



**INVITATION TO TENDER**  
**DOCUMENT 2 – SCOPE OF SERVICES**

**Framework Agreement for**  
**Building Surveying Consultancy Services**

**OJEU Reference:** 2019/S 050-115083

**Project Code:** project\_24689

**ITT Code:** itt\_34103

10<sup>th</sup> May 2019

This document is one of six parts, as listed below, which together form the Invitation to Tender Documentation. Please ensure that no part or page is missing or duplicated.

ITT Document No.	TITLE
1	Instructions to Tenderers
2	Scope of Services
3	Framework Agreement
4	Qualitative Tender Submission
5	Commercial Tender Submission
6	Declarations

<b>Tender Package (TP)</b>	TP-QTS	Fully completed Qualitative Tender Submission in response to Document 4
	TP-CTS	Fully completed Commercial Tender Submission in response to Document 5
	TP-D	Fully completed Declarations in response to Document 6

Documents 1 – 6 are the 'ITT Documentation'.

The three documents collectively referred to as the 'Tender Package' (TP) are to be completed and returned by Tenderers.

Document No.	Revision No.	Control Document Name	Related Procurement Process
2015_004	V_3	ITT Document template (Restricted Procedure)	Supplies & Services Tenders (OJEU £172k+ Restricted Procedure)

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## **1 SCOPE OF SERVICES – BUILDING SURVEYOR**

### **1.0 INTRODUCTION**

This Plan of Work, generally based on the RIBA Plan of Work 2013, sets out the key events and deliverables which the Consultant is to provide in accordance with this Agreement. In addition to the matters set out in this Plan of Work, the Consultant shall, in accordance with the terms of this Agreement, perform such other services as are reasonably required by the Client for the purposes of the Project.

To the extent that there is any discrepancy or divergence between this Plan of Work and any other document forming part of this Agreement, this Plan of Work shall prevail.

Words and phrases used in this Plan of Work shall, save where the context otherwise requires, have the same meaning as defined elsewhere in this Agreement. Notwithstanding that, the following words and phrases used in this Plan of Work shall have the following meanings:

Client	means the University of Ulster and is used in this Plan of Work interchangeably with “University” to mean the University of Ulster;
Principal Contractor	means the entity appointed as “principal contractor” under the CDM Regulations in relation to the Project;
Principal Designer	means the entity appointed as “principal designer” under the CDM Regulations in relation to the Project (which, it is acknowledged, may be the Consultant);
Room Data Sheets	Room data sheets should give a detailed description of all the finishes, fixtures and fittings, mechanical and electrical requirements that will be required for each room. They should also include information about room type and dimensions, the activities it will house, it's expected or maximum occupancy, fire protection and structural loadings.
C-Sheets	A composite drawing of the architectural, mechanical and electrical finishes within a room. It provides a co-ordinated drawing of all the fixtures and fittings (group 1, 2 & 3) on the floor, walls & ceiling, providing details of the exact position of

	all items. It includes relevant schedules and finishes within the room.
Project Manager	means the University's Client Representative as defined in the Conditions of Contract forming part of this Agreement;
Group 1 Equipment	Equipment procured and installed by a Contractor
Group 2 Equipment	Equipment procured by the Client and installed by a Contractor as part of its Contract
Group 3 Equipment	Equipment procured and installed by the Client
Programme Execution Plan	How the project programme will be delivered over the life of the project, identifying the timeline, project milestones and key constraints.

## **1.1 OBJECTIVES**

The Plan of Work aims to ensure that

- 1.2.1 The consultant is aware of key tasks and deliverables from them throughout the duration of the project.
- 1.2.2 The scope of services have been defined below, this list is not seen as exhaustive, the consultant will be expected to carry out all services as reasonably expected to allow the delivery of this project.
- 1.2.3 Consistency of project documentation production/delivery
- 1.2.4 Compliance with University procurement, financial, project management and estate management procedures.
- 1.2.5 Best practice in survey, design, assessment of options, detailing, specifying, procurement, value for money, contract administration, quality of workmanship, supervision, etc. is aimed for and delivered consistently through the project
- 1.2.6 Consistency of approach to deliver projects to the University end users

The Consultant is deemed to have studied the Plan of Work and satisfied themselves as regard to what is expected. The other documents making up this Agreement and the Plan of Work outline the minimum level of service to be provided. Where the Plan of Work details an action or deliverable which is not included or is noted as an additional service in the remainder of the Agreement the Plan of Work shall take precedence. The failure to note any task in the Plan of

Work that is covered elsewhere in this Agreement or could reasonably be described as good practice is not to be taken that this task is not required.

The University's preferred procurement route for this Framework is the Traditional Tendering method. This has been reflected in the scope of services. Alternative options for procurement of any contractor may be recommended by the Consultant and used when approved by the Project Manager.

The appointed consultant should be aware that they will be expected to carry out all services required in the appointment and management of contractors irrespective of the method of procurement of contractors.

## **1.2 GENERAL REQUIREMENTS**

The Consultant will be expected to liaise and be available for consultation with Client and Project Manager as and when required meeting the needs of the project at any given time. The Consultant is commissioned to provide all professional services associated with building surveying, to include but not be limited to the following:

- 1.3.1 The Consultant will undertake their duties under the general direction of the Project Manager who will act on behalf of the Client in all matters concerning the duties of the Consultant
- 1.3.2 The Consultant shall give the Project Manager and the Client sufficient notice of all meetings to be held in connection with a Project which the consultant may arrange with any of the other consultants appointed to a specific project, any building contractors, sub-contractors or others in order to give the Project Manager the opportunity of attending. The Consultant shall provide the Project Manager with copies of the minutes of all such meetings, whether or not the Project Manager has attended.
- 1.3.3 During the course of the Consultant's commission, they shall attend meetings with the Project Manager and others as may be necessary to deal with matters appertaining to a Project and in order to ensure its satisfactory completion.
- 1.3.4 Where any of the Services is included in or referred to as any particular stage but is relevant or applicable to any other stage the same shall be deemed to be provided therein

- 1.3.5 Establish and issue clear structures, defining roles and responsibility for individuals involved in the project, for Project Manager and Client approval.
- 1.3.6 Establish and maintain an effective communications strategy with all other appointed consultants throughout the project
- 1.3.7 Comply with CDM Regulations
- 1.3.8 In conjunction with the Project Manager, establish the scope of the project and communicate to other consultants.
- 1.3.9 In conjunction with the Project Manager review the University objectives and recommend a preferred Procurement approach if different from Traditional Tendering.
- 1.3.10 Whilst electronic communication procedures will be adopted, the Consultant will be expected to provide soft and hard copies, printing or copying of drawings or other project related documentation as and when required throughout the project for use by the Client.
- 1.3.11 Preparation and issue of a Final Project Brief at the end of Developed Design and a final design scheme , together with a detailed cost plan and programme of works. Documentation at the completion of this phase will be sufficient to apply for planning permission. Preparation of all necessary finishes schedules, sample boards, internal elevations/perspectives and any other drawings necessary to adequately inform the Client prior to materials selection.
- 1.3.12 Assist in the procurement and/or management of site surveys, building surveys, structural surveys, condition surveys and other similar investigations.
- 1.3.13 Assist in development and management of an integrated and continuous Client liaison process.
- 1.3.14 Design and integration of all specialist systems to support the operation of the University.
- 1.3.15 Design of enabling works, services diversions, services provisions and all modifications to existing structures affected by agreed proposals.
- 1.3.16 Development of space planning brief into a detailed Project Brief which responds to business and stakeholder requirements.
- 1.3.17 Preparation of detailed equipment schedules (Group 1, 2 & 3).
- 1.3.18 Services necessary for the preparation and submission of planning application.

- 1.3.19 Preparation and collation of tender documentation including coordinated drawings, specifications and details for all disciplines.
- 1.3.20 Assist in the completion of a tendering process based on an appropriate procurement strategy compliant with relevant laws and regulations, to include evaluation, advising Client and negotiation with any construction contractor.
- 1.3.21 Participation in risk workshops
- 1.3.22 Assist in the management and implementation of appointment process for all contractors.
- 1.3.23 Preparation of construction contract documentation including coordinated drawings, specifications and details. Drafting of construction contracts and supporting contract documentation appropriate to the construction procurement method.
- 1.3.24 Supervision, monitoring and co-ordination of commissioning activities.
- 1.3.25 Collation and review of all documentation provided by the Client.
- 1.3.26 Assist in the design and management of a comprehensive and ongoing stakeholder consultation process from inception of Project to Practical Completion
- 1.3.27 Development of a resultant efficient and cost effective design. This will include the identification and assessment of different options/ solutions for discussion with the Client's technical staff and stakeholders.
- 1.3.28 Compliance with all necessary codes, standards, statutes and regulations.
- 1.3.29 Submission and management of all permitting processes to conclusion.
- 1.3.30 Consideration and integration of whole life costs into design.
- 1.3.31 Provide information, as reasonably required to support preparation of whole life costings and the operating cost plan.
- 1.3.32 Liaise with contractor(s) on build ability issues.
- 1.3.33 Co-ordination of sustainable solution which will achieve a BREEAM rating of 'VERY GOOD' for major refurbishment projects.
- 1.3.34 Participation in value engineering exercises.
- 1.3.35 Compliance with the Programme Execution Plan in the delivery of all Services.
- 1.3.36 The Consultant will be required to identify any necessary specialist services.
- 1.3.37 Liaison with other appointed consultants including, but not limited to Project Manager, Mechanical and Electrical Engineer, Civil and Structural Engineer Quantity Surveyor and BREEAM assessors.



- 1.3.38 Collaborate in preparation and maintenance of project documentation, including but not limited to programme, risk register, project execution plan, monthly reporting, communication procedures, commissioning and handover strategy, equipment strategy, operational readiness procedures, value management, Health & Safety file, Building Manual etc. throughout the life of the project.
- 1.3.39 For the avoidance of doubt, when the Consultant is appointed as the Principal Designer, they should be responsible for completing and maintaining the Health & Safety file and not merely for collaborating in its preparation and maintenance; and on all stages of the project satisfy the requirements of Principal Designer as specified within the CDM Regulations (NI) 2016.

### **1.3 LIAISON AND CONSULTATION PROCESS**

It is critical that the Consultant provide adequate resources as appropriate to facilitate the delivery of the design programme and construction programme, this is to cover liaison with all parties involved in Projects. Client liaison, stakeholder consultation, consultation with statutory authorities and other designated parties may be required and due account must be taken of time and resource required in scheduling delivery of the Services in the Design Programme.

Projects will be carried out with full consultation and input from principal stakeholders and periodic liaison with and information to other stakeholders. The management of this process will be the responsibility of the Project Manager; however the Consultant will play an important role in this consultation process.

### **1.4 ORGANISE AND CONTROL INFORMATION GATHERING**

It is expected that the Consultant will thoroughly document the building surveying process to include but not limited to Project Brief development, minute taking, data collection, and all sources of information, which will contribute to the final production of the Project Brief.

**1 2. BUILDING SURVEYING SERVICES**

In addition to the services listed above, the Consultant will be required to provide the following services in relation to individual projects.

**2.1 GENERAL RESPONSIBILITIES**

- 2.1.1 The Consultant will coordinate the development of the overall design in a comprehensive way, avoiding clashes or mismatches in design. The Consultant will be responsible for all necessary design reviews to avoid such clashes and mismatches.
- 2.1.2 Gather necessary input from the other consultants (when appointed), Client, Project Manager, Mechanical and Electrical Engineer, Civil and Structural Engineer Quantity Surveyor, Principle Designer (where not being undertaken by Lead Consultant), and others as required, prepare and manage the design programme, identifying key project design milestones and production of, and release of design information for tender/construction. Assist the Project Manager to co-ordinate the Design Programme with that of each contractor and adjust as necessary.
- 2.1.3 The Consultant is responsible for the totality of the Building Surveying design elements including the integration, into the design as a whole, of Client and contractor designed items.
- 2.1.4 The Consultant is to co-ordinate the activities of the other consultants (when appointed) in relation to the design aspects of project change control. The Consultant will participate in and comply with the Change Management Procedures prepared by the Project Manager.
- 2.1.5 Adhere to reporting structure implemented by the Client.
- 2.1.6 Prepare and maintain a detailed design programme for the project and provide a copy of the programme to the Project Manager.
- 2.1.7 Prepare and maintain a detailed programme for the production of design information leading up to obtaining tenders for the construction works and provide a copy of the programme to the Project Manager.
- 2.1.8 Adhere to the change control mechanism implemented.
- 2.1.9 Establish the Client requirements and undertake and co-ordinate the design for the project including, but not necessarily limited to, the following aspects of design: (all of which to be fully coordinated with other consultants when appointed).
  - 2.1.9.1 Buildings accommodation requirements.

- 2.1.9.2 Review of Space planning, including the development of project review into a detailed accommodation schedule.
- 2.1.9.3 Co-ordinate development of dimensioned space layout including initial sign-off.
- 2.1.9.4 Co-ordinate further development of all room data sheets and produce 'C' sheets including sign-off with relevant parties.
- 2.1.9.5 External / Internal cladding, brick/block, glazing, roofing, partitioning, including all detailing relating to penetrations, secondary support, etc.
- 2.1.9.6 External entrance doors including automatic doors, roller shutter doors, revolving doors, turnstiles, etc.
- 2.1.9.7 Raised floors (including dimensioned floor box layouts), suspended ceilings (including provision of dimensioned reflected ceiling plans showing all ceiling mounted equipment, lights, etc.) and screens/demountable partitions. Obtain information from the other consultants (when appointed) as required.
- 2.1.9.8 Integration and co-ordination into the Consultant's design of items procured directly by the Client or any contractor including interfaces in design.
- 2.1.9.9 Gathering of Client's requirements and preparation of layouts, performance specifications, etc. to all areas.
- 2.1.9.10 Floor, wall and ceiling finishes.
- 2.1.9.11 Toilets, cleaner facilities wash down areas, etc.
- 2.1.9.12 Necessary fire compartmentation measures including fire and smoke barriers (including above ceiling and below floor).
- 2.1.9.13 Joinery work and internal doors including ironmongery (encompassing any door related equipment, e.g. security, defined by others).
- 2.1.9.14 Not used.
- 2.1.9.15 Not used.
- 2.1.9.16 Coffee points and other break out areas.
- 2.1.9.17 Measures related to access and facilities for the disabled (DDA).
- 2.1.9.18 Not Used.
- 2.1.9.19 Window blinds and other such screens.

- 2.1.9.20 Access control, timekeeping and other systems.
- 2.1.9.21 Not used.
- 2.1.9.22 All internal and external signage including corporate, site information, security, door, fire and escape related, etc.
- 2.1.9.23 Items of furniture for conference, office, break out areas etc. (including integration/co-ordination of building services items and Client procured items).
- 2.1.9.24 Full equipment schedule, identifying Group 1, 2 & 3.
- 2.1.9.25 Ceramic (or other type) wall and floor tiling.
- 2.1.9.26 Preparation of any required action plan or report (as requested by the Client from time to time) e.g. fire response, emergency egress, etc.
- 2.1.9.27 Interior Design (including integral shelving or racking systems furniture, fixtures and fittings) unless directed otherwise by the Client.
- 2.1.9.28 Advice in relation to non-integral racking and shelving and other proprietary equipment in relation to any stores, library etc.
- 2.1.9.29 Support to the Mechanical and Electrical consultant (when appointed) in relation to the spatial management and co-ordination of building services.
- 2.1.9.30 Full integration of the mechanical and electrical services into the design.
- 2.1.9.31 Not used.
- 2.1.9.32 Not used.
- 2.1.9.33 Provision of commissioning and handover strategy.
- 2.1.9.34 Advise on the development of a fire strategy and fire engineering proposals.
- 2.1.9.35 Provision of all specifications in elemental and NBS format.
- 2.1.10 Provide all information required for the preparation and maintenance of project documentation, including but not limited to programme, risk register, project execution plan, monthly reporting, communication procedures, commissioning and handover strategy, equipment strategy, operational readiness procedures, value management etc.
- 2.1.11 Assist the Project Manager in the development and update of all project documentation.

- 2.1.12 Prepare and maintain a design programme, agree with Project Manager and other consultants (when appointed).
- 2.1.13 Not used.
- 2.1.14 Provide information to the Project Manager throughout the project to allow for the preparation and maintenance of a detailed risk register for the project.
- 2.1.15 Co-ordinate Risk Assessments including Planning Risks and prepare report for Project Manager at the various stages of the project.
- 2.1.16 Provide information to the Project Manager over the life of the project, to allow the preparation and maintenance of programme for the project, including identifying project dependencies, project milestones and critical path.
- 2.1.17 Provide information to the Project Manager to allow the preparation of Project Execution Plan.
- 2.1.18 Identify the significant health and safety hazards and risks of any design work.
- 2.1.19 Ensure the exchange of design or other information between the other consultants (when appointed) throughout the course of the Project.
- 2.1.20 Ensure that adequate regard is given to the hierarchy of risk control and that full and detailed risk analyses are undertaken on all aspects of the design.
- 2.1.21 Attend regular meetings with the other consultants to discuss health and safety issues. Circulate minutes to the Project Manager and to others. The minutes shall record the action to be taken to rectify any deficiencies and shall indicate who is responsible for taking action.
- 2.1.22 Assist the Principal Designer (where the Consultant is not appointed as the Principal Designer) and the Principal Contractor to provide adequate information on health and safety to those who require it.
- 2.1.23 Consult as necessary with any local or other authority on matters relating to the proposed Works.
- 2.1.24 Establish contact with the other consultants following their appointment and arrange and chair regular meetings with them throughout projects in order to review their input to the design process.
- 2.1.25 Co-ordinate, arrange, chair and minute regular project meetings and client progress/review meetings.
- 2.1.26 Review all minutes of meetings, and action when required.
- 2.1.27 Not used.

- 2.1.28 Consider the elimination of hazards and reduction of risks during design.
- 2.1.29 Continually up-date the remaining risks and establish project risk register and report to Project Manager.
- 2.1.30 Ensure good communications throughout other consultants (when appointed).
- 2.1.31 Collation and issue of all information to the Project Manager in the agreed format and to timeline agreed.
- 2.1.32 The building surveyor will be required on occasion to perform the role of lead consultant and shall be responsible for the performance of the activities in all relevant stages, to include but not be limited to the following:
- Preparing the clients initial statement of Project Objectives.
  - Lead, co-ordinate and preparation of project Execution Plan and the Project Programme.
  - Issuing information, decisions, approvals and instructions to other consultants.
  - Implementation of any feasibility and/or option appraisals required.
  - Develop and maintain a management structure and communication strategy with all consultants, contractors and other persons engaged on projects.
  - Manage the development of the brief and ensuring its implementation.
  - Develop and manage change control procedures in consultation with the Project Manager, ensuring timely decisions necessary for cost control.
  - Lead the co-ordination of all consultants' designs, drawings and specifications to ensure there is no conflict of information or design.
  - Review progress of design work in relation to overall programme.
  - Receive regular status reports from each consultant and issue monthly report to project manager.
  - Organise, chair and minute regular project design review meetings, construction stage progress meetings and post-construction review meetings to a programme agreed with the project manager.
  - Monitor cost planning and control, programme and progress, reporting to the Project Manager. Issue instructions on a timely basis to other consultants.
  - Report to the Project Manager at regular intervals on progress and cost control.
- 2.1.33 Where the Consultant is appointed as Lead Consultant, the Consultant shall

also be appointed as the Principal Designer and carry out the duties of the Principal Designer as defined by the CDM Regulations on all stages of the project to include the following:

- : Plan, manage, monitor and coordinate health and safety in the pre-construction phase of a project
- : Prepare and provide relevant information to other dutyholders.
- : Liaise with the principal contractor to help in the planning, management, monitoring and coordination of the construction phase
- : Establish and chair regular design Risk Workshops (including documenting the meeting and issuing this to the University)
- : Establish and maintain a design Risk Register for the project (as per University requirements)
- : Complete the H&S File (as per University requirements)
- : Ensure H&S standards are not compromised during Value Engineering exercises related to the project
- : Notify the project to the HSENI on behalf of the University (Client)
- : Assist and advise the University to ensure all Client duties are met under the CDM Regulations

2.1.34 Where the Consultants appointment does not include the Principal Designer co-operate fully with the Principal Designer. Assist the Principal Designer to ensure that the CDM Regulations are fully complied with on all stages of the Project.

2.1.35 Where BIM is to be utilised, lead in the planning and implementation of BIM strategy (where appointed as Lead Consultant) ensuring that all parties are clear on their responsibilities and deliverables and monitor and report on progress to the Client at each RIBA stage.

## **2.2 PROCUREMENT OF CONTRACTOR – PRE-QUALIFICATION STAGE**

2.2.1 Ensure that all Pre-Qualification Questionnaire (PQQ) documentation and submissions are managed with the utmost emphasis on security and confidentiality.

2.2.2 Provide the draft PQQ documentation with assistance from the Project Manager using University PQQ template to meet University requirements - draft Pre-Qualification Questionnaire (PQQ) and Memorandum of Information (MoI) pack.

- 2.2.3 Upon acceptance of final PQQ documentation, the Consultant will formally submit the completed PQQ to the University internal Project Manager for issuance to Procurement Office for advertisement on eSourcing NI.
- 2.2.4 Provide Contract Notice for OJEU advertisement (if required) and incorporate feedback from University internal Project Manager and Procurement for final Contract Notice.
- 2.2.5 Review and formally respond to University issued PQQ clarifications from applicants via the Project Manager.
- 2.2.6 Nominate PQQ evaluation panel (minimum two assessment panel members) who will evaluate applications. Any changes to the original panel nominees must be notified to Project Manager.
- 2.2.7 Provide PQQ Evaluation Packs to Project Manager for acceptance in advance of PQQ evaluation meeting.
- 2.2.8 Attend and chair the PQQ Consensus Evaluation Meeting and record appropriate Consensus Scores and Comments for Project Manager acceptance.
- 2.2.9 Produce the final PQQ Scoring Matrix for Project Manager acceptance.
- 2.2.10 Provide a PQQ Evaluation Report with recommendations to shortlist and select applicants to the Project Manager for acceptance.
- 2.2.11 Sign final PQQ Evaluation Report for Project Manager acceptance.
- 2.2.12 Produce success/ regret letters & debrief documentation and issue to Project Manager for acceptance.
- 2.2.13 Attend, manage and chair any debrief meetings with unsuccessful applicants (if requested).
- 2.2.14 Where the Consultants appointment includes the Principal Designer role, ensure all Principal Designer and Client duties have been satisfactorily met during the selection and appointment of contractors with regard to the CDM Regulations.

## **2.3 PROCUREMENT OF CONTRACTOR – TENDER STAGE**

- 2.3.1 Ensure that all ITT documentation and tenders are managed with the utmost emphasis on security and confidentiality.
- 2.3.2 Provide the draft ITT documents using University ITT template to meet University requirements – including Invitation to Tender (ITT) and tender evaluation/ award criteria and weightings.
- 2.3.3 The Consultant will formally submit the completed ITT documentation to the University via the Project Manager for acceptance.



- 2.3.4 Review and formally respond to University issued ITT clarifications from Tenderers via the Project Manager. Maintain detailed records of all clarifications received and responses issued.
- 2.3.5 Nominate separate ITT qualitative evaluation panel (where applicable - minimum two assessment panel members) and commercial evaluation panels that will evaluate tenders. Any changes to the original panel nominees must be notified to the Project Manager.
- 2.3.6 Provide ITT Evaluation Packs to Project Manager for acceptance in advance of ITT qualitative individual evaluation and consensus evaluation meeting.
- 2.3.7 Manage the Evaluation of all tenders including an analysis of the commercial and qualitative (where applicable) aspects of the tender submissions ensuring that these are scored separately and by different assessment panels. Ensure that all score sheets are signed and price and qualitative scoring matrices are completed.
- 2.3.8 Ensure that “Information Barriers” exist so that information is not shared between the separate qualitative and commercial evaluation panels.
- 2.3.9 Arrange and manage the Commercial Submission Evaluation.
- 2.3.10 Complete Commercial Submission Scoring Matrices. Ensure all commercial tender submissions under consideration receive a detailed arithmetical and technical check and ensure that any errors are resolved in accordance with the Works Conditions of Contract.
- 2.3.11 Attend and chair the Consensus Qualitative Submission Meeting and record appropriate Consensus Scores and Comments.
- 2.3.12 Complete and collate the Qualitative Scoring Matrices and Commercial Scoring Matrices.
- 2.3.13 Produce the final ITT Scoring Matrix for Project Manager acceptance.
- 2.3.14 Issue the Procurement Office with completed consensus scoring sheets for both commercial and qualitative questionnaires, all relevant scoring matrices and the required Code of Ethics declaration documentation.
- 2.3.15 Provide a Tender Evaluation Report, with recommendations, to identify a Preferred Bidder to the Project Manager for acceptance.
- 2.3.16 Sign final Tender Evaluation Report.
- 2.3.17 Produce ITT 'Intent to Award' (Standstill Letter) Notification for review, acceptance and issuance to University.

- 2.3.18 Attend, manage and chair any debrief meetings with unsuccessful tenderers (if requested).
- 2.3.19 Assist Project Manager in creating a Contract Suite of Documents for review and acceptance by Project Manager and Procurement Office.
- 2.3.20 Undertake final due diligence, where requested by the Project Manager, on the Preferred Bidder 'Tenderer's Team' to ensure that the legal, economic and financial; and technical requirements detailed within the PQQ continue to be satisfied and there have been no other material adverse changes since the submission of the PQQ.
- 2.3.21 With assistance from the Project Manager, ensure Contract Suite of Documents are signed by Preferred Bidder and the University.
- 2.3.22 Draft OJEU Contract Award Notice, where applicable, and issue to Project Manager for acceptance.
- 2.3.23 Draft and issue Final Contract Award Notification Letters (where applicable) to Project Manager for review and incorporate changes for final acceptance.
- 2.3.24 In association with the University's legal advisers arrange for the execution of Performance Bonds, Guarantees, Collateral Warranties or other appropriate forms of undertaking or security to secure proper performance of the Works Contract.
- 2.3.25 Where the Consultants appointment includes the Principal Designer role, ensure all Principal Designer and Client duties have been satisfactorily met during the selection and appointment of contractors with regard to the CDM Regulations.

#### **2.4 STAGE 0 - STRATEGIC DEFINITION & STAGE 1 - PREPARATION AND BRIEF**

- 2.4.1 Obtain an outline brief from the Client including the timescale for the Project and financial limits.
- 2.4.2 Establish the scope of the project with the Project Manager.
- 2.4.3 Review information including, room adjacencies and generic data sheets generated by the university, preparing a report on issues and concerns for issue to the Project Manager.
- 2.4.4 Develop a complete set of room data sheets with end user including initial sign-off.
- 2.4.5 Ensure that the Client is aware of their duties under CDM Regulations and that Principal Designer has been appointed.
- 2.4.6 Carry out an inspection of the existing facilities.
- 2.4.7 In conjunction with the Structural Engineer (when appointed) arrange for the carrying

out of any site investigation authorised by the Project Manager, and, if necessary, make recommendations to the Project Manager on the basis of the interpretation of the results by the Structural Engineer and any other relevant consultant.

- 2.4.8 Assist the Project Manager to assess the implications of any constraints which may be attached to the Site.
- 2.4.9 Liaise with the other consultants (when appointed) for the Project.
- 2.4.10 Visit the Site and undertake such further studies as may be necessary in order to submit proposals and options to the Project Manager including an anticipated programme and costs and undertake all work necessary to obtain the Client's approval to proceed on the basis of the agreed proposals.
- 2.4.11 Liaise with the other consultants (when appointed) as to the need for any Site investigations or tests to be undertaken in conjunction as appropriate with the relevant consultant and, following any decision by the Client to require any investigation or test, implement any decision taken.
- 2.4.12 In conjunction with the Project Manager validate the proposed Procurement approach.
- 2.4.13 Initial identification and assessment of options with the Project Manager. These could relate to the overall project regarding space provision, design, location or elements of these.
- 2.4.14 Provide collated information to the Project Manager to allow the preparation of feasibility studies as part of option appraisals.
- 2.4.15 Co-ordinate development of Project Brief with the Project Manager.
- 2.4.16 Provide information to the Project Manager to allow the preparation of a report on contingency allowances.
- 2.4.17 Not used.
- 2.4.18 Co-ordinate quotations for any specialist surveys on Client's behalf including Archaeology, etc. and report to Project Manager.
- 2.4.19 Provide environmental assessment of options.
- 2.4.20 Develop room data sheets and C-sheets including sign-off.
- 2.4.21 Develop dimensioned space layouts including initial sign-off.
- 2.4.22 Develop outline dimensioned sections, elevations, etc. ensuring structure and services integration.
- 2.4.23 Develop outline specification in elemental and NBS format.

- 2.4.24 Explore feasible solutions with the Client, the Project Manager, and other consultants (when appointed). These should relate but not be limited to the overall project regarding space provision, design, location, orientation and sustainability.
- 2.4.25 Ongoing assessment of options including identification of further alternatives.
- 2.4.26 Assess whole life costs for feasibility and option appraisals.
- 2.4.27 Develop sustainable options for projects.
- 2.4.28 Participate in value engineering exercises.
- 2.4.29 Provide information to allow the preparation of cost estimates and provide report as necessary.
- 2.4.30 Provide information to the Project Manager to allow the preparation of projected cash flow based on the approved cost limit for a Project and the anticipated programme and update as necessary until completion of the Works keeping the Client informed at all times of any changes.
- 2.4.31 All building surveying services appropriate to this stage of the Project.
- 2.4.32 Where the Consultants appointment includes the Principal Designer role, ensure all Principal Designer and Client duties have been satisfactorily met and the CDM Regulations fully complied with.
- 2.4.33 Where BIM is to be utilised advise Client on purpose of BIM including benefits and implications. Agree level and extent of BIM including 4D (time) 5D (cost) and 6D (FM) following software assessment. Advise BIM Model Manager and Client on Architectural Consultancy Services matters in relation to BIM. In relation to Building Surveying services related matters, define BIM Inputs and Outputs and scope of post-occupancy evaluation (Soft Landings), identify scope of and commission BIM surveys, investigations and reports and contribute to BIM execution plan. Follow floor naming protocol and asset labelling standards.
- 2.4.34 Obtain Project Manager approval to proceed to next stage.

## **2.5 STAGE 2 - CONCEPT DESIGN**

- 2.5.1 Coordinate the work of other consultants (when appointed) in the development of the scheme.
- 2.5.2 Consult as necessary with any local or other authority on matters relating to the proposed Works.

- 2.5.3 Ongoing assessment of options including identification of further alternatives.
- 2.5.4 Deliver environmental assessment of options.
- 2.5.5 Review all minutes of meetings, and action when required.
- 2.5.6 Provide information to the Project Manager to allow the update of cost estimates in elemental format.
- 2.5.7 Carry out value engineering exercises and prepare report for the Project Manager.
- 2.5.8 Issue information in agreed format.
- 2.5.9 Further develop room data sheets and production of 'C' sheets, including sign-off.
- 2.5.10 Further develop dimensioned space layout including sign-off.
- 2.5.11 Further develop dimensioned sections, elevations etc. ensuring structure and services integration.
- 2.5.12 Consider outline specification in elemental and NBS format.
- 2.5.13 Provide information to the Project Manager to allow the co-ordinated development of outline construction phasing and site activity plan/programme.
- 2.5.14 Develop fire strategy including fire engineering proposals when required.
- 2.5.15 Ongoing assessment of options including identification of further alternatives.
- 2.5.16 Assist the Client evaluate the alternative options, allowing an informed decision to be reached on which option best meets the need, objectives and vision of the Client.
- 2.5.17 Develop sustainable options which will achieve BREEAM rating of 'VERY GOOD' for major refurbishment projects.
- 2.5.18 Consider the elimination of hazards and reduction of risks during design.
- 2.5.19 Prepare elemental cost plan and affordability statements for input to Stage C Report where required.
- 2.5.20 Provide information to the Project Manager to allow the Preparation of the Stage C Report.
- 2.5.21 Not used.
- 2.5.22 Liaise with statutory bodies/utilities.
- 2.5.23 Provide information to the Project Manager to allow the development of detailed equipment strategy.
- 2.5.24 Preparation of estimates of running costs (maintenance, energy consumption etc.) report to Project Manager.

- 2.5.25 Assist the Project Manager in the development of report on criteria for post-project evaluation.
- 2.5.26 Assist in the development and preparation of a report for the proposed form of contract.
- 2.5.27 Confirm to Project Manager that design meets functional Requirements.
- 2.5.28 Prepare a report for the Project Manager to include any specific unresolved problems and to demonstrate that the scheme is cost effective.
- 2.5.29 Submit a detailed report to the Project Manager on the recommended scope of the Works together with a recommended programme and anticipated costs including reviewing alternative design and construction solutions and obtain estimates of cost of those options, as required, and assist the Project Manager in reporting these matters to the Client.
- 2.5.30 Assist in the development of elemental cost plan and affordability statements for input to Stage 2 Report.
- 2.5.31 Provide information to the Project Manager to allow the preparation of Option Appraisal Report for the Client, including identification of option, summary of each option, advantages/disadvantages, capital and recurrent costs, non-financial benefits, risk matrix , programme etc. recommending preferred option.
- 2.5.32 Produce formal Stage 2 Report.
- 2.5.33 Obtain the Client's final brief from the Project Manager which includes a detailed programme for completion of the Project and an agreed cost limit.
- 2.5.34 Not used.
- 2.5.35 Liaise with the other consultants (when appointed) and in conjunction with them undertake any further studies as may be necessary in order to submit proposals and options including an anticipated programme and costs to the Project Manager.
- 2.5.36 Assess the need to take action to protect the interests of the Client in respect of neighbouring properties and accordingly make recommendations to the Project Manager.
- 2.5.37 Advise on the need to obtain planning permission or other under Statutory Approvals.
- 2.5.38 All building surveying services appropriate to this stage of the Project.
- 2.5.39 Where the Consultants appointment includes the Principal Designer role, ensure all Principal Designer and Client duties have been satisfactorily met and the CDM Regulations fully complied with.

- 2.5.40 Where BIM is utilised, attend BIM pre-start meeting. Utilise BIM model with Consultant Team for strategic analysis and options appraisal. Utilise BIM data for environmental performance and area analysis. In relation to Architectural matters, identify key model elements and create concept level parametric objects for major elements. Agree extent of performance specified work. Execute Building Surveying services functions required at this stage for Level 2 BIM as set out in BIM execution Plan
- 2.5.41 Obtain Project Manager approval to proceed to next stage.

## **2.6 STAGE 3 - DEVELOPED DESIGN**

- 2.6.1 Arrange, chair and issue minutes of regular project meetings and Client progress/review meetings.
- 2.6.2 Consult as necessary with any local or other authority on matters relating to the proposed Works.
- 2.6.3 Coordinate the work of other consultants (when appointed) in the development of the scheme.
- 2.6.4 Carry out environmental assessment.
- 2.6.5 Review all minutes of meetings, and action when required.
- 2.6.6 Carry out value engineering exercises and prepare report for Project Manager.
- 2.6.7 Issue information in agreed format with project Manager.
- 2.6.8 Undertake whole life costing.
- 2.6.9 Provide information to the Project Manager to facilitate the update of the programme. This should include allowance for tracking actual progress against planned.
- 2.6.10 Make application for planning permission. Take all reasonable steps to ensure that planning conditions are satisfied or waived, and that completion of the Project according to the agreed programme is not impeded in any way by the presence of such conditions and that the design of the Project complies with any planning permission, Building Regulations or other statutory requirements.
- 2.6.11 Assist the Project Manager to ensure that the Project Cost Plan is prepared for the Project based on the approved cost limit. Assist in the preparation of the Project Cost Plan based on the approved cost and the anticipated start and completion dates and, thereafter, assist the Project Manager to monitor the development of the scheme

- design against that Project Cost Plan and report any anticipated difficulty to the Project Manager including proposals for overcoming that difficulty.
- 2.6.12 Assist the Project Manager in the preparation of a projected cash flow based on the approved cost limit for the Project and the anticipated Project Programme and in updating the same as necessary until completion of the Works.
- 2.6.13 Develop a scheme design within the approved cost limit and submit to the Project Manager for approval giving details of proposed specification and services.
- 2.6.14 Develop a scheme design in such a way to achieve a minimum BREEAM rating of 'VERY GOOD' for major refurbishment projects'.
- 2.6.15 Consider elimination of hazards and reduction of risks during design.
- 2.6.16 Prepare and maintain a detailed programme for the production of design information leading up to obtaining tenders for the Works and provide a copy of the programme to the Project Manager.
- 2.6.17 Assist the Project Manager to establish rigorous cost control procedures in order that designs are strictly monitored against the agreed Project Cost Plan and that any difficulties are rectified and the approved cost limit is maintained.
- 2.6.18 In conjunction with the Project Manager establish efficient management procedures to monitor the production of design information produced by the other consultants in order that any shortcomings are immediately highlighted and ensure that proper action is taken to rectify any shortcomings.
- 2.6.19 Where the Consultants appointment does not include the Principal Designer role, in conjunction with the other consultants identify the significant health and safety hazards and risks and provide the necessary information required by the Principal Designer for inclusion within the Health and Safety Plan. For the avoidance of doubt, when the Consultant is appointed as the Principal Designer, they are responsible for completing and maintaining the Health & Safety file and not merely for collaborating in its preparation and maintenance.
- 2.6.20 Establish regular reporting procedures with the Project Manager, identifying those matters which require approval and, where necessary, provide assistance to obtain those approvals.
- 2.6.21 Make recommendations to the Project Manager on the need for specialist contractors and suppliers to design and execute any sections of the Works and take any action reasonably necessary to implement the Project Manager's instructions.



- 2.6.22      Ensure that the designs are fully integrated and are tested throughout the design phase against cost targets, health and safety and planning or other controls and take any action necessary to rectify deficiencies.
- 2.6.23      Organise any required mock-up, trials or sample.
- 2.6.24      Prepare reports showing the progress made against the agreed design programme and confirm in the reports whether the approved cost limit and programme generally is being maintained and submit the reports to the Project Manager at not more than monthly intervals or at such intervals as the Project Manager may instruct.
- 2.6.25      Agree material and construction specifications with the other consultants and keep the Project Manager fully informed.
- 2.6.26      Assist the Project Manager to ensure that statutory approvals for the Project are obtained and that all utilities and other necessary services are in place both for the construction phase and for permanent operation following completion of the Project.
- 2.6.27      Give the Project Manager sufficient notice of all approvals, decisions or other matters which require action by the Client and, where appropriate, assist the Project Manager by providing information and by making recommendations.
- 2.6.28      Where the Client has indicated the possibility of a change to the agreed brief during the design phase, liaise with the Project Manager and the other consultants (when appointed) to establish the cost and programme implications and obtain the Client's instructions.
- 2.6.29      Where difficulties are highlighted during the design phase which may not be capable of being resolved and which may result in a failure to meet the Client's brief, submit a report to the Project Manager as soon as practicable giving recommendations and options.
- 2.6.30      Ensure that all drawings, specifications, schedules, or other documents necessary for tender are completed and are fully co-ordinated, are in accordance with the Client's brief, approved by the Client and are available on the programmed date.
- 2.6.31      Make recommendations and discuss with the Project Manager the preferred method of procuring the construction and completion of the Works to assist the Project Manager to obtain the Client's approval to the recommendations.
- 2.6.32      The Consultant is to provide and manage a system of fully dimensioned room data sheets and C-Sheets in order to define Client requirements and to assist in the management of information. Data to include room finishes, room dimensions, floor and ceiling levels, comms/data points and locations, power & lighting and locations, gases, air and chemical points and locations, vacuum points, furniture, security, fire

protection, PA, etc. All such equipment locations to be fully dimensioned and coordinated with furniture and equipment.

- 2.6.33 Finalise all room data sheets and 'C' sheets including space plans, sketch elevations/ sections including final sign-off.
- 2.6.34 Finalise scheme design layouts and sections ensuring integration of building surveying, structural and services design.
- 2.6.35 Finalise the fire strategy and fire engineering proposals.
- 2.6.36 Finalise scheme design details.
- 2.6.37 Preparation general CAD generated perspectives.
- 2.6.38 Finalise outline specification in elemental and NBS format.
- 2.6.39 Develop construction phasing and site activity plan/programme.
- 2.6.40 Finalise finishes and colours for presentation by building surveyor to the client for comment/approval.
- 2.6.41 Obtain information from client and prepare schedules for Groups 2 and 3 equipment.
- 2.6.42 Finalisation equipment strategy.
- 2.6.43 Cost check design against Stage 2 Cost Plan. Take action on cost checking reports.
- 2.6.44 Prepare formal Stage 3 Report and provide report as necessary.
- 2.6.45 Not used
- 2.6.46 Demonstrate that the Scheme is cost effective.
- 2.6.47 Prepare the Client Requirements Document that will include
  - 2.6.47.1 details of the Project, client, consultants, procurement process and information being provided by other consultant members and the University
  - 2.6.47.2 Collate site survey information, room data sheets, consultant's drawings, details schedules, specifications and other information required.
- 2.6.48 Not used.
- 2.6.49 All Building Surveying services appropriate to this stage of the Project.
- 2.6.50 Where the Consultants appointment includes the Principal Designer role, ensure all Principal Designer and Client duties have been satisfactorily met and the CDM Regulations fully complied with.

- 2.6.51 Where BIM is utilised – attend BIM design stage review meetings. Share data and co-ordinate design and detailed analysis including data links between models and development of generic/bespoke design. Develop and utilize BIM Data for environmental performance and area analysis. Carry out assessments including 4D and/or 5D assessment. In relation to Building Surveying elements, provide information on cost management aspects and software as well as designing for maintenance. Execute all functions required at this stage for Level 2 BIM per level and extent set out in BIM execution plan.
- 2.6.52 Obtain Project Manager approval to proceed to next stage

## **2.7 STAGE 4 - TECHNICAL DESIGN**

- 2.7.1 Co-ordinate development of approved scheme design.
- 2.7.2 Arrange, chair and issue minutes of regular project meetings and client progress/review meetings.
- 2.7.3 Prepare all production information.
- 2.7.4 Reference and layer CAD drawings.
- 2.7.5 Comply with CDM Regulations.
- 2.7.6 Prepare project specific specification using the National Building Specification format and referencing.
- 2.7.7 Eliminate hazards and reduce risks during design.
- 2.7.8 Ensure design co-ordination and integration of all design elements throughout the process.
- 2.7.9 Ensure co-ordination of building, structural/civil and building services design, providing coordinated layered drawing overlaid on a series of plans, sections and elevations.
- 2.7.10 Review and update as necessary room data sheets and C-Sheets, including space plans, sketch elevations/sections with end user including sign-off.
- 2.7.11 Co-ordinate arrangement of meeting(s) with Project Manager to review layouts, services installations, finishings, fixed furnishings etc.
- 2.7.12 Develop construction phasing and site activity plan/programme.
- 2.7.13 Provide information about remaining risks and assist the Project Manager in the development and update of project risk register.
- 2.7.14 Carry out value engineering exercises and prepare report for Project Manager.

- 2.7.15 Develop detailed design to achieve BREEAM 'VERY GOOD' for major refurbishment projects'
- 2.7.16 Agree materials and construction specifications with Project Manager
- 2.7.17 Develop detailed design delivery, production information and tender documentation production programme, obtaining sign-off from all other consultants (when appointed). Agree with the Project Manager when the production information is frozen.
- 2.7.18 Finalise schedules for Groups 2 and 3 equipment.
- 2.7.19 Provide all details to Project Manager for preliminaries including area of works, site area, compound, phasing, etc.
- 2.7.20 Issue information to the Quantity Surveyor (when appointed) to allow any Bills of Quantities to be completed.
- 2.7.21 Provide detail to Quantity Surveyor (when appointed) on contract periods, etc. (Ensure sufficient time is allowed within contract periods for commissioning, demonstration and handover).
- 2.7.22 Lodge statutory approval applications.
- 2.7.23 In conjunction with Project Manager, assist when necessary in the preparation of OJEU notices and advertisement, ensuring compliance with EU procedures and directives.
- 2.7.24 Answer tenderer queries in agreed format.
- 2.7.25 Prepare and assess PQQ applications in accordance with the University's procurement regulations, using University procurement pro formas, inputting results into a consolidated scoring matrix, attending consensus scoring meetings.
- 2.7.26 Submit to the Project Manager the names of contractors who are considered to be suitable to be invited to tender for main contract works and specialist works in order to assist the Project Manager to obtain the Client's instructions.
- 2.7.27 Issue all drawings, specification, to Project Manager four weeks prior to tender for review/comment.
- 2.7.28 Arrange/chair and provide minutes of final design review meeting to go through all drawings, details, specification, Bills of Quantities, etc.
- 2.7.29 Assist the Project Manager to deal with all enquiries from the contractors during the tendering period.

- 2.7.30 Participate in ongoing value engineering exercises to ensure that the works cost remain within the Works Cost Limit.
- 2.7.31 Consider any building design information, proposals for substitute materials and programmes provided by sub-contractors as part of their tenders.
- 2.7.32 Participate in the preparation of the final agreed contract package that includes construction drawings, schedules, specifications, details and programme.
- 2.7.33 Reply to all enquiries from the contractors during the pre-contract stage.
- 2.7.34 Management, coordination and issue to Project Manager of contract documents, including review of information produced.
- 2.7.35 Ensure that all drawings, specification, schedules or other documents necessary are produced in accordance with the agreed programme and that the works included therein are capable of being constructed within the approved cost limit for the Project.
- 2.7.36 Ensure that all drawings, specifications, schedules, or other documents necessary for the placing of contracts are completed and are fully co-ordinated, are in accordance with the brief approved by the Client and are available on the programmed dates.
- 2.7.37 Assist the Project Manager to ensure that tenders are invited on the programmed date and that the PQQ/ITT invitations are in accordance with the Project Manager's instructions.
- 2.7.38 In conjunction with the Project Manager, manage and prepare a detailed Design Report, Product Specification and Validation of the Works Cost Limit.
- 2.7.39 Where the Consultant's appointment includes the Principal Designer role appraise any contractor's proposed Health and Safety Plan otherwise assist and support the Principal Designer in appraising any contractor's proposed Health and Safety Plan as required.
- 2.7.40 Assist in tender appraisals and any cost saving reviews.
- 2.7.41 Obtain the Project Manager's decision regarding the acceptance of a tender.
- 2.7.42 Following discussion with the Project Manager, provide documents to enable the Client to enter into any building contracts and assist the Project Manager to ensure that any adjustments have been made to the documents in order that they conform to the approval given by the Client.
- 2.7.43 All building surveying services appropriate to this stage of the Project.

- 2.7.44 Where the Consultants appointment includes the Principal Designer role, ensure all Principal Designer and Client duties have been satisfactorily met and the CDM Regulations fully complied with.
- 2.7.45 Where BIM is utilised – attend design stage review meetings. Share data and co-ordinate design and detailed analysis including data links between models and development of generic/bespoke design components. Develop and utilise BIM data for environmental performance and area analysis. Carry out assessments including 4D and/or 5D assessment. In relation to Building Surveying elements, prepare and provide cost management aspects and software as well as designing for maintenance. Finalise detailed modeling and analysis. Create production level parametric objects for all major elements (where appropriate and information exists this may be based on tier 2 supplier's information). Embed specification to model. Participate in final review and Client sign off of model. Integrate subcontractor performance specified work model information into BIM model data. Review construction sequencing (4D) with contractor. Execute all functions required at this stage for Level 2 BIM per level and extent set out in BIM execution plan.
- 2.7.46 Obtain Project Manager approval to proceed to next stage.

## **2.8 STAGE 5 - CONSTRUCTION**

- 2.8.1 Assist Project Manager in advising contactors of proposed tender acceptance.
- 2.8.2 Assist Project Manager review each contactors programme.
- 2.8.3 Chair pre-start site meeting.
- 2.8.4 Comply with CDM Regulations.
- 2.8.5 Issue contract drawings to Project Manager
- 2.8.6 Provide a "For Construction" pack to the PM for issue to each contractor/sub-contractors.
- 2.8.7 Provide Project Manager with a full set of "For Construction" information.
- 2.8.8 Participate in meetings with other consultants (when appointed), each main contractor and relevant sub-contractor(s) to ensure ALL elements of design including contractor's design are fully co-ordinated and are integrated into the overall building design.
- 2.8.9 Review and approve sub-contractors services co-ordination drawings.

- 2.8.10 Assess and approve any samples.
- 2.8.11 Provide regular site inspections as required at the various stages of the project.
- 2.8.12 Carry out Contact Administrator role for each construction contract, in accordance with the terms of each such contract.
- 2.8.13 Request and distribute actions received from Project Manager and any main contractor following contractor co-ordination meeting in advance of Technical Design Meeting.
- 2.8.14 Chair and minute site progress meeting and distribute minutes within 3 working days to the other consultants, any relevant contractor, Client and Project Manager.
- 2.8.15 Issue minute agenda at least 24 hours prior to meeting.
- 2.8.16 Arrange, chair and minute project meetings and distribute within 5 working days.
- 2.8.17 Arrange, chair and minute Technical Design Meetings.
- 2.8.18 Arrange, chair and minute all Progress Meetings.
- 2.8.19 Issue contract instructions in a timely fashion getting Project Manager approval for fundamental changes or expenditure of contingency in advance.
- 2.8.20 Promptly confirm any verbal instructions.
- 2.8.21 Where a variation is agreed to facilitate any contractor the instruction should note the reason for the instruction and also clearly note that the contractor accepts there is no increased costs or time associated with this instruction.
- 2.8.22 Complete site visit book each time the site is visited.
- 2.8.23 Promptly issue any extensions of time, phased possession, sectional completion, non-completion certificates, etc.
- 2.8.24 Issue Valuation Certificate so it arrives with the Project Manager within the first 3 calendar days of every month.
- 2.8.25 Continually monitor the quality of the works advising the contractors of any unsatisfactory work as soon as it is noticed.
- 2.8.26 Arrange for any material testing and receipt of results. Provide a detailed report of results.
- 2.8.27 Co-ordinate contractors/sub-contractors access to areas outside their site with the Project Manager.
- 2.8.28 Co-ordinate any services shutdowns, disconnections, reconnections, new connections, etc. regardless of whether the works are inside or outside any given

contractors site with the Project Manager.

- 2.8.29 Co-ordinate any work outside normal working hours with the Project Manager.
- 2.8.30 Co-ordinate any phased possessions, sectional completions etc. with the Project Manager.
- 2.8.31 Ensure each contractor is complying with all relevant Health and Safety Regulations, Construction Phase Health & Safety Plan Method Statements, etc. and promptly notify any main contractor of any concerns in writing.
- 2.8.32 Not used.
- 2.8.33 Provide such assistance as the Project Manager may require in order that the Project Manager can agree a detailed programme for the Works with any building contractor which specifies completion by the agreed programme date.
- 2.8.34 In liaison with the Project Manager agree a date with each building contractor for the commencement of work on the Site.
- 2.8.35 Prepare and issue drawings, details, specifications and other documents relating to the Consultant's designs for the Works (including for variations to the Works) necessary for construction of the Works in accordance with the agreed programme for their issue.
- 2.8.36 Ensure all drawings, details, specifications and other documents to be produced by the other consultants are fully co-ordinated, and are available for construction of the Works in accordance with the agreed programme for their issue.
- 2.8.37 Attend the Project Manager's progress meetings with any building contractor or with others.
- 2.8.38 Attend regular meetings with the other consultants and, when necessary, the Principal Designer to review design information. The minutes prepared by the Project Manager shall record the action to be taken to rectify any deficiencies and shall indicate who is responsible for taking that action.
- 2.8.39 Assist the Project Manager to ensure that efficient safety policies are in place and are implemented by each building contractor and any sub-contractor working on the Site and that there is adequate protection for the public and others.
- 2.8.40 Comply with the obligations of a Designer under the CDM Regulations in relation to ongoing design work during construction including all variations and give due regard to the hierarchy of risk control.
- 2.8.41 Where the Consultant's appointment includes the Principal Designer role appraise any contractor's proposed Health and Safety Plan otherwise assist and support the



- Principal Designer in appraising each building contractor's proposed safety method statements as required.
- 2.8.42 Assist the Project Manager to ensure that rigorous quality management procedures are in place throughout the construction phase.
- 2.8.43 Assist the Project Manager and the other consultants to establish post-contract cost control procedures in order to ensure financial control covering the issue of instructions which vary the Works and the issue of cost reports to the Project Manager.
- 2.8.44 Under the direction of the Project Manager assist with all matters concerning each building contract as necessary in order to ensure the satisfactory completion of the Works.
- 2.8.45 Monitor the work of each building contractor and sub-contractor on site with a view to ensuring that they fully comply with the design specification, quality standards, financial targets, applicable statutory requirements and regulations and any other conditions set out in their contracts. Visits to the site are expected to be of appropriate frequency to achieve the objective described in the previous sentence.
- 2.8.46 Represent the Client's interests in any instances where there is an apparent discrepancy between the work undertaken or goods supplied by any building contractor or any sub-contractor and the relevant building contract; investigate the discrepancy, determine the nature and extent of any problem and advise the Project Manager of the appropriate action required with a view to ensuring full compliance with the relevant building contract.
- 2.8.47 Assist the Project Manager to maintain comprehensive records of all activities and works carried out on site with a view to verifying all claims eventually made by any building contractor or any sub-contractor.
- 2.8.48 Take all reasonable steps to assist the Project Manager in ensuring that all works are completed in accordance with the relevant contracts and that all plant and equipment is installed according to the relevant specification. This will also include a responsibility to ensure that all of any building contractor's or sub-contractors' plant and equipment, along with surplus material and debris, is removed from the Site, that all areas of the Project relevant to the works carried out by each building contractor or sub-contractor are cleaned prior to the relevant Practical Completion and that any plant and equipment is properly tested and commissioned.
- 2.8.49 Advise the Project Manager as to the need for any special inspections or tests necessary to ensure that proper and adequate standards of construction are

- maintained and that all works are constructed in accordance with the relevant contract documents and arrange the same where appropriate.
- 2.8.50 Provide information as requested by the Project Manager to prepare financial reports to the Client.
- 2.8.51 Generally review materials delivered to Site and comment on their suitability.
- 2.8.52 As appropriate, advise on the need for sample taking and carrying out tests of materials, components, techniques and workmanship. Review and comment on the conduct and results of such tests, whether on or off Site.
- 2.8.53 As appropriate, advise on the need to instruct the opening up of completed Works to determine that it is generally in accordance with the relevant construction contract.
- 2.8.54 As appropriate, visit the sites of the extraction and fabrication and assembly of materials and components to review and comment on such materials and workmanship before delivery to Site.
- 2.8.55 Recommend adjustments to the Construction Programme as may be necessary from time to time, in the light of the progress of the Works.
- 2.8.56 The Consultant is to receive contractor presented drawings and other design development information, review same, comment as to compliance with requirements in relation to building design as described in the Consultant's and the other consultants' issued design information, and, as the prime reviewer of building design related contractor design and fabrication information, is to obtain and incorporate, where appropriate, comments made by other project related parties, including the Client and the other consultants, as part of the review process and return to the contractor within 7 working days (Mon – Fri). When satisfied that such submitted information complies with requirements, as described in the Consultants and other consultants' issued design information, in relation to building services, then the Consultant is to return the information to the contractor endorsed as "No Comment".
- 2.8.57 In the event that design change is identified during design development by any contractor, or is identified as part of the above review process, varying from previously issued construction information issued by the Consultant, then, should it be proposed to accept this change, revised versions of the Consultant's design information should be prepared promptly and where appropriate (i.e. programme and/or cost implications) referred to the project change control process prior to issue for construction to the contractor.
- 2.8.58 Assist the Project Manager to continue to monitor the construction phase and to take

any necessary action in order to ensure that the Project will be completed within the Project Cost Plan and by the Project Programme completion date.

- 2.8.59 Assist the Project Manager to ensure that adequate records and photographs are available at all times throughout the construction phase recording progress of the Works and, particularly, highlighting any delays resulting from interaction between any building contractor or any sub-contractors working on the Site to assist in dealing with any claims by any building contractor for adjustment of amounts payable under the relevant building contract, extensions of time or loss and expense.
- 2.8.60 Assist the Project Manager to ensure that the other consultants (when appointed) observe cost control procedures and the procedures for obtaining approval to introduce variations.
- 2.8.61 Ensure that Payment Certificates to be issued by the Consultant in accordance with the terms of each building contract are issued in the appropriate form.
- 2.8.62 Witness commissioning of the Works as appropriate.
- 2.8.63 On completion of the Works, deliver upon request to the Client three soft and hard copies of the final drawings supplied by the Consultant to the relevant construction contractor for the purpose of constructing the Works. Soft copies should be capable of amendment by the Client as required for the future operation of the Works.
- 2.8.64 Review in draft and final form and comment on the adequacy of As-Built Drawings and the operation and maintenance manuals for the Works provided by any construction contractor.
- 2.8.65 Prepare as-built information required for the building manual.
- 2.8.66 In conjunction with the other consultants, provide the necessary information required for inclusion within the Health and Safety File.
- 2.8.67 Issue of Certificates relating to the completion of the Works and issue any certificates to be issued by the Consultant in accordance with the terms of any building contract.
- 2.8.68 Attend meeting(s) with Project Manager, any main contractor and relevant sub-contractor(s) and the University to finalise detailed testing and commissioning plan.
- 2.8.69 Attend meeting(s) with any main contractor and relevant sub-contractor(s) and the University to finalise completion testing, commissioning, demonstration and handover programme.
- 2.8.70 Co-ordinate consolidated snag list from all consultants (when appointed) during the works and prior to completion of the relevant works with completed action column.
- 2.8.71 Co-ordinate witnessing of testing and commissioning.

- 2.8.72 Co-ordinate system handovers
- 2.8.73 Co-ordinate system demonstrations to University Maintenance Staff and Building Occupants.
- 2.8.74 Final snagging inspection(s) at end of making good defects (or equivalent).
- 2.8.75 Collate defects list information received from other consultants (when appointed) and issuing to Project Manager.
- 2.8.76 Co-ordinating making good defects list (or equivalent) and issue to relevant main contractor.
- 2.8.77 Arranging, chairing and issue minutes of snagging review meeting(s).
- 2.8.78 Co-ordinate with the Principal Designer (where the Consultant has not been appointed as the Principal Designer) and the Principal Contractor to ensure a completed Building Manual is provided to the Project Manager on the day of each relevant practical completion. For the avoidance of doubt, when the Contractor is appointed as Principal Designer, it shall ensure that the Building Manuals are completed on the day of each practical completion.
- 2.8.79 In liaison with the other consultants (when appointed), provide the Client with a set of record drawings and guidance on the operation and maintenance of the buildings.
- 2.8.80 Ensure that all relevant drawings, specifications, operating instructions, manuals and other ancillary guidance notes relating to the Project and the plant and equipment that are installed during the Project are handed over to the Client.
- 2.8.81 Advise the Client on the resources and skills required to operate and maintain the completed works and make recommendations on the timing of their appointment and the need for any maintenance agreements.
- 2.8.82 Assist as appropriate in advising the Client on what service and maintenance contracts are needed:
  - 2.8.82.1 To maintain the validity of any guarantees;
  - 2.8.82.2 To ensure that the Project and its plant and equipment can be maintained in a fit and proper state.
- 2.8.83 Ensure that all statutory certificates and approvals are given to the Project Manager.
- 2.8.84 All building surveying services appropriate to this stage of the Project.

- 2.8.85 Where the Consultants appointment includes the Principal Designer role, ensure all Principal Designer and Client duties have been satisfactorily met and the CDM Regulations fully complied with.
- 2.8.86 Where BIM is utilised – attend BIM review meetings. Share data and co-ordinate design and detailed analysis including data links between models and Integration/development of generic/bespoke design components. Carry out assessments including 4D and/or 5D assessment. Use 4D/5D BIM data for contract administration purposes. Review construction sequencing (4D) with contractor. Contribute to planning the transfer of data at handover – 3D Models etc. and identify how this would be used. Prepare 2D Graphical output for alignment with University Micad system records etc. In relation to Building Surveying elements, assign components to space, type & system and plan production of asset sheets and integration with University asset management system (Planon). Execute all functions required at this stage for Level 2 BIM per level and extent set out in BIM execution plan.

## **2.9 STAGE 6 - HANDOVER AND CLOSE OUT**

- 2.9.1 Assist the Project Manager to conduct a post construction review of the Project and prepare a report of its findings for the Employer.
- 2.9.2 Responding to any issues, variations, etc. following occupation to ensure prompt resolution of any issues.
- 2.9.3 Provide any information necessary to update any Building Manuals
- 2.9.4 Assist the Project Manager to co-ordinate the production of each Final Account and the issue of each Final Certificate pursuant to each building contract.
- 2.9.5 Participate in post project review.
- 2.9.6 Assist the Project Manager to co-ordinate contractor/sub-contractor feedback within two months of practical completion of the relevant construction works.
- 2.9.7 Assist the Project Manager to co-ordinate and prepare report on post-project evaluation.
- 2.9.8 Participate in project review, to be held within 12 months of practical completion under each building contract.
- 2.9.9 Administer the terms of each construction contract during the defects liability period (or equivalent) under such construction contract, attend site inspections as appropriate and advise as necessary in connection with the issue of final certificates

(or equivalent) under each construction contract.

- 2.9.10 Issue a list of defects relating to the building works to the Project Manager within 2 days of the issue of any relevant Practical Completion Certificate (or equivalent), and promptly in the case of defects noted within the Defects Liability Period, or similar, following Practical Completion (or equivalent) in accordance with the terms of any building contract and monitor that they are properly rectified. Visit site as may be required, and issue written confirmation of clearance of defects in accordance with the terms of the relevant building contract when all such identified defects have been cleared.
- 2.9.11 Issue of making good defects certificate (or equivalent) on completion of works and in accordance with the terms of the relevant building contract.
- 2.9.12 Advise Project Manager of final completion of all work.
- 2.9.13 Provide list of altered, refurbished or new spaces together with scaled space drawings in CAD format with each individual space polylined (as built information).
- 2.9.14 Monitor progress of each building contractor in remedying defects. Prepare and issue when appropriate lists of defects and contractual notices relating to remedy and completion of remedying of defects.
- 2.9.15 All building surveying services appropriate to this stage of the Project.
- 2.9.16 Where the Consultants appointment includes the Principal Designer role, ensure all Principal Designer and Client duties have been satisfactorily met and the CDM Regulations fully complied with.
- 2.9.17 Where the Consultants appointment includes the Principal Designer role, ensure the completed Health and Safety File is provided to the University in a timely manner.
- 2.9.18 Where BIM is utilised – attend BIM handover meeting(s). Contribute to the implementation of BIM aspects of “Soft Landings” in line with BIM execution plan. Facilitate the release and transfer to Client of “End of Construction” BIM record model data to include 3D Models, 2D Graphical output for alignment with University Micad system records etc. asset records for integration with University asset management system (Planon) and as required for efficient ongoing building maintenance and operation and energy usage analysis. Execute all functions required at this stage for Level 2 BIM per level and extent set out in BIM execution plan.

**2.10 STAGE 7 - IN USE**

- 2.10.1 Assist the Project Manager to conduct a post construction review of the Project and prepare a report of its findings for the Employer.
- 2.10.2 Assist the Project Manager to co-ordinate end user feedback, to be achieved at two stages:-
  - 2.10.2.1 Stage 1 - within 6 months occupation
  - 2.10.2.2 Stage 2 - after 12 months
- 2.10.3 Assist the Project Manager to co-ordinate and prepare report on post-project evaluation.
- 2.10.4 All building surveying services appropriate to this stage of the Project.
- 2.10.5 Comply fully with the requirements of the CDM Regulations including, but not limited to, any defects or rectification works.
- 2.10.6 Where the Consultants appointment includes the Principal Designer role, ensure all Principal Designer and Client duties have been satisfactorily met and the CDM Regulations fully complied with.
- 2.10.7 Where BIM is utilised – attend BIM in-use review meeting. Review implementation and effectiveness of BIM in line with BIM execution plan. Execute all functions required at this stage for Level 2 BIM per level and extent set out in BIM execution plan. Participate in a review of the cost/benefits of Level 2 BIM of the project.