**CIVIL/STRUCTURAL ENGINEER SCOPE OF SERVICES**

**AT ALL STAGES**

**Principle Role**

* Design and document all structural and civil engineering elements including advising on quality control during contract
* Assist in design co-ordination

**Employer Interface**

* Attend meetings called by the Employer to progress any aspect of the commission
* Provide information as requested by the Employer to the Employer and/or any other participant
* Initiate and maintain liaison in order that the Employer is kept fully informed of the progress of the commission
* Progress the design of any structural engineering elements and provide sufficient detail to obtain the appropriate approvals in accordance with the Employer’s approvals processes
* Prepare any report or documentation required for consideration of proposals for alternative works such as Value Engineering Options
* Progress the design in accordance with the Building Regulations
* Provide information required by the Employer for issues relating to statutory services, highways and drainage connections and any other third party approval
* Make recommendations to the Employer on the economic and financial viability of the Works

**Participants**

* Advise on the need for and scope of services of other consultants that may be required within the commission
* Be aware of the work which other participants are carrying out and advise on any apparent errors and omissions
* Maintain co-ordination of the engineering design work with all the other designers and ensure drawings and other documents are up to date
* Liaise with all other consultants deemed to be involved on the project as instructed to do so by the employer
* Provide information as reasonably required and requested to comply with the requirements of the Construction Design and Management Regulations

**Processes**

* Implement and adhere to the requirements of the agreed change control procedure developed for the project
* Adhere to the requirements of the project execution plan
* Execute services in accordance with agreed project programmes
* Participate in preparation of a register of risks formulating and reviewing strategies for minimising the same
* Participate in preparing and updating the overall project programmes showing all significant activities and events
* Provide relevant information for incorporation in the health and safety plan and file

**Cost Planning and Control**

* Provide information in order that a detailed cost plan can be prepared

**DETAIL DESIGN & TENDER**

**Design and Documentation**

* Develop Employer’s Requirements for structural design in accordance with the Employer’s Brief and cost estimate
* Provide design and cost information to incorporate with the input of other participants into detail design
* Co-ordinate the different elements taking account of architectural, M&E and other elements
* Participate in agreeing the form and content of the Employer’s Requirements and Contractor’s Proposals
* Provide advice and in sufficient detail to enable completion of the Employer’s Requirements
* Issue substantially complete tender information in sufficient time to allow review and modification prior to final tender issue

**Cost Planning and Control**

* Provide structural designs and other information and advice for the preparation of estimates of construction and cost

**Procurement**

* Participate in preparing a list of tenderers for each trade package
* Participate in reviewing and reporting on tenderer’s programmes and method statements and advise on acceptability
* participate in negotiating with the tenderers
* Revise production information to adjust tender sum or to obtain new tenders within the project budget

**External Bodies**

* Prepare material for the submission of applications for approvals under building regulations and other statutory requirements
* Negotiate as necessary over building regulations and other statutory requirements and revise design and / or production information
* Negotiate waivers and / or relaxations under building regulations and other statutory requirements

# CONTRACT

Design and Documentation

* Provide further production information as required in accordance with the programme of works and / or agreed information release schedules
* Receive design, fabrication and installation drawings from contractors and check for adequacy, accuracy, good engineering practice and adherence to the design concept and authorise for construction where applicable
* Receive copies of record drawings, operating instructions and maintenance manuals prepared by the main contractor and check for adequacy and adherence to contract requirements

**Cost Planning and Control**

* Provide information required for the preparation of financial reports to the Employer
* Participate in evaluating claims for delay and additional costs made by the contractor or any nominated subcontractors / suppliers
* Participate in evaluating claims for delay and additional costs made by trade contractors

**Contract Administration**

* Assist the Project Manager in issuing any instructions required to achieve satisfactory completion of the works.
* Attend meetings with the contractor at regular intervals, appropriate to the stage of construction, to review progress and identify information requirements,
* Visit the site at intervals appropriate to the stage of construction to inspect the progress and quality of the works
* Advise whether construction activities and completed work, witnessed during site visits, is not in accordance with the Employer’s Requirements and other good practice guidance and report any apparant discrepancies
* Participate in documenting all items of work incomplete at practical completion
* Advise on the issue of certificates of sectional or practical completion in accordance with any contract requirements relating to the submission of operation and maintenance manuals

# External Bodies

* Advise on satisfactory completion of all statutory, insurance and other tests and receipt of relevant certificates for incorporation into documentation prior to approving certification of sectional or practical completion