

Mechanical, Electrical, Public Health - Scope of Service

The scope and duties for the Mechanical, Electrical and Public Health engineering services for the SWCF 2016-2020 framework are detailed below. These are based on the ACE (2009) Schedule of Services Part G(b) – Detailed Design in Buildings and part G(c) Performance design in buildings.

Three project procurement routes are generally envisaged, these are;

- 1) Traditional procurement
- 2) Design and Build (D&B), two stage with novation (the design is developed by the Consultant to RIBA Stage 3 including the planning application, Employers Requirements are prepared for a design and build project and the consultant appointment is novated fully to the contractor at the end of Riba Stage 3/ commencement of Riba stage 4)
- 3) Design and Build, two stage without novation (the design is developed by the Consultant to RIBA Stage 3 including the planning application, Employers Requirements are prepared for a design and build project involving other designers employed by the Contractor and the Consultant is retained to act as the clients Technical Advisor)

Services

The mechanical and electrical services will generally comprise;

- Building Management System (BMS)*
- Boiler plant and auxiliaries
- Cold Water Services
- Hot Water Service
- Heating Installation
- Ventilation systems
- Cooling systems
- Fuel gas distribution
- Public Health and Plumbing Services
- Electrical Distribution Services
- Small power distribution
- Lighting
- Emergency lighting
- Fire Detection and Alarm¹
- Electrical wiring for mechanical plant
- Lightning Protection Services¹
- Lifts¹
- Ancillary systems such as disabled alarm systems
- Noise attenuation in connection with M & E services*
- Thermal Insulation in connection with M & E services*
- Building regulation part L modelling (to be included although normally categorised as other services to be performed by the consultant under ACE) *
- Energy performance certificate , EPC (to be included although normally categorised as other services to be performed by the consultant under ACE)*
- LZC report and renewable energy technology design*
- Contribute to BREEAM assessment

* Items marked will under taken by the D&B contractor under the D&B with no novation route.

¹ These services have contractor design portions and will be performance designed

The following services are related to the M&E services but do not form part of the M&E offer and require design input from specialists. The scope allows for liaison with the specialists and any power and containment services;

- Advanced Security Services (Intruder, Access control, CCTV)
- ICT/Data/Telephone systems
- Audio visual and systems
- Sprinklers systems
- Kitchen Ventilation
- Dedicated Energy Management Systems (EMS)
- Commissioning/commissioning management

The following services normally deemed as other services (G3) to be performed by the consultant and do not form part of the base scope of works.

- Below ground drainage
- Rain water design
- Day lighting
- Soft landings
- BREEAM
- Display Energy Certificate
- BIM & 3D Services modelling
- Clerk of works role
- Post Occupancy Evaluation (POE)
- Building User Guide

1) Traditional

The traditional route is based on ACE schedule G(b) (normal services) comprises of the following stages which are aligned to the RIBA stages as shown in the table below;

ACE work Stage	ACE description	Equivalent RIBA Plan of Work
G2.1	Appraisal stage	1
G2.2	Strategic briefing stage	
G2.3	Outline proposals stage	2
G2.4	Detailed proposals stage	3
G2.5	Final proposals stage	
G2.6	Production information stage	4 ¹
G2.7	Tender information stage	
		5 (Specialist design elements)
G2.8	Mobilisation stage	6
	Construction to practical completion stage	6
	After practical completion stage	7
G3	Other Services to be performed by the consultant	TBA

1 Stage 4 will be to 4a as defined by BSRIA guide BG6/2014 'A Design Framework for Building Services'

2) Design and Build with Novation

The D&B with novation route is based on ACE schedule G(b) (normal services) with novation at stage 3 and comprises of the following stages which are aligned to the RIBA stages as shown in the table below;

ACE work Stage	ACE description	Equivalent RIBA Plan of Work
G2.1	Appraisal stage	1
G2.2	Strategic briefing stage	
G2.3	Outline proposals stage	2
G2.4	Detailed proposals stage	
		3 ²
G2.5	Final proposals stage	4 ³
G2.6	Production information stage	
G2.7	Tender information stage	5 (Specialist design elements)
G2.8	Mobilisation stage	6
	Construction to practical completion stage	6
	After practical completion stage	7
G3	Other Services to be performed by the consultant	TBA

² Consultant duties to be novated at end of stage 3

³ Stage 4 will be to 4a as defined by BSRIA guide BG6/2014 'A Design Framework for Building Services'

3) Design and Build without Novation

The D&B without novation route is based on ACE schedule G(c) (Performance design services) with completion of the employer requirements/performance specification at stage 2. The Contractor D&B work will commence at stage 3. The table below details the stages which are aligned to the RIBA and ACE plan of work.

ACE work Stage	ACE description	Equivalent RIBA Plan of Work
G2.1	Appraisal stage	1
G2.2	Strategic briefing stage	
G2.3	Outline proposals stage	2
G2.4	Detailed proposals stage	
		3 ⁴
G2.5	Final proposals stage	4 ^b
G2.6	Production information stage	
G2.7	Tender information stage	5 (Specialist design elements)
G2.8	Mobilisation stage	6
	Construction to practical completion stage	6
	After practical completion stage	7
G3	Other Services to be performed by the consultant	TBA

- 5 4 Consultant duties to be novated at end of stage 3
Stage 4 will be to 4a as defined by BSRIA guide BG6/2014 'A Design Framework for Building Services'