

DESIGN TEAM SERVICES BRIEF

ARCHITECTURAL SERVICE TO BE PROVIDED

The Consultant shall provide the following Services in whole or part as instructed by the Project Manager.

For ease of reference the Services have been divided into stages as described below. General and Design Team Management Obligations are identified first followed by specific obligations for each stage. Such divisions however shall not limit the Consultant's obligations generally to provide the Services when appropriate.

A list of typical stage deliverables is included with each stage. The purpose of the deliverables is to identify the specific products that must be produced generally and at each stage of the project. This list is not exhaustive and adjustments adding or deleting deliverables must be made, based on the needs of the Project before each stage commences. Failure to produce deliverables is construed to mean that a Project is in delay.

The Services should not be viewed as definitive. The Consultant is encouraged to use their own initiative and expertise to assist the Client in achieving the right solution.

General Obligations

1. To act as Architect **AND** Design Team Leader / Lead Consultant with full responsibility for the day to day management and co-ordination of the Design Team to ensure production of all design deliverables within agreed objectives, scope, quality, programme and budget.
2. To take responsibility for the full design of the project, inclusive of any external / landscaping works.
3. To take responsibility for all above ground drainage, sanitary ware and rainwater goods, lead valleys and gutters and fully coordinating their interface with the below ground drainage; liaising with the Structural Engineer as required.
4. To act as Contract Administrator under the terms of the Building Contract.
5. Coordinate consultations with third parties that relate to the design of the Project, including regular contact WDBC Conservation Officer, Historic England and the schemes Development Officer
6. Agree with the Project Team and the Client compatible computer software that will (to include Microsoft Project or suitable equivalent for progress reporting):
 - a. Enable the transfer of information between the Project Co-ordinator, Project Manager (Client), Project Team and the Contractor; and

- b. Produce and procure from the Project Team and Contractor co-ordinated as-built information and operation and maintenance manuals from both the Project Team and the Contractor for ease of use by occupiers.
 - c. Working closely with other advisors, Tavistock Heritage and Town Council in the delivery of the co-ordinated outcome.
7. Provide a monthly Checkpoint Report, to an agreed timetable, to the Project Manager to detail the progress of the entire design team, enabling the Project Manager to report to the Client identifying amongst others:
 - a. The progress of the Consultant s design;
 - b. The progress of all other Consultant s designs;
 - c. The progress of the Contractor s design (if any);
 - d. Advice Project Manager regarding updates to design risk and programme status;
 - e. Comments in relation to quality of the Project on and off site;
 - f. Progress of the documentation to be provided on completion of the Project.

The purpose of the report is not to catalogue past achievements but to set future objectives and to assess potential problems.

8. Operate a quality management procedure appropriate to the needs of the project.
9. Comply at all times with the Council s Standing Orders and Financial Regulations.
10. Ensure compliance with all relevant legislation at all times including any changes that may occur during the course of the project and inform the Client of any such changes
11. Consultants are to allow for a minimum response time to attend site of 24 hours following a request to do so by the Project Manager and where reasonable to do so. If a design response is required this must be supplied in sufficient time so as not to unreasonably hold up the progress of the works.
12. Take responsibility for coordinating, applying for and obtaining all relevant statutory approvals, for example Planning, Building Regulation approval, and Listed Building consent.

Design Team Management Obligations

The following Design Team Management obligations are applicable to all stages of a project.

1. Assist the Project Manager with input into stage plans, including programming the Design Team's work and defining the design deliverables to be produced at the end of each stage.
2. Assist in the preparation of the risk log. Take ownership of specific risks as agreed with the Project Manager, and assist in the formulation of action plans.
3. Execute risk management action plans, advise the Project Manager of changes in the status of risks. Identify new risks as they arise, and provide input into their mitigation.
4. Manage the design resources available to produce required deliverables, highlighting resource problems as necessary with the Project Manager.
5. Manage and coordinate the production of Design Team deliverables in accordance with the stage plan.
6. Arrange, chair, provide agenda and minute Design Team coordination meetings, distributing minutes within 7 days and plan actions.
7. Raise Project Issues as they arise, and coordinate the Design Team's input into their evaluation and resolution, recommending action where appropriate.
8. Ensure technical compliance of the design with relevant legislation, design codes and standing orders.
9. Contribute to and provide completed design team deliverables for incorporation into the end stage reports.
10. Agree with the Project Manager the Design Team deliverables to be produced in the next stage and the programme for their delivery.
11. Obtain approval from the Project Manager to proceed to the next Project stage. (Note: Break Clause at the end of RIBA Stage 3, tender submission to include lump sum up to and including RIBA Stage 3, Stage 4 to be priced separately, Stage 5, 6 and 7 to be identified as a Lump Sum figure with hourly rate identified for works outside the project brief)
12. ***Act as Principal Designer (refer to separate brief)***

Architectural Services Deliverables/ Plan of Work

DEVELOPMENT PHASE:

RIBA Stage 2 (C): Concept Design

Project Initiation & Feasibility (RIBA Stage 0/1) has been undertaken in preparation of the Round 1 Heritage Lottery Fund bid submission, but it is expected that the design team procured for the development stage will wish to review this work. There has been limited documentation, surveys and investigations undertaken to date and whilst that information will be made available to the team to review the Architect will be responsible for co-ordinating survey and investigation works early in the design development.

Prepare Concept Design, including outline proposals for structural design, building services, site landscape, outline specifications and preliminary cost information (obtained from independently appointed Quantity Surveyor) along with relevant project strategies in accordance with the design programme. Agree alterations to brief with Project Manager, developed at RIBA Stage 0/1 and issue final Project Brief. All designs, specifications and works must be prepared and carried out in accordance with BS79913:2013 with an emphasis on Conservation Principles.

Concept design to include recommendations/requirements of separately commissioned by Client, R & D Asbestos Survey/ecological surveys/scaffold design (to be arranged) and previously commissioned flood risk assessment and modelling report.

(Note: the concept design must be compatible with recently undertaken works to convert the 1st floor Town Council Office space, including installation of three-phase metering and data/telephony connectivity works)

Review project programme, prepare sustainability strategy, maintenance and operational strategy and advise Project Manager regarding risk register. Prepare access strategy and the heritage impact assessment and mitigation strategy. Review and update project execution plan. Prepare construction strategy, including review of off-site fabrication, site logistics and H&S aspects.

Consultation with key agencies and stakeholders, including Historic England, Planning Department, Building Control and the WDBC Conservation Officer, will be required throughout this stage to develop the detailed project brief. Establish the possible need for Scheduled Ancient Monument consent from Historic England.

TYPICAL STAGE 2 DELIVERABLES

1. Preliminary room data sheets (including critical adjacencies)
2. General arrangement plans
3. Site layout
4. Typical sketch section and elevations (including detailed measured survey)
5. Design risk assessment advise to Project Manager

6. Design development report to include:
 - a. Indicative architectural scope of works
 - b. Preliminary schedule of refurbishment
 - c. Indicative mechanical and electrical services scope of works
 - d. Indicative structural engineering scope of works
 - e. Indicative transportation and environmental impact scope of works
 - f. An assessment of impacts/synergies with complimentary works such as THI Guildhall public realm strategy

RIBA Stage 3 (D): Developed Design

This Stage will focus on the submission of the Planning and Listed Building Consent application and developing the scheme to the level of detail required for the Round 2 Heritage Lottery Fund bid submission. A 10 year Management & Maintenance Plan, compliant with Heritage Lottery Fund guidance (www.hlf.org.uk/HowToApply/goodpractice/Pages/Management_maintenance_plan_guidance.aspx), will be required at this stage so that this can be embedded within the business plan (to include DCF analysis for life cycle items post the 10 year plan e.g. roof slates/lift). A procurement strategy will also be required (format provided by Tavistock Town Council), including the brief for the main contractor and any other significant sub-contractors, including for the fit-out of the exhibition space.

Prepare Developed Design, including coordinated and updated proposals for structural design, buildings services systems, outline specifications, landscape, cost information and project strategies in accordance with the design programme. Continuing consultation will be required with the Development Officer to finalise the fit-out.

Review and update project programme, sustainability strategy, maintenance and operational strategy, risk register, access strategy and conservation impact assessment and construction strategy. Review and update project execution plan, including change control procedures and update cost information.

Public and stakeholder Consultations will need to be carried out at this pre-application stage, potentially taking the form of one or two exhibitions and some presentations (to include equality assessment consultation).

Respond promptly to requests for further information from the Council s Planning Department.

TYPICAL STAGE 3 DELIVERABLES

1. Final room data sheets
2. Site plan
3. 1:100 general arrangement plans
Including updated Heritage Assessment with recommendations for Historic Building Recording.
4. Key sections
5. 1:100 elevations
6. Full planning application
7. Fully Listed Building consent application

8. 1:200 external works general arrangement
9. Design development report to include:
 - a. Indicative architectural scope of works and outline specification
 - b. Preliminary schedule of refurbishment
 - c. Indicative mechanical & electrical services scope of works and outline specification
 - d. Indicative structural engineering scope of works and outline specification
 - e. Indicative transportation and environmental impact scope of works
 - f. Building regulation and other statutory approval and compliance status
10. Updated design risk assessments

At the end of RIBA Stage 3 and the submission of the Round 2 HLF application there will be a break clause. All subsequent Stages through to completion are subject to HLF deliver funding being secured and satisfactory performance.

DESIGN TEAM SERVICES BRIEF

DELIVERY PHASE

RIBA Stage 4: Technical Design, Production & Tender Information

STAGE SPECIFIC DESIGN TEAM MANAGEMENT DUTIES

1. Production of all detailed design deliverables to programme for tender pricing information (typically SMM7 bills of quantities)
2. Coordinate, assemble and take responsibility for the production and assembly of the tender/contract documents in their entirety. To include the selection of the Contract and insertion of all Contract particulars and project specific contract terms with agreement from Project Manager.
3. Confirm in writing to the Project Manager that as Lead Consultant you have fully coordinated the project design with the whole design team, so that all aspects of the design are coherently integrated.
4. Ensure all required tender documents are delivered to the Works Administrator in one complete coherent package and in the format, and to the timescale required, to allow the project to be tendered.

PROVIDE DESIGN INFORMATION, ANALYSIS AND ADVICE

5. Complete final layouts.
6. Receive and incorporate design information from Design Team and consultees.
7. Consult statutory authorities on developed design proposals.
8. Agree positions for main service runs and, ceiling layouts, and major builders work for services installations.
9. Provide information for cost checks to be carried out by independent Quantity Surveyor.
10. Review design coordination and development with CDM Coordinator review and update design risk assessments, and provide final information for pre-tender health and safety plan.
11. Prepare, including receiving and integrating information from Design Team and specialists, coordinated production information.
12. Issue design deliverables for preparation of tender pricing document and pre-tender estimate.
13. Advise on contract conditions, to include preliminaries, contingencies, access, working and storage areas, work sequence and phasing.

14. Provide design deliverables to be included with tender documents.
15. Assist in an advisory capacity with the appraisal of tenders and any negotiations with tenderer(s) authorised by the Project Manager.
16. Contribute to the tender report.
17. Contribute to the preparation and assembly of the main contract documents.
18. Attend and contribute to pre-contract meeting (as per Tavistock Town Council format).
19. Brief Clerk of Works and provide all information necessary to undertake site inspection duties.

CONSENTS

20. In conjunction with the Project Team, submit, negotiate and obtain Building Regulation approval and all other statutory approvals. Note: Exemptions may need to be applied with regards to Building Regulations due to the status of the heritage assets.

TYPICAL STAGE 4 DELIVERABLES

21. All documents to allow project to be tendered. To be issued as complete packages to in hard and electronic copy.
22. Project specific NBS Specification that clearly identifies the work to be carried out.
23. Finalised site plan.
24. Contractor s access, storage and working area plan (including phasing arrangements).
25. Access philosophy.
26. Draft Construction Traffic Management Plan, including dialogue with Planning Officer as required.
27. Phasing and decant plan.
28. Finalised general arrangement plans (1:50)
29. Finalised sections (1:100 and 1:50)
30. Finalised Elevations (1:100)
31. Coordinated setting out plans.
32. Coordinated / dimensional floor plans.
33. Coordinated / dimensional reflected ceiling plans and external access plans

34. External door and window schedules with an emphasis on repair of historic fabric.
35. Internal doors and screen schedules with an emphasis on repair of historic fabric.
36. Fixtures and fittings plans (1:50).
37. Room elevations as appropriate.
38. Construction details to appropriate scale.
39. Statutory compliance certificates (Planning, Building Control, etc.)
40. Updated design risk assessments.
41. Record of responses to tenderers queries.
42. Technical evaluation of tenders for incorporation into tender report.
43. Six sets of Tender drawings and specification for contract.

RIBA Stage 5 & 6: Construction, Commissioning & Handover

CONTRACT ADMINISTRATION DUTIES

1. Administer the terms of the Building Contract
 - a. Issue information
 - b. Issue instruction required within delegated limits
 - c. Issue interim certificates
 - d. Inspect and advise on the compliance of off-site goods and materials within the terms of the Building Contract
 - e. In consultation with the Quantity Surveyor consider claims received and liability for loss and expense
 - f. Issue certificate(s) of practical completion
 - g. Issue notice of non-completion to enable the Client to claim liquidated damages where appropriate
2. Make regular visits to the Site, at least once fortnightly, or more frequently should the need arise, to inspect the progress and quality of the work being executed by the Contractor. Assist in the resolution of any queries received.
3. Receive reports from Contractor, Design Team and Clerk of Works, comment and take action as appropriate.
4. Prepare Contract Administrator s monthly report.
5. Arrange, chair and minute contract progress meetings and present Contract Administrator s report; and attend all other appropriate meetings as requested by the Project Manager.
6. Take responsibility for leading the process of identifying and resolving defects, including liaison with the Clerk of Works. Receive snagging list from the Clerk of

Works and ensure all defects are resolved, agreeing any outstanding de minimis items with the main contractor before the issue of practical completion certificate(s).

7. Attend hand over meeting with the Council's Project Coordinator and Project Manager and agree defects reporting procedure.

PROVIDE DESIGN INFORMATION, ANALYSIS AND ADVISE

8. Respond to requests for additional information from main contractor, subcontractors and specialist suppliers and contractors.

9. Provide as built drawings and update specification for incorporation into Health and Safety file.

TYPICAL STAGE 5 & 6 DELIVERABLES

10. Contract Administrator s monthly report

11. Inspection reports

12. Contract Administrator s Instructions

13. Contractual certificates and notifications

14. Responses to reasonable requests for additional information

Defects Liability & Project Closure

CONTRACT ADMINISTRATION DUTIES

1. Receive defect reports, determine necessary action and instruct Contractor.

2. Review decisions affecting the completion date within the period prescribed in the Building Contract.

3. Issue interim certificates as necessary.

4. Coordinate pre-final inspections, collate and issue schedule of defects including incomplete work and liaise with Client and Contractor to agree programme.

5. On receipt of Contractor s confirmation that all work is complete arrange and make final inspection.

6. Issue certificate(s) of making good defects.

DESIGN TEAM MANAGEMENT DUTIES

7. Attend and contribute to the Post Project Review

TYPICAL STAGE 5 & 6 DELIVERABLES

8. Input into Post Project Review
9. As-built drawings
10. Certificate of making good defects

RIBA Stage 7: In Use

Undertake In Use services in accordance with Schedule of Services.

Conclude activities listed in the handover strategy including: post occupancy evaluation, review of project performance, project outcomes and research and development aspects.

Update as Constructed and project information as required in response to on-going client feedback and maintenance or operational developments.

STRUCTURAL ENGINEERING SERVICES TO BE PROVIDED (as part of the tender submission from the architects)

The Consultant shall provide the following Services in whole or part as instructed by the Architect / Lead Designer. The Services shall not be viewed as definitive. The Consultant is encouraged to use own initiative and expertise to assist the Client in achieving the right solution.

General Obligations

1. Take responsibility for the structural design and integrity of the project, including the full design for the underground drainage (refer to previous surveys), new openings, external access works and external retaining structures and the inspection of completed works for compliance with design and specification.
2. The Structural Engineer has a duty to ensure that they produce a cost-efficient design solution. This may also include contribution to Value Management / Value Engineering if required.
3. Cooperate in the coordination by the Architect of the work of all the Design Team and comply with the Architect's directions in respect of such coordination. In order to provide compliance with Building Regulations, particularly L, provide written records of investigations, option appraisals and meetings.
4. Coordinate consultation with third parties that relate to the structural design of the Project.
5. Provide information to the Architects to enable the Design Team Leader to prepare a monthly progress report to the Project Manager identifying amongst others:
 - a. The progress of the Consultant's design
 - b. The progress of the Contractor's design (if any)
 - c. Comments in relation to quality of the Project on and off site
 - d. Progress of the documentation to be provided on completion of the Project.
6. Review and approve any design drawings produced by others, including fabricators and sub-contractors, which fall within the remit of the Structural Engineer. These may include contractor design packages such as roof truss rafters. Ensure all such works have necessary listed building consent.
7. Operate a quality management procedure appropriate to the needs of the Project.

8. Comply at all times with the Council's Standing Orders, Financial and Procurement Regulations.
9. Assist the Design Team Leader with input into stage plans, including programming the Design Team's work and defining the design deliverables to be produced at the end of the stage.
10. Assist in the preparation of the risk log. Take ownership of specific risks as agreed with the Design Team Leader, and assist in the formulation of action plans.
11. Execute risk management action plans, to feed into the Architects overall assessment, and advise the Design Team Leader of changes in the status of risks. Identify new risks as they arise, and provide input into their mitigation.
12. Manage the design resources available to produce required deliverables, highlighting resource problems as necessary with the Design Team Leader.
13. Manage and coordinate the production of Design Team deliverables in accordance with the stage plan.
14. Attend Design Team coordination meetings.
15. Raise Project Issues as they arise with the Design Team Leader and assist with their evaluation and resolution, recommending action where appropriate.
16. Ensure technical compliance of the structural design with relevant legislation, design codes and standing orders.
17. Contribute to and provide completed design team deliverables for incorporation into end stage reports.
18. Agree with the Design Team Leader the Design Team deliverables to be produced in the next stage and assist the Design Team Leader with programming for their delivery.
19. Obtain approval from the Design Team Leader to proceed to the next Project Stage.

Structural Engineering Services Deliverables/ Plan of Work

RIBA Stage 2 (C): Concept Design

RESEARCH INFORMATION

1. Consider structural aspects of feasibility design studies, site surveys and investigations and appraise constraints.
2. Evaluate Strategic Brief; consider programme, cost, risk and environmental issues (including flood management).
3. Identify any additional information required.

PROVIDE DESIGN INFORMATION, ANALYSIS AND ADVICE

4. Participate in the development of the Project Brief
5. Advise on the structural aspects of initial design studies.
6. Consider comments on design studies with Client and Users.
7. Assist with the preparation of Concept Design proposals in accordance with the Strategic Brief and developing Project Brief and provide information for initial cost studies.
8. Prepare and review initial design risk assessments with the CDM Coordinator.

Typical Stage 2 Deliverables

9. Room live and dead loadings schedule, including abnormal point load requirements. (E.g. lift installation, new openings, new floor space, external ramp)
10. Option appraisal and recommendations for structural elements. To include load transfer and stability provision.
11. Design Risk Assessment with regard to structural design elements, to include risks in use and risks in construction and maintenance.
12. Contribute to Design Development Report to include:
 - a. Indicative structural engineering scope of works, inclusive of underground drainage and external retaining structures
 - b. Indicative transportation and environmental impact scope of works

RIBA Stage 3 (D): Scheme Design

Management Duties

1. In conjunction with the Design Team Leader coordinate and present detailed proposals and cost plan (after consultation with independent Quantity Surveyor), to a Client Representative Review Panel at a formal **Scheme Design Review** prior to formal issue of Stage End report to the Project Board.

PROVIDE DESIGN INFORMATION, ANALYSIS AND ADVICE

2. Contribute to the on-going development of the Project Brief
3. Evaluate structural aspects of concept design proposals and develop structural aspects of detailed design solutions
4. Contribute to the preparation of Detailed Proposals and outline specification of structural elements
5. Provide information on structural design for elemental cost plan
6. In conjunction with the Architect consult and negotiate as necessary to establish compliance in principle with statutory requirements
7. Review design coordination and development with the Design Team Leader, carry out design risk assessments.

CONSENTS

8. Assist the Architect in making and negotiating full development control, listed building consents, Scheduled Monument Consent with the local authority planners, Historic England, engineers, surveyors and other relevant departments.

Typical Stage 3 Deliverables

9. Contribute to the Design Development Report to include:
 - a. Indicative structural engineering scope of works and outline specification of structural elements, inclusive of underground drainage and external retaining structures
 - b. Structural aspects of Building Regulation and other statutory approval status
10. Updated design risk assessments by liaising with Project Manager

At the end of RIBA Stage 3 and the submission of the Round 2 HLF application there will be a break clause. All subsequent Stages through to completion are subject to HLF deliver funding being secured and satisfactory performance.

RIBA Stage 4: Detailed Design, Production & Tender Information

PROVIDE DESIGN INFORMATION, ANALYSIS AND ADVICE

1. Complete final layouts
2. Receive and incorporate design information from Design Team and consultees
3. Consult statutory authorities on developed design proposals
4. Receive and comment on structural aspects of service locations, and major builders work for services installations
5. Provide for integration of service installations and associated major builders work implications
6. Complete sizing of all structural elements
7. Provide information for cost checks
8. Review design coordination and development with Design Team Leader review and update design risk assessments, and provide final information for pre-construction information document
9. Prepare, including receiving and integrating information from Design Team and specialists, all structural aspects of coordinated production information
10. Issue design deliverables for preparation of tender pricing document and pre-tender estimate
11. Advise on contract conditions, to include preliminaries, contingencies, access, working and storage areas, work sequence and phasing
12. Provide design deliverables to be included with tender documents
13. Contribute to the tender report
14. Contribute to the preparation and assembly of the main contract documents
15. Attend and contribute to pre-contract meeting

CONSENTS

16. In conjunction with the Project Team, submit, negotiate and obtain Building Regulation approval and all other statutory approvals

TYPICAL STAGE 4 DELIVERABLES

17. 6 sets of hard copies of all structural information required for tender
18. Design Calculations
19. Finalised general arrangement plans for all structural elements, inclusive of underground drainage and external retaining structures (1:50)
20. Finalised structural sections (1:100 and 1:50)
21. Finalised structural elevations (1:100)
22. Reinforcement schedules, including bar bending schedules
23. Beam and lintel schedules
24. Finalised construction details for all structural elements to the appropriate scale
25. Project specific NBS Specification for all structural
26. Finalised structural details for major builder s work in connection with building services engineering, including statutory authorities
27. Statutory compliance certificates (Planning, Building Control, etc.)
28. Updated design risk assessments
29. Record of responses to tenderers queries
30. Technical evaluation of tenders for incorporation into tender report
31. 6 sets of structural drawings for contract

RIBA Stage 5 & 6: Construction, Commissioning & Handover

INSPECTION & COMPLIANCE DUTIES

1. Make regular visits to the Site, as required and as co-ordinated by the Architects, to inspect the progress and quality of the work being executed by the Contractor. This must be once fortnightly as a minimum until the structural element of the work is complete. Assist in the resolution of any queries received. It is expected that this will as a minimum, cover the inspection of formations, reinforcement of significant elements, steelwork and timber trusses / framing. This list is not exhaustive and other visits to deal with specific elements may be required.
2. Receive reports from Contractor, Design Team and Clerk of Works, comment and take action as appropriate.
3. Contribute to Contract Administrator s monthly report.

4. Attend contract progress meetings and present Structural Engineer s report; and attend all other appropriate meetings as requested by the Project Manager.
5. Receive and comment on snagging list from Clerk of Works, agreeing any outstanding items with the Contract Administrator.

PROVIDE DESIGN INFORMATION, ANALYSIS AND ADVICE

6. Respond to reasonable requests for information from main contractor, subcontractors and specialist suppliers and contractors.
7. Provide as built drawings and update specification for incorporation into Health and Safety file

TYPICAL STAGE 5 & 6 DELIVERABLES

8. Contribution to Contract Administrators monthly report
9. Inspection reports
10. Advise the Contact Administrator on the need for Instructions
11. Response to reasonable requests for additional information

Defects Liability & Project Closure

MANAGEMENT DUTIES

1. Contribute to, and provide completed design team deliverables for incorporation into, the Project Closure Report
2. Attend and contribute to the Post Project Review

INSPECTION AND COMPLIANCE DUTIES

3. Comment on defect reports, determine necessary action and advise the Contract Administrator
4. Assist the Contract Administrator with reviewing decisions affecting the completion date within the period prescribed in the Building Contract
5. Assist the Contract Administrator with pre-final inspections
6. Assist the Contract Administrator with the final inspection

TYPICAL DELIVERABLES

7. Defect inspection reports
8. Input into Post Project Review
9. As-built drawings

BUILDING SERVICES ENGINEERING SERVICES TO BE PROVIDED (As part of the tender submission from the architects)

Building Services is to consist of hot and cold water, mechanical and electrical systems, Building Management systems, ventilation, air conditioning, sprinkler systems, heating systems, lifts, external lighting, security and access systems and controls, fire alarm systems and controls, ICT data wiring and infrastructure. Please note that this is a general and non-exhaustive list that is not specific to this project i.e. not all of these services may be required.

The Consultant shall provide the following Services in whole or part as instructed by the Lead Designer. The Services shall not be viewed as definitive. The Consultant is encouraged to use own initiative and expertise to assist the Client in achieving the right solution.

General Obligations

1. To take responsibility for the design of the building services installations, including inspection of completed works for compliance with design and specification, commissioning and setting to work
2. Cooperate in the coordination by the Architect of the work of all the Design Team and comply with the Architect's directions in respect to such coordination. In order to provide compliance with all Building Regulations current at the time of tender, provide written records of investigations, option appraisals and meetings
3. Coordinate consultations with third parties that relate to the services design of the Project
4. Provide information to the Design Team Leader to enable the Design Team Leader to prepare a monthly progress report to the Project Manager identifying amongst others:
 - a. The progress of the Consultant's design
 - b. The progress of the Contractor's design (if any)
 - c. Comments in relation to quality of the Project on and off site
 - d. Progress of the documentation to be provided on completion of the Project
5. Operate a quality management procedure appropriate to the needs of the Project
6. Drawings provided are to be of an appropriate size and scale, likely to be 1:100 for sketch design and 1:50 for details
7. Take responsibility for thermal and daylight modelling and the production of Energy Performance Certification as and when required. Design at all times to maximise thermal efficiency and to allow efficient design to be

developed, provided there is no adverse impact on the character or special interest of the listed buildings. Consultants should at all times take a realistic view of how the end users will operate the building and design accordingly.

8. Take responsibility for, manage and fully coordinate the process of providing all utility services, including all connections, infrastructure, metering and metering accommodation, under instruction and co-ordinated by the Architects. Apply for and obtain all necessary quotations from statutory bodies, appropriately applied for so as to meet the project programme. Liaise and coordinate with the Council's Project Coordinator to ensure that supply contracts are in place according to programme.
9. Take responsibility for the design of ICT infrastructure including containment, wiring and outlets.
10. Comply at all times with the Council's Standing Orders and Financial Regulations.
11. Assist the Design Team leader with input into stage plans, including programming the Design Team's work, including details of time allocation for partial and fully system commissioning and defining the design deliverables to be produced at the end of the stage.
12. Assist in the preparation of the risk log. Take ownership of specific risks as agreed with the Design Team Leader, and assist in the formulation of action plans. Risk of harm to the designated heritage assets must be assessed and planned for.
13. At each stage, provide risk assessments and/or updates of all risks relating to services design, installation and future maintenance and produce action plans.
14. Execute risk management action plans, advise the Design Team Leader of changes in the status of risks. Identify new risks as they arise, and provide input into their mitigation.
15. Manage the design resources available to produce required deliverables, highlighting resource problems as necessary with the Design Team Leader.
16. Manage and coordinate the production of Design Team deliverables in accordance with the stage plan.
17. Attend Design Team coordination meetings.
18. Attend and contribute to Value Management and Value Engineering meetings and processes if and as required.

19. Raise Project Issues as they arise with the Design Team Leader and assist with their evaluation and resolution, recommending action where appropriate.
20. Ensure technical compliance of the building services design with relevant legislation, design codes and standing orders.
21. Contribute to and provide completed design team deliverables for incorporation into the end stage reports.
22. Agree with the Design Team Leader the Design Team deliverables to be produced in the next stage and assist the Design Team Leader with programming for their delivery.
23. Obtain approval from the Design Team Leader to proceed to the next Project stage.

Building Services Engineering Services Deliverables/ Plan of Work

RIBA Stage 2 (c): Concept Design

RESEARCH INFORMATION

1. Evaluate Strategic Brief; consider programme, cost, risks and environmental issues
2. Consider building engineering services aspects of feasibility design studies, site surveys and investigations and appraise constraints
3. Identify any additional information required

PROVIDE DESIGN INFORMATION, ANALYSIS AND ADVICE

4. Participate in the development of the Project Brief, advise on energy conservation, fuel policy and confirm energy targets
5. Advise on the building engineering services aspects of initial design studies
6. Consider comments on design studies with Client and Users
7. Assist with the preparation of the Concept Design proposals in accordance with the Strategic Brief and developing Project Brief and provide information for initial cost studies
8. Prepare and review initial design risk assessments with the CDM Coordinator
9. Make enquiries with the current service providers and obtain quotes as required

TYPICAL STAGE 2 DELIVERABLES

10. Provide a report on the energy requirements and sufficiency of electricity, gas, water and telecommunications services, including all load checks as required.
11. Option appraisal and recommendations for building engineering services elements
12. Design risk assessment with regard to services design elements
13. Provide a services Design Development Report to include:
 - a. Indicative building engineering scope of works
 - b. Impact of services on architectural design
 - c. Provision of services infrastructure (e.g. plant rooms, service routes)
 - d. Report defining the entire energy management strategy, including renewable energy sources and systems as appropriate
 - e. Drawings to include sketch plans and schematics, riser requirements and primary routings

RIBA Stage 3 (D): Scheme Design

MANAGEMENT DUTIES

1. In conjunction with the Design Team Leader coordinate and present detailed proposals and cost plan, to a Client Representative Review Panel at a formal **Scheme Design Review** prior to formal issue of stage end report to the Project Board.

PROVIDE DESIGN INFORMATION, ANALYSIS AND ADVICE

2. Contribute to the on-going development of the Project Brief
3. Evaluate building engineering services aspects of the concept design proposals and develop building engineering services aspects of the detailed design solutions
4. Contribute to the preparation of Detailed Proposals and outline specification of building engineering services
5. Provide estimate of building engineering services for elemental cost plan
6. In conjunction with the Architect consult and negotiate as necessary to establish compliance in principle with statutory requirements and Building Regulations
7. Review design coordination and development with the Design Team Leader, carry out design risk assessments
8. Work in conjunction with the other members of the Design Team and be responsible for the production of initial daylight and thermal modelling

CONSENTS

9. Assist the Architect in making and negotiating full development control, listed building and scheduled monument consents with the local authority planners, Historic England, engineers, surveyors and other relevant departments

TYPICAL STAGE 3 DELIVERABLES

10. Detailed energy management strategy document to be approved by the Council's Project Coordinator as part of the scheme design approval process

11. Final room loading schedules

12. Building Management System (if appropriate) design and specification, including a detailed description of the controls philosophy along with target programming and operating costs

13. Provide a Design Development Report to include:

- a. Building engineering services scope of works and outline specification of services elements
- b. Building engineering services aspects of Building Regulation and other statutory approval compliance status
- c. Incoming services strategy to include detailed methodology, design, programming, external infrastructure and all utility requirements
- d. Detailed metering strategy
- e. General arrangement plans and schematics

14. Updated design risk assessments

15. Initial thermal and daylight modelling report, including an analysis of the results and recommendations

At the end of RIBA Stage 3 and the submission of the Round 2 HLF application there will be a break clause. All subsequent Stages through to completion are subject to HLF deliver funding being secured and satisfactory performance.

RIBA STAGE 4: DETAILED DESIGN, PRODUCTION & TENDER INFORMATION

PROVIDE DESIGN INFORMATION, ANALYSIS AND ADVICE

1. Complete final layouts and sizing of building and engineering services
2. Receive and incorporate design information from Design Team and consultees
3. Agree and finalise the developed design proposals with all relevant statutory authorities including water, gas, electricity and telecommunications
4. Provide details of positions for main service runs and major builders work for services installations
5. Provide information for integration of service installations and associated major builders work
6. Update building engineering services estimates to assist Quantity Surveyor with cost checks
7. Review design coordination and development with Design Team Leader review and update design risk assessments, and provide final information for pre-tender health and safety plan
8. Prepare, including receiving and integrating information from Design Team and specialists, all building services aspects of coordinated production information
9. Issue design deliverables for preparation of tender pricing document and pretender estimate
10. Advise on contract conditions, to include preliminaries, contingencies, access, working and storage areas, work sequence and phasing
11. Provide design deliverables to be included with tender documents
12. Assist with the appraisal of building engineering services aspects of tenders and any negotiations with tenderer(s) authorised by the Project Manager
13. Contribute to the tender report
14. Contribute to the preparation and assembly of the main contract documents
15. Attend and contribute to pre-contract meeting

CONSENTS

16. In conjunction with the Project Team, submit, negotiate and obtain Building Regulation approval and all other statutory approvals

TYPICAL STAGE 4 DELIVERABLES

17. Design criteria and calculations
18. Finalised and coordinated Building Engineering Services drawings including:
 - a. General arrangement plans indicating routes and sizes of main service runs
 - b. Schematic drawings
 - c. Detailed design drawings
 - d. Building Management System (if appropriate) zones and sensors
 - e. Builders work and fixings schedules
19. Plant/lift room installation layouts and elevations to appropriate scale
20. Finalised details for major builders work in connection with building engineering services
21. Project specific Building Engineering Services Specification, suitable for working within a package contract environment so that the document can be split and tendered as required, based on (or incorporating the Council s specific requirements of) the Council s Standard Specification for Mechanical and Electrical Services. BMS systems strategy to demonstrate compatibility for all components.
22. Statutory compliance certificates (Planning, Building Control, utilities, etc.)
23. Updated design risk assessments
24. Finalised thermal and daylight modelling report, including all recommendations to ensure compliance with Building Regulations where applicable and not harmful to the heritage assets.
25. Six hard copies of all tender documents for the Project Manager, to be provided to the Lead Consultant in sufficient time so as to ensure the project is tendered to programme.
26. Record of responses to tenderers queries
27. Technical evaluation of tenders for incorporation into tender report
28. Six sets of Tender building services drawings for contract
29. Six sets of building services specifications for contract

RIBA STAGE 5 & 6: CONSTRUCTION, COMMISSIONING & HANDOVER

MANAGEMENT DUTIES, INSPECTION & COMPLIANCE DUTIES

1. Make regular visits to the Site, at least once fortnightly under instruction and co-ordinated by the Architects during the building services element of the work, or more frequently should the need arise, to inspect the progress and quality of the work being executed by the Contractor. Require samples and sample panels for any heritage sensitive works and agree precisely the extent of any works which could result in harm or loss of historic fabric. Assist in the resolution of any queries received.
2. Receive reports from Contractor, Design Team and Clerk of Works, comment and take action as appropriate
3. Contribute to the Contract Administrator s monthly report
4. Attend contract progress meetings and present Services Engineer s report; attend all other appropriate meetings as requested by the Project Manager
5. Request and review the Contractor s commissioning programme and make comments to the Project Manager as required. Attend testing procedures and witness commissioning of plant and systems and certify at Practical Completion that all building services systems have been supplied, installed and programmed to the design and specification
6. Where seasonal commissioning is required, be responsible for attending testing procedures and witnessing the commissioning of the systems. Certify to the Project Manager that the systems have been supplied, installed and programmed to the design and specification
7. Obtain and review all commissioning and test certificates from the contractor for all building services elements
8. Receive and comment on snagging list from Clerk of Works, agreeing any outstanding items with the Contract Administrator

PROVIDE DESIGN INFORMATION, ANALYSIS AND ADVISE

9. Respond to reasonable requests for additional information from main contractor, sub-contractors and specialist suppliers and contractors
10. Coordinate the provision of as built drawings and updated specification for incorporation into Health and Safety file. This process is to include the provision of base design drawing information to the contractor for alteration as required to allow the production of as-built drawings

TYPICAL STAGE 5 & 6 DELIVERABLES

11. Contribution to Contract Administrator s monthly report

12. Inspection reports
13. Advise the Contract Administrator on the need for Instructions
14. Response(s) to reasonable requests for additional information
15. Arrange for the demonstration of all systems to the building users and record names of staff and clients involved. Liaise with the contractor and end users as required to achieve this
16. Arrange for Energy Performance Certificates by Services Consultant

DEFECTS LIABILITY AND PROJECT CLOSURE

MANAGEMENT DUTIES

1. Contribute to, and provide completed design team deliverables for incorporation into, the Project Closure Report
2. Attend and contribute to the Post Project Review

INSPECTION AND COMPLIANCE DUTIES

3. Comment on defect reports, determine necessary action and advise the Contract Administrator
4. Assist the Contract Administrator with reviewing decisions affecting the completion date within the period prescribed in the Building

Contract

5. Assist the Contract Administrator with all inspections

DELIVERABLES

6. Defect inspection reports
7. Input into Post Project Review
8. As build drawings and receive O&M Manuals and Log Book