

## **STANDARD TERMS, CONDITIONS AND SERVICES FOR USE WITH ACE AGREEMENT 1: DESIGN**

### **General**

Our appointment would be in accordance with the Association of Consulting Engineers (ACE) Agreement 1: Design, 2009 edition, Second Revision, for where the appointment of a Consultant to design permanent Works *where the Client appointing the Consultant intends to employ a Contractor to construct or install such permanent Works*.

With reference to this agreement we confirm the following (clause numbers as given):

#### **ACE Agreement 1: Design, Part A: The Memorandum of Agreement**

We confirm the appointment is to be executed under hand.

#### **ACE Agreement 1: Design, Part B: The Particulars of Agreement**

- B2 The Services to be performed are as described in Appendix A.
- B3 The particular parts of the project for which the services are to be performed (“the Works”) are described in Appendix B
- B5 We have not been appointed as lead consultant.
- B12 The total liability of engineersHRW for any claim or series of claims arising out of the same occurrence or series of occurrences shall not exceed a multiple of ten times the total of the fees payable to the consultant by the client.
- B13 First paragraph deleted, final paragraph adopted. EngineersHRW shall not be liable for any losses, costs, action, proceedings or claims arising out of or in connection with pollution and contamination.
- B14 First paragraph deleted, final paragraph adopted. EngineersHRW shall not be liable for any losses, costs, action, proceedings or claims arising out of or in connection with asbestos or any product containing asbestos.
- B15 First paragraph deleted, final paragraph adopted. EngineersHRW shall not be liable for any losses, costs, action, proceedings or claims arising out of or in connection with any act of terrorism.
- B17 The period of engineersHRW’s liability is six years from the date of the accompanying letter.
- B18 Where Collateral Warranties or bespoke appointments are to be entered into by engineersHRW, there is a single payment of £1000 for each appointment that is not ACE and Warranty that is not a standard CIC Warranty.

#### **ACE Agreement 1: Design, Part C: The Brief provided by the Client**

- C1 ‘The Brief’ is structural engineering consultancy services comprising ‘the Works’ and ‘the Services’.

**ACE Agreement 1: Design, Part E: The Schedule of Fees**

- E1 Where payment of fees for the Services is to be time-based, refer to time charge rates included in E5.
- E2 Where payment of fees for the Services is to be on a lump sum basis invoices will be submitted on a monthly basis to an agreed schedule.
- E3 Where payment of fees for the Services is to be on a percentage basis, this shall be based on the "Total Project Cost". Invoices will be submitted on a monthly basis to an agreed schedule.
- E5 EngineersHRW Standard Time Charge Rates are:

Director	£120.00 per hour
Associate Director	£100.00 per hour
Associate	£90.00 per hour
Senior Engineer	£80.00 per hour
Engineer	£70.00 per hour
Graduate Engineer	£60.00 per hour
Senior Revit/CAD Technician	£75.00 per hour
Revit/CAD Technician	£60.00 per hour

The time charge rates are only applicable for additional work where this has been agreed with the client and where a fixed fee has not been agreed in advance for the works. Time spent travelling in connection with the Services would be charged at the applicable time charge rate. These rates are valid as of 1<sup>st</sup> June 2015 and are subject to a regular 6 month review and may be changed without prior notification. Invoices will be submitted on a monthly basis.

- E7 Expenses will be added to our fees. Invoices for expenses will be submitted on a monthly basis.
- E8 Payment is due within 28 days of the date of the invoice. If there is any query regarding an invoice then this must be notified to engineersHRW within 7 days of the invoice issue date. Interest and compensation in accordance with the Late Payment of Commercial Debts (Interest) Act 1998 and the Late Payment of Commercial Debts Regulations 2002 shall be added to all amounts that remain unpaid after 28 days.
- E9 Refer to B18.
- Note VAT will be added to our fees.

**Construction (Design and Management) Regulations 2015**

Under the Construction (Design and Management) Regulations 2015 we are *'not to commence work in relation to a project unless satisfied that the client is aware of the duties owed by the client under these Regulations'*.

We would refer to documents available on the HSE website including *'Managing health and safety in construction: Construction (Design and Management) Regulations 2015'* and *'Need building work done? A short guide for clients on the Construction (Design and Management) Regulations 2015'*

We have assumed that in accordance with the Regulations, we would be 'Designer' and that you would employ others to act as 'Principal Designer'

**APPENDIX A- THE SERVICES**

The services we would undertake are described in section G2 of ACE Schedule of Services-Part G(a), "The Services". The following clauses have been amended as follows:

- G2.2.5 and G2.2.7 These services would be undertaken by others. EngineersHRW would arrange as agent for the Client when authorised by the Client for such investigations to be undertaken, certify the amount of any payments to be made by the client to the firms carrying out such investigations and advise the Client on the results of such investigations.

## **APPENDIX B- THE WORKS**

The Project shall comprise the following work elements- “the Works”. The following schedule defines the areas of responsibilities of engineersHRW.

### **CORE WORK ELEMENTS**

Unless noted otherwise the following are included in our scope of work. These elements are the basic structural services that we would understand would form part of the structural consultants work:

- Foundations including forms of piling but not the design of the piling.
- Structural steelwork elements / framed buildings.
- Reinforced concrete elements / framed buildings and performance specification of precast structures.
- Primary timber elements.
- Structures in masonry, brickwork or blockwork, unreinforced or reinforced.

### **STANDARD WORK ELEMENTS.**

These elements are outside of the basic structural services that normally form part of the structural consultants work, but are services which we allow as part our normal scope of service:

#### **Waterproofing**

- Waterproofing is the prevention of the passage of free water for which engineersHRW’s responsibilities are set out below.
- EngineersHRW will assist the Architect in determining the appropriate waterproofing system which is required to protect basement areas from ground water and will specify that part of the system which is an integral part of the main structural elements. This would cover the design of structures to resist aqueous solutions to BS 8102; the use of additives in concrete and the specification of external bentonite membranes and any designed joints within the concrete substructure. Where specialist products are used the responsibility for design would remain with and be warranted by the supplier.
- The waterproofing system(s) adopted may require the use of an internal drained cavity system or surface applied render. EngineersHRW’s responsibilities exclude the design or specification in respect to these items.
- The prevention of damp and passage of water vapour is not the responsibility of engineersHRW.

#### **Ground Contamination**

- EngineersHRW’s responsibility excludes the design of measures required to protect the building/site from ground contamination. Where this is necessary we will incorporate into the structural design the recommendations given by the Specialist Geotechnical Consultant.

#### **Temporary Works**

- EngineersHRW will prepare schematic proposals for major temporary works required to retain excavation faces or existing features / structures and / or provide a sequence of works drawing(s) showing the anticipated method of construction. The method of construction and the detail design of all temporary works will be undertaken by and be the responsibility of the contractor, including the establishment of all temporary loadings.
- As new build frames and structures are erected the stability of the structures in part and in whole during construction is the responsibility of the contractor.

## **APPENDIX B- THE WORKS, continued...**

### **Fire Protection**

- Where the fire protection to the primary structural frame is provided within the architectural finishes these will be designed, detailed by and be the responsibility of the Architect or relevant subcontractor.
- EngineersHRW will assist the Architect in finalising their performance specification for applied fire protection of permanent primary steelwork frame or elements; the design of which will be undertaken by and be the responsibility of the relevant subcontractor.
- The architect is to advise engineersHRW of the required level of fire protection and engineersHRW will accommodate the required level of protection in the design of the primary reinforced concrete frame or elements.
- Where exposed timber elements are proposed that are required to be fire rated the architect is to advise engineersHRW of the required rating and engineersHRW will advise (using charring rates) the required section size of the elements.

### **Party Wall Awards, Planning Applications and Listed Building Consents**

- EngineersHRW will supply information that may be incorporated into the Party Wall Award, Planning Application and any Listed Building Consent Application that results from the structural design work undertaken in relation to the structural refurbishment works. We have not allowed for extended negotiation, site meetings or re-drawing of any of the structure as a consequence of the requirement to obtain approvals.
- Where required by the Relevant Local Authority, we have allowed for production of a Structural Methodology Statement for subterranean developments (this maybe separately priced).

### **Steelwork**

- Connections would be performance specified as part of our 'Core Works'. In addition, we would develop visually exposed and key connections to 'stage D'.

### **Secondary steelwork (including framing to support ceilings, lift motors/guide rails, cleaning cradles, plant platforms, wind posts, shelf angles, access walkways, lighting gantries, etc).**

- EngineersHRW will assist the Architect in finalising the structural aspects of their tender drawings and performance specification, the design of which will be undertaken by and be the responsibility of the relevant subcontractor including the connections onto the primary structure.

### **Architectural metalwork (stairs, balustrades, balconies, canopies, handrails, etc)**

- EngineersHRW will design the structural aspects of the architectural metalwork elements and provide advice/sketches, as necessary, to allow the Architect to finalise their drawings.

### **Structures in timber**

- Connections would be performance specified as part of our 'Core Works'. In addition, we would develop visually exposed and key connections to 'stage D'.

### **Performance specification of structures in glass**

- Development to 'stage D' of structural glass elements (beams/columns) visually exposed and key connections. The structural glass elements, joints and connections will be designed by and be the responsibility of the specialist sub-contractor.

### **Cladding**

- EngineersHRW will assist the Architect in finalising the structural aspects of their tender drawings and performance specification for the cladding system(s), the design of which will be undertaken by and be the responsibility of the specialist subcontractor.
- This includes all purlins, sheeting rails and secondary steel framework within the cladding system, plus any fixings/connections between these elements and onto the primary structural frame plus the cladding system itself including louvres and windows and the fixing of these elements.

**APPENDIX B- THE WORKS, continued...**

**Non-loadbearing masonry walls**

- EngineersHRW will design the structural aspects of any masonry panels that form part of the perimeter cladding system or internal partitions.
- All support systems and fixings plus wind posts which are necessary to provide horizontal support to these masonry panels will be designed by and be the responsibility of the relevant subcontractor in accordance with architectural details and performance specification, engineersHRW will assist the Architect finalise their performance specification and tender drawings which will show the location of masonry supports, wind post positions, head restraints and the like.
- All pre-stressed or proprietary lintels over openings in masonry walls for doors, windows and services routes will be designed by and be the responsibility of the relevant subcontractor.

**Services and Builderswork**

- Major service holes, through the primary structure will be shown on the structural drawings, all other builders work information to be shown on the relevant services/architectural/ sub-contractors drawings and reviewed by engineersHRW.

**Existing structures to be retained**

- EngineersHRW's responsibility is limited to checking and modifying the existing primary structure to accommodate the proposed new works, it does not cover checking the condition or overall adequacy of the existing retained building structure, unless specifically requested by the client.
- Monitoring may be advised by engineersHRW to structures being worked on or adjacent structures where it is considered that the scope and scale of the proposed works could pose a risk to these structures. The monitoring regime will be specified within the tender documents and be the responsibility of the contractor. It is possible that the client and/or neighbours (party wall surveyors) require additional monitoring.

**Additional work elements.**

Unless noted otherwise the following are not included (or advice with regard to the items limited as described above) in our scope of work:

- Earthworks and excavations
- Detail design of prefabricated timber trusses, elements and connections
- Steelwork connection design
- Timber connection design
- Architectural staircases and balconies (see above)
- Metalwork for balconies and balustrades (see above)
- Lintels in non-loadbearing walls
- Brickwork / blockwork movement control joints
- Windposts to non-loadbearing partitions, whether internal or external
- Detail design of glulam timber elements
- Private Roads, hardstandings and pavement design
- Adoptable/crossover roads, hardstandings and pavement design
- Below ground drainage (defined as below the underside of the lowest slab of the development or below ground level beyond the perimeter of the building)
- Cladding/ façade engineering
- Temporary works design
- Determination of dimensional setting out and level information
- External works, which include hardstandings, pavements, retaining walls that are not part of the building.
- Preparation of information necessary for negotiations with third parties including ground landlords, financing bodies and adjoining owners (unless for party wall notices/awards).
- Non-structural screeds.
- Production of reinforced concrete detail drawings and bar bending schedules.