#### **PROJECT MANAGER**

# SCHEDULE OF SERVICES TO BE PROVIDED GC/WORKS/5 GENERAL CONDITIONS FOR THE APPOINTMENT OF CONSULTANTS (1998)

As amended for JIC - NGI Project.

All consultant services are arranged generally over the five GC Works stages as outlined below:

GC Works Stage		RIBA 2013 Plan of Works Equivalent
Stage 1	Covering inception of the Project.	Stages 0 – 2
Stage 2	Covering the development of the design and the preparation of tender documents.	Stages 3 – 4
Stage 3	Covering tender stage.	Procurement
Stage 4	Covering the construction and operations on site.	Stage 5
Stage 5	Covering completion.	Stages 6 - 7

## **GENERAL DUTIES (ALL STAGES)**

- 1. Act as Project Manager under the selected Client Form of Contract
- Promote adherence to the principles of the Office of Government Commerce (OGC) 'Achieving Excellence in Construction' and support the Employer in achieving the objectives for this project. Provide all necessary information and advice to support the OGC Gateway process and other third party reviews and audits (including National Audit Office (NAO), Research Councils Internal Audit Service (RCIAS), Peer Reviews). Attend any external reviews if requested to do so.
- 3. The Employer, Project Manager, Cost Manager, other Consultants, Contractor and all others involved with the project will work closely together to foster a partnering culture. The culture will embody the principles of mutual trust and co-operation with an overall aim of delivering a successful project on time and to budget.
- 4. Advise the Employer on current Government Policies and Best Practice pertinent to the project, the impact this may have on design and cost and recommendations for implementation.
- 5. Discuss the Development as appropriate with outside groups who may influence the design and construction, including adjoining owners, environmental groups, archaeological departments and statutory undertakers.
- 6. In conjunction with the other consultants and subject to the allocation to them of specific duties pursuant to their respective appointments, submit applications to and make all necessary arrangements with planning, local and other statutory bodies to enable the Project to proceed.
- 7. If required work in conjunction with the Employer and PMO in setting out a clear delivery strategy.
- 8. Participate in the operation of an early warning system whereby the Project Manager shall notify the Employer and/or other Consultants and Contractor as soon as the Project Manager is aware of a matter that may adversely affect the project or its performance.
- 9. Assist the Employer and their Procurement Consultant in the procurement and evaluation of the Contractor.
- 10. Co-operate at all times with the <u>Lead Consultant</u> in respect of Construction (Design and Management) Regulations (CDM Regulations).

- 11. Organise and manage workshops, to be facilitated by Others, with contributions from other Consultants to carry out Value Engineering, Value Management, Environmental Assessments and Risk Management exercises, including Hazard Risk Assessments, throughout the project duration. Report proposals for Employer approval based on the results of these exercises to give the best overall value for money.
- 12. Establish and maintain project management procedures, hierarchy of responsibility and lines of communication for the exchange of information between the Employer and respective Consultants, Contractor, sub-contractors and others concerned in the project to allow them to work closely as a team.
- 13. Together with the Employer and other Consultants, develop, implement and maintain and use a project collaboration tool for the sharing of drawings, specification and key project information from RIBA Stage 3 onwards only.
- 14. Review and update the existing risk register, issues log, risk allowance and the risk management activities undertaken to date and maintain these during each stage of the project.
- 15. Arrange and facilitate risk workshops with stakeholders during each stage of the project.
- Develop and update the risk register on a regular basis to reflect the status of the project.
- 17. Attend, chair and minute project meetings
- 18. Agree with the Employer an acceptable project programme. Monitor progress against the agreed project programme. Incorporate a report on progress against the agreed programme within each monthly report to the Employer.
- 19. Make recommendations to the Employer on the need to appoint Consultants to the Project Team and on the scope of their Services. Subsequently assist the Employer in all matters leading to their appointment and prepare detailed briefs covering the scope of the Services for which they will be responsible.
- 20. Establish contact with Consultants following their appointment and establish formal communication procedures and hierarchy of responsibility between them and introduce procedures to allow them to work closely as a team.
- 21. Following consultation with the Employer, arrange for any necessary surveys to be undertaken.
- A BISRIA soft landings approach will be adopted throughout the project and all consultants shall support this within the provision of their services.
- 23. Provide support to the Employer with the provision of reports in their prescribed format.

#### **DUTIES OF THE PROJECT MANAGER**

## GC/WORKS/5 GENERAL CONDITIONS FOR THE APPOINTMENT OF CONSULTANTS (1998)

- All duties indicated with a '\*' below are additional services over and above the standard GC Works 5 consultant services.
- All duties in <u>blue text with double underline</u> indicate amendments to the standard GC Works 5 consultant services.
- All duties with a strikethrough indicate standard GC Works 5 consultant services not applicable to this Appointment.

### STAGE 1: Inception [RIBA Plan of Work Stages 0 - 2]

- A1.1.1 Receive an initial brief from the Employer, and assist in identifying possible options and expenditure limits.
- A1.1.2 <u>In conjunction with the Employer's Procurement Consultant,</u> develop and submit to the Employer for approval a Project procurement strategy and, following approval by the Employer, carry out the Services and obligations necessary to achieve the satisfactory completion of the Project at or below the approved cost limit which Services and obligations shall include, but shall not be limited to, the Services and obligations set out in this Annex.

- A1.1.3 Assist the Employer to select and procure the site and assess the implications of any constraints attaching to it and report thereon to the Employer.
- A1.1.4 Make recommendations to the Employer on the need for any site investigations or tests to be undertaken including any tests to ascertain the presence of contaminated ground and implement any decision taken by the Employer.
- A1.1.5 Make recommendations to the Employer on the need to appoint Consultants to the Project Team and on the scope of their Services. Subsequently assist the Employer in all matters leading to their appointment and prepare detailed briefs covering the scope of the Services for which they will be responsible.
- A1.1.6 Establish contact with Consultants following their appointment and establish formal communication procedures and hierarchy of responsibility between them and introduce procedures to ensure that they allow them to work closely as a team.
- A1.1.7 Following consultation with the Employer, arrange for any necessary surveys to be undertaken.
- A1.1.8 Arrange for the Consultants to <u>review and comment on undertake</u> preliminary feasibility studies <u>prepared by others</u>, based on the Employer's brief and if these studies highlight the need to amend that brief, discuss with the Employer and obtain instructions.
- A1.1.9 Co-ordinate the views of the Consultants in order to submit a detailed report to the Employer on the recommended scope of the Works together with a recommended programme and anticipated costs the report to include reviewing alternative design and construction solutions together with estimates of cost of those options and provide assistance to the Employer in selecting the preferred option and in formulating the brief.
- A1.1.10 Confirm the brief with the Employer which shall include a detailed programme for completion of the Project and an agreed cost limit.
- A1.1.11 Communicate the details of the agreed brief to all Consultants and ensure use all reasonable endeavours to procure that the Consultants confirm in writing their commitment to that brief. If this highlights the possibility of difficulty in implementing the brief, take the necessary action to resolve such difficulties and, if this proves to be impossible, report to the Employer making recommendations.
- A1.1.12 Where there is duplication between the Services provided under the terms of this Appointment and the Services of another consultant commissioned in connection with this project, resolve the duplicated Services by agreement with the Consultant concerned, confirm the matters agreed in writing and copy to the Employer.
- A1.1.13 Assess the need to take action to protect the interests of the Employer in respect of neighbouring properties and accordingly make recommendations to the Employer.
- A1.1.14 Undertake risk assessments.
- A1.1.15 Undertake value management exercises.
- A1.1.16 Obtain the Employer's approval to proceed to Stage 2.
- A1.1.17\* Develop and manage a Change Control Procedure based on comments related to the project brief, obtaining input from other members of the Project Team as required.

# STAGE 2: Development of the design and the preparation of tender documentation [RIBA Plan of Work Stages 3 – 4 and including Procurement]

- A1.2.1 Ensure Use all reasonable endeavours to procure that a cost plan is prepared for the project based on the approved cost limit and ensure that copies of the cost plan are given to all Consultants and that they confirm their agreement to the content applying to their own discipline.
- A1.2.2 Submit to the Employer Use all reasonable endeavours to procure that a projected cashflow is prepared for the project and submitted to the Employer, based on the approved cost limit for the Project and the anticipated programme and update as necessary until completion of the Works keeping the Employer informed at all times of any changes.

- A1.2.3 In co-operation with the other members of the Project Team prepare a detailed programme for the production of design information leading up to obtaining tenders for the Works and obtain the Consultants commitment to that programme in writing.
- A1.2.4 In conjunction with the Cost Manager, establish rigorous cost control procedures and ensure use all reasonable endeavours to ensure that designs are strictly monitored against the agreed cost plan and that any difficulties are rectified and the approved cost limit is maintained.
- A1.2.5 Establish rigorous management procedures to monitor the production of design information produced by the members of the Project Team in order that any shortcomings are immediately highlighted and rectified and continue to implement the monitoring procedure until completion of the Project. Where difficulties are encountered which cannot be satisfactorily resolved, inform the Employer of those difficulties and make recommendations.
- A1.2.6 Establish and chair regular meetings with the other members of the Project Team and others in order to monitor progress and to highlight any shortfall in design information and take any action necessary to correct any deficiencies. Circulate minutes of the meetings to the Employer and to the members of the Project Team. The minutes shall record the action taken to rectify any deficiencies and shall indicate who is to be responsible for taking that action.
- A1.2.7 Establish regular reporting procedures with the Employer, identify those matters which require Employer approval and introduce procedures to obtain those approvals.
- A1.2.8 In conjunction with the other members of the Project Team, make recommendations to the Employer on the need for specialist contractors to design and execute any sections of the Works or for specialist suppliers to provide any materials or equipment and obtain the Employer's approval and take any action necessary to implement the Employer's decision.
- A1.2.9 Co-ordinate Manage the Project Team in the production of all design work, ensure use all reasonable endeavours to procure that the designs are fully integrated and are tested throughout the design phase against cost targets and that the designs fully comply with all Statutory requirements or Regulations including, but not confined to requirements concerning Health and Safety, Planning, Fire, Building Control etc., and take any action necessary to rectify deficiencies.
- A1.2.10 At monthly intervals, submit a written report to the Employer showing the progress made against the agreed design programme and the present estimated cost of the Project relative to the approved cost limit and, if required by the Employer, arrange to meet the Employer in order to discuss the content of the report and to receive instructions.
- A1.2.11 Agree materials and construction specifications with the Consultants and keep the Employer fully informed.
- A1.2.12 Ensure Use all reasonable endeavours to procure 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 and, where action by the Employer is necessary, assist the Employer to take that action.
- A1.2.13 Give the Employer sufficient notice of all approvals, decisions or other matters which require action by the Employer and, where appropriate, assist the Employer by providing information and by making recommendations.
- A1.2.14 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 Employer's brief, in conjunction with the Project Team submit a report to the Employer giving recommendations and options.
- A1.2.15 Receive and certify all applications from the members of the Project Team for the payment of fees and pass to the Employer for payment.
- A1.2.16 Ensure that all notices required under EC regulations are given at the proper time and that all procedures comply with EC legislation.
- A1.2.17 Ensure Use all reasonable endeavours to procure that life cycle costings and environmental assessment techniques are applied to the development of Consultants the designs and adopt solutions giving the best overall value for money and, where this may result in the cost limit for the project being exceeded, make recommendations to the Employer and obtain instructions.

- A1.2.18 Make recommendations to the Employer on the preferred method of procuring the construction and completion of the Works and obtain the Employer's instructions.
- A1.2.19 <u>In conjunction with the Employer's Planning Consultant,</u> arrange for any required submissions of designs, drawings, models, calculations or other material to regulatory bodies and expedite any necessary approvals.
- A1.2.20 Act as witness at any hearing or planning enquiry and the like or, alternatively, act on the Employers behalf to arrange for other appointed Consultants to do so and manage their activities.
- A1.2.21 Ensure Use all reasonable endeavours to procure that all drawings, specifications, schedules, bills of quantities or other documents necessary for the obtaining of tenders are completed and are fully coordinated by the Project Team, are in accordance with the brief approved by the Employer and are available on the programmed date.
- A1.2.22 Discuss with the Employer the general arrangements for obtaining tenders and implement the action approved.
- A1.2.23 In co-operation with the other members of the Project Team submit to the Employer the names of firms who are considered to be suitable to be invited to tender for the Works and specialist Works and obtain the Employer's instructions. Assist the Employer and their Procurement Consultant in developing the Request for Proposal (RFP) for procurement of the Contractor.
- A1.2.24 Ensure <u>Use all reasonable endeavours to procure</u> that a pre-tender estimate is prepared based on the tender documentation and check against the cost target for the Project approved by the Employer and report to the Employer accordingly.
- A1.2.25 Undertake risk assessments.
- A1.2.26 Undertake value management exercises.
- A1.2.27 Obtain the Employer's approval to proceed to Stage 3.
- A1.2.28\* In conjunction with the Project Team assist the Employer to review the pre-purchase of any materials or products which may be subject to long delivery periods, and consider regulatory restrictions imposed by OJEU on procurement of the same.
- A1.2.29\* In conjunction with the Project Team assist the Employer in the review of the procurement of any fixtures and fittings to be purchased direct by the Employer.
- A1.2.30\* In conjunction with the Project Team establish rigorous cost control procedures and use all reasonable endeavours to ensure that designs are strictly monitored against the agreed cost plan and that any difficulties are rectified and the approved cost limit is maintained.
- A1.2.31\* Manage the Change Control Procedure.

# STAGE 3: Covering tender stage (including both first and second stage tenders under the two stage design and build contract) [RIBA Plan of Work Stages – Procurement]

- A1.3.1 Ensure In conjunction with the Employer's Procurement Consultant use all reasonable endeavours to procure that tenders are invited on the programmed date and in accordance with the Employer's instructions and arrange for tenders to be returned direct to the Employer in accordance with the Employer's procedure.
- A1.3.2 Accompany tendering contractors or sub-contractors or the representative of the Employer or occupying Department to the site of any works being undertaken in connection with this Appointment.
- A1.3.3 Ensure Use all reasonable endeavours to procure that all enquiries from contractors during the tendering period are answered satisfactorily and ensure that any clarification on the content of the documentation given to a tenderer is copied to other firms tendering.
- A1.3.4 Copy to the Employer all correspondence concerning the obtaining of tenders.
- A1.3.5 Where full time site inspection staff are to be appointed, ensure use all reasonable endeavours to procure that arrangements are made in good time to implement that instruction.

- A1.3.6 Co-ordinate tender appraisals from the other members of the Project Team and submit a report to the Employer with recommendations. If the lowest tender obtained is higher than the approved cost for the Works, obtain whatever advice is necessary from other consultants in order to make recommendations to the Employer and arrange to implement the Employer's instructions.
- A1.3.7 Arrange for any tender under consideration for acceptance to receive an arithmetical and technical check and ensure use all reasonable endeavours to procure that any errors are resolved in accordance with the Employer's procedure.
- A1.3.8 Obtain the Employer's decision regarding the acceptance of a tender or tenders and implement the Employer's instructions.
- A1.3.9 Co-ordinate the collection of documents from the other members of the Project Team to enable the Employer to enter into Contract and ensure use all reasonable endeavours to procure that any adjustments have been made to the documents in order that they conform to the approval given by the Employer. In conjunction with the Employer's legal advisors, make arrangements for the agreed contract documents to be available to the parties on the programmed date to enable the Employer to enter into Contract.
- A1.3.10 Arrange for unsuccessful tenderers to be notified.
- A1.3.11 Ensure Use all reasonable endeavours to procure that the site will be available to the Contractor on the programmed date and in the event of any difficulty, keep the Employer fully informed.
- A1.3.12 Undertake risk assessments.
- A1.3.13 Undertake value management exercises.
- A1.3.14 Before Stage 4 is implemented ensure use all reasonable endeavours to procure that the Employer has accepted the selected Contractor's tender and that the Employer approves that the matters referred to in Stage 4 can proceed. At the end of the pre-construction phase following receipt and review of the Contractor's second stage tender offer certify the 'Design Process Event' under the construction contract in relation to the Employer's acceptance of the second stage tender.
- A1.3.15\* In conjunction with the Project Team assist the Employer to review the pre-purchase of any materials or products which may be subject to long delivery periods, and consider regulatory restrictions imposed by OJEU on procurement of the same.
- A1.3.16\* In conjunction with the Project Team assist the Employer in the review of the procurement of any fixtures and fittings to be purchased direct by the Employer.
- A1.3.17\* Arrange for any available suppliers' and manufacturers' guarantees to be obtained procured in favour of the Employer.
- A3.3.18\* Once the Employer is ready to enter into the Building Contract, obtain in writing from the design consultants that so far as concerns matters within their responsibility or knowledge, a state of readiness has been achieved for construction to commence and to proceed in accordance with the proposed construction programme.
- A3.3.19\* Advise on the tenderers' design and construction programmes and method statements. In conjunction with the Project Team obtain clarification of ambiguities and establish the degree of compliance with the Employer's Requirements.

#### STAGE 4: Covering the construction and operations on site [RIBA Plan of Work Stage 5]

- A3.4.1 Administer the terms of the construction contract whilst the Project is under construction, undertaking the full range of duties imposed on the Project Manager by the Works contract in accordance with the timescales therein, including (but not limited to) all activities in connection with the adjudication of disputes between the Employer and the Contractor.
- A1.4.2 Agree a detailed programme for the Works with the Contractor which specifies completion by the agreed date.
- A1.4.3 Agree a date with the Contractor and the Employer for the commencement of work on site.
- A1.4.4 Establish and chair regular meetings with the Contractor and Consultants as necessary in order to monitor the progress of the Works and the production of design information to the Contractor

- and circulate minutes of the meeting to the Employer and to others. The minutes shall record the action to be taken to rectify any deficiencies and shall indicate who is to be responsible for taking that action. Inform the Employer if any delay in the production of design information cannot be resolved in time to prevent a delay to the Works.
- A1.4.5 Until completion of the Project, continue reporting to the Employer in accordance with A1.2.10.
- A1.4.6 Ensure Use all reasonable endeavours to ensure relevant standards to procure that rigorous safety policies are in place and are implemented by the Contractor and Sub-Contractors working on the site and that there is adequate protection for the public and others.
- A1.4.7 Ensure Use all reasonable endeavours to ensure relevant standards to procure that rigorous quality management procedures are in place throughout the construction phase.
- A1.4.8 <u>Use all reasonable endeavours to</u> arrange for any special inspections or tests necessary to ensure that proper and adequate standards of construction are maintained by the Contractor and that all Works are constructed in accordance with the contract documents.
- A1.4.9 Throughout the construction phase and until all construction accounts are settled, inform the Employer of any contractual claims which have been received or are likely to arise. Make recommendations to the Employer and implement the Employer's instructions.
- A1.4.10 Continue to monitor the construction phase and take any necessary action in order to ensure that to enable the Project will to be completed within the cost approved by the Employer and by the programmed completion date. When matters arise which effect the contract completion date or the approved cost, keep the Employer fully informed.
- A1.4.11 Ensure Use all reasonable endeavours to procure that adequate records are maintained and photographs of the Works are taken throughout the construction phase recording progress of the Works and, particularly, highlighting any delays including those resulting from interaction between Contractors or Sub-Contractors working on the site.
- A1.4.12 Keep accurate records of all payments and other matters relating to the service provided under this Commission and retain all vouchers and invoices and, if requested, make these available to the Employer.
- A1.4.13 Ensure Use all reasonable endeavours to procure that Consultants observe the provisions of their Appointment regarding cost control procedures and the procedures for obtaining the Employer's approval to introduce variations. On behalf of the Employer, receive the Consultants financial statements and submissions in accordance with this Condition and submit to the Employer with recommendations.
- A1.4.14 Ensure Use all reasonable endeavours to procure that Certificates are issued in accordance with the terms of the contract.
- A1.4.15 Co-ordinate site visits of consultants and ensure use all reasonable endeavours to procure that the frequency of those visits is satisfactory.
- A1.4.16 Arrange for any necessary spare equipment, 'as built' record drawings, maintenance manuals and general guidance on the operation of the Building and Services to be made available in good time in order that they can be provided to the Employer on completion of the Project.
- A1.4.17 Inform the Employer four weeks prior to the anticipated date of completion of the Works.
- A1.4.18 Co-ordinate the preparation of and issue Certificates relating to the completion of the Works.
- A1.4.19 Ensure Use all reasonable endeavours to procure that lists of defects are issued at the appropriate time under the Works contract.
- A1.4.20\* Issue Certificates as required under the Works Contract with regard to valuations and payments and the preparation of the final account under the Works Contract. Review the Quantity Surveyors' periodic valuations under the Works Contract and liaise with the Employer with regard to payments to contractors and our other consultants.
- A1.4.21\* Closely monitor the construction of the Works with respect to compliance with the Building Contract and programme. Monitor the submission and approval of design and specification information to be provided by the Contractor or sub-contractors or suppliers.

- A1.4.22\* Develop and manage a Change Control Procedure based on comments related to the Contractor prepared design documents, obtaining input from other members of the Project Team as required.
- A1.4.23\* Develop and manage a process for issues related to reconciliation of design proposals and contractual requirements via the Request for Project Manager's Instruction (RPMI) process.

#### STAGE 5: Covering completion [RIBA Plan of Work Stage 6-7]

- A1.5.1 Advise the Employer on the resources and skills required to operate and maintain the completed Works and make recommendations on the timing of their appointment or on the need for any maintenance agreements.
- A1.5.2 Ensure <u>Use all reasonable endeavours to procure</u> that all defects are rectified <u>Use all reasonable endeavours to procure that operational-critical defects are rectified prior to operational start to ensure the Employers deadline are not jeopardised.</u>
- A1.5.3 Ensure <u>Use all reasonable endeavours to procure</u> that the Works are cleaned, tested and commissioned prior to handover to the Employer. <u>Use all reasonable endeavours to procure that operational-critical defects are rectified prior to operational start to ensure the Employers deadline are not jeopardised.</u>
- A1.5.4 Ensure Use all reasonable endeavours to procure that all statutory Certificates and Approvals are given to the Employer. Use all reasonable endeavours to procure that operational-critical defects are rectified prior to operational start to ensure the Employers deadline are not jeopardised.
- A1.5.5 Ensure <u>Use all reasonable endeavours to procure</u> that an appropriate Certificate is issued to the Contractor when all defects have been made good <u>and within a timely manner ensuring the Employers deadline are not jeopardised.</u>
- A1.5.6 Make recommendations to the Employer regarding any outstanding claims, counterclaims, liquidated damages or other contractual issues and receive and implement the Employer's instructions.
- A1.5.7 Co-ordinate the production of Final Accounts and the issue of Final Certificates and, accordingly, make recommendations to the Employer.
- A1.5.8 <u>In conjunction with the Project Team,</u> prepare a completion report to the Employer showing:
  - a comparison between the out-turn cost and the approved budget cost;
  - the actual expenditure against sums includes in the contract for specialist works
  - and provisionally measured work;
  - the costs included against any Variation of Price Condition;
  - the expenditure against approved variations and additional Works authorised by
  - the Employer;
  - a comparison of programme dates against actual dates achieved;
  - any lessons obtained from the scheme which could be applied to future Projects;
  - the performance of Project participants.
- A1.5.9 Assist Provide reasonable assistance to the Employer in dealing with any outstanding insurance claims.

- A1.5.10 In the event of any arbitration or litigation resulting from the Project, prepare any necessary documentation and reports and, if required by the Employer, attend any hearings acting if necessary, as a witness (and subject to the payment of an additional fee. in accordance with Condition 46 (Payment for changed Services and variations).
- A1.5.11\* Provide reasonable assistance to the Employer in managing the Soft Landings process, including through the Employer commissioning and occupation phases to operational readiness, the latter assumed as a period of eight months' post completion.
- A1.5.12\* Use all reasonable endeavours to procure that all key defects, that will prevent the Employer from fully occupying or operating the building, are rectified prior to the Employer's programmed Operational Start date.