required to meet the delivery targets set at tender and appointment stage.

Design teams should (from pre-planning consultations) be aware of the likely Planning conditions and where those conditions are proportionate and reasonable may elect to factor those into their detailed designs.

Performance assessment will be carried out on the project programme agreed at Stage 1 and on the extent to which those delivery targets are met.

During the preparation of detail designed documents (the Works Requirements) the Design Team via the Design Team Leader must keep UCC informed on a regular basis of progress and any issues which will affect programme or the approved budget cost.

3.3.3 Statutory Approvals

Design teams must submit the Planning Permission, the Fire Safety and Disability Access Certificate applications prior to commencing work on detailed design as part of stage 2a.

On receipt of notification of the Decision to Grant Planning Permission and/or Fire Safety Certificate/DAC, the Design Team must immediately review the conditions and determine whether any of the conditions are disproportionate or unreasonable, require a substantive change to the brief, or give rise to un-anticipated or unreasonable additional costs.

The Design Team must then **immediately** (normally within 3 working days of receipt of the decision) notify UCC's appointed Project Manager by email reporting on the decision and attached conditions, attaching a copy of that decision.

Any conditions which are disproportionate, unreasonable, require a substantive change to the brief, or gives rise to un-anticipated or unreasonable additional costs should be highlighted with commentary

on whether taken as a group, in the view of the Design Team, an appeal is appropriate. (Conditions which are reasonable, proportionate and foreseen can be grouped together as such.) The total additional cost implications of all conditions together should be stated.

Unless an appeal is recommended (as above) the Design Team should proceed with detailed design.

3.3.4 Detailed Design

The Design Team are fully responsible for ensuring that the project is fully designed and detailed before going to tender and that all the information necessary to complete the construction is included in the Tender Documents.

Having submitted the Planning application, Fire Certificate application and the Disability Access Certificate application, and determined the appropriate level of risk transfer the Design Team is ready to commence work on detailed design.

During the preparation of detail design documents (the Works Requirements) the Design Team must keep UCC informed (on a regular basis) of progress and any issues which will affect the programme or the project cost.

The detailed design must comply with the design presented at the Stage 2a Stakeholder's meeting and submitted for Planning. The onus and responsibility remain with the Design Team to ensure that the detailed drawings are in accordance with the Grant of Planning Permission, Fire Safety Certificate and Disability Access Certificate obtained, and comply with the Building Regulations.

It is essential that thorough planning of the building, services and external works should take place at this stage. This planning should be of such a nature that Employer's Representative change orders in the post contract stage will be kept to a minimum.

3.3.5 Risk Transfer

The onus rests with the Design Team to determine the appropriate level of risk transfer. The correct strategy is to assess the risk, mitigate it where possible, quantify the risk and finally to determine whether risk transfer is appropriate. Risks should not be transferred where they cannot be reasonably evaluated.

Additional site or building investigations should not be required at this stage (other than in exceptional circumstances). The Design Team should not re-visit the investigative work carried out at Stage 1 unless the Design Team has reason to believe that the results of that investigation were suspect or inadequate (whether or not risk is transferred).

As part of Stage 1, the Design Team will have determined an appropriate risk mitigation strategy. This may in exceptional circumstances include enabling contracts or specialist advance contracts (e.g. archaeological excavation, contaminated ground remediation, asbestos removal, or moving existing services).

Subject to the above each transferable risk must be assessed on a case by case basis for each project based on the results of that investigative work and justified on the basis of value for money.

Where UCC is better able to manage the risk, it should be retained as an Employer risk. Inappropriate risk transfers will cost UCC money (e.g. unknown or unquantifiable risks). Appropriate risk transfer is when the Design Team is satisfied that Contractors tendering for a project will offer good value for carrying the residual risk.

For Events 18 to 20 i.e. site investigations, archaeology and underground utilities (applicable to the major form of contract only), these risks will have been assessed as part of the site location assessments at Stage 1.

Where the risks associated with ground conditions, archaeology and/or underground utilities are to be dealt with under the main contract, the Design Team must determine whether risk transfer is appropriate:

- Any significant risk of archaeological items of value should only be transferred after full archaeology investigation, and where appropriate an enabling contract. Any substantive risk transferred should be measurable and consequently capable of being costed by the Contractor.
- Any significant risk of archaeological items of value should only be transferred after full archaeology investigation, and where appropriate an enabling contract. Any substantive risk transferred should be measurable and consequently capable of being costed by the Contractor.
- The risk of unforeseeable ground conditions should only be transferred if the Design Team are satisfied that there is reasonable certainty as to the nature of the ground conditions. Any risk transferred should be minimal. Where the risk is appreciable either the risk should not be transferred, or further investigation should be done to minimise risk.
- The risk of unforeseeable utilities buried in the ground should only be transferred after full desk-top and site investigation (if required). As with ground conditions, any risk transferred should be minimal.
- In the case of Event 21 - unforeseeable delays by utility companies, it is a judgement call. Where such delays are critical to the programme and will have a high cost to the Contractor, risk transfer is not recommended. Where there is slack in the project delivery programme and such delays can be accommodated without undue disruption, risk transfer is acceptable.
- Where practical the Contract duration should allow adequate time to the Contractor to accommodate reasonable delays by the utility companies without a commensurate increase in Tender Prices, and the risk should be transferred.

3.3.6 Enabling Contracts

Where one or more enabling contracts are required and the design team have obtained UCC agreement for those contracts, they must ensure that adequate time is allowed both for the procurement of the relevant contractors and carrying out the works prior to the appointment of the Main Contractor.

The Design Team will have determined (at Stage 1 or Stage 2a) whether enabling contracts are appropriate and if so, will also have determined a program of design work to allow those enabling contracts to be carried out without delays to the overall project programme. They will also have informed UCC (whether or not such enabling works will cause delays or incur additional costs) and will have obtained their agreement to the proposed procurement strategy (Generally at the Stage 2a Stakeholder meeting).

Where the cost of the enabling contract(s) is (in the view of the Quantity Surveyor, and recorded in writing) within the assigned budget for that element of the works and will not cause additional project

costs, the relevant Design Team member should proceed with the Tender Competition for those works (Agreed in principle at the Stage 2a meeting).

Prior to issuing a Letter of Acceptance to the lowest suitable tenderer the Authorisation of UCC is always required.

The cost of these enabling works where agreed in advance will be paid by UCC.

Where the cost of enabling contract(s) will exceed the assigned budget for that element of the works or will cause additional project costs the Design Team must contact UCC to review the options available prior to award.

The Design Team are not authorised to award any Enabling Contract without prior written Authorisation from UCC.

3.3.7 Procurement of Contractors

Capital Works Management Framework are to be utilised for the procurement of all Construction contracts. The procurement strategy for the implementation phase of the project is to be developed by the Design Team in conjunction with UCC.

The Design Team Leader shall submit to UCC a Procurement Strategy for the procurement of all Works Contractors for the project for approval.

The open or restricted procedures may apply for all projects above €250,000.00. For projects less than €250,000.00 the open procedure should generally be used.

3.3.8 Specialists.

The design team is to refer to the most recent version of GN 2.3.3 Specialists and the Public Works Contracts for the requirements for procuring specialists.

If it is deemed by UCC that the project has a level of complexity sufficient to justify the use of any specialists, then Design Team is to include the procurement of these specialists in line with GN 2.3.3 and it is deemed included as part of their fee.

3.3.9 Detailed Cost Control

The approved project cost at Stage 2a (or as reviewed and agreed subsequent to that Stage) must not be exceeded.

Where unforeseeable Planning, DAC or Fire Certificate conditions arise affecting the Total Project Cost, the Design Team are required to notify UCC.

The agreement of UCC is needed for any additional Project costs.

The production of detailed design drawings and specifications and the preparation of Bills of Quantities based on proposals in excess of the area limit or the approved cost limit are not permitted. It will also cause delays in the Project and will result in abortive work by Design Team members at their own expense.

Any additional work arising from the preparation of the Bill of Quantities or Pricing Document before the relevant detailed design work has been substantially completed will also be at the Design Team's own time and expense.

3.3.10 UCC Progress Report

Before commencing the preparation of the Bill of Quantities the Design Team must confirm to UCC (in writing) that:

- The project complies substantively in design, form, layout and area with the Developed Sketch Scheme agreed at the Stage 2a Stakeholder meeting
- The Design Team has fully considered Health & Safety at all stages and has carried out a risk assessment of the Design at the Detailed Design Stage
- Either that there were no onerous Planning, Fire Safety Certificate, or Disability Access Certificate conditions or that the relevant conditions were appealed, or that in consultation with UCC it was agreed to accept those conditions and proceed with the project.
- That all conditions attached to the above approvals have been incorporated in the detail design documents, that any cost implications have been included in the Cost Plan and UCC's authorisation for the additional costs has been received.
- The project does not exceed the (most recently) authorised project cost limits and could be built within those limits if tendered at that time.

3.3.11 Bill of Quantities

All construction projects with a construction value of over €1.0m excluding VAT will be required to include a Bill of Quantities as a pricing document. Projects of less than €1.0m may also require a Bill of Quantities where the nature and complexity of the project warrants it – otherwise a detailed schedule of rates will suffice.

While a full set of detailed drawings and specifications is not required as part of UCC's Progress Report above, the onus and responsibility remain with the Design Team to prepare fully detailed drawings and specifications prior to the preparation of the Bill of Quantities.

The onus also rests with the Design Team to ensure that the preparation of a Bill of Quantities does not proceed where it is the professional judgement of the Quantity Surveyor that the design as proposed will exceed the current approved budget, if tendered at that time. In such an event, the Design Team shall seek clarification from UCC before proceeding.

Bills of Quantities shall be prepared in accordance with the current method of measurement of building works agreed between the Society of Chartered Surveyors and the Construction Industry Federation including any amendments required by the Department of Public Expenditure and Reform.

The Quantity Surveyor must not prepare the Bill of Quantities for any particular element before the relevant detailed design work has been substantially completed. In particular, the Quantity Surveyor must not prepare Bill elements and descriptions on incomplete information, drawings and specifications.

Where the relevant consultant repeatedly fails to provide the required information and such failure is affecting the Project Programme, the Quantity Surveyor should notify the Design Team Leader, and if required UCC's appointed Project Manager.

3.3.12 Tender Conditions

The Design Team **must not include the contract duration as an award criterion** and **must not allow tenderers to determine the contract length**.

The contract duration shall be sufficient to ensure that the Construction work can be carried out safely in accordance with the Safety, Health & Welfare at Work (Construction) Regulations 2006.

Performance Bonds are normally required for all construction contracts with an estimated value in excess of **€500,000**.

3.3.13 Electronic Issue of Tender Documents

All tenders are to be issued electronically. For projects greater than €50,000 the E-Tenders Portal must be utilised and OJEU for all projects greater than €5.35m

All tenders' returns are to be returned electronically using either the E-Tenders or OJEU portal depending on project value.

3.3.14 Pre-Tender Cost Check

A detailed pre-tender Cost Plan in the same format as the Stage 2a Cost Plan must be prepared dated not later than 1 month before going to tender.

The Cost Plan should be based on the completed Bill of Quantities, priced by the Quantity Surveyor, submitted in both electronic and hard format.

If the Cost Plan exceeds the permitted limits, the Design Team must review the project and identify any possible savings needed to bring the cost within budget. A Stage 2b submission should not be made for a project exceeding the area and cost limits.

3.3.15 Stage 2b Submission / Report

The Design Team are not permitted to proceed to Tender until the written authorisation of UCC has been received to do so.

When the full set of Tender Documents and a Pre-tender cost-check (in accordance with the agreed cost limits) are complete, the Design Team must submit a summary Stage 2b Report to UCC seeking authorisation to proceed to tender.

This summary Stage 2b Report must include:

- Stage 2b Completion Certificate signed by all Design Team members.
- The Pre-tender Cost Check.
- A copy of the appropriate Form of Tender forming part of the Tender Documents.
- A copy of the completed Schedule Part 1.
- A copy of the Grant of Planning Permission / Approval, a copy of the Fire Safety Certificate and a Copy of the Disability Access Certificate including all submission documentation and revisions.
- A list of pre-qualified contractors (Restricted Procedure only).
- An updated programme including the pre-qualification of Contractors (where appropriate) indicating the time (in weeks) required for each remaining stage of the project.
- Sustainability & Energy Report.
- Completed UCC Non-Exhaustive H&S Checklist.

- Completed UCC Building Maintenance Requirements for New Projects.
- A copy of the Tender Documentation in electronic format.

3.3.16 Authorisation to Proceed to Tender

When requested to do so, the DT lead shall submit a full set of tender documentation in electronic format and in a suitable file structure to allow the appointed UCC's representative to upload the tender documentation onto the E-tenders / OJEU web portal.

Under no circumstances is the Design Team to issue Tender Documentation on E-Tenders or direct to shortlisted contractors without the written agreement of UCC. Failure to comply may result in a requirement to re-tender the project at the Design Team's own expense.

3.3.17 Performance Assessment

The Design Team Leader shall ensure that a full set of co-ordinated tender documentation is submitted to UCC's appointed Project Manager at least 10 working days before the nominated Tender Date. At this stage UCC may undertake a detailed review of the tender documentation either internally or by an appointed external third party.

Following this review, any revisions to the tender documentation resulting from a failure to achieve the project brief, be fully co-ordinated, comply with these Design Team Procedures or expose UCC to potential contractual risk shall be undertaken promptly by the design team and is deemed to be included their tender price

When Stage 2b is complete, and the Stage 2b submission has been issued to UCC, then UCC may elect to have the submission and the standard of Tender Documentation audited by a third party for compliance with the brief, these design team procedures and the scope of services.

3.3.18 Design Team Responsibility

Other than an Audit of selected projects, UCC will not examine projects in detail and in any event will not correct procedural or contractual mistakes. The onus rests with the Design Team to prepare a fully detailed and compliant Tender package for issue to the pre-qualified contractors.

Any abortive work or additional Design Team input required as a result of the failure of the Design Team to prepare an adequate set of substantially compliant Tender Documents are the responsibility of the Design Team. In exceptional cases where contractual issues arise, University College Cork reserves the right to seek recompense from the Design Team members' Professional Indemnity Insurance for substantive costs or delays incurred.

3.4 STAGE 3 TENDER ACTION

3.4.1 Objectives

The design team objectives for Stage 3 – Tender Action apply to the procurement of all Works Contractors, including Specialists, Loose Furniture, Enabling Works etc.

- Provide a fully designed and co-ordinated set of tender documentation to allow tendering contractors to provide a realistic tender price to undertake the works.
- The Design Team are responsible for ensuring that the project is fully designed, detailed and co-ordinated before going to tender and that all the information necessary to complete the construction is included in the Tender Documents.
- Change orders should only be required for exceptional reasons (i.e. **unforeseeable** circumstances).

3.4.2 Pre-Tender Checklist

If the restricted procedure is being used the Architect as Design Team Leader will have

- Assisted UCC in issuing an E-Tenders contract notice for the pre-qualification of the contractor.
- Evaluated and short-listed suitable contractors in consultation with the Quantity Surveyor and UCC.
- Received confirmation from the PSDP that the selected Contractors are deemed suitable to act as Project Supervisor (Construction) for the project.

On all projects Open and Restricted the architect as Design Team Leader will have

- Obtained all statutory approvals
- Prepared a complete set of tender documentation in 3 volumes comprising
 - [Volume A] the Works Requirements including the project particulars,
 - [Volume B] the Form of Tender and Schedules, and
 - [Volume C] the Pricing Document (Bill of Quantities, including the pricing elements for the Mechanical and Electrical Installation)
 - Completed the Information Pack (Appendix 3 to ITT) and
- Obtained the written authorisation of UCC and to submit Tender Documentation to the appointed UCC representative for uploading to the E-Tenders / OJEU web-based portal.

3.4.3 Tender Competition

The Public Works Form of Tender appropriate to the type of contract (i.e. Major Works, Minor Works or Short form) must be used. The Design Team is to complete the Form of Tender & Schedule.

The Tender Period should allow sufficient time for tenderers to price the works. It should be not be less than the minimum time periods allowed under EU and National Thresholds where these apply, except in the case of minor and emergency works where a reduced period may be used.

Neither the Employer nor the Design Team has any obligation to respond to tender queries. Should they choose to do so a defined set of procedures for dealing with queries should be established (e.g. the eTenders query facility).

The latest date for issuing clarifications/amendments/further information to tenderers should be a **minimum of 3 working days before the date set for receipt of tenders (as set out in the particulars)**. Therefore, all clarification responses from the design team shall be received by UCC no later than 5 days before the date set for receipt of tenders.

In the case of the Restricted procedure, the onus rests with the Design Team to obtain verification from each tenderer that such clarifications/ amendments/ further information have been received.

When requested to do so, the DT lead shall submit a full set of tender documentation in electronic format and in a suitable file structure to allow the appointed UCC's representative to upload the tender documentation onto the E-tenders / OJEU web portal.

3.4.4 Non-Compliant Tenders

Care should be taken in considering whether a Tender is compliant or not (you will have to list the reason for exclusion for any non-compliant tender).

Clause 7 of the ITT states "If a Candidate fails to comply in any way with these Instructions, the Employer may (but is not obliged to) disqualify the Candidate concerned and reject any Tender concerned as non-compliant, and, without prejudice to this right, the Employer may (but is not obliged to) seek clarification or further information (that does not materially alter a Tender) from the Candidate in respect of the relevant tender or take any other step permitted by law, including the principles of equal treatment, non-discrimination, transparency and proportionality"

While tenders should not be excluded on a technicality, it is unfair to other tenderers if you do not exclude a tenderer who has not complied with the ITT on a substantive issue (e.g. Form of Tender not signed, blank pricing document etc).

3.4.5 Tender Evaluation

Tenders sought using the Major or Minor Works Contracts (PW- CF1, PW-CF5) should be evaluated on the basis of the criteria as set out in the Instructions to Tenders and the Tender Information Memorandum.

If the short form (PW-CF6) is used, Tenders are evaluated on the basis of the lowest price only.

The following procedure for examining tenders should apply

- If qualifications are attached to the Tender Form, the Design Team should not open and examine the Pricing Document until those qualifications are withdrawn and so confirmed in writing.
- If qualifications are attached to Pricing Document, the Contractor should be advised that the Pricing Document will not be examined until the qualifications are withdraw.
- If such qualifications (as above) are not removed (in writing) the Design Team Leader should consult with UCC prior to excluding that tenderer and proceeding to examine the next lowest tender.
- If arithmetical errors are found in the tender computation, the tenderer shall be given the opportunity to stand over their tender notwithstanding the errors or to withdraw their tender.

They should be asked to confirm their decision in writing. (A Tenderer may not change the Tender sum).

3.4.6 Validating the preferred bidder's evidence of suitability.

Once the Design Team is satisfied that the preferred bidder's Tender is a valid tender, the preferred bidder in an Open Procedure should be asked to provide evidence verifying the declaration. In practice this can be done (at the discretion of the Design Team at the same time as discussions are held with the Contractor on rates, abnormally low tenders and other matters.

If the preferred bidder does not meet the minimum standard required, that tenderer should be excluded, and the next lowest tenderer should be deemed to be the preferred bidder. The process should be repeated until a qualifying preferred bidder is established.

Except where a tender is withdrawn or deemed to be non-qualifying (as above) the Design Team must not pass over the lowest or any tender, (due to any other reasons apart from compliance with the Conditions for Participation) without prior consultation and agreement with UCC.

This clause does not apply to the Restricted Procedure as the Short-listed candidates' submissions will already have been validated prior to going to tender

3.4.7 Abnormally Low Tenders

The Instructions to Tender [ITT] Clause 8.3 refers. Where a tender "appears to be abnormally low", Regulation 69 of the European Union Regulations 2016 requires a contracting authority to "request in writing details of the constituent elements" but does not define "Abnormally Low".

Comparison with the pre-tender estimate and the other tenders may be used as a preliminary indicator of an "apparently abnormally low tender" but is not in itself evidence sufficient to justify exclusion.

There are many reasons why a tenderer may bid below a pre-determined estimate or an average tender amount. For example, a Contractor might wish to develop a track record in the particular area of construction (as a means of being better positioned to get more work). Further investigation is required prior to reaching a (fair and transparent) decision:

- Any investigation needs to look at the capacity of the Contractor to complete the work based on their resources rather than just the tender rates. There is nothing intrinsically contrary to EU law in a person bidding for a contract at a price at which it will make a loss rather than a profit
- If a Contractor of unquestionable economic capacity and good reputation is prepared (for its own commercial reasons) to build a project at a price that won't make a profit (or may make a loss), and the Contracting Authority has every confidence that the project will be delivered (in accordance with the Contract), the Contracting Authority has no reason to exclude that tender.
- The true measure of an abnormally low tender is the risk to the Employer that the tenderer will not be able to perform the contract.
- The Litmus test is both a mathematical assessment that a tender meets the prima facie description of an apparently "abnormally low" tender and that the Employer considers that there is an unacceptable risk of non-performance.
- A combination of an arithmetically "low tender" **plus** evidence that the tender is below reasonable cost + profit **plus** an assessment of the Contractor's financial capacity (using or

validating the information provided as part of suitability assessment – not a new examination of financial capacity) **plus** current workload may be sufficient to determine that there is an unacceptable risk of non-performance.

While the above guidance describes a methodology to assess whether a Tender is abnormally low or not, the most effective way to avoid apparently abnormally low tenders is to ensure that the Tender Documentation is clear and comprehensive and does not offer any scope for post Contract change orders requests for information or claims.

The Design Team must not exclude an apparent “Abnormally Low Tender” without first consulting with UCC.

3.4.8 Discussions/Meetings with Contractor

The ER and the Design Team are not permitted to enter any post-tender negotiations with the Contractor which have the effect of changing the Tender Sum or scope of works.

EXTRACT FROM GUIDANCE NOTE 2.3 (May 2011) (www.Constructionprocurement.gov.ie)

“If a Contracting Authority seeks agreement at the pre-award stage of a contract with the winning tenderer on the value of the omission of non-essential work which would be deducted by means of a change order post contract award and that agreement is included in the contract, it would amount to negotiation post tender which is not permitted under the EU procurement rules and therefore such an agreement is not permitted”

The Design Team may however meet with the Contractor to discuss the project and matters relating thereto. The subject matters of the discussions may include:

- Performance Bond and insurances.
- Tax Clearance Certificate/evidence of compliance with Tax Clearance Procedures.
- Evidence of compliance with legal obligations regarding Sick Pay/Pensions
- The name and contact details of the designated person within the Contractor’s firm to deal with compliance with Registered Employment Agreement compliance.
- The Detailed Programme of Work and the Resources related to the Detailed Programme of Work.
- The Contractor’s management arrangements for the Project.
- The Projected cash flow and their relationship with the agreed programme.
- Appointment of Project Supervisor Construction Stage [PSCS] to Health & Safety Authority
- Project specific Health and Safety Plan.
- Anomalies in Rates, Re-balancing of Rates and apparently “Abnormally Low” Tenders.
- Scheduled and special meetings.
- Other Post-tender clarifications.

The Design Team must not in any circumstances agree to a reduced Contract Period as this changes the basis of the Tender competition and also exposes the Design Team to an accelerated timeline for decisions and the provision of additional information.

3.4.9 Unbalanced Rates

Under the Public Works Contracts, the Employer may at his/her discretion re-balance the rates to reflect a fair rate for each pricing item. (ref. 8.2 of the ITT). **This process should not be used unless the rates are self-evidently un-balanced.**

- If it is the intention of the Design Team to use this provision, they should so inform the Contractor and obtain the Contractor's agreement.
- Contractually, the Contractor is bound to accept such re-balancing and to construct the project using the revised rates.
- Where a Design Team has concerns regarding apparent pricing errors, low rates, un-priced items (including un-priced or low priced delay days, or zero or low percentages against items listed in Appendix 5 of the ITT) a meeting should be convened between the Contractor and the Design Team before the completion of the Tender Report.
- At this meeting all of these concerns and their implications throughout the course of the project should be brought to the attention of the Contractor.
- The Contractor should then be given the opportunity to stand over his tender or withdraw it.
- Should the tenderer stand by his tender notwithstanding apparent pricing errors he should confirm so in writing.

Where the Design Team proposes to pass over the lowest or any tender, due to any of the above or other reasons, they should consult with UCC before proceeding to examine the next lowest tender or entering into any communications (verbal or written) other than with the lowest tenderer.

3.4.10 Cost Overruns

If the tender price exceeds the approved pre-tender budget, the Design Team must identify any possible savings needed to bring the cost within budget.

The Design Team must not propose changes to the specification or omissions which would lower the standard of the building or external works below that required by the brief. Changes should be non-essential works that will not materially change the project.

Care must also be taken to ensure that, during the process of identifying the savings necessary to bring the project within budget, the Design Team does not enter pre-award negotiations with the Contractor.

Notwithstanding the above, the Design Team may identify savings due to changes and omissions, and prepare a Schedule of proposed Reductions:

- Where a Schedule of proposed Reductions is prepared, the ER can, and should, notify the Contractor of the Change Orders which may be issued on commencement of Contract.
- Where the cost of these Change Orders can be determined by reference to the rates in the Pricing Document, the Contractor should also be informed of the applicable credit to the UCC (if and when the Change Orders are issued).

- This is not pre-award negotiation as the right to issue these change orders or not rests with the ER (post-award), and the value will be determined by reference to the pricing document at the time of issue of those change orders in accordance with the Contract.
- The Design Team may also wish to discuss with the Contractor the impact of such changes on the programme of works and seek reassurances that those changes will not adversely affect the programme of works.
- Where the cost of proposed Change Orders cannot be determined as above, supplementary rates for the work should be ascertained in the same manner as provided for in the Contract.
- The Design Team can and should discuss these with the Contractor and seek information to assist in the assessment of the value of such works but may not include these supplementary rates in the Contract Documents.
- As above, the Design Team may also wish to discuss with the Contractor the impact of such changes on the programme of works and seek reassurances that those changes will not adversely affect the programme of works.
- Whether the intended change orders relate to existing rates only or include supplementary rates, the ER should ensure that any positive or negative affect on the cost of preliminaries, and any potential consequential cost or delays arising are included in the Schedule of proposed Reductions, and equally important where there are none arising the basis for that calculation.

The Detailed Programme of Work (called for in the Letter to Successful Tenderer) should be based on the original scope of works on which the Contract will be formed. An amended draft detailed programme which allows for these intended changes can also be requested from the Contractor but cannot be attached to the Contract as a clarification in the Letter of Acceptance.

As stated in Guidance Note 2.3 (www.Constructionprocurement.gov.ie) the ER and the Design Team are not permitted to enter any post-tender negotiations with the Contractor. Any such negotiations would be in violation of the EU procurement rules (applies also to below threshold projects) and might result in the project being re-tendered.

3.4.11 Electronic Issue of Tender Documents - Validation

The completed Pricing Document (Bill of Quantities or Schedule of Rates) returned with the Tender submission may be in another format (e.g. BuildSoft, CostX; Masterbill etc.) as long as the pricing information therein is the same and in the same order as the original Pricing Document (Bill of Quantities, Schedule of Rates) issued with the Tender Documents. It is not critical that each word of each description is the same as long as the identification of each bill/rate item is clear.

The Design Team must also confirm in writing in the Tender Report that the above validation process has taken place.

3.4.12 Tender Report

On completion of the examination of the tenders (and the preparation of a Schedule of proposed Reductions if required) the Design Team are required to prepare a tender report and submit it to UCC as soon as possible (and at latest within 10 working days of receipt of tenders). (Where it is necessary to identify cost savings to bring the project within budget, a longer period of time may be required).

The Design Team Leader, Quantity Surveyor (and the Building Services Engineer where appropriate), should comment on the level of pricing generally and on any obvious pricing errors.

- Any rates which are unusually high or low, especially when considered to be below cost and any un-priced items should be specifically commented upon.
- **Where such below cost or un-priced items occur, the Design Team should comment on whether the Design Team has used the provision under Clauses 8.1 and 8.2 of the ITT to re-balance the rates.**
- If the tender price exceeds UCC's authorised pre-tender budget, the report must provide a cost reconciliation indicating the cause of the cost over-run and identifying any possible savings needed to bring the cost within budget (see section 3.4.10 Cost Overruns).
- As a pre-award agreement (forming part of the Contract) is not permitted, the value of the savings is the Design Team's estimate and not a contractually binding agreement. In consequence the Design Team should also indicate the basis of that.
- calculation and whether all consequential costs have been included.
- Where omissions or substitutions are proposed as savings, the Design Team must also comment on the effect of such omissions or substitutions on the suitability of the building for its intended use and the durability and life of the building.
- The Design Team must not propose changes to the specification or omissions which would lower the standard of the building or external works below that required by the brief.

The following information shall be accumulated by the Design Team Leader into one brief report and submitted as a bound A4 document to UCC.

- eTenders / OJEU Contract Notice / Pin Notice
- Prequalification documentation.
- Schedule of queries / responses
- Scoring Matrix and report on selection process.
- List of Shortlisted contractors and unsuccessful contractors.
- ITT Documentation
- Tender Opening Form
- A list of Tenderers, the amount of each tender received, and the comparative cost of Tenders signed and dated by Design Team Leader where indicated.
- Tender Analysis and MEAT Scoring Matrix.
- Record of Addendums, Queries and responses.
- For each of the 3 tenders having the lowest comparative cost of tender, a copy of the completed Form of Tender and Schedule (Part 1 and Part 2).
- Design Team Leader's report with tender recommendation (the tenderer with the lowest comparative tender other than in exceptional circumstances) and comment on any omissions or substitutions.

- Quantity Surveyor's report with comment on the level of pricing generally and on any obvious pricing errors including any rates which are unusually high or low, and any un-priced items (including tendered compensation event charges). If the tenderer intends to stand by his tender notwithstanding apparent pricing errors or omissions, his written justification for doing so shall be included and commented on.
- Copy of Appendix 5 as issued to the Tenderers.
- M&E Engineer's comment on the level of pricing generally in the Mechanical and Electrical section of the Pricing Document and on any obvious pricing errors including any rates which are unusually high or low, and any un-priced items. [The M&E Engineer cannot seek the names of domestic M&E sub-contractors or seek to change the prices (other than to re-balance the rates), unless those sub-contractors are listed in the Tender Documents as Specialists.]
- VAT Calculation for the recommended tender
- A reconciliation with the approved budget (adjusted if appropriate in line with current market conditions) and, where appropriate, a schedule of proposed reductions which may be necessary to meet cost limits. (Failure in this regard will mean a delay in the completion of tender examination).
- Recommendation and award of contract in liaison with other design team members.
- All Notification Letters issued.
- Or any other requirement as noted in the Quantity Surveyors Schedule of Services.

The Design Team must not submit a qualified report to UCC. All the Design Team members contributing to the report must support the appointment of the recommended Contractor without equivocation or the Report cannot be accepted by UCC.

3.4.13 UCC Authorisation

In all cases written authorisation is required from University College Cork before proceeding to issue a Letter to Successful Tenderer or Letter of Acceptance to the recommended Contractor.

The Design Team are not permitted under any circumstances to enter into any commitments with the recommended contractor until such formal written authorisation has been obtained

3.4.14 Notification Letters

3.4.14.1 Letter to Successful Tenderer

Once UCC has given written authorisation to the Design Team Leader to submit **the Letter to Successful Tender**, the Design Team Leader shall prepare and submit to UCC the Letter of Successful Tenderer using the template available at <https://constructionprocurement.gov.ie/> requiring the recommended contractor proceed to satisfy all preconditions to which acceptance of the tender is subject

Under no circumstances should a Letter of Acceptance be issued at this time (whether subject to meeting certain conditions or not). This has the effect of accepting the contract sum without the protection of the Contract conditions.

The Design Team Leader shall ensure that UCC's IBA Questionnaire is to be completed by the successful tenderer as part of the preconditions to which acceptance of the tender is subject. UCC shall make available the current IBA Questionnaire to the DT lead at this time.

For projects greater than €5m the Design Team Leader R shall ensure that the RSA Guidelines and Questionnaire Form (supplied by UCC) shall be completed by the Main Contractor prior to appointment.

If contractors insurance cover expires during the course of the contract, an updated IBA questionnaire should be completed by the Contractor and furnished to UCC by the Design Team Leader.

3.4.14.2 Notice to Unsuccessful Tenderers

At the same time as the **Letter to Successful Tenderer** is issued, (whether the project is above or below EU threshold) the Design Team Leader will prepare and submit letters to UCC for issuing to all the apparently unsuccessful tenderers using the template **Letter to Unsuccessful Tenderers** available at <https://constructionprocurement.gov.ie/>

All notification letters are to be issued on UCC headed paper.

A minimum of **14 calendar days** must be allowed for responses before a Letter of Acceptance to the successful tenderer can be issued (subject also to UCC and to the other requirements in these procedures).

Where a valid challenge or legal appeal is made within the relevant time period, the subject matter of the challenge or appeal must be resolved prior to Contract award.

3.4.15 Tender Report Supplement

The Design Team shall satisfy themselves as to the adequacy of the Contractor's programme, management resources and management arrangements for the project

Then, having waited a minimum of 14 days (as above), and prior to receiving authorisation from UCC prepare and submit to UCC the formal Letter of Acceptance. In addition the Design Team must submit to UCC the following supplementary Tender Report information:

- Confirmation that all pre-conditions as set out in the letter of intent have been satisfied.
- The Detailed Programme of Work and Resources related to the Detailed Programme of Work.
- The Contractor's management arrangements for the Project.
- The Projected cash flow with observations on the projected Cash-flow and "S" Curve and their relationship with the agreed programme.
- Confirmation of the name of the Project Supervisor Construction Stage [PSCS] who will be appointed (by the Design Team Leader on behalf of UCC) and confirmation from the PSCS (in writing) that the PSCS will accept that appointment.
- Confirmation that a preliminary project specific Health and Safety Plan has been prepared by the person to act as Project Supervisor (Construction Stage).
- Confirmation that letters to all apparently unsuccessful tenderers have been issued, and that there are no appeals outstanding.

- Confirmation that there are no impediments to the commencement of work on site once authorisation to issue the letter of acceptance is received (e.g. planning conditions requiring certain actions before commencement, enabling works by others such as utility companies, etc.)

Under no circumstances should a Letter of Acceptance be issued by the Design Team until written authorisation to award the contract has been received from UCC.

3.4.16 Tender Acceptance and Contract Execution

Once written authorisation to award the contract has been received from UCC a Letter of Acceptance using the template Letter of Acceptance available at <https://constructionprocurement.gov.ie/> may be prepared by the design team and issued to UCC's nominated representative for issuing to the contractor, on UCC headed paper.

Any post-tender clarifications should be included in the Letter of Acceptance (Clause 1.3 of the contract). Typically, such post-tender clarifications will include:

- The Detailed Programme of Work and the Resources related to the Detailed Programme of Work
- The Contractor's management arrangements for the Project.
- The Projected cash flow and their relationship with the agreed programme.
- Any re-balancing of Rates [Clause 8.2 ITT]
- Scheduled and special meetings, and other agreed operational procedures (not being a change in the Works Requirements)
- Other Post-tender clarifications

Care should be taken to ensure that nothing in the listed post-tender clarifications constitutes post-tender negotiations.

In particular there should be no change to the Contract Sum or scope of work. Proposed post-award change orders must not be included as clarification (Refer also to Section 3.4.10 Cost Overruns).

Once this letter has been issued there is a Contract in place and all the Contract terms and conditions apply.

- The date of Letter of Acceptance is the Contract Date.
- The Contract Period starts from this date.
- The Start Date is within 20 days of the Contract Date.

The Employer's Representative must now:

- Notify (on behalf of UCC) the Health & Safety Authority of the appointment of the Project Supervisor Construction Stage [PSCS] using the correct form.
- Register the project on the BCMS system; after consultation with UCC and the Contractor. (The issue of the Commencement Notice shall be timed to allow commencement of the contract in accordance with the letter of acceptance and the Conditions of Contract).
- Arrange for the signing of the Contract.

When the contract has been signed, the Design Team must submit to UCC a copy of the priced Pricing Document and a copy of the Articles of Agreement, and Schedule 1 & 2 of the signed and sealed Conditions of Contract (Contract must be under seal for all projects greater than €5m).

3.4.17 Retention of Documents

UCC has a requirement to keep all Prequalification & Tender Documents for all projects in a readily retrievable form for a set duration following the completion of the project for Audit purposes. All consultants that are involved in the assessments of Prequalification or Tender documents must return copies of all submissions to UCC on completion of their assessment prior to contract award. Documents are generally submitted in Soft copy to UCC both of which must be returned intact. Documents include but are not limited to the following:

- Copy of E-Tenders or OJEU original notice.
- Log of companies who expressed an Interest on E-Tenders.
- Log of all Tender Clarifications issued.
- Record of all queries and answers at Pre- Qualification and Tender Stage.
- Soft Copy of all original Prequalification & Tender Documents issued.
- Completed Suitability Assessment Questionnaire's and supporting documentation for all candidates.
- Completed Forms of Tender & Schedules for all candidates.
- Completed Pricing Documents from all candidates.
- MEAT Assessment supporting documentation from all candidates.
- Signed & Dated Assessment Scoresheets and supporting documentation.
- Copy of all Post Tender Clarifications, & Minutes of information and clarification meetings.
- Copy of signed Letters of Acceptance & Contracts, Performance Bonds & Collateral Agreements.

3.5 STAGE 4 CONSTRUCTION

3.5.1 Objectives

The design team objectives for Stage 4 – Construction are to:

- Administer the Contract effectively so as to achieve a high quality of construction and bring the project to substantial completion on time and within budget all in accordance with the conditions of Contract and the Works Requirements.
- Fulfil the obligations of the Building Control (Amendment) Regulations 2014 and adhere to the Code of Practice for Inspecting and Certifying Buildings and Works.
- All members of the Design Team are individually and collectively responsible for contract administration, post contract cost control, and complying with the reporting requirements set out in this document. Regular communication and information exchange between all members of the Design Team and with UCC is essential.
- The Design Team Leader's duties include overall Management /Coordination of the Construction Stage including ensuring that any information, communications documentation and/or reports are channelled through the Design Team Leader. In addition, the Design Team Leader must also ensure effective communications between the relevant DT disciplines, and where such communications or responses are not effective implement corrective action including UCC notification (if required).

3.5.2 Construction Cost Control

Cost control during the construction stage is a continuous process, dictated in part by the quality and completeness of the design and tender documentation, and in part by the capacity of the Design Team and in particular the Employer's Representative to minimise change and to anticipate any Contractual requirements for information.

Overall cost control during construction should be co-ordinated by the Design Team's Quantity Surveyor in consultation with the other members of the Design Team and in particular the Employer's Representative (usually the Architect). The Quantity Surveyor is responsible for the preparation of the Progress Reviews, Interim Valuations, cost review and recommendation on Change Orders, and Final Accounts.

The Consultant Mechanical and Electrical Engineer must provide information and advice (including relevant cost data) to the Employer's Representative and Quantity Surveyor with respect to the mechanical and electrical services, including for the purposes of preparing Progress Reviews, Interim Valuations cost review and recommendation on Change Orders, and the Final Account for these works.

In particular:

- End User or UCC Facility Managements Teams requested changes are not permitted (whether within the ER's authority or not) without prior approval from UCC's appointed Project Manager.
- No changes are allowed which would affect the Schedule of Accommodation, Room Layouts, or materially change the Works Requirements unless previously discussed and agreed with UCC.

- The Employer's Representative [ER] does not have any discretion to authorise any change order (whether within the ER's authority or not) for non-essential works or works which could have been reasonably foreseen.
- The ER must obtain UCC's authorisation (in writing) for any change outside the ER's authority.
- While UCC officials (either Administrative or Technical) may communicate with the Design Team and/or individual members of the design team and may provide advice and/or make suggestions, such advice and/or suggestions do not constitute authorisation or approval for additional funding.
- Requests for additional funding must be on the **UCC's Change Order Request form** sent to UCC's appointed Project Manager by e-mail.
- Adequate time must be allowed for a considered response from UCC. All authorisations for Additional Funding must come in writing from the Capital Projects Officer.
- The Design Team (individually and collectively) are responsible for any change orders arising from incomplete design and/or inadequate detailing (the standard required is that of reasonable skill and care) which either generate a compensation event and/or cause delays (whether within the 1st or 2nd threshold for delays or not).
- Where the standard of reasonable skill and care was not applied, UCC reserves the right to recoup such costs (including consequential costs arising from such delays) from the Design Team and/or their Professional Indemnity insurance.

3.5.3 Pre-Contract Consultations

The ER and the Design Team are not permitted to enter any post-tender negotiations with the Contractor which have the effect of changing the Tender Sum or scope of works.

"If a Contracting Authority seeks agreement at the pre-award stage of a contract with the winning tenderer on the value of the omission of non-essential work which would be deducted by means of a change order post contract award and that agreement is included in the contract, it would amount to negotiation post tender which is not permitted under the EU procurement rules and therefore such an agreement is not permitted." **Extract from Guidance Note 2.3 (May 2011)**

The Design Team may however meet with the Contractor to discuss the project and matters relating thereto.(refer to section 3.4)

➤ Post Tender Clarifications

- Care should be taken to ensure that nothing in the listed post-tender clarifications constitutes post-tender negotiations. In particular there should be no change to the Contract Sum or scope of work. Proposed post-award change orders must not be included as clarification (Refer to Section 3.4)

3.5.4 Employers Representative (ER)

3.5.4.1 ER' Authority

The Design Team Leader (usually the Architect) will normally, but not necessarily, be the Employer's Representative [ER]. The ER is identified in Schedule Part 1A of the works requirements.

The limitations on the authority of the Employer's Representative to perform its functions or powers under the Contract are as stated in the Conditions of Engagement for that consultant.

- Unless otherwise stated, the maximum adjustment to the Contract Sum for a **single Change Order must not exceed €2,000**, and the maximum cumulative value over whole contract of adjustments to the Contract Sum for **Change Orders in any 3 month period must not exceed 0.25% of the Contract Sum**.
- Likewise (Schedule Part 1A) the ER is not permitted to issue a change order causing or contributing to a reduction in safety, quality, usefulness, of the Project; or to waive any of the UCC's rights or the Contractor's obligations under a Project construction contract without limitation to notice periods such as those set out in sub-clause 10.3 of the Public Works Contracts (PW-CF1 to PW-CF5).
- The above limits to the ER's authority are stated in the contract for the Contractor's information only. (Under Clause 4.3.2 the Contractor must comply with any ER's instruction whether within the limits or not.)
- If the Employer's Representative deliberately exceeds these limits (specified in the COE schedule) it is a breach of their Conditions of Engagement and the ER may be liable for costs arising there-from.

The Employer's Representative may delegate in writing to named representatives any functions or powers under the Contract and revoke any delegation. For example, the Employer's Representative may delegate limited powers to the Building Services Engineer to liaise with the Contractor in connection with the Mechanical and Electrical Installation.

However, the Employer's Representative may not delegate the power to issue instructions or change orders.

Again, for example where the Building Services Engineer has discussed and agreed in principle a recommended course of action with the Contractor, the Building Services Engineer must report to the Employer's Representative who, if he/she deems fit (within his/her limitations), may issue the requisite instruction or change order.

3.5.4.2 Instructions

Under **Clause 4.5** the Employer's Representative may give the contractor instructions, (in writing), which the Contractor must comply with, up to the date the Defects Certificate is issued. Instructions can be in the form of:

- A direction (in accordance with the contract), or
- A Change Order (in accordance with the contract).

Instructions of the Employer's Representative must be given in writing (Clause 4.5.5) except when there is imminent danger to safety or health or of damage to property, in which case the Employer's Representative may give oral instructions and shall confirm them in writing as soon as practicable.

It is very important to be clear as to the difference between a direction, a proposal and change order. **A direction is an instruction within the contract (i.e. not changing the works requirements).** A direction does not trigger a compensation event or a delay event.

If the ER gives an instruction and calls it a direction, but the Contractor considers that it is a Change Order, the Contractor must give notice (under sub-clause 10.3) before implementing the instruction, or otherwise (under the contract) it will be taken to be a direction.

If the ER gives an instruction that changes the Works Requirements, it is a Change Order.

The Employer's Representative is not allowed give a Change Order under the contract (Clause 4.5.3) after Substantial Completion has been certified, except concerning defects or work to be done after Substantial Completion.

3.5.4.3 Change Orders

UCC's authorisation for increased funding is required for all Change Orders outside the Employer's Representative's authority. This includes change orders arising from Contractor Claims and Employer Claims. Such authorisation must be sought in a timely manner to allow UCC to give a considered response.

Where (due to a failure to act with due diligence) a request for authorisation for increased funding is presented too late for a considered response or after the event the Design Team may be held responsible for costs arising there-from including costs consequential to the delay caused

Any such requests for authorisation must be presented to UCC using the UCC Change Order Form"

The reason for the Change Order must be fully explained and justified with comment from the relevant Design Team member appended as appropriate. In particular, the Design Team must state whether the Change Order arises from a UCC Requested change, a contractor claim, an employer claim (a credit), unforeseeable circumstances, a Design Team mistake, or the inadequacy of the Works Requirements.

Where the change order arises from a contractor claim, the circumstances must be explained. It must also be stated whether the amount requested is based on a final adjustment to the Contract Sum and Date for Substantial Completion of the Works (and any affected Section) or whether the amount is a determination by the ER in the absence of such agreement (Clause 10.6.3).

It is also necessary to state whether the claim arises from a UCC Requested change, unforeseeable circumstances, a Design Team mistake, or the inadequacy of the Works Requirements.

Where the change order arises from unforeseeable circumstances the nature of those circumstances must be explained and why they could not have been foreseen.

In the case of Employer's Claims, the reason why the work is not required should be stated. It should also be confirmed that the omission of that work will not materially cause or contribute to a reduction in safety, quality, usefulness, of the Project (Schedule Part 1A); or have the effect of waiving any of the UCC's rights or the Contractor's obligations under the contract.

Where the change order arises from a Design Team mistake or the inadequacy of the Works Requirements the circumstances in which this arose must be explained. In the absence of a clear indication of fault the cause will be attributed equally between all the design team members. The agreement of all the Design Team members to the explanation should be confirmed.

3.5.5 Project Administration

3.5.5.1 Contractor Programme

The Employer's Representative (as provided for in the Letter to Successful Tenderer, and in **Clause 4.9** of the Contract) should receive from the Contractor, before the Starting Date, a detailed programme, in the form set down in the Contract, that will permit effective monitoring of the works. The programme must include any contingency period and clearly indicate the critical path.

The programme must allow reasonable periods of time for the Employer and the Employer's Personnel to comply with their obligations under the Contract (the ER should check this prior to issuing a Letter of Acceptance).

Even if the Contractor proposes a reduced time for completion, the ER should not permit the Contract Period to be reduced.

If directed by the Employer's Representative, the Contractor must submit a revised programme showing actual progress, and progress projected by the Contractor. Failure by the Contractor to submit the requested revised programme within 15 working days of being requested to do so will entitle the Employer to withhold from the Contractor 15% of any payment to be made to the Contractor until the revised programme is submitted (Clause 4.9.3).

As a general principle, the ER should think carefully before seeking a revised programme. Once the revised programme has been accepted (or noted) the ER and the Design Team are subject to the revised timelines for the provision of Information. The revised programme might also contain certain proposals for recouping lost time (such as overtime or weekend working) which may result in a contractor claim against the Employer. The ER cannot reject a programme but may (Clause 4.9.3) require the Contractor to revise the programme to reflect actual or reasonably projected progress.

3.5.5.2 Records

Detailed, up-to date, chronological contract records are vital. In particular, each request for a proposal (**Clause 10.4**), direction and change order (**Clause 4.5**) should be recorded. It is equally important to record actions, objections, Contractor claims, and UCC change orders reducing the Contract sum, all as soon as practicable.

It should be possible (in the event of a dispute) for the ER to consult the sequential Contract Records and verify as to whether a direction, change order or request for a proposal was issued, track whether an objection was made and determine unequivocally whether the action was authorised under the Contract or not.

3.5.5.3 Contractor Reports

The Contractor is obliged to submit to the Employer's Representative monthly progress reports, in the form set down in the Contract, within 7 days after the end of the month.

Each progress report (**Clause 4.10.2**) shall include (in particular but not limited to):

- A detailed description of progress against the Contractor's current programme
- Details of when any instructions to be given by the Employer's Representative will be required, and any that are outstanding.
- Details of when any Works Items or other things to be given by the Employer will be required, and any that are outstanding.

- Details of any Delay Events and Compensation Events that have occurred during the period, or are unresolved, with updated Notification of Claims log.
- Details of any accidents, injuries, hazardous incidents, environmental incidents, labour relations problems and public relations problems concerning or affecting the Works.
- Details of anything that might have an adverse effect on the execution of the Works, the steps the Contractor is taking or proposes to take to reduce those risks, and any steps that the Contractor proposes that the Employer or the Employer's Personnel take to reduce those risks.
- Updated Cashflow Projections
- Anything else relevant to a progress report that the Employer's Representative directs.

Under anything else relevant the ER may request a statement showing the amount of wages and other payments due at the date of the request to and in respect of each worker, or, in respect of workers not employed by or otherwise working for the Contractor, ensure that their employer or the person for whom they are working does the same (Refer to **Clause 5.3.4**).

It's a good idea to synchronise these reports with the site meetings and to use the information therein to record instructions, proposals and claims (including where such instructions, proposals or claims did not occur).

3.5.5.4 Site Meetings

The Employer's Representative must schedule regular meetings attended by the Contractor's Representative and the Employer's Representative and attended by the Employer's and Contractor's personnel, as required. Within 5 working days after each meeting the Employer's Representative shall issue minutes of the meeting to the Employer and the Contractor.

It is a matter for the ER (in co-operation with the other Design Team members) as to how site minutes and other contract records are kept. However the Design Team are reminded that the minutes of a site meeting are de facto a chronological record and that the opportunity exists to expand the meeting discussions (and records) to record each instruction (whether a direction or a change order), each proposal (whether Value Engineering or ER requested), each Contractor request for information, and each Contractor claim; and to track the progress of each item until mutually resolved. Equally it should be possible to confirm that because it was not recorded at the subsequent meeting.

Lastly the minutes must record the names of those in attendance (both Contractor and Design Team personnel)

3.5.6 Contractor Proposals.

3.5.6.1 Value Engineering Proposals.

The Contractor may give the Employer's Representative a written Value Engineering proposal (**Clause 4.8**) that will, if adopted, either:

- Reduce the contract sum.
- Accelerate the execution of the works, or otherwise be of benefit to the Employer, with no increase to the Contract Sum.

The ER should make it clear to the Contractor (e.g. at 1st site minutes or as a post-tender clarification) that any Value Engineering proposal must be labelled as such. The cost of Value Engineering proposals should include design costs (by the Design Team), consequential costs and liability for delay.

There is no onus on the ER to accept any such proposal (or any proposal) whether there is a financial benefit or not.

The ER must, however, as soon as practicable, notify the Contractor whether the Employer agrees to or rejects a proposal. **No proposal should be accepted which reduces the standard of construction from that specified in the Works Requirements.**

If the proposal is rejected this shall be conclusive (i.e. the Contractor cannot re-submit it for re-consideration).

The ER (at his/her discretion) may indicate (in advance) that no value engineering proposals will be accepted and that the Contractor is required to build the project fully in accordance with the Works requirements. This course of action should only be taken if the Design Team is satisfied that the project as designed and described in the Works Requirements represents the best value for UCC.

3.5.6.2 Required Contractor Submissions

Under **Clause 4.7**, objections may be made by the Employer's Representative to Contractor submissions **within 10 working days of receipt of sufficient information to make a purposeful review of the matter**. The Employer's Representative may alter or withdraw an objection. The Employer's Representative may make an objection on the grounds that to proceed:

- would not comply with the contract.
- would have an adverse effect on the Employer or the public interest.
- would impose an obligation on the Employer that the Contract does not require the Employer to bear.
- would be contrary to a Legal Requirement.
- would have an adverse effect on the Contractors ability to comply with the contract.
- any other ground stated in the contract.

The above grounds are very wide and should be used to the full to ensure that proposals (whether ER requested or not) are rejected if they would cause a reduction in the standard or cause additional costs whether directly or indirectly (e.g. consequential delays).

3.5.6.3 Contractor Proposals

The Contract does not expressly provide for Contractor Proposals (other than Value Engineering Proposals and responses to the ER's requests for proposals). Equally it does not exclude them.

As with Value Engineering Proposals there is no onus on the ER to accept any proposal, but it is still important to keep a record of such proposals and the date they were accepted or rejected. As with Value Engineering Proposals, the ER (at his/her discretion) may indicate (in advance) that no contractor proposals will be accepted and that the Contractor is required to build the project fully in accordance with the Works requirements.

3.5.6.4 Substitutions

The word substitution does not appear in the Contract and it would therefore seem that contractually it does not exist. (If a material complies with the Works Requirements, it's not a substitution. If a material does not comply with the Works Requirements it's a proposal which will, if implemented, give rise to a Change Order).

The issue of substitutions arises because of the way some specifications are written:

- If the consultant states the name of a manufacturer's product in the specification and adds the words "or equal approved", he/she are inviting requests for approval of alternative products meeting the specification and must respond in a timely manner as with requests for information.
- If the consultant states the output requirements of a material only or names of a manufacturer's product in the specification and adds the words "or equivalent", he/she is in effect stating to the Contractor that an equivalent manufacturer's product (i.e. meeting the specification in all respects) is acceptable (without prior approval) and that the onus is on the Contractor to ensure that the material meets the standard required.
 - Such output requirements might include a requirement for a test or Agrément Certificate, or Insurance backed guarantee or other means of proof of compliance.
 - For example, an Engineer specifies the quality of concrete used in terms of the output of compressive strength and provides for a cube test to measure this output. He does not state a manufacturer's name or the words "or equivalent". He also specifies other restrictions e.g. working temperature, constituent materials and a methodology for verifying same.

Where specifications are performance based (as above) the issue of substitutions and "approvals" does not arise. If the material complies with the specification in the Works Requirements, approval isn't necessary (and should not be given).

As long as the Design Team is confident that the specification is clear and robust (and in accordance with the EU Directive on Technical Specifications), the ER may wish to respond to all contractor proposals (which are in effect substitutions) as follows:

- the Contractor is required to construct the project in accordance with the Works Requirements
- The Contractor must use materials that comply with the specification in all respect.
- The ER will not issue "approvals" for proprietary materials or construction methods. A proprietary material or construction method in accordance with the Works Requirements does not need an approval.
- Where the Contractor installs a proprietary material not in accordance with the Works Requirement (including not passing the specified test or not having the required certification and/or guarantee) the ER may issue a Direction to the Contractor to remove the defective material and/or work and to reinstate the relevant element with a material and method of construction in accordance with the Works Requirement at the Contractor's expense.

3.5.6.5 Requests for Information

The Works Requirements should provide sufficient information to the Contractor to construct the building without requests for additional information.

Requests for information should be presented in a timely manner (Clause 4.1.2.(4)). It is reasonable to refer to the detailed programme provided by the Contract, and from that determine whether a reasonable period of time has been allowed for the Employer and the Employer's Personnel to comply with their obligations. It is also reasonable to note that in certain cases the latest reasonable time for delivery of the necessary information is later than that stated by the Contractor.

The Contract states:

4.11.1 The Contractor shall give the Employer's Representative **at least 10 working days advance notice** of the date by which the Contractor requires any instructions that the Employer's Representative is to give, or Works Items or other things that the Employer is to give.

4.11.2 The latest date for the Employer's Representative to give required instructions, or the Employer to give the Contractor any required Works Item or other thing **shall be the latest of the following**:

- the date stated in the Contract, if any
- the date shown in the Contractor's current programme
- the date for which the Contractor first notifies the Employer's Representative under this sub-clause that it is required
- the date the Contractor requires the instruction,
- Where a request for information is justified (i.e. the information is needed to carry out the work) and the time provided for the Employer and the Employer's Personnel to comply with their obligations is reasonable, **the ER must respond in a timely manner.**

In all cases it is important to record such requests and such judgements (see Site Meetings) as well as the basis for any such decisions.

3.5.7 Contract Conditions

3.5.7.1 Co-operation

Under the contract (**Clause 4.1**) the Employer, and his personnel, and the Contractor are obliged to support reciprocal cooperation for the contract purposes in respect of all aspects of the contract but particularly to any of the following:

- Negotiation and agreements.
- Value Engineering.
- Use of effective communications.
- Efficient order and timing of information.
- Minimizing the effects of suspension.
- Minimizing delay and Compensation events.
- Contractors flexible management.

3.5.7.2 Inspection

The Contractor (Clause 8.3) shall ensure that the Employer's Representative, 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.

3.5.7.3 Pay and Conditions

Clause 5.3 places an onus on the Contractor to comply with the REA / SEO rates of pay and conditions of employment. The ER has a number of resultant duties (both under the contract and as part of their duties under these Design Team Procedures) including withholding payment where the Contractor has failed to provide a certificate showing that the Contractor has fully complied with Clause 5.3 (Clause 11.4.4).

The ER should also note Clause 5.3.9 setting out the Contractor's duties to engage constructively with trade union officials party to a registered employment agreement affecting workers having concerns in relation to the Contractors or Contractor's Personnel's compliance with the agreement and Clause 5.7 requiring the Contractor to give the ER weekly a list of the name of each worker who worked the previous week and details of the category of and hours worked by each worker on the list.

3.5.7.4 Defects

The Employer's Representative may direct the Contractor to search for a Defect or suspected Defect or its cause (Clause 8.5.1). This may include uncovering, dismantling, re-covering and re-erecting work, providing facilities for tests, testing and inspecting. If, through searching or otherwise, the Contractor discovers a Defect, the Contractor shall notify the Employer's Representative as soon as practicable.

If the Employer's Representative notifies the Contractor that the Employer will not accept a Defect, this shall be conclusive.

3.5.7.5 Contractor's Personnel

The Employer's Representative may direct the removal from site of any Contractor's personnel (Clause 5.6) because of negligence or incompetence, or on the basis that the Contractor's Personnel's presence on the Site is not conducive to safety, health or good order.

At the beginning of each week the Contractor shall give the Employer's Representative a list of the name of each worker who worked the week ending the previous Sunday and details of the category of and hours worked by each worker on the list (**Clause 5.7**).

3.5.7.6 Suspension

The Employer's Representative may at any time direct the Contractor to suspend all or part of the work under the Contract (Clause 9.2). The Contractor shall comply with the direction and, during suspension, shall protect, store and secure the affected Works Items against deterioration, loss and damage and maintain the Insurances.

After a suspension, the Contractor shall resume work when so directed by the Employer's Representative. When a direction to resume is given, the Contractor and the Employer's Representative shall jointly examine the Works and Works Items, affected by the suspension.

If the Contractor is entitled to an adjustment of the Contract Sum or an extension of time because of the suspension, the Contractor's cost of rectifying any deterioration in or loss of the Works or Work Items that the Contractor could not have avoided shall be included in the determination of the adjustment, and any resulting delay shall be taken into account in determining the extension.

3.5.8 Payments and Claims

3.5.8.1 Payments

Interim Certificates, based on the interim recommendations prepared by the Quantity Surveyor, must be prepared and issued by the Employer's Representative to the Contractor and then submitted by the Contractor, to the assigned UCC Project Manager and UCC's Finance Department.

At the discretion of the Employer's Representative, but only when so provided in the Schedule, part 1L, interim payments may include any amount, not exceeding the percentage of value stated in the Schedule, part 1L, the Employer's Representative considers proper for each of the following:

- The Contract value of any Works Items delivered to site, to the satisfaction off the Employer's Representative,
- The Contract value of any Work Items not delivered to the Site, to the satisfaction of the Employer's Representative.

The Contract value of a Works Item means a portion of the Contract Sum the Employer's Representative determines is for supplying of the Works Item, having regard to the Pricing Document. The ER cannot pay for unfixed works items not listed under the **Schedule, part 1L**.

If the contractor does not give the **Rates of Pay and Conditions of Employment Certificate**, required by **Clause 5.3.7** with an interim statement, there shall be no payment due under **Sub-clause 11.4** for the relevant work until the certificate is given.

3.5.8.2 Contractor Claims

If the Contractor considers that under the Contract there should be an extension of time or an adjustment to the Contract Sum, or that it has any other entitlement under or in connection with the Contract, notice must be given under Clauses 9.3 or 10.3 as appropriate.

Under Clause 9.3 notice it must be as soon as practicable after the Contractor becomes aware of delay with full details of the delay and its effect on progress being provided not later than forty days after the Contractor become aware of the delay.

Under sub-clause 10.3 of the Contract notice must be given within 20 working days) with all relevant facts provided within a further 20 working days

The ER must manage Contractor Claims and co-operate with the Contractor (Clause 4.1) in ensuring that valid claims are submitted and processed within the time periods specified by the Contract.

While the ER does not have the discretion to relax the time periods stated, he/she should make the Contractor aware in writing of the limitations imposed by this clause at the start of the Contract, and at each site meeting remind the Contractor to submit any valid claims within the time allowed. All new claims should be recorded at each site meeting as well as the current status of existing claims and the ER's determination of same.

If the cause of the claim has a continuing effect, the Contractor shall update the information at monthly intervals.

- stating the extension of time and adjustment to the Contract Sum claimed for delay and cost already incurred, and
- so far as practicable, proposing a final adjustment to the Contract Sum and Date for Substantial Completion of the Works and any affected Section, and
- providing any other information the Employer's Representative reasonably requires

If the Contractor has made a claim under sub-clauses 10.3 or (proposal under 10.4), the Employer's Representative must, within 20 working days of receiving it, do one of the following:

- direct the Contractor to give additional information or revised proposals, in which case the Contractor shall do so within 10 working days and the Employer's Representative shall reply in accordance with this sub-clause within a further 10 working days, but that reply must not require the Contractor to give additional information or a revised proposal
- notify the Contractor and the Employer that the Contractor's proposals are agreed and make any resulting adjustments to the Contract Sum, use of the programme contingency referred to in sub-clause 9.4 or extension to the Date for Substantial Completion of the Works and any affected Section
- make a determination of any adjustments to the Contract Sum, use of the programme contingency referred to in sub-clause 9.4 or extension to the Date for Substantial Completion of the Works and any affected Section, and notify the Contractor and the Employer
- in response to a proposal under sub-clause 10.4, notify the Contractor that the proposed instruction will not be given.

The Employer's Representative must process any claims within the permitted time limits in accordance with Clause 10.5 of the Contract. Contractual claims arising from the failure of the Employer's Representative to comply with Clause 10.4 (exercising reasonable skill and care) shall be deemed to be a breach of Contract between the Employer's Representative and UCC.

In the event that the contractor does not accept the determination of the Employers Representative, then the ER in conjunction with the Design Team shall prepare and maintain a risk register indicating which claims are in dispute, assess the risk in terms of risk exposure to UCC, in terms of low, medium and high with their associated monetary and associated delay days.

3.5.9 Employers Claims

Under Clause 10.9 Employer's Claims, if the Employer or the Employer's Representative considers that, under the Contract, there should be a reduction of the Contract Sum, or that any amount is due to the Employer from the Contractor under the Contract, the Employer or the Employer's Representative shall, as soon as practicable, give notice and particulars of the event or circumstances to the other, and to the Contractor.

This covers Adjustments to the Contract Sum for a Compensation Event for the value of any additional, substituted, and omitted work required as a result of the Compensation Event

The risk of **Event 17 (schedule PART 1 K)**, a difference between the Contract value of the Works according to the Pricing Document and the Contract value of the Works described in the Works Requirements is a compensation event.

This has the effect of permitting either a Contractor Claim or an Employer Claim where the Pricing Document, when compared with the Works Requirements:

- includes an incorrect quantity or
- includes an item that should not have been included or
- excludes an item that should have been included or
- gives an incorrect item description

AND the difference for an item in, or that should have been in, the Pricing Document is more than €500.

The notice to the Contractor must include:

- details of the event or circumstances giving rise to the notice, and all relevant facts and
- a calculation, and a proposal based on that calculation, of any adjustment to be made to the Contract Sum or any amount due by the Contractor to the Employer.

The procedure in this Sub-clause 10.9 applies until either the Defects Certificate or the certificates required following termination have been issued, but this does not limit the Employer's rights after then.

While the Contract does not specify the timing for Employer's claims arising from a difference in the Bill of Quantities, when compared with the Works Requirements, the Contract does state that there shall be support for reciprocal co-operation which includes efficient order and timing of information provided for in the Contract.

It is reasonable therefore that the ER should give notice under 10.9 of Employer's claims arising from a difference in the Bill of Quantities (when compared with the Works Requirements) as soon as is practicable after the ER becomes aware of the nature and extent of that difference. It is not reasonable to defer such claims to the end of the Contract (The Contractor is obliged to make his claims within 20 days).

3.5.10 Liquidated Damages

If the Works do not reach Substantial Completion by the due date, liquidated damages at the rate stated in the Schedule, part 1G, become due for the period from the Date for Substantial Completion of the Works to the date of actual substantial completion of the Works.

Just as the Contractor is entitled to recompense for a valid Contractor Claim, the Employer is entitled to recoup the cost of Liquidated Damages when the project is not completed on time.

The Contractor should be made aware (at the beginning of the works) that Liquidated Damages may be applied (at the discretion of the Employer) in accordance with the Contract for all delays to the date for Substantial Completion (as adjusted in accordance with the Contract).

3.5.11 Termination

Clause 12.1 Termination on Contractor Default states that the Employer may terminate the Contractor's obligation to complete the Works by notice to the Contractor if (inter alia) the Contractor (if an individual) dies, becomes insolvent or fails to comply with its obligations under the Contract:

Any communications in relation to Clause 12 must be sent by the Employer and not the ER.

3.5.12 UCC Report

A Project Review report must be prepared by the Employer's Representative and Quantity Surveyor jointly on the Template Progress Report and submitted to UCC monthly i.e. together with each Interim Certificate. An electronic copy of same must also be sent (by the ER) to the appointed UCC Project Manager.

- Each Progress Report Letter must be completed in full and must contain all Change Orders since the previous certificate.
- Where any change orders outside the Employer's Representative's limitations of Authority were authorised by the Employer's Representative without approval a full explanation must be submitted.
- The Employer's Representative must report on any critical delays in the Contract Programme and the causes of any such delays, implications for UCC i.e. alternative temporary accommodation requirements, and what actions have been/are being taken under the contract to mitigate such delays. It should (where appropriate) include brief statements from the Civil/Structural Engineer and Services Engineer, comparing progress to date with the agreed Contract Programme.
- The Quantity Surveyor must comment in the Progress Report Letter/Form on actual cash-flow and compare it to the forecast/programmed cash flow. Any significant variance between actual cash flow and forecast cash flow, and its relationship with works progress relative to the Contract Programme must be fully explained.

3.6 STAGE 5 HANDOVER AND FINAL ACCOUNT

3.6.1 Objectives

The Design Team objectives for Stage 5 - Handover and Final Account are to:

- to achieve a satisfactory standard of construction and the Substantial Completion of all elements of the Project prior to issuing the Certificate of Substantial Completion
- to prepare and agree the Final Account in accordance with the Contract conditions and the requirements of this document (see Final Account below)
- to administer the Defects Liability Period to ensure all defects are remedied and issue a Defects Certificate on expiry of that period

3.6.2 Safety File

3.6.2.1 Safety File and Substantial Completion.

The ER should check with the PSDP before issuing the Substantial Completion Certificate. All substantive elements (sufficient to allow safe occupation of the building) of the Safety File should be complete before Substantial Completion, and any supplementary information in place within three months of that date.

The Design Team Leader in conjunction with all design team members shall familiarise themselves with the UCC Digital Project Manual (DPM) Hand Over File Procedures and in conjunction with the PSDP, PSCS populate the DPM in the manner prescribed.

3.6.2.2 Duties of the Project Supervisor Design Process (PSDP)

The Project Supervisor Design Process must arrange for the provision of one hard copy and one electronic copy in the format provided by UCC of the completed Safety File. Both the hard and electronic copy should be forwarded to UCC. Safety Files stored or housed on FTP sites will not be accepted. (i.e. dropbox, onedrive, A360 etc)

The Safety File should include all relevant information to enable the building to be occupied and maintained safely and future changes to be made with full knowledge of the hazards and risks. Where appropriate it should incorporate details of the building, or the mechanical and electrical services systems, manufacturers' operational instructions, supplier references, checklists, test certificates and other maintenance details.

Where substantive elements of the Safety File are incomplete due to the failure of the Contractor or Project Supervisor (Construction Stage) to cooperate or provide the requisite information, the PSDP should so advise the Employer's Representative who should not issue Substantial Completion until the relevant information is provided.

3.6.3 Substantial Completion

Substantial Completion is defined in the Contract as occurring when all of the following have happened

- The Works or the part of the Works are complete so that they can be taken over and used by the Employer for their intended purpose and there are no Defects other than
 - Defects accepted by the Employer under sub-clause 8.5.4 or
 - Minor Defects to which all of the following apply:
 - they do not prevent the Works or the part from being used for their intended purpose
 - the ER considers the Contractor has reasonable grounds for not promptly rectifying them
 - rectification will not prejudice the safe and convenient use of the Works or the part
- All tests that are required by the Contract to be passed before Substantial Completion have been passed
- The Contractor has given the Employer's Representative the Contractor's Documents that the Contract requires be provided before Substantial Completion
- The Contractor has given the Employer's Representative the collateral warranties that the Contract requires for the Works or part.

It is up to the Contractor to tell the ER that the works are ready for Substantial Completion and request that the ER so certifies (Clause 9.6.2) and not the other way round.

Within 20 working days after receiving the Contractor's request to certify Substantial Completion of the Works, the Employer's Representative shall give to the Contractor and the Employer:

- a certificate stating the date that Substantial Completion occurred or
- the reasons for not issuing the certificate.

If, in the judgement of the ER, the works are not ready for Substantial Completion, the ER must state the reasons. These reasons must be based solely on the Contract i.e. Clause 9.6.2, and may be the subject of conciliation/arbitration particularly if a refusal results in Liquidated Damages becoming due.

- The first test is are the Works or the part of the Works complete so that they can be taken over and used by the Employer for their intended purpose? A pragmatic approach is required here.
- Minor Defects which do not prevent the Works being used for their intended purpose and will not prejudice the safe and convenient use of the Works should not be used as grounds on which to refuse Substantial Completion.
- However, defects which present a real Health and Safety risk or are self-evidently inconvenient (e.g. no glass in the windows!) are valid reasons to refuse Substantial Completion
- "Tests that are required by the Contract" and Contractor's Documents required (e.g. Safety File, Guarantees, certificates etc) must be specified in the Works Requirements as being required prior to Substantial Completion. Otherwise it is more difficult to justify refusal to certify Substantial Completion without them.

The Design Team Leader is advised to enter "The Employer's Representative **is required** to issue the certificate of Substantial Completion if the Works or a Section reaches Substantial Completion before its Date for Substantial Completion" in the Schedule Part 1H.

If the Schedule, part 1H, so states, then the ER cannot refuse to certify on the basis of early completion. The Substantial Completion certificate may include a list of Defects and any outstanding work [but nothing in the certificate, including the failure to list any Defect, relieves the Contractor of any obligations].

It is the responsibility of the Design Team to ensure that all snags have been identified, agreed with UCC and listed for the contractor's attention. (They have 20 days to do so – see Clause 9.6.2)

If the ER has refused to issue a certificate of Substantial Completion (as above) the ER must give a copy setting out the reasons to UCC. This should be accompanied by a brief summary of the implications of such a refusal, the likely delay to Completion and whether Liquidated Damages will be applicable.

3.6.4 Handover

Prior to hand over of the building the Design Team must explain the building and how it operates to UCC, UCC's Facility Managements Team and end users so that maximum benefit can be gained from the facilities provided.

They must clearly (and in detail) explain how to operate and maintain the building and its engineering services systems at optimum efficiency with particular emphasis on safety and energy conservation.

At the same time as the issue of the Certificate of Substantial Completion, the ER and Design Team should:

- issue copies of all certificates of standards, guarantees and commissioning certificates allowed for in the Contract Documents (e.g. Agreement Certificates, Roofing material and installation guarantees, etc.) to UCC.
 - As stated [above](#) Tests that are required by the Contract and Contractor's Documents required (e.g. Safety File, Guarantees, certificates etc) should normally be specified in the Works Requirements as being required prior to Substantial Completion
 - Where the Works Requirements provided for a later delivery date for some guarantees and certificates, the ER must list those guarantees and certificates, the anticipated delivery date, and provide a note explaining why a later delivery date was called for
- In conjunction with the Project Supervisor for the Design Process must provide comprehensive sets of the latest issue of construction drawings and specifications (architectural, structural and services drawings) to UCC.
 - In addition, copies must also be provided in electronic format in PDF and AutoCAD and or REVIT format. These construction drawings and specifications may be included as part of the Safety File where appropriate.
- Issue to UCC the completed Safety File, in a format specified by UCC

Likewise, at the same time as the issue of the Certificate of Substantial Completion to UCC, the DT Lead must issue to UCC:

- A Certificate of Compliance on Completion by the Builder and by the Assigned Certifier.
- All Ancillary BCAR Certificates.
- plans, calculations, specifications and particulars, showing how the completed building has achieved compliance with the Building Regulations.
- the Inspection Plan as implemented by the Assigned Certifier in accordance with this Code of Practice.
- The Building Control Validation Certificate.

On project completion the Design Team in conjunction with UCC shall actively participate in a Post Project Evaluation Assessment workshop to review the project as a whole. The purpose of these workshops is to

- identify areas of strength
- identify areas of weakness
- Lessons learnt and room for improvement.

3.6.5 Liquidated Damages

Clause 9.8.1 states *"If the Works do not reach Substantial Completion by the Date for Substantial Completion of the Works, the Contractor shall pay the Employer [and the Employer may deduct from*

payments to the Contractor] liquidated damages calculated at the rate stated in the Schedule, part 1G, for the period from the Date for Substantial Completion of the Works to the date of substantial completion of the Works” and “The date of substantial completion means the date certified by the Employer’s Representative that the Works reached Substantial Completion.”

The Date for Substantial completion of the Works is the date stated in the Contract or as otherwise adjusted by the ER on foot of a Contractor Claim. Such Claims are adjudicated on at the time of those claims and additional time cannot be granted retrospectively.

It is not at the discretion of the ER whether to forego part or all of the Liquidated Damages due.

3.6.6 Anticipated Final Account

During the last month of the construction period prior to Substantial Completion, the Design Team and Employer’s Representative shall prepare a summary of the anticipated Final Account for submission to UCC with the Certificate of Substantial Completion. Where the anticipated Final Account cost is within the original Contract sum plus the cost of any Change Orders within the limits of the Employer’s Representative’s Authority plus the cost of any Employer approved changes. UCC consultation is not required.

Where the anticipated Final Account cost is outside those limits, the Design Team must submit to UCC a detailed explanation with the anticipated Final Account Summary highlighting any discrepancies between the anticipated Final Account Summary and the monthly Progress Reports/Project Reviews.

The Design Team is reminded that the Contractor must give notice of claims within 20 working days with all relevant facts provided within a further 20 working days, and that the Employer’s Representative in turn must process any such claims within the permitted time limits. There should consequently be no outstanding claims in excess of 3 months duration and any unresolved Contractor’s Claims should have been recorded both on the Progress Report and in the anticipated Final Account Summary

Under no circumstances should the Employer’s Representative agree to a Final Account or element of the Final Account (including Contractors Claims in excess of the Employer’s Representative’s authority) outside the limits above without prior UCC approval.

3.6.7 Penultimate Certificate (Final Account)

3.6.7.1 Apparent Defects

Prior to the receipt of the Final Statement and allowing sufficient time for the Contractor to complete the Final Statement, the Employer’s Representative shall ensure that all apparent defects have been recorded and brought to the attention of the Contractor in writing. The Employer’s Representative shall also ensure that any Change Orders required to complete the construction have been issued and where practicable the additional cost (if any) agreed.

The Employer’s Representative does not have the authority to issue Change Orders after the receipt of the Final Statement.

3.6.7.2 Final Statement

Clause 11.5.1 states; *“Within 2 months after Substantial Completion of the Works is certified, the Contractor shall give to the Employer’s Representative a final statement. The Contractor shall include in that statement all money that the Contractor considers to be due from the Employer to the Contractor under or in connection with the Contract.”*

It also states; *“The Employer shall have no liability to the Contractor under or in connection with the Contract for any matter not detailed in the final statement, except under the indemnities in the Contract or compensation Events occurring after Substantial Completion of the Works was certified. If no final statement is given within the time required, the Employer shall be released from all liability to the Contractor under or in connection with the Contract.”*

Clause 11.5.1 provides a cut-off point for the delivery by the contractor of its final account, including particulars of all claims for any adjustment to the contract sum, after which the employer will be released from any further liability to the contractor.

In addition, if the contractor fails to submit its final statement within two months of substantial completion, the contracts provide that the employer will have no further liability to the contractor whatsoever i.e. the Contractor is not entitled to any more payments for any reason.

This is an onerous requirement and the ER should seek to ensure that the Contractor does not forfeit such payment unnecessarily.

At or before Substantial Completion, the Contractor should be advised (in writing) of the consequences of failure to present a Final Statement within 2 months of Substantial Completion, and the ER (and other Design Team members should co-operate fully in assisting the Contractor to present a meaningful and realistic Final Statement

3.6.7.3 Final Account

Within a period of 1 month after the receipt of the Final Statement the Design Team must submit a Draft Final Account to UCC identifying and explaining/justifying any additional costs over and above those already identified in the earlier Anticipated Final Account Summary prepared at Substantial Completion.

3.6.7.4 Penultimate Certificate

Clause 11.5.2 states: *“Within 3 months after receipt of the Contractor’s final statement, the ER must issue to the Contractor and to the Employer a penultimate payment certificate certifying the amount that, in the Employer’s Representative’s opinion, will be due from the Employer to the Contractor, less any final retention to be paid after the Defects Certificate is issued, or from the Contractor to the Employer.”*

Payments and certificates, including the penultimate and final payment certificates and the Defects Certificate, will not relieve the Contractor of any obligations, or be evidence of the value of work, or that work has been completed satisfactorily

3.6.7.5 Final Account Report

At the same time as the penultimate payment certificate is issued for payment the Design Team must issue a Final Account Report to UCC. This Report must be in the following format:

- Agreement of all members of the Design Team to the adjusted Contract Sum
- The summary section only of the Final Account.
- Quantity Surveyor’s Final Account Report.
- Written Confirmation from the Project Supervisor Design Process [PSDP] that the completed Safety File has been handed over to UCC.

- A Certificate of Compliance on Completion by the Builder and by the Assigned Certifier.
- The Building Control Validation Certificate.
- Stage Completion Certificate signed by all parties.
- Copies of all guarantees provided for in the Contract Documents.
- Completed **Area Re-conciliation Sheet** listing the areas of the spaces as built compared with the areas shown in the most recent UCC authorised Schedule brief.

3.6.8 Defects Period

3.6.8.1 Defects

In consultation with UCC, the ER will have prepared a comprehensive list of all defects prior to the receipt of the Final Statement. The ER must seek (through the Contract) to ensure that all these defects are remedied promptly.

Clause 8.6 states *“As soon as practicable after Substantial Completion of the Works or any Section, the Contractor shall complete any outstanding work and rectify any Defects that the Employer’s Representative directs before the end of the Defects Period”*

And Clause 8.5.3 *“The Contractor shall comply with any direction under this sub-clause 8.5 [Defects] within the reasonable times, if any, the Employer’s Representative directs. If the Contractor fails to begin the work required to comply with the direction within the reasonable time directed, if any, or to complete it as soon as practicable, the Employer may have the work done by others and the Contractor shall, on request, pay the Employer its cost of doing so.”*

The ER must however remain vigilant to ensure that no direction to remedy a defect can in any way be construed as a Change Order. The Employer’s Representative does not have the authority to issue Change Orders after the receipt of the Final Statement.

During the Defects period and particularly shortly before the expiry of the Defects period the Design Team must consult with UCC and satisfy itself that no new defects have become apparent and that defects previously identified have been remedied satisfactorily.

If work remains outstanding or Defects remain uncorrected at the end of the Defects Period, the ER can (and should) extend the Defects Period until such time as the work is fully completed and can be verified to be completed.

The ER should not issue a Defects Certificate until all defects (including those notified to the ER by the School) have been satisfactorily remedied.

3.6.8.2 Defects Certificate.

The Employer’s Representative must issue the Defects Certificate to the Contractor and the Employer within 20 working days after the end of the Defects Period.

As soon as practicable, but no more than 3 months, after the Defects Certificate is issued, the ER must issue a final payment certificate certifying the amount that, in the ER’s opinion, is finally due from the Employer to the Contractor, or from the Contractor to the Employer.

The amount in the final payment certificate must be the same as the amount in the penultimate payment certificate, except for

- the final payment of retention
- amounts owed by the Contractor that were not included in the penultimate certificate [for example, for Defects that the Contractor has not rectified]
- deductions under sub-clause 11.4 (obligations that the Contractor has still not complied with), and
- other amounts to be paid after Substantial Completion of the Works [such as payments for testing after Substantial Completion].

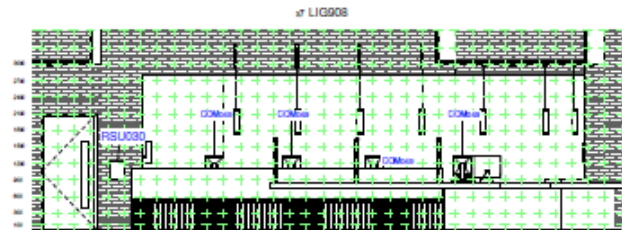
If the final payment certificate states that there is a sum owing to the Contractor, the Contractor must issue an invoice to the Employer for that sum and the Employer must pay the amount due on the invoice within 15 working days after receiving the invoice. If the penultimate or final payment certificate states that there is a sum owing to the Employer, the Contractor must pay the amount due within 10 working days of receipt of the Employer's demand for payment.

3.6.8.3 Final Account Report (supplement)

At the same time as the Defects certificate is issued for payment the Design Team must issue a Final Account Report (supplement) to UCC. This Report must be in the following format:

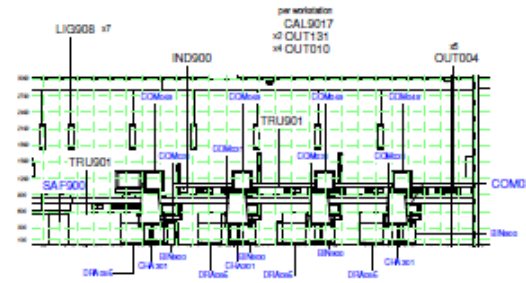
- Written confirmation of the Design Team that the work is complete, and all defects have been corrected within the Defects Period.
- The summary section only of the Final Account.
- Report on quality of the Building Works with contributions from all the Design Team Members.
- An assessment of the Contractor's performance during the Building Contract.
-

APPENDIX A – SAMPLE ROOM DATA SHEETS.



1 ELEVATION 1

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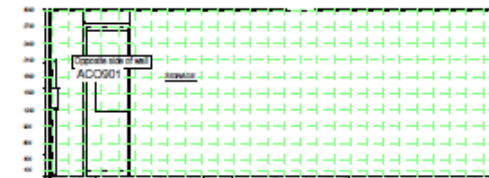
2 ELEVATION 2

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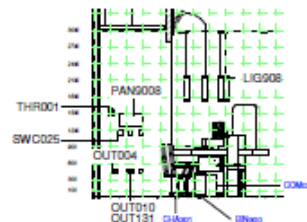
3 ELEVATION 3

 1 : 50



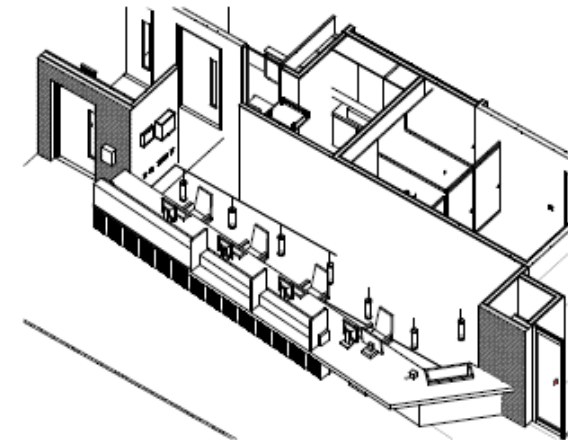
4 ELEVATION 4

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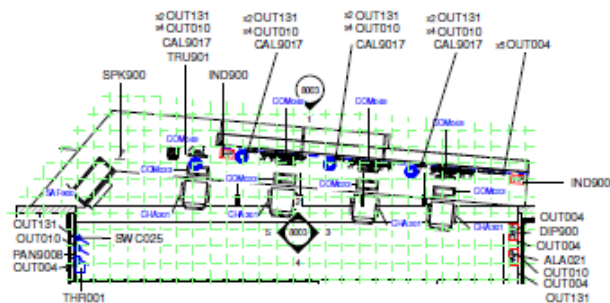


5 ELEVATION 5

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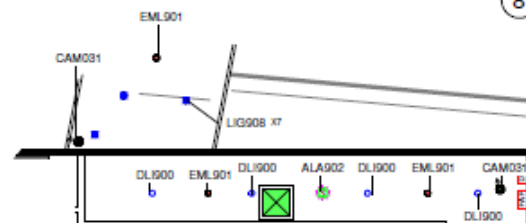


8 RECEPTION DESK - AXONOMETRIC



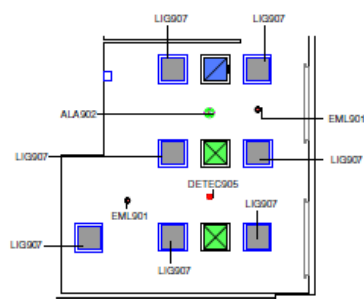
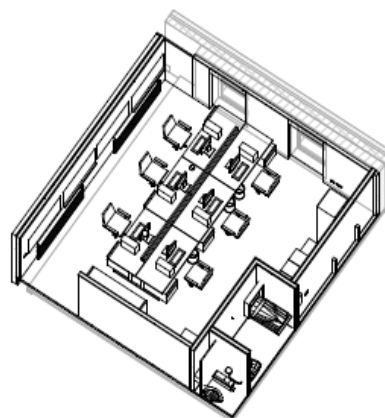
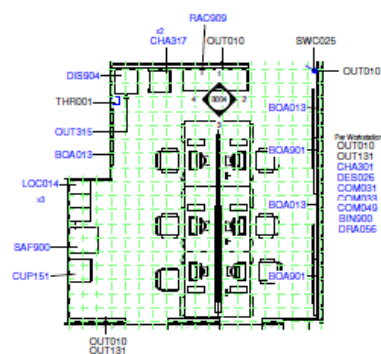
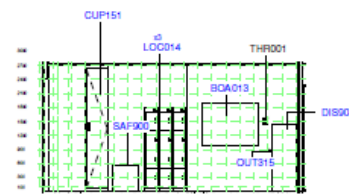
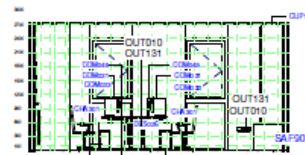
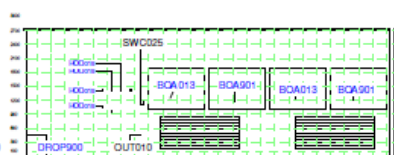
7 RECEPTION - PLAN

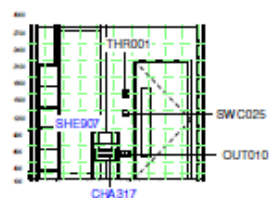
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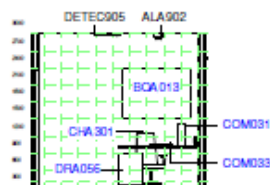
6 RECEPTION - RCP

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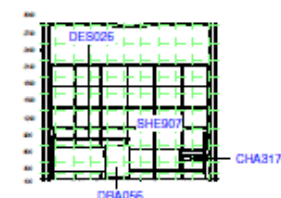
① **ELEVATION 1**
1 : 50



② **ELEVATION 2**
1 : 50



③ **ELEVATION 3**
1 : 50



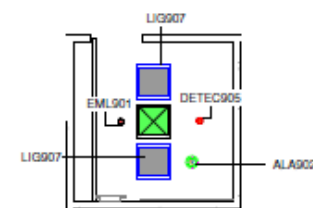
④ **ELEVATION 4**
1 : 50



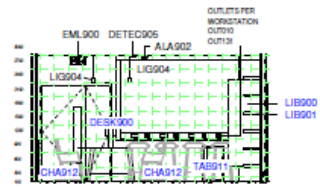
⑤ **MULTI - PURPOSE FINANCE ROOM - PLAN**
1 : 50



⑥ **MULTI - PURPOSE FINANCE ROOM - AXONOMETRIC**

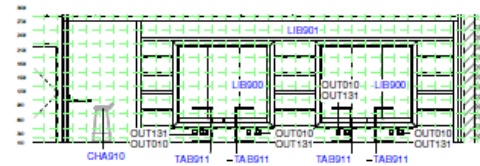


⑦ **MULTI - PURPOSE FINANCE ROOM - RCP**
1 : 50



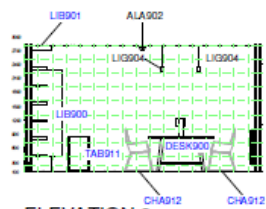
1 ELEVATION 1

 1 : 50



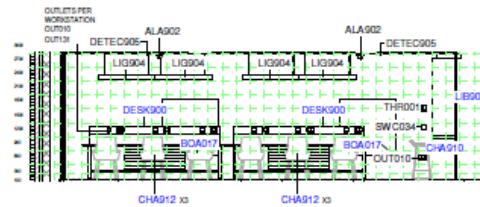
2 ELEVATION 2

 1 : 50



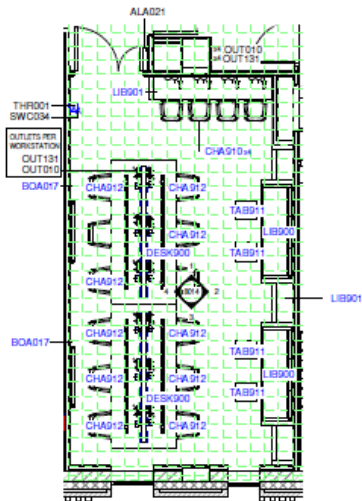
3 ELEVATION 3

 1 : 50



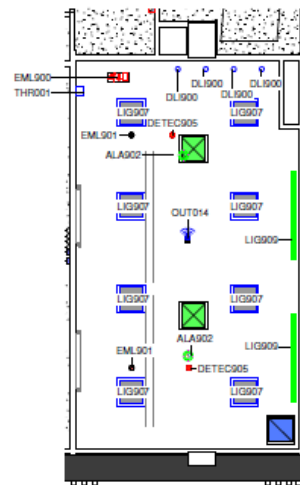
4 ELEVATION 4

 1 : 50



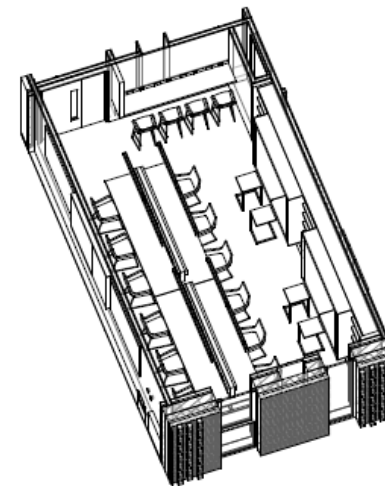
5 QUIET ROOM - PLAN

 1 : 50



6 QUIET ROOM - PLAN

 1 : 50



7 QUIET ROOM-AXONOMETRIC

Department:	Public & Entrance	Name:	Reception Desk	Number:	G.078
Level:	L00-FFL Ground Floor				
Req'd Area(m2):	30.0	Designed Area(m2):	29.7	Status:	Date: 2020.10.12
Ceiling Height:	2,700.0			Rev.:	P2.1

Mechanical

Heating

Heating LTHW (DegC): *45/35°C*
 Heating Type: *LTHW*
 Int. Min Winter D/Temp (DegC): *21°*
 Winter D/Temp Tol. (±) (DegC): *3°*
 Heating Terminal Type: *Underfloor heating*

Ventilation

Ventilation (Y/N): *Yes*
 Ventilation Type: *S & E*
 Design Fresh Air Flow Rate: *10l/s Per Person*
 Mech. Air Change Rate: *NA*
 Relative Pressure: *NA*

Cooling

Cooling (Y/N): *No*
 Cooling Type: *NA*
 Internal Design Temperature: *NA*
 Int. Design Temp. Tolerance (±): *NA*
 Cooling Terminal Type: *NA*

Acoustics

Target Services Noise Criteria: *42dB*

Shielding

Shielding Criteria: *-*

Other

Notes

Refer to: *M&E Drawings and Specification*

Public Health

Water Supplies

Domestic Cold Water (Y/N): *No*
 Domestic Hot Water (Y/N): *No*
 Mains Water (Potable) (Y/N): *No*
 Reverse Osmosis (RO) Water: *No*
 Notes

Specialist Gases

Compressed Air Outlets (Y/N): *No*
 Natural Gas Outlets (Y/N): *No*
 Oxygen Outlets (Y/N): *No*
 Med Vacuum Outlets (Y/N): *No*
 Medical Air Outlets (Y/N): *No*
 Surgical Air Outlets (Y/N): *No*
 Nitrous Oxide Outlets (Y/N): *No*
 AGSS Outlets (Y/N): *No*
 Gas Detection (Y/N): *No*

Refer to: *M&E Drawings and Specification*

Department:	Public & Entrance	Name:	Reading/Quiet Room	Number:	1.026
Level:	L01-FFL First Floor				
Req'd Area(m2):	0.0	Designed Area(m2):	39.6	Status:	Date: 2020.10.12
Ceiling Height:	2,700.0	Rev.:	P2.1		

Activities

Function: 1) Desk space for 20 persons.
2) Using laptop(s).
3) Quiet Zone for individual work

Personnel (Use): 20 Persons approx
Intermittent Use

Ceiling Height (mm): 2700

Finishes

Finishes

Walls: WF4 - VINYL WALLCOVERING 1
Skirting: SF3 - MDF, PAINTED
Floor: FF1 - CARPET TILES
Ceiling Type: CF1 - 600X600 TILES
Notes:
Refer to GA drawings: 6000 drawing series for Wall, Ceiling and Floor finishes layouts

Electrical

Light		Security and Alarms	
Prop Normal Lux Level:	300 lux	Access Control Level (Y/N):	No Refer to Dirgs
Normal Dim Lux Level Min:	-	Panic Alarms Required (Y/N):	No
Prop Night Lux Level:	-	CCTV Coverage (Y/N):	No
Prop Local Lux Level:	-	Keypad Lock (Y/N):	-
Limiting Glare Rating	19	Patient Services	
Min. Col. Rendering Index	-	Nurse Call (Y/N):	No
Min. Local Col. Rendering Index	-	Entertainment Services (Y/N):	No
Standby Normal Lighting Grade	-	Notes:	
Standby Local Lighting Grade	-	Fire Alarms	
Lighting Calc. Workplane	800mm	Fire Detection Type	Smoke
Lighting Ctrl Switching Type	Absence detection, switch	Fire Suppression Type	No
Emergency Lighting Type	Separate Stand Alone (On Central Battery System)	Visual Fire Alarm Req'd (Y/N):	No
General Lighting Type	LED	Notes:	
Exam Lighting Type	N/A	Refer to:	M&E Drawings and Specification
Illuminated Signage	N/A		

Mechanical

Heating		Ventilation	
Heating LTHW (DegC):	45/35°C	Ventilation (Y/N):	Yes
Heating Type	HEAT PUMP	Ventilation Type	S & E
Int. Min Winter D/Temp (DegC):	21°C	Design Fresh Air Flow Rate	10l/s Per Person
Winter D/Temp Tol. (±) (DegC):	3°C	Mech. Air Change Rate	NA
Heating Terminal Type	Radiators	Relative Pressure	NA
Cooling		Acoustics	
Cooling (Y/N):	No	Target Services Noise Criteria	42dB
Cooling Type	NA	Shielding	
Internal Design Temperature	NA	Shielding Criteria	N/A
Int. Design Temp. Tolerance (±)	NA		
Cooling Terminal Type	NA	Refer to:	M&E Drawings and Specification
Other			
Notes			