

The CSU mentoring pack



Example capital project team scope of services

Contents

Introduction

1.0 Typical Project Manager Scope of Services

2.0 Typical Architect Scope of Services

3.0 Typical Mechanical & Electrical Engineer Scope of Services

4.0 Typical Structural Engineer Scope of Services

5.0 Typical Quantity Surveyor Scope of Services

6.0 Typical CDM Coordinator Scope of Services

Example capital project team scope of services

Introduction

This document is intended as a simple guide to assist grant applicants and grant holders when considering the appointment of professional project team members.

It is accepted that in construction projects it is critically important that the basis of the appointment of the professional project team members is unambiguous. In particular, where the project is funded by external organisations it is necessary that the capital project team appointments provide for the requirements of the external funders.

This document is for guidance purposes only and will hopefully inform grant applicants and grant holders of the different roles and responsibilities that the professional project team members carry out on a construction project. The document simply lists out typical scopes of service against the different disciplines within the capital project team.

This document should be read in conjunction with the “How to commission a design team” guidance document also provided with the CSU Mentoring Pack.

1.0 Typical Project Manager Scope of Services

- Shall be part of the project team, but shall be considered to be the project leader with ultimate responsibility to the client
- Shall prepare the client's initial statement of project objectives taking into account the client's core operations and identifying constraints.
- Review the project objectives and specify areas where sufficiently detailed information is not available.
- Obtain confirmation from the client that the client's requirements established at feasibility stage and as confirmed by any further reports, represent the basis for giving instructions to proceed.
- Agree with the client a programme for signing off key project stages.
- Co-ordinate and produce reports necessary to obtain client sign-off at the key agreed stages.
- Shall establish the requirement for professional skills, including the development of the project brief, procedure and programme management and legal, insurance and financial services.
- Identify the optimal procurement route for the appointment of the consultants, contractors or specialists required.
- Manage the appointment of consultants and specialists
- Develop and maintain a project management plan or strategy.
- Develops and maintains a management structure and communications environment in which all consultants can perform effectively.
- Prepares and maintains a master programme in co-ordination with any programmes prepared by others
- Identifies project procedures including – change control procedures, reporting procedures, risk

Example capital project team scope of services

management procedures and performance and design quality reviews.

- Identifies key funder requirements and ensures that processes are in place to capture and report on the funder's requirements
- Co-ordination of documents and liaison with relevant bodies to ensure compliance with requirements of planning or statutory authorities, landlords etc.
- Advise the client on the need for any special surveys, installations, model tests or feasibility studies and propose appropriate action.
- Review the project objectives and specify areas where sufficiently detailed information is not available.
- Monitor any negotiations with public and other utility authorities for the provision of incoming services.
- In conjunction with the project team, comment on the list of contractors and subcontractors and advise the client as to the suitability for executing the works.
- Check, approve and recommend applications for payment submitted by any consultants or subcontractors appointed by the client.
- Ensure that contractor and consultant applications for payment which are to be paid by external funder's are compiled and submitted to the funder in compliance with the funder's requirements.
- Ensure that the project team carries out all inspections prior to the issue of the Certificate of Practical Completion and makes the relevant representations to the party certifying such completion.
- Ensures that all necessary completion procedures, insurances, as-built documentation, certification, warranties etc are initiated and implemented.
- Ensure that the project team carries out all

inspections prior to the issue of the Final Completion Certificate, or equivalent documentation, triggering the release of outstanding retention monies due to the Contractor.

- Carry out Contract Administrator or Employer's Agent duties if appointed to do so as required under the building contract.

2.0 Typical Architect Scope of Services

- Receive client instructions and information about the site.
- Visit the site and carry out the initial appraisal
- Where applicable co-operates with the CDM Coordinator
- Assists the client in defining the client's requirements
- Prepare feasibility studies to assist the client's requirements.
- Review with the client alternative project options
- Prepare and submit to the client reports for each stage of the RIBA Plan of Work.
- Prepare and submit for each work stage a programme for performance of the services including any services not completed under the previous stage.
- Pass information required for the performance of the statutory duties to the CDM-Coordinator.
- At stage C Preparation of the RIBA Stage C concept design architectural information.
- Preparation of the outline specification for the project in conjunction with the client and the project team.
- At Stage D develops the approved concept design to show spatial arrangements, type of construction, materials, appearance and detailed proposals for structural and building services

Example capital project team scope of services

systems.

- Provides design information for the preparation of the project cost estimate at key stage (or RIBA stages).
- Prepares and submits application for detailed planning permission.
- At Stage E prepares technical designs, calculations and specifications sufficient to co-ordinate components and elements of the project.
- At Stage F prepares production information including specifications in sufficient detail to enable a tender or tenders to be obtained.
- Prepares and makes submissions to achieve building control consent.
- At stages G – H assists the lead-consultant to identify and evaluate potential tenderers.
- Contributes to the appraisal and report on tenders / negotiations.
- At stages J – K provides construction information as required for the building contract.
- Reviews design information from contractors or specialists.
- Reviews compliance with statutory and contract requirements.
- Generally attend project team meetings through all stages where required.
- If appointed as contract administrator performs all duties required under the contract.
- Carries out accessibility audit and produces report for the client.

3.0 Typical Mechanical and Electrical Engineer Scope of Services

- Receive the client's instructions and information about the works.
- Obtain information on the existence of public services such as water, gas, electricity, sewerage and telecommunications and report to the client on any effect these may have on the works during construction and on completion.
- Comment on any physical site constraints which may affect the engineering options for the works.
- Collaborate with the lead consultant / project manager in providing recommendations and reports to the client.
- Provide sufficient information in relation to the works in the form of advice, sketches, reports or outline specification to enable the lead consultant / project manager to prepare reports required at key milestone dates (i.e. following the stages of the RIBA Plan of Work).
- Attend project team meetings and client meetings as and when required throughout the course of the project.
- Prepare reports required by the lead-consultant or client on the suitability of specialist low-zero carbon technologies for use in the project.
- Carry out evaluation of the acoustical requirements of the building design and construction with respect to design noise criteria.
- Measure and provide analysis of ambient noise levels giving general building acoustic advice.
- Provide information sufficient for building regulations compliance under Part L of the Building regulations.
- Advise the client on the need for arrangements to be made for contamination investigations on the site. Act as the agent for the client to ensure that such investigations are undertaken properly and in

Example capital project team scope of services

accordance with the agreed scope.

- Prepare any information required by the client to satisfy external funder's requirements.
- At RIBA Stage A – C Develop the Client's Brief into a full Brief for the Works in consultation with the Client, the Lead Consultant and any Other Consultants.
- Such Brief shall describe the Client's requirements in respect of the Services and both the Client and the Consultant shall work to the Brief.
- Consult with any local or other authorities about matters of principle in connection of the design of the works
- At RIBA Stages D – E Provide input into project team discussions about the programme for completion of the design information through the key project stages.
- Provide co-ordination design information to enable the other project team members to complete their designs taking cognisance of the Mechanical & electrical dimensional and structural requirements.
- Negotiate with public and other utility authorities for the provision of necessary incoming services.
- Assess and prepare preliminary schedules of power, heating and cooling loads as applicable.
- Receive from the client through the architect the thermal performance standards for the facades and the roofs of buildings and any details of external shading / solar control.
- Analyse the preliminary heat gains and losses for the purpose of initial sizing of heating, ventilation and air conditioning system and plant as applicable.
- At RIBA Stages F – H Assist the lead consultant and the project team in co-ordinating the design of the works into the overall project design through the preparation of sufficient calculations, design drawings, schedules and specifications.
- Integrate into the design of the works any

requirements of specialist contractors.

- Advise the lead consultant on the need for special conditions of contract relevant to the works.
- Assist the client and the lead-consultant in advising the client as to the suitability for carrying out the works of those invited to tender for the works.
- Assist in the assembly of the tender documentation.
- At RIBA Stages J – K Provide additional design information where required to enable contractors and sub contractors to prepare installation drawings.
- Advise the client through the lead-consultant of the need for special inspections or tests arising during the construction of the works.
- Assist the Project Team in examining contractors and sub-contractors proposals.
- Witness any tests as required under the contract and the commissioning schedules.
- Inspect the works on completion and record any defects and provide the lead-consultant with copies of the defects list.

4.0 Typical Structural Engineer Scope of Services

- Receive the client's instructions and information about the works.
- Pass information required for the performance of the statutory duties to the CDM-Coordinator at all stages of the project.
- Comment on any physical site constraints which may affect the engineering options for the works.
- Attend project team meetings and client meetings as and when required throughout the course of the project.
- Prepare any information required by the client to satisfy external funder's requirements.

Example capital project team scope of services

- Provide sufficient information in relation to the works in the form of advice, sketches, reports or outline specification to enable the lead consultant / project manager to prepare reports required at key milestone dates (i.e. following the stages of the RIBA Plan of Work).
- At RIBA Stages A – C Advise the client on the need for arrangements to be made for geotechnical / geological investigations on the site. Act as the agent for the client to ensure that such investigations are undertaken properly and in accordance with the agreed scope.
- Provide initial report as required by the lead-consultant to set out the structural design concept for the project.
- At RIBA Stages D – F Provide full foundation design, structural design and structural detailing design including design drawings and specification fully co-ordinated with the lead-consultant and the other project team members.
- Provide input into project team discussions about the programme for completion of the design information through the key project stages.
- Provide calculations as required to assist in submitting applications for building control consent for the works.
- At RIBA stages G – H Assist the lead-consultant and project team in compiling the tender documentation by providing all necessary completed structural drawings and specifications and reports.
- Assist the client and the lead-consultant in advising the client as to the suitability for carrying out the works of those invited to tender for the works.
- Assist the lead-consultant and the project team in the evaluation of the tenders received.
- At RIBA Stages J – K Provide additional design information where required to enable contractors and sub contractors to prepare installation

drawings.

- Review and advise the lead-consultant on further construction detail drawings provided by the contractor / subcontractor as required.
- Inspect the works on completion and record any defects and provide the lead-consultant with copies of the defects list.

5.0 Typical Quantity Surveyor Scope of Services

- Liaise with the client and the project team to determine the client's initial requirements and subsequent development of the full brief.
- Visit the site and report any implications likely to affect time, cost or method of implementation.
- Provide information at all stages of the project as required by the client to satisfy external funder requirements.
- Attend meetings as and when required during the course of the project.
- At RIBA stage A prepare initial budget estimate and liaise with the client to test the feasibility of the proposals.
- At RIBA stages A – C Prepare and develop the cost plan from the initial budget estimate and provide detailed cost information to the project team as required.
- Maintain and develop the cost plan and provide updates at agreed milestone dates (at RIBA Stages).
- Overview the preparation of detailed design for cost consequences and advise against the approved cost plan.
- Advise and assist the client in assessing alternative design options.
- Highlight cost difficulties to the client immediately as these become apparent, prior to their inclusion in the project.

Example capital project team scope of services

- Advise the client on financial effects of advance orders or purchase of materials with long delivery time to enable programme to be complied with.
- At RIBA Stages D – H Implement suitable negotiating and contractual arrangements including advice to the client on amendments to standard forms and liaising with the clients legal advisors.
- In conjunction with the project team prepare tender contract documentation and cost documentation (bills of quantities, cost plan etc).
- Seek agreement with the client regarding inclusion of provisional sums and amendments to standard contract terms
- Provide a pre-contract estimate based upon the information within the tender documentation.
- Carry out an analysis of the tender returns to check for arithmetical accuracy, levels of pricing, pricing policy etc.
- Advise upon errors and qualifications within the tender returns and negotiate thereon in conjunction with the client.
- Co-ordinate a value engineering exercise is required, preparing a report for sign-off by the client.
- Obtain the contract drawings and other relevant documentation from the consultants. Prepare and deliver to both parties properly marked copies of all the contract documents and ensure contract documents are executed by both parties prior to start on site.
- RIBA Stages J – K Advise on the availability of materials and components and assist in the implementation of pre-purchasing or pre-ordering arrangements.
- Prepare valuation of the works based upon the contractor's application in accordance with the pre-agreed payment schedule and the building contract.
- Prepare cost reports in an agreed format and at specified intervals.
- Prepare a final financial statement within one month of completion of the works
- Prepare the final account for the works.
- Provide an accurate and detailed cost management service including cost checking of variations prior to instruction.
- If so requested give an opinion to the client on delays, requests for extension of time or the consequence of acceleration or disruption.
- RIBA Stages K – L Manage the agreement of the final account with the contractor within the terms of the contract.
- Seek formal approval of the final account with the client.
- Upon completion provide a full reconciliation against the agreed cost plan.

6.0 Typical CDM-Coordinator Scope of Services

- Inform the client of their duties under the CDM Regulations and that further guidance is available from the Health & Safety Executive.
- Notify the project particulars to the Health and Safety Executive.
- Carry out a desktop review of the information available for the project provided by the client and the project team.
- Identify responsibilities for the designers for particular elements of the design relating to health and safety.
- Review the implications of the proposed procurement method in respect of CDM Regulations.
- Identify and investigations or surveys required in connection with the CDM Regulations and advise

Example capital project team scope of services

the lead-consultant and client accordingly.

- Establish the format of the construction information pack to be included in the tender documentation.
- Review the project design at defined stages through the project (RIBA work stages).
- Advise the client regarding the competence of the principal contractor in relation to the CDM Regulations and conduct necessary appraisals.
- Review the principal contractor's health and safety plan and notify the client when the construction phase health and safety plan is sufficiently developed by the principal contractor for the construction phase to commence.
- Agree with the project manager / lead-consultant / client procedures for dealing with health and safety matters during the construction phase.
- Review the health and safety co-ordination procedures by the design team in respect of further production information or design variations and ensure relevant information is provided to the principal contractor.
- Review design information from contractors and specialists and ensure that health and safety implications are considered by the principal contractor if applicable.
- Review and report upon the Health & Safety File information prepared by Designers, Principal Contractor, contractors and specialists prior to inclusion in the finished Health & Safety File.
- Ensure the delivery of the health and safety file to the client at practical completion and advise upon secure storage and future use.