



The Scottish Parliament

THE SCOTTISH PARLIAMENT

BUILDING USER BRIEF

PART 1

SECTIONS 1- 8

NOVEMBER 1998 -

1. INTRODUCTION

- 1.1. The Building User Brief is produced as a guide to the Design Team and others involved in the procurement of the Scottish Parliament Building.

It sets down parameters for space requirements, occupation standards and technical innovation.

As the design process is developed it will be refined by input from the Design Team, Scottish Parliament Staff and appointed consultants.

- 1.2. The Brief also poses a number of questions, which may not be answered in finite detail until after the election and the Members of the Scottish Parliament are in place.

Indeed, it will be a number of their decisions, which will eventually influence the detail of the services provided.

- 1.3. One of the aims of the document is to provide information to permit the design of a building and equip it for use in a manner which will be sufficiently flexible to allow for change over time to meet the requirements of Parliament not just in the short term, but also in the future.

Information on electronic voting, numbers of Ministers, access for Press and Public is set out in detail in the brief, but designed in a manner to allow for change in the future to take account of technological and operational developments.

- 1.4. On the 24 July 1997 the Government published the White Paper, "Scotland's Parliament" from which the following are extracts.

"The building the Scottish Parliament occupies must be of such a quality, durability and civic importance as to reflect the Parliament's status and operational needs; it must be secure but also accessible to all including people with special needs; it must promote modern and efficient ways of working and good environmental practice.

It will be an important symbol for Scotland.

It should pay tribute to the Country's past achievements and signal its future aspirations.

It must be flexible enough to accommodate changes over time in operational requirements.

Quality and value for money are also key considerations.

The accommodation must allow Scottish Parliamentarians and their staff to work efficiently harnessing the best of modern technology.

People must be able to see and meet their elected representatives and to watch the Scottish Parliament in operation.

Provision needs to be made to permit easy reporting and broadcasting of Parliamentary proceedings so that people throughout Scotland can be aware of its work and decisions."

- 1.5. Following the consideration of various alternatives, the Secretary of State announced on 9 January 1998 that the Scottish Parliament Building would be located at Holyrood on the site adjacent to the Palace of Holyrood House, bounded by Canongate, Horse Wynd and Holyrood Road.
- 1.6. The Design Team was selected in July 1998.

The Building User Brief, which was made available to the competing designers, provides most of the necessary information to allow the Design Team's work to commence. It will be supplemented by a sustained dialogue with The Scottish Parliament's Holyrood Building Project Team.
- 1.7. An Outline Notice of Proposed Development, submitted to the City of Edinburgh Council proposing the change of use of the site and the intention to demolish a number of buildings adjacent to Queensberry House, which is to be retained, and other buildings in the Conservation Area, has been accepted.
- 1.8. The Brief deals in detail with the site characteristics and the issues raised by the location. The design of the Parliament Building presents an enviable challenge to the Design Team to produce a building worthy of the site and a fitting home for Scotland's Parliament.

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3. AIMS AND OBJECTIVES

- 3.1. The Scottish Parliament Building presents the Design Team with a unique opportunity to make a significant contribution to the design of a building, which marks a very significant milestone in Scotland's political history.

The White Paper extract quoted in the Introduction lays down in outline strategic guidelines, which reflect the aspirations of the Government and the people of Scotland for this building.

- 3.2. The design should respect its historic surroundings, paying due regard to the significant adjacent buildings of the Palace of Holyrood House, Queensberry House and the Canongate, but at the same time be a building which reflects the prevailing mood at the end of the century and the millennium.

It will be the first landmark building of the new millennium.

It should have a resonance of quality, durability and civic importance of which the Scottish people can be proud.

- 3.3. The views to and from the building with the backdrop of Salisbury Crags across the former playing fields and the park must play a role in integrating the building into the wider context.

There are buildings under construction - Dynamic Earth and "The Scotsman" headquarters, which have already made a contribution to the regeneration of the area.

The Parliament Building and other developments in hand or planned must complete the regeneration of this part of the Old Town of Edinburgh.

- 3.4. There is an opportunity to resolve the traffic problems that affect this end of the Canongate and Holyrood Road.

A start has been made with the roadworks and new road connection to the Park proposed as part of the Dynamic Earth and "Scotsman" developments.
This should be continued around the Parliament site into Horse Wynd and Canongate.

There is an opportunity to produce an environment in which there is considerably less intrusion from through traffic.

- 3.5. The building must be accessible to all; it will be necessary to investigate the traffic and public transport in the area.

The traffic study is currently nearing completion and a study of public transport links will commence shortly.

The outcome and recommendations of the traffic study and, to a lesser extent, the public transport study will affect the design of access to the Parliament and the treatment of the civic spaces around the building.

The designer can respond to these decisions to achieve the aim of access for all.

- 3.6. The design of the building must reflect the opposing requirements of openness and security.

The Brief provides detailed information on the Security needs.

It will be a measure of the success of the design if these can be achieved unobtrusively.

- 3.7. The Scottish *Parliament* is committed to promoting good environmental practice in terms of building design, construction and management.

The Brief deals with this in detail, pointing to levels of achievement in energy conservation, material specification and construction that must be achieved.

- 3.8. The Parliament is a living, changing organisation that over a period of time will reflect different attitudes and aspirations.

The Building must be flexible and have the capacity to accept changes in organisation, space requirement and management.

- 3.9. A budget has been agreed for the building, which should enable the designer to reflect the requirements of the Brief and also to provide quality in construction and design, and secure value for money.

- 3.10. The design must take account of the latest advances in technology within the budget constraints.

IT will play a prominent part in the management of information both within the Parliament and disseminating it to the Public.

The accommodation must be designed to cope with IT, television and sound broadcasting as well as the press, so that the Parliament's proceedings may be easily reported to the people of Scotland.

- 3.11. In the layout within the building the juxtaposition of Public, Press, MSP's and Staff must be handled with care.

People must be able to see and meet their representatives within the building and control of these activities must allow freedom of access within the designated areas.

- 3.12. The Parliament Approved a budget and a completion. To achieve this, the personnel at all levels must make timeous decisions to enable the programme to be achieved.

This applies to the members of the Scottish Parliamentary Corporate Body to deliver the necessary information; the various groups set up to consult on the detail of requirements, specification and provision of services; and the technical group managing the design and construction. The Design Team and other professionals are part of this team and accept the responsibility to deliver the project on programme.

The Contractor is also a major component of this projected achievement.

- 3.13. This project presents an opportunity for the Design Team to produce a landmark building reflecting the aspirations of Scotland as a nation, with a building of quality and value.

4. PLANNING AND FUNCTIONS

- 4.1. With the decision to provide a new building for the Parliament an opportunity has been given to achieve a building of national importance for Scotland.

The crucial decisions to be taken are in the planning of the building and its setting.

To realise this aim we must appreciate the function of the building both externally and internally.

- 4.2. The new Parliament building must in its setting command respect and contribute to an enhanced urban environment wherever it is sited. Public access to the building must be clearly defined by the design of the approach, public open space and the urban context.

The building in its design should reflect the Government's stated aim of open government but at the same time maintain the level of security that is deemed appropriate.

- 4.3. The space requirements and uses, detailed functional requirements and the Schedule of Accommodation set out the parameters for the planning of the new Parliament.

All of these bear to greater or lesser extent on the success of the Parliament building and it is the skill of the designer applied to these differing and sometimes conflicting requirements, which will on completion of the project produce a successful building in terms of design and use.

- 4.4. The section on the site gives detailed information on various existing physical aspects that must be taken into account in the design.

The approach to the building for the public and the adjacent areas should provide a setting in keeping with the importance of the building but also allow members of the public to gather in a secure area when visiting or lobbying Parliament.

The surrounding open spaces whether water or landscape need to be designed to limit access within terms of the security requirements, but handled in a manner which does not detract from the overall design.

- 4.5. There are 7 principal users of the Parliament building. These are:

- Members of Scottish Parliament
(MSP and Staff)
- Parliamentary Staff
- The Scottish Executive
- Official Visitors
- Press
- Public
- Services and Delivery

- 4.6. It is envisaged that there will be 4 main entrances that can be approached by vehicle or on foot or on bicycle.

Vehicles fall into a number of categories.

Cars, taxis and coaches will set down passengers who will then approach the building on foot either to a public entrance or to the entrances for MSP's, staff, etc.

Cars and delivery vehicles entering the site will be required to pass through security checks and barriers before being directed to parking areas or loading bay.

Taxis will only enter the site on call from security.

Coaches will drop off passengers close by.

- 4.7. Secure parking for 65 cars is to be provided within the building, 59 of which will be for MSPs.

Parking for visitors will be in public parking areas outside the site.

Secure covered parking is required for cycles.

The figure of 65 includes 6 parking spaces for disabled people (MSPs or staff), which will be provided as required by The Building Standards (Scotland) Regulations 1990.

- 4.8. There must be control of the various users, with the Public using a separate, defined entrance from those other users as detailed at 4.5.

These categories are also controlled within the building. The interaction of the Public with MSPs is controlled by the discreet planning of the building and by the security arrangements.

MSPs will need to meet Constituents but Constituents will not have access to MSPs' accommodation.

The public from their entrance will have access to a multi-use area, the Viewing Gallery of the Debating Chamber and to Committee Rooms.

The Press will have their own accommodation and access to the Viewing Gallery, Chamber Conference Room and Interview Rooms.

- 4.9. The declared objective of openness and accessibility of the new Parliament to the members of the public, in particular, when taken in conjunction with the parameters for controlled access to the site and the accommodation, presents a considerable challenge to the designer.

Movement control and security must not conflict with this objective and must therefore be achieved by unobtrusive means and through the careful planning and design of the building.

- 4.10. Section 5, on "The Space Requirements and Uses" sets down the adjacencies and uses of the various elements of accommodation.

These divide into 9 major groupings that are related by function. (Areas for individual rooms are detailed in Section 6 - Schedule of Accommodation.)

Security, entrances, reception

Public Areas and Press

Debating Chamber and Ancillary Accommodation

Clerk / Chief Executive, Presiding Officers, Deputy Presiding Officers and Staff Members' and Ministers' Accommodation

Parliament Staff Accommodation

Dining and Catering

Facilities

Car Parking

- 4.11. There is a need for a close integration of a number of the groupings.

For instance, the Debating Chamber and the ancillary accommodation must be closely linked.

The visitors' areas must have ready access to the Debating Chamber, Committee Rooms, and Press must in addition have access from these areas to the Chamber Conference Room.

All of the groupings impinge on each other in some aspects and this suggests a closely integrated building providing an efficient and effective environment for the operation of a modern Parliament.

MSPs whether in their own offices, meeting rooms of any category, public or catering areas must be able to reach the Debating Chamber within no more than 5 minutes on foot.

Particular attention must be paid to these adjacencies in the planning of the building and to the location of services, plant rooms, lifts and staircases.

The general principle must be to respond to the brief and to provide accommodation suitable for the wide range of functions contained within the Parliament building.

Attention is now drawn to particular elements, which the client wishes to be accommodated in the building or to be achieved in the design process.

- 4.12. **Access and Transportation**

- 4.12.1. The design of the Parliament Building should conform to national and regional policies with regard to access and transportation.

Particular reference should be made to the draft National Planning Policy Guidelines (NPPG) on Transport and Planning which has key policy objectives that:-

Closely relate to the location of individual development proposals to transport infrastructure

Take a holistic view of related land uses and provide for them in a closely integrated manner in relation to existing or planned transport infrastructure

Confirm that the development is well served by public transport

Control car usage through a management strategy of parking provision and control

Improve road safety

Encourage more people to walk

Encourage more responsible car use

4.12.2. **Taxis**

Suitable facilities should be provided for persons travelling to and from the Parliament Building by taxi.

This will include the provision of taxi set-down and pick-up areas, suitable taxi waiting areas and taxi turnaround facilities.

The design of taxi facilities should be co-ordinated with the Local Council, Parliament Security and The Parliament Police Unit.

4.12.3. **Cycling**

Suitable provision should be made for persons travelling to and from the Parliament Building by bicycle.

The City of Edinburgh Council is developing and promoting a cycle network for the city. The designer should familiarise himself with this network and ensure that his proposal is sufficiently connected into the network.

In the design of the site layout cycle and pedestrian routes should be separated.

Suitable facilities should be provided for the safe and secure accommodation of bicycles.

4.12.4. **Walking**

The designer must ensure that his proposal is fully accessible by foot and that suitable facilities are provided to ensure pedestrian safety.

All walking surfaces should be flat, with crossing areas well marked and as user friendly as possible.

If a change in level is necessary, facilities should be provided for mobility impaired pedestrians.

4.12.5. **Emergency Vehicles**

Unhindered access for emergency vehicles to all areas of the building should be provided.

The designer should ensure through his design that these remain unobstructed at all times.

4.12.6. **Delivery Vehicles/Mail**

Suitable provision must be made for the delivery of mail, goods and equipment to the building.

This will include the provision of suitable parking areas for delivery vehicles and the provision of turnaround space.

The designer must demonstrate that his allocation of delivery facilities is adequate for the expected use.

4.13. **Daylighting**

4.13.1. All areas should wherever practical have good natural lighting and deep plan

arrangements or totally internal rooms should be avoided where possible.

- 4.13.2. Daylighting in offices should provide for an average daylight factor of not less than 2%.

In certain instances higher standards may be required for design or functional requirements.

- 4.13.3. Lightwells are prohibited but this does not preclude the use of open or closed atria or accessible internal courtyards providing daylight or natural ventilation where appropriate.

Laminated glass must be specified throughout.

4.14. **Offices: Principal Planning Dimensions**

- 4.14.1. The preferred internal depth, window to window, for offices should be based on 12.0m maximum for cellular layout; 14.0m to 16.0m optimum for mixed layout of cellular and open plan.

EMBT/RMJM Statement of Compliance [Letter 1089/TJK/LM – B4 14 February 2003]:

The design complies with this statement. Maximum floorplate widths in the “fattest” location of the Towers and MSP is approximately 15m – typical section widths are obviously less.

- 4.14.2. The clear height in office areas from finished floor level to the underside of the lowest point of the ceiling (or beam soffit if exposed) should be 2.7m minimum.

Where ceilings are provided a minimum ceiling void of 300mm clear of all structural impediments is required, from the top face of the ceiling to the underside of the general structural level.

- 4.14.3. If it is necessary for the structure to occasionally penetrate this minimum zone (e.g., by downstand beams), provisions should be incorporated to enable services within the ceiling void to pass from one side to the other.

This may be achieved by a lower ceiling at toilet or notional corridor positions or by service holes being provided through the structural downstands.

- 4.14.4. Corridors should have a clear width of 1.8m unless otherwise stated.

This requirement also applies to notional corridors in open-plan areas.

- 4.14.5. Clause Deleted

- 4.14.6. The offices and other areas will be highly serviced with IT equipment, telephone, faxes and visual aids.

To accommodate the necessary wiring, in addition to ventilation and heating pipes, a clear space of 400mm must be provided as a floor void.

EMBT/RMJM Statement of Compliance [Letter 1089/TJK/LM – B4 14 February 2003]:

General office spaces typically have a 250mm raised floor which is adequate to accommodate power and data [offices typically being naturally ventilated there are minimum requirements for ventilation ductwork]. Where services requirements are more extensive [e.g., at garden level in MSP] this void is increased to, typically, 600mm to

accommodate additional ventilation and drainage requirements.

EMBT/RMJM Statement of Compliance [Letter 1089/TJK/LM – B4 (01.14) 1 April 2003]:

The Public Foyer is provided with accessible timber strip inlays which run longitudinally through the space between column positions providing flexible IT and power locations. Similarly the MSP Foyer is provided with areas of accessible timber flooring at various locations.

Notwithstanding this, clause 14.4 refers specifically to requirements for offices, where floor voids access and flexibility is clearly more important than in general circulation areas.

4.15. **Internal Circulation**

4.15.1. Traffic flows in common areas should be assessed to ensure selection of optimum circulation patterns to obviate overcrowding and excessive counter flows.

The assessment should consider the following points in association with other relevant matters:-

Safety of the users

Location of staff facilities

Security

Access to toilet facilities, etc.

4.15.2. Access between floors should be by means of enclosed staircases and lifts.

Fire Exit stairs are not permitted to be external but should be enclosed by the building envelope.

4.15.3. There should be no direct access to the office or other areas from toilets, lifts or main staircases all of that should open into common vestibule and lobby areas as appropriate.

4.15.4. Floors on each storey should be on a common level or connected by means of a ramp complying with the Building Regulations.

4.15.5. Stairs and lifts should be so arranged as to prevent the public gaining access to restricted areas and sufficiently separated to avoid the interference of traffic from each source.

4.15.6. Fire doors across main access routes should be provided with electro-magnetic door holders to retain the doors in the open position during normal use, except where precluded for security reasons.

Door holders must be linked to the fire alarm system to fall closed in the event of an alarm being triggered.

Smoke detectors linked into the alarm system must also be provided at these doors to combat the danger of smoke spread.

Fire doors should be provided with vision panels, and comply with Disabled Access requirements.

4.16. **Fire Precautions**

- 4.16.1. The building shall comply with the requirements of HM Inspectorate of Fire Services as well as the local fire authority, the recommendations of the client's fire consultant, and all documents pertinent to their requirements.
- 4.16.2. The designer should ensure that the nature and function of the building are adequately defined to the fire authority and fire consultants so that appropriate precautions can be taken (e.g., where basement car parking or other high hazards may exist).
- 4.16.3. All materials and surfaces incorporated in the construction of the development should have the requisite fire resistance, surface spread of flame and other relevant characteristics appropriate to their location and purpose as specified by the above authorities and in accordance with current legislation.
- 4.16.4. All floors should be non-combustible to separating floor standards with openings fire stopped or enclosed within protected shafts.
- 4.16.5. Open stairs between offices or large openings creating double storey accommodation should generally be avoided.
- Where atria are a feature of the development then any special arrangements as required by HM Inspectorate of Fire Services, the local fire authority and recommended by the fire consultant should be incorporated, including compliance with any related authoritative guidance documents considered suitable for the application by the fire authority and fire consultant.
- 4.16.6. Dry or wet rising mains should be incorporated where required by legislation or regulations relevant to the development.
- 4.16.7. Hydraulic fire hose reels will not normally be required but where these are specifically agreed as being necessary by the fire consultant, the installations should comply with relevant British Standard Specifications and Codes of Practice.
- 4.16.8. Detailed requirements in respect of fire alarm and detection systems should be provided as required by Section 8 of this document.

Fire fighting appliances such as extinguishers will be provided by the Client following determination of location by the Design Team in consultation with HM Inspectorate of Fire Services.

4.17 **Clause Deleted**

4.18. **Soft Landscaping**

- 4.18.1. In general soft landscaping schemes should be simple, functional and designed for ease of maintenance.

Particular attention should be given to the following items.

- 4.18.2. Avoiding parked cars overhanging soft landscaped areas necessitating maintenance out of normal working hours, or causing damage by exhaust fumes or overshadowing.
- 4.18.3. Ensuring landscape features do not obstruct access for building maintenance, i.e., window cleaning, meter access, access to service chambers, fire hydrants, etc.
- 4.18.4. Ensure that direct public access is not impaired by soft landscaping, which could quickly

succumb to wear.

- 4.18.5. Exercising care in the selection and placing of trees to avoid future damage to the building, vehicles (paintwork), and hard standing areas or buried services, from tree roots.
- 4.18.6. Ensuring that as landscape features fully mature CCTV cameras or lighting, safety and the general effectiveness of planning arrangements are not compromised (e.g., obstructing light to the building).
- 4.18.7. Provide any necessary land drainage and protection against surface erosion.
- 4.18.8. Contracts will provide for soft landscape schemes to be maintained throughout the maintenance period and for one growing season after handover if the handover of landscaping is delayed from the building handover or agreed occupation date.

4.19. **External Hard Landscaping**

- 4.19.1. Where adjacent roads are subject to continuous waiting or loading restrictions, access roads with adequate turning space should be provided within the curtilage of the site.
- 4.19.2. Access and hard standing for emergency services vehicles should be provided to comply with the requirements of the relevant authority (e.g., Fire Brigade vehicles) and due consideration should be given to providing access and hard standing adjacent to major engineering services plant locations (e.g., substations).
- 4.19.3. The construction of all access roads, footpaths and hard standings should be suitable for the purpose and comply with all relevant regulations and Local Authority requirements.
- 4.19.4. Due regard must be paid to security considerations when designing hard screening.

To assist with the control of groups of demonstrators it would helpful if the assembly area could be delineated, perhaps by the use of different colours / patterns of paving.

4.20. **Building Acoustics**

- 4.20.1. The design and planning arrangements of the building should take due account of the need to ensure an acceptable internal acoustic environment, with particular regard to the Debating Chamber, Committee Rooms, Chamber Conference Room and other areas where numbers of persons are discussing, debating or listening.
- 4.20.2. The design and planning arrangements should ensure that ambient noise levels, with all engineering services operating normally but with no activity in the area, do not exceed the following:-
 - Cellular Offices,
 - Interview Rooms, : 40dB(A)
 - First Aid Rooms,
 - Conference Rooms
 - Open Plan Offices : 45dB(A)
- 4.20.3. These levels should be regarded as a maximum and preferred values are 5dB(A) lower.
- 4.20.4. Permitted noise levels due to traffic noise intrusion with windows open are referred to in Section 8 but care should be exercised during planning to ensure rooms requiring a quieter environment are located as far away as practicable from any noisy elevations. Acoustic control can be of assistance for those with hearing impairments.

Where possible and appropriate, soft floor coverings should be used to minimise background noise.

4.21. Signage

- 4.21.1. The design of the signage both inside and outside forms an important element in the function of the building.

A co-ordinated signage package will be presented by the appointed design team to illustrate directions, departments, and room uses and individual locations within the building.

The same system will apply externally to entrances, parking and pedestrian routes.

It is important that a design proposal is prepared at an early stage.

- 4.21.2. There are various “statutory signs” such as Escape, Fire Exit and lift signs.

Signs for all rooms, pictograms, location signs and directional indicators will be provided.

The signage system proposed must recognise the need for those with sight impairments to access the building, with particular cognisance given to tactile and/or Braille signs.

Consideration should also be given to the provision of talking signs at key positions in the building and how any audible sign would be managed.

- 4.21.3. Clause Deleted

4.22. Disabled Users

General

- 4.22.1. The Scottish Parliament is bound by the provisions of the Disability Discrimination Act 1995 to provide facilities for all categories of Disabled User.

The broad sheet published by Disability Scotland “Access Guide” should be used as a reference.

The building will be expected to comply with this document. In addition, the Joint Mobility Unit can advise on current best practice on the use of colour content to meet the needs of visually impaired people as well as offering advice on lighting and signage.

The Royal National Institute for Deaf People is available to offer guidance on the facilities/systems, which will aid those with hearing difficulties.

- 4.22.2. The building and its environs should be designed to be suitable for disabled users, both staff (including Members and visiting officials) and visiting public.

- 4.22.3. The intention is for people with disabilities to be able to access and use the building in as independent a way as possible.

Where security circumstances mean it is not possible to incorporate all appropriate facilities, consideration should be given as to how disabled people might seek assistance (for example a bell).

Such circumstances should be kept to a minimum.

4.22.4. General access and facilities as required by the building regulations and the solutions for their compliance contained in “Approved Documents” should be incorporated together with the further requirements outlined below.

4.22.5. External Access

External access facilities should be carefully considered with attention given to the following:

Routes through grounds or out-buildings clearly sign-posted and well lit

Firm, non-slip and well laid surfaces

Main path clearly delineated by different coloured paving stones, edgings, different textured strip along edges or by a low rail

Obstacles placed so as to avoid hazard, e.g. planters, maturing soft landscaping features

Gratings flush and with maximum gap 18mm

4.22.6. Overhanging canopies or other features should have a minimum clearance of 2000mm.

Any projection, which is too low to walk under, should be avoided but where this is not possible it should be safeguarded by a form of ground level edging to protect partially sighted or blind users.

4.22.7. Entrances

Access for people with disabilities should be provided through the principal entrances to the building.

4.22.8. Automated sliding doors are preferred.

4.22.9. Frameless glass doors should be avoided and any glass doors that are fitted should be clearly marked.

4.22.10. Entrance mats should be close fitting, flush with the door surface and firm.

4.22.11. Low headroom areas (e.g., the under edge of staircase) should be avoided or where this is not possible should be protected by a barrier.

4.22.12. Internal Layout

Internal layouts should reflect the needs of disabled users and careful consideration should be given to:

Clear signing of key areas (e.g.. Reception) and of any special facilities (e.g., auditory aids).

Minimising hazards on circulation routes.

The design of Public counters/Reception desks should include a section at a suitable height for wheelchair users.

Taking care in the positioning of Public counters (avoid glare from reflective surfaces)

Providing space in main reception areas for wheelchair users to be able to park adjacent to the normal seating area.

Avoiding deep pile or bold patterned carpets. The latter is confusing for people with impaired vision.

Using contrasting colours to signify features or hazards.

Ensuring all safety signs are clearly visible and large enough to be easily read by users with impaired vision.

Lifts to be fitted with Braille and tactile buttons as well as both visual and voice floor indicators.

A visual indicator within the lift carriage could advise those with hearing difficulties that assistance is due in the event of the lift malfunctioning.

Miscellaneous

4.22.13 Sanitary facilities suitable for disabled users should be provided as detailed in Section 5.

4.22.14. Lighting arrangements, which must comply with the specific arrangements detailed elsewhere in this document, should wherever practicable also take due account of the needs of visually impaired users and lip readers, specific examples include:-

Taking care in the position and angling of spotlights to avoid dazzle

Ensuring constant levels in brightness without sudden changes

Avoid glare from natural sunlight and provide blinds or curtains where necessary to reduce glare effects.

4.22.15. The requirements for fire alarms should be discussed with the Fire Consultant.

Fire alarms should be a combination type (i.e. audible and visual) and provided throughout the building including toilets and restaurants.

4.22.16. Special facilities such as induction loop/infra red hearing aid systems should be provided at public counters as well as in the debating chamber and committee rooms.

Consideration should be given to having available a portable loop system which can be used in rooms in the Parliament Building not provided with a fixed loop/infra red system.

4.22.17. Handrails for disabled users should generally be round in shape about 50mm dia, securely fixed and easy to grasp.

Smooth hardwood or nylon coated types are preferred as being comfortable to touch.

4.22.18. Door handles should be fitted approximately 1000mm above floor level and, where operating a latch, should preferably be a lever action handle, not a twist knob.

4.22.19. The tension on door closers should be set as low as practicable to enable disabled users to open doors without needing assistance.

4.23. **Information Technology in the Scottish Parliament**

4.23.1. Background

The Government has made clear, in the White Paper “Scotland’s Parliament”, that a Scottish Parliament will be open and accessible to the people of Scotland, and that it will be modern and forward thinking, using the best and most efficient ways of doing business.

Information systems and information technology have an important part to play in realising these objectives.

Well-designed information systems linked to the world-wide Web will make it possible for the Parliament to provide information about its activities to a wide audience in Scotland and beyond; and also, possibly to seek the views of members of the public who use the world-wide Web.

Information systems can also make a significant contribution to internal efficiency – for example, by allowing the Parliament and the Scottish Executive to communicate with each other quickly; to support financial and personnel administration; to support electronic mail and possibly electronic voting systems; and to allow electronic searching and retrieval of relevant information.

The Consultative Steering Group is considering the scope of the IT facilities to be introduced into Parliament and the following reviews the possible opportunities, which the Design team should reflect in the design of the building.

4.23.2. It is expected that the Parliament will from the beginning make arrangements for televisual and sound production of its proceedings for its own closed circuit television, for broadcasting to the wider public and for archiving.

The Debating Chamber and the principal Committee Rooms will have to be prepared for televising and also for audio pick-up and broadcasting.

All 6 Committee Rooms should be capable of both audio and visual broadcasting. The 2 Large Rooms will have more sophisticated permanent multi-purpose camera systems, whilst it will be for the Broadcasting Office to specify the systems for the 4 smaller Committee Rooms.

Cabling will have to be provided within the building to take signals back to a central point for editing.

4.23.3. It is envisaged that the Parliament would rely heavily on information technology for internal communication and the provision of information to members and staff.

For example, the library facility available to MSPs would be strictly limited in physical terms, but use of electronic databases and of the World-Wide Web would be encouraged. It is envisaged that every MSP, their staff, and each member of the staff of the Parliament itself would have a desktop workstation to allow access to Parliamentary information systems and to the Web.

The normal medium for communication among MSPs and with staff of the Parliament would be electronically, rather than on paper.

So, for example, the electronic record of proceedings would be put up on the internal network as soon as it was available.

4.23.4. It is possible that Parliament staff would be able to submit MSPs’ Parliamentary Questions electronically to Ministers of the Scottish Executive, and MSPs would create and send their correspondence electronically.

Significant use of external electronic mail, both to correspondents in general and in particular to constituency offices, is likely to reduce elapsed time and the amount of effort required to send and deal with mail.

- 4.23.5. The Parliament is likely to use electronic means, rather than paper, to store and retrieve information.

This is likely to mean that incoming correspondence on paper will be scanned into electronic filing and retrieval systems and that there will be minimum requirement for on-site storage of paper either in libraries or in file stores.

- 4.23.6. Other applications of information systems to promote internal efficiency will depend upon the Parliament's own view of what is suitable and sensible.

For example, electronic voting would save time but may be thought to have other drawbacks.

It would be possible to operate an electronic presence system, which would ensure that staff were aware when MSPs were within the Parliament.

Electronic mail boxes and voice mailboxes are likely to be used to get messages to MSPs.

Other applications of information systems are likely to emerge over time.

The Chamber will be cabled for electronic voting, but the decision on whether it will be operated will be for Parliament itself.

Note: In the event that Division Bells are employed to alert Members of an impending vote, a visual indicator announcing the same would assist those with hearing impairments.

- 4.23.7. General Points

The design and maintenance of the information systems will be a significant task requiring the indexing and organisation of large amounts of textual material, as well as other data, into coherent categories so that linkages can be established.

- 4.23.8. It will be very important to ensure that MSPs and staff are properly trained to use information technology, and that this training is updated regularly. Some of the training will be provided at the desktop workstation by electronic means but there will be a place for face-to-face training also, and attractive, flexible and convenient accommodation will be required for this function.

- 4.23.9. Information systems and information technology will have a part to play in opening up the workings of the Parliament for visitors, especially schoolchildren and students.

Facilities will be needed in the public areas to allow visitors to browse the Parliament's Web site and find out about the current business of the House.

- 4.23.10. The Parliament Building and its infrastructure will have to support a high level of use of information systems, and also developments in that use.

For example, it is possible that the main cabling systems will have to be upgraded in due

course to cope with multimedia, and in general the building should be able to accommodate several revolutions in information and communication systems infrastructure over its life - "long-life, loose-fit".

In general, the Parliament will be a significant user of information systems and technology.

- 4.23.11. A number of rooms in the Parliament will require special consideration in the way the rooms are constructed and positioned in the building to eliminate the risk from fire, flood, loss of power and breach of security.

These rooms are PABX, Communications Room, FM Suite, Security Control Room, and ITSD Rooms, Switch Rooms and vertical risers and servers.

4.24. **Art in the Parliament**

- 4.24.1. It is, of course, expected that there will be considerable artistic merit in the design of the Parliament Building.

This will be reflected in its external appearance and the internal spaces and fittings particularly in areas of the building accessible to members of the public.

In order to secure an integrated artistic environment and maximum artistic and design value for money, an art strategy will have to be developed.

- 4.24.2. Careful thought should be given to identify opportunities for combining function and aesthetic considerations in key elements of the building (e.g. St Andrew's House is renowned for its bronze doors, its saltire mosaic and art deco fittings, Victoria Quay for its glazed internal screen, mosaic floor and reception desk).

- 4.24.3. Areas suitable to accommodate the commissioning of original works of art should be highlighted as well as sites which require "special treatment". Spaces suitable for the location of works of art and crafts, which may be donated or loaned, must be identified.

It is envisaged that exhibitions relevant to the responsibilities of the Parliament will from time to time be held in the building and possible display areas should be identified.

4.25. **The Building and the Environment**

- 4.25.1. It is necessary from the outset in the design of the Parliament Building to consider the impact on the environment and to produce a design, which minimises the adverse affect on the environment in its construction, use and ultimately its disposal. The necessity of a life cycle approach to this problem must be part of the Design Team philosophy.

It is anticipated that on completion of the Parliament Building that an application will be made for accreditation to ISO14001 standard.

- 4.25.2. Environmental issues, sustainability, restricted material use and the consideration of alternative resolutions to the problems posed by the building design are dealt with throughout the Building User Brief.
- 4.25.3. To manage this process in an orderly fashion, the progress of the design of the Parliament Building will be monitored by the Client, Design Team and the Quantity Surveyor by adopting the working strategies and policies laid down in the publication, "Environmental

Code of Practice for Buildings and their Services” published by:

The Building Services Research and Information Association (BSRIA)
Old Bracknell Lane West
Bracknell
Berkshire
RG12 7AH

Each member of the Design Team must have access to this document and include the activities set out in the document in the programming and costing of the project.

- 4.25.4. The Scottish Executive recognise that they have an important part to play in specifying and using products and processes that do not damage the environment and will therefore always use suitable alternatives where these are available.

The Scottish Executive is a signatory to the Declaration of Commitment on Energy Efficiency, which it will promote through its operations, both in procuring and operating the Parliament Building.

- 4.25.5. The Scottish Parliament and the Environment

It is The Scottish Parliament’s policy to play a full role in the sustainable development of Scotland as set out in “Sustainable Development: The UK Strategy” (Cm2426).

In particular, it recognises its statutory responsibilities under the Environmental Protection Act 1990 to ensure that, as far as is reasonably practicable, all activities associated with the Parliament Building will be undertaken in a manner which ensures environmental care and protection and the prevention of pollution.

It is the aim that the Parliament Building will serve as a model for the development of environmental management systems.

- 4.25.6. Effective environmental management requires the development of realistic and acceptable procedures, which can be applied to all practices and decisions.

This Policy Statement seeks to assist designers and managers by setting objectives and by outlining the contribution, which can be made by everyone.

- 4.25.7. It is the aim of The Scottish Parliament to ensure continuous environmental improvement and, as far as reasonably practicable, that the following objectives are met at the Parliament Building.

Indoor air quality is maintained to ensure a healthy working environment

energy is used efficiently to minimise harmful by-products

waste is minimised

products are chosen with regard to their environmental impact

water is used economically

waste is recycled

- 4.25.8. These objectives will be achieved only if the Design Team contribute by taking responsibility for the environmental impact of their own activities.

Designers must be committed to providing information, instruction and training.

- 4.25.9. Co-operation is sought in achieving these objectives and individuals are encouraged to take responsibility for the environmental impact of their own activities.

DRAFT

5. SPACE REQUIREMENTS AND USES

- 5.1. This section of the brief is provided to inform the designer of the various spatial elements, which will form the Parliament building. The uses have been grouped to reflect the adjacencies of rooms and the interaction of political and service functions in the building.
- 5.2. The Debating Chamber and the Committee Rooms will be the main focus of the Parliament's work, supported by Members' Rooms, Press and Broadcasting facilities and public visitor areas. The interaction of all these spaces is crucial in achieving the aim of visible open government, which has been referred to earlier.
- 5.3. The areas given in the schedule of accommodation are for the guidance of the designer. Major variations in the spatial elements achieved by the design would be of concern to the user. No figures have been given for circulation, apart from entrances where these are a major function of the building use. Plant rooms, ducts, IT equipment, switch rooms and toilets in addition to those specifically referred to are to be provided to meet the building and occupational requirements.
- 5.4. The building will be used by the Scottish Executive as the new Government of Scotland; Members of the Scottish Parliament; staff providing a wide spectrum of services in the operation of the Parliament and the building; constituents visiting their Members of Parliament; the public who are interested in the Parliament and school children as part of a democratic educational process.
- 5.5. The building design may reflect the many activities and uses which it will provide but should also make a cohesive statement as a natural symbol of democracy in Scotland. The headquarters of the Scottish Executive will be in St Andrew's House.
- 5.6. The description of each group of uses and the rooms and spaces this generates follows but is sufficiently flexible not to inhibit the designers in exercise of their skills. Items 5.7 to 5.26 provide a general description of the spaces.

5.7. **Main Entrances and Reception Area**

- 5.7.1. Main entrance areas should provide a light, attractive and welcoming approach to the building using good quality materials with hardwearing low maintenance floors and attractive yet durable wall finishes. Ceilings should be good quality feature types with effect lighting incorporated as an integral part of the design. Good quality doormats should be provided in entrance lobbies.

Doormats can cause problems for disabled people both by their texture and position. Specification should be such that they are fully accessible for disabled people.

- 5.7.2. Where the separate MSP, staff and public entrances are provided, consideration should be given to the design of the individual entrances. A more restrained approach could be used at the MSP and staff entrance, with the over-riding priority being the safety and security of the MSPs and staff.
- 5.7.3. The public entrances in this type of building require a more robust approach to the design philosophy. The entrance area especially should provide hard, easily cleaned and vandal resistant finishes while still providing an attractive ambience.

It should be noted that hard surfaces and open spaces generally cause poor acoustic conditions, and the requirements of disabled people should be taken into account when

specifying finishes.

5.7.4. Clause Deleted

5.8. **Main Circulation Stairs**

5.8.1. Main staircases and lift halls shall be designed to reflect the philosophy of the main entrance and have a high quality of finish.

5.8.2. Secondary staircases where used for circulation should be designed to a similar standard, and fire escape stairs should be provided with plastered, painted walls and vinyl flooring with non-slip nosings as a minimum standard.

5.8.3. Escape stairs should not utilise open risers. Balustrades should use infill panels or rails with the gap between rails no greater than 100mm in the public areas.

5.8.4. Due consideration should be given in the design of stairs for the requirements of disabled people, with refuges, tactile finishes and suitable colours.

5.9. **Open Plan Offices**

5.9.1. Open plan office areas should provide a working environment, which is both pleasant for the user and economical in use. Particular attention should be given to the following requirements.

5.9.2. Provide adequate natural light and areas which are regular in shape and of good proportions; keep columns to a minimum compatible with good design; ensure height to depth ratios are reasonable and avoid the "tunnel" effect. The need for open plan spaces to be capable of being partitioned at some future date with minimal disruption should be considered.

5.9.3. All office areas should be designed for VDU use with suitable glare control, and the general use of VDUs taken into account particularly in respect of service facilities and environmental effects. TV screens will also be provided in the relevant areas for the live feed and the annunciator.

5.9.4. Engineering service requirements (e.g. lighting, power, voice/data facilities etc.) are separately identified elsewhere in this document but attention should be given to the integration and co-ordination of services particularly in relation to potential layout changes.

5.10. **Cellular Offices**

5.10.1. Cellular offices should have the following characteristics.

5.10.2. Adequate natural light; regular shape with proportions suitable to the purpose and permitting a sensible arrangement of furniture and working area. Where practicable a facility to enable the room temperature to be adjusted by the occupant.

5.11. **Conference, Meeting and Committee Rooms**

5.11.1. Conference rooms, etc should be located in areas convenient for access from main access areas. Care should be taken in selecting the location to reduce nuisance to the users from noise and solar gain. These rooms should have emergency call buttons linked to the Security Control Room. The indicator in the Control Room should identify

the particular room.

- 5.11.2. The design of the rooms should result in a quiet, well-proportioned environment with finishes sympathetic to the proposed use.
- 5.11.3. A higher level of finish is required in all of these rooms except the Meeting Rooms, which are generally in office areas.
- 5.11.4. Double doors are the preferred means of entry, with at least one leaf 900 mm wide for Disabled Access.
- 5.11.5. It should be assumed that overhead projectors and audio/visual presentation facilities will be used, and provision should be made for their use including black out blinds or curtains and containment systems for wiring in all Conference and Committee Rooms. The Committee Rooms should be equipped with facilities to allow the proceedings to be recorded by audio, transcription and video.
- 5.11.6. Dimmer switches should be provided to enable adjustment of the room lighting levels.
- 5.11.7. Care must be taken to ensure fresh air ventilation provisions are suitable for the proposed occupation density. Where necessary mechanical ventilation and cooling as described in Section 8 should be incorporated. Special facilities, which will be identified on the Room Data Sheets, are to be provided.

5.12. **Stores**

- 5.12.1. Where stores are provided care must be exercised in the design to ensure that the floor loadings are adequate, see Section 7, and that access doors are sized to permit the passage of goods trolleys if required.
- 5.12.2. Lighting layouts must take into account proposed racking/shelving layouts to ensure that passages between units are adequately lit.
- 5.12.3. Fire protection, fire detection and security requirements must be appropriate for the type/value of goods stored.
- 5.12.4. Internal environment must be suitable for the type of goods to be stored (e.g., temperature, humidity, ventilation needs, etc.).

5.13. **Staff Toilets**

- 5.13.1. Male and female staff toilets should be provided on all occupied floor levels and the design should provide an attractive integrated environment, capable of being varied in appearance at intervals and with finishes which are hard wearing, hygienic, attractive and easily maintained.

Facilities for disabled people should be part of the general toilet accommodation and be accessible from all parts of the staff area. Toilets should be alternate left and right hand transfer, located adjacent to the standard provisions and no greater than 80m apart.

- 5.13.2. Where false ceilings are provided these should be modular suspended ceilings suitable for use in damp conditions.
- 5.13.3. Toilets shall be effectively ventilated by incorporating mechanical ventilation systems that are independent of other systems.

- 5.13.4. Cubicles should complement the walls finishes and be no less than 2.0m in height and raised 150mm from the floor for ease of cleaning; minimum width 900mm.
- 5.13.5. Sanitary accommodation should be provided on the basis of 50% male staff: 50% female staff. WC suites, wash-hand basins, urinal bowls and modesty divisions should be of good quality vitreous china.
- 5.13.6. The preferred method of sanitary towel disposal is by bin service that will be arranged by the client. Consideration should be given to the appropriate positioning of soap and roller towel dispensers.
- 5.13.7. Unless referred to in the brief, where toilets are designated for particular groups, the following general provision shall be made:

	WC's	WHB's	Showers	Urinals
Male	1/20	1/15	1/40	1/15
Female	1/15	1/15	1/40	

5.14. **Public Toilets**

- 5.14.1. Where toilets are provided for the public, the provision is to be as the brief with separately accessed unisex disabled person's compartments.
- 5.14.2. Public toilets should be located in a supervised area with the facilities designed to be vandal resistant, with hard impervious floor and wall finishes resistant to damage and graffiti.
- 5.14.3. Toilet fittings, sundries and lighting fitments should also be as vandal resistant as possible and consideration should be given to concealing flushing cisterns. Locks are to be provided to the entrance doors.

5.16. **[Lounge and Break Areas]**

5.17. **Restaurants, Kitchens**

- 5.17.1. The location of these facilities should be carefully considered at the very earliest stage due to the fundamental effect on basic planning considerations, structural design, service requirements, health and safety provisions, arrangements for deliveries/disposals, etc. Any catering facilities for public or Press must be wholly self-contained within the public area and cannot share facilities with Members/staff restaurants/bar (such as kitchens and washing up facilities) which would allow potential access to controlled areas.
- 5.17.2. All accommodation should be designed as a modern unit providing a good working environment for the kitchen staff and quality dining areas complete with furnishings and fittings.
- 5.17.3. The client's agreement will be required to the design standards and materials proposed prior to finalisation of the design.

The kitchen facilities should be carefully sited to ensure minimum impact on the environment while remaining easily accessible, both for staff and deliveries.
- 5.17.4. Kitchen facilities are major energy consumers and designers should therefore incorporate measures to reduce energy consumption.
- 5.17.5. Fly screens should be provided to all windows in kitchen and food

preparation/storage areas. Fly screens should also be provided on the air intakes and exhausts of ventilation systems.

5.17.6. Trolley standing areas should be located within the kitchen and wash-up areas and not in restaurants.

5.17.7. A mains water supply should be provided within the restaurant together with mains water/electrical services for drinks dispensers.

5.18. **Smoking Rooms**

5.18.1. Smoking is not likely to be permitted in the building generally or in staff/mess rooms. Separate smoking facilities are therefore required.

5.18.2. Smoking rooms should be appropriately sized and should be provided with suitably sized 100% fresh air mechanical ventilation and a dedicated extract system, whose discharge shall be located to prevent re-entrainment by air intakes.

5.19. **First Aid Accommodation**

5.19.1. First Aid accommodation should be provided in accordance with the brief.

5.19.2. Each room should have the following:

A separate WC compartment, wash-hand basin with hot, cold and drinking services with wrist action taps, mirror, paper towels, bin, etc.

Local light switching and inspection lamp.

Space to accommodate a bed, stretcher, cabinet and table.

Visual/audible alarm activated by a floor-length pull-cord, sounding in Security where staff can register the alarm.

Door locks capable of being easily opened from the outside in case of emergency.

5.20. **Shower Room**

5.20.1. Shower rooms should be provided as required by the brief. They will be unisex and suitable for use by disabled people.

5.20.2. Shower rooms will be provided with non-slip floor finishes, fully tiled walls to shower areas, thermostatic shower mixing valves with adjustable height spray outlets, seating and shower curtains, with finishes suitable for a humid environment.

5.21. **Cleaner's Room**

5.21.1. Cleaners' rooms should preferably be provided on each floor of the building, see brief.

5.21.2. The rooms should be adequately sized for the purpose, and contain a bucket sink complete with grating, hot and cold water supplies, side drainer/laying space and adequate storage shelving.

5.21.3. The floor shall be hard impervious material with a coved skirting in matching material. Walls will be tiled around the sink area, and the preference is for tiling

throughout the room to 1500mm above floor level.

5.22. **Plant, Switch and Lift Motor Rooms, and Service Units**

- 5.22.1. Plant areas and switchrooms should be sufficient in scale to enable easy and safe access to equipment for inspection and maintenance and to facilitate the removal/replacement of plant components.
- 5.22.2. Access to plant and switchrooms should be restricted to authorised persons only and exit doors should have panic latches. Plant, switchrooms and IT rooms must be lockable.
- 5.22.3. Access arrangements must permit the removal of the largest and heaviest items of plant without the need for dismantling, except where the plant design specifically provides for a large component to be broken down into smaller parts (e.g., sectional air handling plant).
- 5.22.4. Plant and switchrooms shall be adequately lit, including emergency lighting, and ventilated to provide a safe working environment. Ventilation provisions should be sufficient to avoid excessive heat build-up and provide sufficient combustion and ventilation air in boiler rooms.
- 5.22.5. The detailed arrangements shall provide for, drainage gulleys in plantrooms housing water services, arranged to prevent loss of waterseal or with a trap replenishment system; provide adequate socket outlets with ELV/RCD protection; site air intakes well away from sources of airborne contaminants; provide noise and vibration attenuation as necessary to ensure a satisfactory environment in adjacent areas and external to the building.
- 5.22.6. Primary plant such as boilers, chillers, generators, substations to be located wherever possible at ground floor level, and not above IT rooms or equipment.
- 5.22.7. Attention should be given to the need to provide accommodation for IT containment systems in the form of space for vertical risers and IT cupboards located one above the other on multi-storey developments.
- 5.22.8. All lift machine rooms, shaft sizes and other facilities should comply with the requirements of BS.5665, Part 5. Lift machine rooms will contain only lift machinery and any associated lift control equipment and there should be safe access to all lift machine rooms (i.e. by a fixed staircase).

5.23. **Loading Bays**

- 5.23.1. Loading bays including any loading bay lifts or dock levellers should only be provided where called for in the brief, and should be designed specifically to suit the intended purpose.
- 5.23.2. Where loading bays are provided the designer should ensure that adequate vehicular access is provided for the type of vehicles, which it is, intended will use the loading bay.
- 5.23.3. The vehicular access should not cause a hazard to other users of the building or the public.
- 5.23.4. Due attention should be given to any security provisions and the need for specific

facilities such as motorised doors/roller shutters, warm air curtains, etc, that may be referred to in the brief.

5.24. **Waste Disposal**

- 5.24.1. Waste disposal facilities adequate for and suited to the purpose and size of the development should be provided. The facilities are within the building and house containers compatible with the refuse disposal service.
- 5.24.2. The location should be in a lockable area resistant to vermin attack and should contain a separate space for the storage of recyclable materials.
- 5.24.3. Care shall be given to the location and design of waste disposal facilities for kitchen waste.
- 5.24.4. The majority of paper with any security implication will be shredded at source in the building and then held prior to collection in a store room near the loading bay, which should also have a secure area for unshredded secure material.

5.25. **Windows and Façade Cleaning**

- 5.25.1. Suitable arrangements, access and facilities should be incorporated for safe window façade cleaning. The preferred method is by cleaning from the inside.
- 5.25.2. Facilities should be incorporated to enable safe, economic cleaning of atria/roof glazing without undue disturbance to members of staff.
- 5.25.3. If the design of the building envelope requires that cleaning facilities are required other than for windows, (e.g., fully glazed elevations), then a cradle system either powered or manually operated must be provided.
- 5.25.4. Suspended access equipment should be provided where windows are over 9m above ground level and cannot be safely cleaned from inside.
- 5.25.5. Buildings over 9m and up to 30m high should be provided with facilities for either manual or power operated cradles and that above this height must have the facility for power operated cradles.

5.26. **Cycle Store**

- 5.26.1. A covered cycle store of the size required by the brief should be provided in a location, which ensures the safety of the cycles, preferably within a controlled and monitored area.
- 5.26.2. Showers are provided throughout the building. Changing lockers will be included in the furniture provision.

5.27. **Clause Deleted**

5.28. **Main Hall**

- 5.28.1. The access for the public to the process of government is an important aim to be reflected in the accommodation provided and the design of the building.
- D2.01 The various public spaces reflect this aim extending access into the viewing gallery of the Debating Chamber.

- TG.20 – Provision is made here for Members to meet their constituents and others and for
 TG.24, TG.25 the education of school children in the democratic processes of government.
 – TG.28 &
 DG.05 Visitors to the Parliament building are to be welcomed and the facilities provided will
 emphasise this.
- 5.28.2. Toilets
 36.1m²
- PG.23 PG.24 Toilets are provided for male and female visitors and for disabled people.
 The finishes should be robust and easily cleaned.
- 5.28.3. Vending and Store
 10m²
- Special arrangements can be made within the Parliament building catering provision,
 if visiting groups requires meals.
- The intention is to provide vending facilities for short stay visitors, these are,
- Queensberry House - free vend "bean to cup" hot drinks vendor for Presiding
 Officer's visitors etc.
- Delivery Bay - hot drinks vendor for out of hour's security staff.
- MSP Block and Fitness Suite - combination machines vending confectionery/snacks
 and canned drinks.
- Public Restaurant - canned drinks vendor.
- An additional canned drinks vendor is included in the specification but no location
 has been agreed.
- 5.28.4. Education Centre
 (33 - 43 persons) (2) 66m²
- DG.05 The Education Centre should be a stimulating environment where young people, and
 other educational groups, can learn about the Parliament through a variety of
 mediums. This would include watching presentations delivered through ITC,
 participating in group discussions, watching live footage of the Debating Chamber
 and Committees, participating in question and answer sessions with Members,
 looking at the Parliament website projected onto a large interactive screen... There
 should be an emphasis on the use of technology, as the educational community will
 expect this centre to set an example of good practice.
- The space must provide flexibility. It will be used for lecture style presentations to
 visiting school groups and other educational groups. It will also be used for events
 such as pupil parliaments, committee simulations and teachers seminars. Therefore
 it should be possible, and simple, to adapt the layout of seating and any other
 furniture.
- With these points in mind, the following list identifies some of the core equipment
 and facilities required.

Seating

33 chairs with removable writing tablet and underseat storage basket for young people participating in visits (recent plans show 27 seats only). Seats should be suitable for adults as well as children.

10 additional chairs for teachers/group leaders and MSPs.
2 chairs (for use at work stations) for Education Service staff

Other furniture

2 small work stations/desks for Education Service staff, one of which could hold the colour printer.

1 small table/cabinet on wheels to hold IT projector or overhead projector.
2 table-height, lockable cabinets on wheels with cupboards and drawers.

Presentation equipment

“Magi-rail” or other track presentation system to be fitted on interior wall (to shop) and narrow wall at back of room.

System above to include the following equipment - 1 high definition projection screen, 2 flipcharts, 1 whiteboard and 2 magnetic/felt display panels.

Magnetic/felt panels will be used to display young people’s artwork, Education Service resources etc.

Glazed areas

Electronic blinds/curtains on all windows and roof lights. This system should have the flexibility to close one blind/curtain independently of the others and create varying degrees of blackout.

The wall between the shop and the Education Centre should be solid to 2.3m and glazed above 2.3m – confirmed by Ross Milne 12-02-02.

Lighting

A flexible lighting system will be required. It should include dimmer switches and offer a range of lighting levels from 50 lux to brighter levels of up to 200 lux.

The lights should be focussed on the central part of the room where visitors will be seated.

Light from this area will then filter to the corners of the room.

A desk top/free standing lamp may require to be integrated into the workstation to illuminate the PCs

IT and electronic equipment

2 PCs with slim-screen monitors for staff use. These computers should be networked, have access to the internet and Parliament live, and have multi-media software installed to allow video clips and sound to be used in presentations.

1 plasma screen to project from PCs, a video recorder and the Parliament’s internal broadcasting channels (including live feed from the Chamber and Committee rooms or the Information Channel).

1 interactive whiteboard*
1 projector suitable for use with PCs and laptops

1 colour printer
1 telephone line
Induction hearing loop/infra red system for people with hearing impairment
Power sockets and IT points should be located around the room.
* indicates optional items

- 5.28.5. Main Hall
(1) 60m²
- DG.15 This is an open area preferably near the entrance to the public area where exhibitions and displays introducing the public to the work and history of Parliament can be arranged.
- The lighting display areas should be flexible to allow for a variety of uses.
- 5.28.6. Garden Meeting Room 1 - 9
(x 9) 108m²
- TG.20 These rooms, while forming part of the public area are for the use of Members of
TG.21 Parliament; access is by swipe card from the controlled area, which is not available
TG.22 to the Public.
TG.23
TG.24 Members must be able to access these rooms without going through the public
TG.25 areas and the public may not use these rooms as a route into the Parliamentary
TG.26 areas.
TG.27
TG.28 There are three sizes of room - first for meetings with small groups of 6-8 persons [4
x 13.5m²], second for meetings with individuals or 2-3 persons [4 x 6.75m²], and
finally for meetings with larger groups 12-16 persons [1 x 27m²] meeting privately
with the Member.
- The rooms should have emergency call buttons linked to Security Control Room,
where a local indicator in the Security Control Room should identify which room.
- 5.28.7. Cleaner
5m²
- A room with bucket sink, shelving and cupboards close to the vending area and
toilets
- .
EMBT/RMJM Statement of Compliance [Letter 1089/TJK/LM – B4 14 February
2003]:
A cleaners store is located off the finishing kitchen to provide convenient facilities
adjacent to this area.
- 5.28.8. Main Hall
665m²
- DG.15 On the days when Parliament sits, progress by the public and Press from the
general area through to the viewing gallery will be controlled by Security.
- DG.19 The public information desk will be located in this area with space for 4 staff. The
desk and associated area should include;
- Lockable cupboards and drawers.

Open shelving behind the desk for storage of staff reference materials.
4 PC's for staff use (in-set into desk) and 1 extra monitor for public to view.
4 phone lines.
1 dedicated phone line for mini com / text phone.
1 dedicated line for credit card machine
Fax machine.
2 printers.
4 staff seats.
2 whiteboards or similar for staff information.
Section at height for wheelchair access.
Induction loop system.
Distribution racks for literature (attached to the desk and free standing).
Video / electronic information boards for public view.
Emergency "panic button" alarm system.

There is a requirement to create an area where the public can consult official publications in print format and on-line. This should be located near to the Information Desk and should include;

10 public seats and 4 wheelchair spaces
networked touch screen PC's allowing public access to the Parliament web site
bookshelves for publications
tables (coffee tables and desk height)

Space is also required for the issue, storage, recharging and administration of an audio tour. This could be included with the desk or a separate desk provided for it within the general public areas.

Visitors will have free use of the general area, which apart from the access to toilets, vending, class room and exhibition space will contain displays of educational material, education by video, display and exhibition space for particular projects by both Parliament and groups to keep the public informed.

During the plenary sessions in the Debating Chamber the amount of seating space may be less than the numbers wishing to view the proceedings.

To compensate for this a large screen, showing the Parliament at work in the Chamber will form part of the display.

Sound for this will be provided by an infrared loop system with headsets to allow the normal business of the general area to take place undisturbed by the sound broadcast.

DG.03 &
DG.04

The area may also be used during non-parliamentary time for non-government exhibitions - art, sculpture, conservation, etc.

A souvenir shop selling pamphlets, brochures, mementoes is part of the general area, and should include;

Space allocation of 76m². Although the space can be flexible in design, it should have a defined entrance and exit in order to meet security requirements.

The configuration of the shop sales /administration desk and retail floor should allow access for wheelchair users.

In addition to the retail floor area, there is a requirement for an enclosed office space to accommodate a safe and an area for banking / bar coding of goods. This will require IT connections (PC and printer) and a phone line. The office should be accessible to wheelchair users.

An automated method of counting visitors is required at the shop entrance / exit.

The shop retails a variety of foodstuffs including chocolate and other items, which are vulnerable to high temperatures. Air conditioning may be required in order to have these items on open display.

Consideration needs to be given to the volume of heat generated by display lighting in this respect. This needs to include any lighting within the display cases as well as general lighting.

A sales counter and administration desk is required within the shop. This should be accessible to wheelchair users as well as staff and customers. The desk needs to be designed to accommodate the following equipment.

- 2 tills
- Credit card machine
- 2 PC's
- Bar code reader
- 2 chairs
- Printer
- Fax
- 3 phone lines (2 standard and 1 dedicated for credit cards)
- Goods wrapping service surface
- A serving section at wheelchair height
- Induction loop system
- Enclosed shelving, lockable drawers and Cupboards
- Emergency alarm system

The retail floor requires being equipped with "permanent" but flexible shop display equipment including wall mounted and free-standing units. Different types of unit are required to display the variety of goods the Parliament sells. The types of unit required include;

- Lockable show cases
- Open shelving
- Book shelving
- Hanging rod system (e.g. to accommodate calendars, t-shirts etc)
- Card racks
- Hanging system for framed items
- Chill cabinet for food items
- Video and television screen with speakers
- Sound system with speakers
- Display unit to accommodate public access touch-screen PC and adjacent printer (to allow access to an on-line catalogue of shop goods and official publications)
- Mannequins / display furniture for textiles
- Public post box

The configuration of the display units should include storage cupboards. Internal display lighting is required within the display units as well as adjustable general lighting.

In addition to the permanent display equipment above, some portable display cases and panels are required to show shop items in the rest of the complex. This should

include a hanging system for framed pictures and photographs.

Four public seats should be provided within the shop

The shop store requires air conditioning for storage of foodstuffs, as well as a phone line and general shelving.

Storage for all these activities should be included and a small-screened area set-aside for lounge seating and public telephones, coin and card operated.

5.28.9. First Aid Room
14.9m²

PG.02 This should be sited off the General Area and provided in accordance with the description at 5.19.

Drinking water facilities will be installed at various communal areas within Holyrood, namely:

Adjacent to the First Aid room
Within the Public Café
Within the Crèche facility
Adjacent to the fitness room

5.29. **Press Area**

5.29.1. There are a number of areas allocated in the building to the Press, which are used to communicate or hold interviews with the Press.

They have a presence in the viewing gallery of the Debating Chamber and require media broadcasting outlets.

"Press" is used to cover newspaper, television and sound cover.

5.29.2. Chamber Conference Room
120.6m²

P1.02 The room's main use will be to present press conferences to the media in an environment, which enables TV and radio broadcasters to cover proceedings effectively. It is also envisaged that the room would be used for delivering presentations to delegates visiting the Parliament.

The facilities to be included within the Chamber Conference Room are to include;
Seating for at least 40 members of the Press
Press Wallbox
Presenter / MSP Rostrum
Projection screen & projector, or plasma screen
Picture monitors
Microphones for desk and rostrum [1 per person, + spare]
PC for presentations
Sound reinforcement
Acoustic treatment
Control of lighting system from the desk / rostrum
Entry lights on all doors
Floor boxes

Microphone switches
Microphone amplifiers
IT outlets [to coffee lounge area]
Audio and Video level monitors
Sound mixer
Feeds to press
Equipment racking
System switcher [sound and vision switching to displays]
Video recorder / player
Cassette recorder / player

The SPCB has stated that the southern end of the room should be fitted out to include a catering area where MSPs will be able to access teas and coffees. The furniture and fittings in the catering area must be capable of easy removal to allow the whole room to be used for its primary function.

The catering facility should comprise a table from which hot and cold beverages in flasks/bottles, biscuits and fruit can be offered together with the associated crockery [that is, there is no requirement for the facility to be supported by building services].

5.29.3. Gallery Office
(6) 30m²

P2.14 A room of 30m² is required by the Press Association or its equivalent to provide verbatim reporting of the proceedings in the Debating Chamber to a large number of news outlets.

A detailed schedule of the facilities required will be included in the Room Data Sheets.

In summary, there will be six desks with PA equipment, VDUs, bookshelves, filing cabinets and lockers.

The services include ISDN telephone system with 10 lines; clean feed of the proceedings; video grab from the Chamber; reception of satellite and terrestrial television channels. The room will need to be sited adjacent to the Press Area in the viewing gallery.

This area should have an Inergen gas suppression system.

RMJM BS, Statement of Compliance [Letter Ref: 1089/IMH/SP/NA 29 August 2003]:

No provision has been made as the brief provided on the room data sheet refers only to detection. Had this appeared on the data sheet this would have been reviewed as part of the risk assessment process.

5.29.4. Television and Sound Broadcasting
160m²

P2.01 This area will be occupied by a number of television and radio broadcasting
P2.02 companies.
P2.03

P2.04 It will be divided into units according to individual requirements as agreed with the
P2.05 Parliament.
P2.06

- P2.07 The resulting rooms will be used as studios, reporting, and editing and office spaces.
P2.08
P2.09 They will be highly serviced with IT equipment, monitor and lighting, and will in part
P2.11 require cooling or air-conditioning.
P2.12
- The area should be located off the Public area and have access for Members of Parliament to be interviewed on TV and sound.
- This area should have an Inergen gas suppression system.
- RMJM BS, Statement of Compliance [Letter Ref: 1089/IMH/SP/NA 29 August 2003]:
- No provision has been made as the brief provided on the room data sheet refers only to detection. Had this appeared on the data sheet this would have been reviewed as part of the risk assessment process?
- 5.29.5. **Press Rooms**
160m²
- PM.01 The Press wishes to locate a number of reporters and staff in the Parliament
PM.02 Building.
PM.03
PM.04 An area has been set aside for this, but the subdivision into rooms has yet to be
PM.05 agreed.
PM.06
PM.07 Although one room may be for the photographic work of development and editing,
PM.08 with a consequent demand for additional services, particularly ventilation, these
PM.09 rooms are designated as offices.
PM.10
PM.11 They have a high occupancy rate around 1 person/7m² and will be fully fitted with IT
PM.12 services, fax and telephones.
PM.13
P2.10
5.29.6. **Toilets**
30m²
- PM.23 Provide toilets for male and female for TV, Broadcasting and Press - each 15m² - 3
PM.24 WCs, 3 wash-hand basins.
- 5.30. **Debating Chamber**
1200m²
- 5.30.1. The design of this, the most important area of the Parliament building, should reflect
the commitment to open government.
- D1.01
It is probably at least a two-storey space because of the viewing gallery at the upper
level.
It must be located close to the ancillary accommodation but also accessible at the
upper level from the public general area.
- 5.30.2. The Press conference room and Press area should be planned adjacent to the
Chamber to allow ease of access by Ministers and Parliamentary staff and ready but
controlled access by the Press.
- 5.30.3. The arrangement of the Members' seating reflects the role of the Parliament.

A horseshoe or semi-circular arrangement with the Presiding Officer at the focal point would appear to be the most appropriate.

5.30.4.

The Principal Clerk and the Minute Clerk will flank the Presiding Officer on either side. Positioned to the front and left of them, and at a lower level will be seating for a Voting Clerk and one spare.

Electronic control of both voting and speaking should be installed, and control of the IT screens and particularly the voting system should be available to all the Clerks positions.

A lectern with microphone and possibly a display of the time available for speaking, controlled by the Presiding Officer, should also be provided.

The generally accepted principle is that each MSP should have a desk microphone at their seat.

The Presiding Officers desk and chair should be such that it is either higher or larger, or both, than the Clerks desk / chairs.

The mace should be situated in the Debating Chamber, directly in front of the seating for the Presiding Officer and clerks. It will be in a secure display case and should be visible by all MSPs and those in the public gallery.

The display of the mace should be able to be adjusted to signify when a meeting of the Parliament is taking place. (currently indicated via the removal of the lid)

The sound system should be complimented with adequate ambient microphones to pick up background sound and also to act as a backup system in the event of a failure of the stem microphone system

Digital Clocks:

[Number dependant on the design of the Chamber] with approximately 12cm high characters for the hours and minutes display and 10cm high characters for the display of seconds. 230v AC power supply. Should include input for connection to debate timer facility, and receiver to allow radio code synchronisation.

The over-riding requirement is that all Members, as well as the Presiding Officer and clerks in the well of the Chamber, are able to see one clock displaying actual time and one clock displaying current speaking time. Provision should also be made for a clock on the Presiding Officers desk [only visible to the Presiding Officer], which displays the amount of time left to speakers.

There should be a mechanism on the clock face to alert Members that speaking times are coming to an end: flashing colons are suggested as one possibility.

Clocks linked to the same system are also required in the following areas,

Presiding Officer's office
Presiding Officers Ante room
All Committee Rooms
Official Report Office
Chamber Office, Business Team

Official Report Booth

1 x Debate Timer:

This should be compatible with the digital clocks specified above and should include the facility for pre-setting at least two [2] different time limits for speakers in debates. When activated, it should automatically change the display on all but one of the digital clocks specified above from the time of day to timer display. The timer should have the facility to either:-

Count down from set number of minutes to zero when the display should then flash until reset by the operator; or

Count up from zero - indicating the time a speaker has been on their feet - until reset by the operator.

The operator should be able to restore the time of display to all clocks when the timer facility is no longer required.

The timer should also have the facility to act as a stopwatch to count up without limit of time until reset by the operator.

The intention is that the main debate timer unit would be situated and controlled from one of the clerks' desks.

2 x slave units:

To allow the main functions of the debate timer system to be operated remotely by the clerks seated on either side of the Presiding Officer.

1 x omni-directional radio code receiver head:

To synchronise digital clocks specified to radio time code information from radio station MSF at Rugby.

5.30.5.

The First Minister is likely to be a Member of the majority party and the seating of this group will reflect this connection, but also the stature of the position.

The Minister is likely to be flanked by their Ministers and there will be other Junior Ministers who will require front bench status.

Separate seating for the Lord Advocate and the Solicitor will be required if they are not MSPs.

Seating is also required at the rear of the Chamber for 24 officials. This should be arranged using three banks of 6 seats and two banks of 3. These will be allocated as follows;

One bank of 6 and one of 3 for Parliament Staff

One bank of 6 and one of 3 for Executive Staff

One bank of 6 for Non-Executive Officials.

The banks of desks should be identical, and thereby interchangeable, so that allocation can be changed depending on party balance, and where the party in power sits within the Chamber.

- 5.30.6. The total number of Members including the Presiding Officer and Ministers will be 129.
- The seating arrangement should recognise that there could be at least four political parties who may wish their Members to sit together.
- The seating should be capable of grouping together to reflect this wish.
- The seating shall be arranged such that the rear four rows should be equidistant from each other.
- 5.30.7. Individual seating with space around for the individual to enter or leave his/her seat is the desired provision.
- Papers may be brought into the Chamber and there should be a provision for temporary storage.
- The allocated space should be wired through floor terminals for electronic voting and individual sound.
- Each floorbox should be configured with 4 Nos. Cat 6 (or equivalent) RJ45 outlets plus one twin 13amp socket.
- If the Parliament does not adopt electronic voting then the Foyer space can be used for the Members to vote.
- 5.30.8. The floor of the Chamber should be gently sloped and the seating arranged in a staggered layout to give each Member a clear view of the lectern and the Presiding Officer's dais.
- 5.30.9. There are others present in the Debating Chamber who have important roles to play.
- The Clerk of the Parliament and the support staff (3 persons) should be as defined at 5.30.4. and facing the main body of the Chamber.
- 5.30.10. The Parliament controls the output of television and sound broadcasting and radio/TV control rooms will be located in the Broadcast Services accommodation in the Upper Basement.
- 5.30.11. The Scottish Parliament Official Report will provide a substantially verbatim report of all meetings of the Parliament and its committees.
- D1.03 & D1.04 Seating for four persons is required.
- Reporters work in a rota of short (five or 10-minute) "turns", so easy access to the Chamber is important, as is convenient access by foot to the Official Report office.
- Reporters note, among other things, which member is speaking and an outline of what they are saying.
- An uninterrupted view of all members' faces and a good acoustic location are therefore essential, as is a surface on which to write.
- A clear view of a digital clock used or synchronised with that used by the Presiding Officer is also essential.

Reporters and chamber attendants should be able easily to send, deliver, collect and return notes to members/civil servants/the occupant of the chair

Requirements for this seating in the Chamber are:

Raised seating to allow clear sight lines and good acoustics for all parts of the Chamber

A desk and two chairs next to each other

A clear view of a digital clock (or one built into the desk).

Ample writing surface

IT facilities including mouse, keyboard and a foldaway screen at both seats, for use as necessary (e.g. if there is not a clear view of voting/presentation screens); flexibility to accommodate future innovation and development

Ability to plug into the sound/interpretation system, for example, a jack plug for headphones; channel selector and volume control

A ledge under the desk to store papers

A third chair close to the desk, for staff waiting to take over

In addition, it has been agreed that official reporters will make use of the parliamentary officials' table at the rear of the Chamber for writing notes to members. There needs to be a letter rack-type storage area for envelopes, notepaper etc. and a delivery/collection point convenient for security staff delivering and receiving the notes to members.

5.30.12. Although security guards may not always be present in the Chamber, seating is required for 4 guards, 2 and at the entrances and 2 with an overview of the viewing gallery.

5.30.13. The Foyer is an important part of the Parliament space.

P1.17 It forms part of the Debating Chamber but should be screened both visually and acoustically from the Chamber.

Its purpose is to allow Members to leave the formal seated area without leaving the Chamber and to be able to discuss together items of business while the work of the Parliament proceeds.

If electronic voting were not adopted, this area would become the voting lobby.

Low level seating can be a problem for people with restricted mobility. Some higher seats and tables should also be provided for their use.

5.30.14. It should be possible to leave the Chamber for the ancillary accommodation or the Press conference room.

5.30.15. An infrared system for the hard of hearing and translation systems will be installed in the Debating Chamber. Disabled persons may also be Members, and their requirements should be respected.

There are detailed requirements for services for disabled people in Section 8 including the installation of a Palan system, or similar [as and when deemed necessary].

5.30.16. At 5.30.10 reference is made to the Television and Sound Broadcasting of Parliament, controlled by Parliament.

D1.02

To achieve this, accommodation is needed, in the Chamber, which is air-conditioned and soundproofed but could still benefit from a view of the Chamber.

Located below the viewing gallery, the accommodation will take up floor space, which could in other circumstances be redundant (10).

5.30.17. The following space requirements for the In-House Television and Sound Broadcasting areas are required:

UB.99 TV Control Room
(4) 40m²

This will include control of the cameras, vision switching and captioning. The area will include a recording and editing suite and will mainly be used in association with the Debating Chamber.

Recording and Editing Rooms

For sound and vision recording

UB.98 One room (1 - 3) 20m²

For the Debating Chamber, this may also house signing and subtitling facilities.

UB.100 Four rooms (1 - 2 per room) 50m²
UB.101 (IN TOTAL)
UB.102
UB.103

UB.97 Apparatus Room
20m²

UB.106 Termination Control Room
40m²

It is not necessary for these rooms to have a view of the Chamber but all rooms should be co-located.

5.30.18. Workshop
(1) 15m²

UB.96

UB.95 Rest Room
15m²

5.30.19. It is suggested that all of this accommodation can be located remote from the Debating Chamber with proximity to the Communications Room and PABX an important factor.

The Press Conference Room should be connected to the control rooms to enable it to be used as an additional Committee Room if required.

These control rooms will require cooling/air conditioning.

5.30.20. Archive Storage
(1) 15m²

UB.91 Archive Storage, for the recording of debates in the Chamber and Committee Rooms, will be held in the Parliament for the current year, and the previous year.

Racking for approximately 2,500 videotapes per year is required.

5.30.21. Translation Rooms
(x2) (6) 24m²

D2.02 Two translation rooms each 10m² should be located above the sound broadcasting
D2.03 commentary booths.

These are soundproofed from exterior uses and each other, and are air-conditioned spaces with a view over the Debating Chamber.

5.31. **Debating Chamber – Upper Area**
272.5m²

5.31.1. Consisting of,
Public Gallery
Press Gallery
Guests' Gallery

The main element of the upper part of the Debating Chamber is the viewing gallery for 200 persons excluding Press, with tiered seating looking out over the Debating Chamber towards the Presiding Officer with the Clerk of Parliament and their assistants.

Space should be provided for 6 wheelchair users with the option of flexible additional spaces for special occasions.

5.31.2. The viewing gallery is for members of the public but will also accommodate researchers or assistants who have a particular interest in a Bill or presentation by a Member.

Their access to speak with Members during the plenary sessions must be controlled by Security, who require seating for three Security Officers in the gallery.

Some seating will be provided with armrests for people with impaired mobility.

5.31.3. The gallery is open to the Debating Chamber floor below.

The seating is raked, tip up with no note taking tables or IT facilities for the Public.

The area has an infrared system for the hard of hearing, switchable to a separate channel for simultaneous interpretation.

5.31.4. Space should be reserved in the viewing gallery for 30 members of the Press.

They may have an area separated from the public by handrail or screen.

Facilities for sound reception are to be available.

Any transmission of reporting must be done outside the gallery from the Pressroom.

The entrance to this area will be separate from the public entrance but available to accredited Press members only.

The seating in this area should have note-taking fittings.

There should be 1 space provided for wheelchair users. Some seats should be provided with armrests for those with impaired mobility.

- 5.31.5. Sound, camera and monitoring is required in the viewing gallery to record, film and transmit sound from the Chamber below.
- 5.31.6. Three (3) sound broadcasting live commentary booths are required.
- D1.05 Each booth, soundproofed and air-conditioned, should be located not to obscure the
D1.06 Public or Press view of the Chamber.
D1.07
- The area of the booth is 5.7 - 5.8m² for single person occupancy.
- Careful consideration should be given to the design of these to ensure they do not exclude their use by wheelchair users.
- 5.32. **Debating Chamber - Ancillary Accommodation**
- 5.32.1. The various uses, which constitute this section, should be readily accessible from the Debating Chamber, but some areas such as committee and conference rooms can function as self-contained suites.
Access for the public to committee rooms, especially the large committee rooms, should be planned not to impair the level of security.
- The Press will also require access.
- 5.32.2. Travel
(2) 25m²
- FG.12 This facility, although controlled by the Directorate of Corporate Affairs, should be located off the Foyer at 5.27.13. to be available to Members and staff.
- The travel section is likely to be franchised to a contractor with a resident representative.
The area with an open access to the concourse should be capable of securing out of hours.
- This area will have an "Off-Air" TV feed.
- 5.32.3. Official Report
(37) 364.5m²
- T2.01 The Official Report office must be close to the Chamber and, if possible, close to the

- T2.03 committee rooms.
- T2.20 An area for note taking is provided in the Chamber (see 5.30.11) from which there is a direct IT link to the official Report office, where debates are transcribed, edited and compiled before being dispatched to the central distribution office for publishing.
- Apart from reporters, the office comprises the editor, the deputy editor, and sub-editors, the office manager and administrative staff.
- As described in 5.30.11. there is a good deal of movement between the Chamber and the office. Reporters should have free access to their own desks such that they do not have to disturb their colleagues or pass through zones for administrative staff and sub-editors.
- Members who wish to check their own speeches before they are dispatched to the CDO, and civil servants who wish to check their Ministers' speeches, may do so by addressing themselves to the sub-editors. There should therefore be space for about six (6) 'visitors' near the sub-editors. A cellular room is not required for visitors but low-level sound baffles around the six desks would be advantageous.
- The Official Report is not expected to have abnormal administrative filing requirements; it carries a modest reference library (about 10m²) but it is likely to build up a substantial quantity of documentation, including all back numbers of reports. This documentation can be held in the planned 20m² tape recording and storage area. The 15m² room originally allocated to the editor should be a shared office for the editor and deputy editor.
- Within the general space allocated to Official Report there should be a small cellular meeting room, capable of holding 8 staff, intended as a quiet working area for proof reading and also suitable for confidential meetings.
- The open plan area should be flexible enough to allow creation of an additional quiet area for dictation using Voice Recognition Technology if this is required in the future (such a decision will be taken corporately across the Parliament).
- The open plan office, the quiet room and the editor's/deputy editor's office should be provided with radio controlled clocks and live broadcast feed located in such a way that all staff can see them from their desks.
A cellular space for photocopying and collating should be provided.
- 5.32.4. Business Managers Offices
(x4) (8) 174.55m²
- M3.04 It is assumed that there will be 4 offices each with space for the Business Manager,
M4.04 his/her 2 assistants and a meeting space for 12 persons. These rooms should not be grouped together but accessed from the Concourse and may be separated by other uses.
- T4.21 Two of the Business Manager offices should be located along with the MSP
T4.22 accommodation; the other two should be located alongside the ministerial
T4.23 accommodation.
- 5.32.5. Lounge
60m²

T1.20 Accessed from the Concourse, close to the Debating chamber, the room is for Members only and is used as a retiring room during the day's business in the Chamber.

It should have a coffee/tea servery and be equipped with lounge chairs, small tables, a monitor, TV and a division bell.
Newspapers should be readily available.

Service to this area should be from one of the finishing kitchens at 5.39.22.

5.32.6. Toilets for Staff/MSPs
20.72m²

P1.19 These should be sited close to the Debating Chamber for the use of those working in
P1.20 the Chamber, and include one unisex toilet for disabled people. Provide 4 WCs and
4 wash-hand basins in female and 2 WCs 2 urinals, 4 wash-hand basins in male
toilet.

The disabled unit shall be alarmed.

5.32.7. Committee Rooms [small]
Committee Rooms [large]
[small] 3 - 6 446m²
[large] 1 & 2 397m²

All Committee Rooms (x6) – General Requirements

TG.60 Given the importance of the committee structure to the work of the Parliament, the
TG.40 provision of an adequate number of committee rooms of varying sizes is a priority.
T1.40 All committee rooms are accessible to the public and should be near to the Debating
T1.60 Chamber and the public concourse.

T4.40 The six committee rooms - 4 smaller and 2 large – together with their ante rooms,
T4.60 should be planned as a suite with controlled access to the suite by either pass or
escort from the public area. Each committee room and ante room should also be
individually secure with access controlled either by pass or key.

Each of the six committee rooms should have the following facilities:

Each of the table spaces must be fitted with audio microphone and voting units
(whilst a decision on the use of voting has not yet been taken, provision of the units
would allow automatic microphone, camera and captioning operation as well as
meaning that electronic voting could be used at a convener's discretion).

There should also be a total of 5 spare microphone/voting sets for use in any of the
six committee rooms in the event of breakdown or if more than 26 people need to be
seated around a committee table.

The table must be accessible to and usable by wheelchair users.

The table should incorporate modesty panels and the seats should be on wheels for
easy movement.

There should be cabling for IT at all table spaces. In addition, there are the following
specific IT cabling and desk space requirements:

Official Report spaces should be able to accommodate equipment associated with a digital audio system.

The clerks' spaces should be able to accommodate electronic voting control equipment.

The broadcasting spaces should be able to accommodate microphone operation equipment.

There should be an "official's box" located close to the witness seats, providing seating for 6 officials to allow those giving evidence to be briefed as necessary. This should incorporate a table (or alternative surface for writing).

There should be a laying out table for papers.

There should be a separate small table capable of holding tea/coffee requirements for members, staff and witnesses.

There should be wiring and space for equipment to relay proceedings, including sound, vision and interpretation to everyone (i.e. Members, staff, witnesses, officials, press and public) in the room via screens and a sound enhancement system, and to others out with the room.

There may be a need to have a sign language interpreter in the room for one or more individuals and who may need to be watched via monitor by those who cannot see the signing direct)

There should be two chairs (preferably with fold-away writing table) for security staff, one to be located by public entrance with full view of public seating and the other on the opposite side within easy reach of the committee table.

There should be a fixed induction loop system for the hard of hearing and an infra-red sound enhancement system.

There should be digital clocks synchronised centrally.

There should be lights outside rooms to indicate that a live broadcast is in progress.

There should be two-way peep holes in all committee room and ante room doors giving access to corridors.

There should be space outside each entry door to committee rooms and ante rooms to have a vacant/engaged sign, a booking timetable and a sign providing details of the committee name and expected duration of meeting (much of this information could be displayed on a Public Information Channel monitor outside each door, if that is considered appropriate).

There should be a well in the Committee tables, modesty panels and a small shelf on the underside of the table for papers.

There should be provision of cold water for drinking (either via a water dispenser, positioned well away from the public, or bottled and provided on the tea/coffee table).

There should be wall-mounted first aid boxes (consistent with any wider first aid policy).

There should be blinds on any windows or glazed walls (also for ante rooms).

There should be seating behind the committee table for the press and public. Seating numbers will vary according to room size and layout. Where layout allows, the seating area for press should be separated from the public seating to allow security and other staff to differentiate between press and public. Press seating should include provision of fold-away desk tops for writing on dedicated space should be provided for any members of the press or public using wheelchairs and the public seats normally provided should be removable to create further wheelchair spaces if required

Large Committee Rooms (x2) – Specific Requirements

Each large committee room should contain two permanent interpretation booths. Each booth should be able to accommodate two interpreters and should be positioned to give a clear view of proceedings. Cameras should be positioned to record speakers not in the direct line of sight of the interpreters so that these can be viewed on a TV monitor in the booth (CRF 0066)). There should be space in one of these rooms to install two additional temporary booths

Large Committee Rooms (x2) and Small Committee Rooms (x3) – Specific Requirements

There should be a meeting table capable of seating 26: 15 members, 2 clerks, 2 Official Report, 4 witnesses, 2 sound operators and 1 other.

Tables should be designed so that they can be reduced in size to accommodate 15-20 people rather than 26.

Small Committee Room (x1) – Specific Requirements

The seating capacity for the table in this room should be reduced to 20 people.

If possible seating for witnesses should be provided immediately outside each of the Committee Rooms.

5.32.8. Clause incorporated under 5.32.7.

5.32.9. Committee Ante Rooms A - E
(x 5) 70.9m²

TG.44 There should be 5 committee ante rooms each with phone, fax, copier, PC on a
TG.45 small desk with one chair and where possible 2 tables measuring 3' x 4' (one for
T1.41 collating papers and one for the use of witnesses).
T4.43
T4.44

Where tables are not possible a "waiting room" style layout is preferred, possibly with chairs fitted with writing tablets.

There should also be space for 8 chairs for witnesses waiting to be called to appear before a committee.

5.32.10. Video Conference Room 1 & 2

31m² and 31.4m²

TG.20
T3.29

These should be located as part of the Committee Room suite but readily accessible from the Members' area.

The area of each room is $\pm 30\text{m}^2$ with a lobby from the concourse or corridor.

The optimum size of the room is between 4.800 x 5.000 and 4.800 x 7.000.

They should be located away from centres of noise, e.g. lift shafts, air conditioning plant, and plumbing.

At detail design stage a specification giving finishes, colours, etc will be issued along with a furniture layout.

Acoustic treatment may be necessary if the ambient noise level exceeds 42dB. The room walls (and doors), ceiling and floor should have an insulation level of 45dB minimum.

These rooms will be provided with full IT and voice facilities.

5.32.11.

Multi - purpose Rooms
191m²

Q1.03
Q1.05
Q1.07

These rooms are not available to the General Public.

They are for use by Members, staff and visiting staff and consultants for pre-meetings to discuss business in the Debating Chamber, Bills, amendments and policies.

When particular reports are required on subjects being dealt with by Committees, they are used to review progress and results.

They are, in short, multi-purpose rooms, which can be booked by various parties working in the Parliament Building.

These rooms will be provided with full IT and voice facilities.

The Committee Rooms, Multi-Purpose Rooms and Videoconference Rooms may require cooling.

5.32.12.

Coffee, Snacks

Provided within the Chamber Conference Room, a space is provided for to break from plenary sessions and to have coffee, etc without returning to other distant parts of the building.

There should be some seating with tables. The use of the area will vary according to demand.

It will be supplied from one of the Finishing Kitchens at 5.39.22.

5.32.13.

Concourse
227m²

- T1.20 Linked with the Coffee, Snack area, this provides a milling space and gathering area for the Committee and Conference Rooms.
- During breaks in business, it is a useful area for an impromptu exchange of views, with refreshment.
There should be a newspaper rack, some chairs and tables, but it is mainly standing up space. It is a linking area, part of the circulation.
- 5.32.14. Storage
 26m²
- TG.29 A lockable, secure storage space with racking and secure filing cabinets for the
TG.56 storage of Committee material.
- Can be an internal space without windows.
- 5.32.15. Radio Room
 20m²
- T5.17 This room needs to be located close to a service riser on the top floor of the building and need not have natural light.
- Additional power sockets are required.
The microwave aerials/satellite dishes will be located on the roof of the building and exact positions agreed with the designer and the Planning Authority.
- 5.33. **Members**
- 5.33.1. There will be 129 Members in the Parliament. It is intended that each one shall have a room for their own use.
- Ministers who will have offices in the Ministerial Suite will be provided with rooms in St Andrew's House.
- Provision has now been made for Members' staff in the ratio of 1:2.
The Members and staff with meeting rooms should be grouped into one area with the staff in semi-open-plan office accommodation.
- 5.33.2. Members' Rooms
 (102) 1,530m²
- e.g. MG.05 Each Member will have a room of 15m².
- It is suggested that it will be fitted out with a worktable, filing, storage, an executive chair and 2 visitors' chairs.
The room will be fully wired for all IT services, plus a PC and separate broadcasting monitor, and telephone.
- Fax machines are provided in the open area. In addition, the room will be fitted with; fridge and coat hanging space, all within an enclosed fitment.
- These are intended as workrooms.
- Meeting the public, press and constituents will take place in other areas of the building in order to maintain the security of the Parliament building.

- 5.33.3. Members' Staff
1,224m²
- e.g. MG.05A This is semi open plan office accommodation next to the Members' Rooms with 2 staff positions available.
- The desking will be structured, each member of staff having a desk, chair, personal storage and lockable filing for Members' correspondence and papers.
- The space should be planned as an anteroom to the Members' Rooms. The area should be fully wired for IT, telephones, etc. and have monitors, TV, and division bells, via voice alarm.
- 5.33.4. Party Leader
(x 2) 54m²
- M3.02 Each room is fitted as a working space in an informal manner, grouped around a
M4.02 desk is seating for 6/8 persons.
- Pre-meetings before party meetings are likely to be held in these rooms, which should have full IT, telephone, TV and monitoring services.
- 5.33.5. Party Leader's Assistant
(2) 30m²
- M3.03 Each Party Leader will have an assistant. Provide 2 rooms each 12.5m² with space
M4.03 for 1 workstation, IT, filing, and 2 visitors' chairs.
- These should be connected to each Party leader's room by a lobby.
- 5.33.6. Other Staff
(12) 81m²
- MG.02 This is a structured space forming two rooms. One room should be 50m², the other
MG.03 25m², with desks, screens, IT and full services.
MG.04
- It is for the use of the constituent staff of ministers. Each Room will be a "hot desk" area.
- 5.33.6.1. Party Resource Centres
(x4) 244.8m²
- M1.01 Four main Party Resource Centres to accommodate 45
M2.01
M3.01
M4.01
- 5.33.7. Photocopier / Storage
(x 4) 94m²
- M1.29 To provide the above, an enclosed space with shelving for stationery and space for
M2.29 photocopiers is required.
M3.29
M4.29 Mail points can also be provided at these locations.

Suitable ventilation should be provided to this area, including direct extract.

5.33.8. Meeting Rooms
(x 7) 128.7m²

UB.03 The meeting rooms as planned are each approximately 15m². These rooms may
UB.07 also be booked as private workspaces.
M2.01

M2.16 They are used either by Members and their staff, possibly 8 persons in a 15m² room,
M3.01 or by a number of Members for discussion and working on a Bill or Paper.
M4.01

M4.16 These rooms require meeting table, chairs, a low-level storage unit, telephone,
monitor and division bell, via voice alarm, and "Room Occupied" indicators.

5.33.9 Learning Resource Centre
(6) 48m²

Q1.06 This is a fully desked enclosed room for training of 6 staff plus lecturer.

It should have IT wiring, training wallboards, desks and pin-up space.

5.33.10. Toilets and Showers
MG.25, The number of toilets in this area, assuming four floors and a 50/50 split male/female
MG.26, are/floor:
MG.34,

	WCs	W/H BASINS	URINALS
FEMALE	4	8	-
MALE	2	8	4

MG.35,
MG.36,
MG.37, M1.25,
M1.26, M1.34,
M1.35, M2.25,
M2.26, M2.34,
M2.35M3.25,
M3.26, M3.34,
M3.35, M4.25,
M4.26, M5.25,
M5.26

Showers are provided at a ratio of 1/20 persons working in the area.

5.34. **Ministers**

5.34.1. The Ministers, who will also have accommodation in their departments, are provided
in the Parliament Building with a room and open plan desk space for their staff.

5.34.2. First Minister's Suite
(3) 43m²

T4.25 A suite of rooms is provided for the First Minister.
This comprises his/her room of 40m² furnished with desk, chair, bookcases, low
level table and lounge chairs, a meeting table with 12 chairs.

The entrance to this room is from a lobby, which also has access to a staff room of
25m², furnished for 2 persons with IT, telephones, monitor, TV, etc.

A private toilet with WC, wash-hand basin and shower is provided with direct access
from the First Minister's Room.

(The First Minister will have his/her secretariat in another building.)

The toilet and shower facility should be designed to be easily adaptable for disabled use.

5.34.2.1. Deputy First Minister.
19m²

T4.26 This accommodation should be fitted out as per the First Ministers Room in terms of Furniture and IT.

5.34.3. Ministers' Rooms
(x 15) 215.06m²

T3.02 T3.03 Other Ministers will also require rooms in the Parliament.

T3.04

T3.05 For planning purposes, it is assumed that there will be 18 other Ministers requiring
T3.06 accommodation. However two of these ministers will be catered for in the rooms for
T3.07 business Managers included at 5.32.4.

T3.22 T3.23

T3.24 The rooms will be fitted out as the members' Rooms to allow for meetings with staff
T3.25 and to provide working bases in the building.

T3.26

T4.02 These Ministers' Rooms should be grouped together and, if there is a choice in the
T4.03 preferred layout, closer to the Debating Chamber than the Members' Rooms.

T4.04

T4.05 The rooms will be fitted with IT, telephones, monitor, TV, etc.

T4.06 To ensure future flexibility, the rooms should be formed using demountable
partitioning.

5.34.4. Ministers' Staff
(50) 494m²

T3.01 In structured open space providing access to desks, IT, fax, and telephones.

T4.01

T4.20 These are available for staff when the Minister is in the Parliament building.

They will have other offices in Ministries. The space should be located in open plan
across from the Ministers' offices and contain a waiting area, break and coat space.

5.34.5 Toilets
24.3m²

T3.12 Provide both male and female toilets for 40 persons on a basis of 50/50 male/female
T4.12 with appropriate showers.

5.34.6. Break / Tea Coffee

5.35. **Clerk/Chief Executive/Presiding Officer**

5.35.1. The Clerk will work closely with the Presiding Officer and this area should therefore
be located with the Presiding Officer.

The Clerk / Chief Executive is assisted by a number of staff and the department

forms a distinct grouping of spaces which should have ready access to the Debating Chamber and Committee Rooms.

The Clerk / Chief Executive is the senior officer of the Parliament.

5.35.2. Clerk / Chief Executive
(1) 48m²

Q2.07 This room reflects the importance of the role of the occupier in the life of the Parliament.

Access to the room should be through or past the Personal Assistant's office and a private access from the corridor is also required.

It should have all the IT services, Annunciator, division bell via voice alarm, telephones and a direct line to the personal assistant. Furnished with a desk, chairs, bookcase, personal file, table and meeting room with chairs for 6 persons.

5.35.3. Private Secretary to the Clerk
(1) 27m²

Q2.06 Next to the Clerk's room with control over access to that room.

It is fitted-out as an office with full IT services, fax, PC, monitor, secure and open filing is required.

There should be 2 visitors' chairs for anyone waiting to see the Clerk / Chief Executive.

5.35.3.1. Deputy Private Secretary to the Clerk

Q2.06 Fitted out as an office with full IT service, fax, PC, monitor, secure and open filing is required.

5.35.3.2. Liaison issues support staff to the Clerk
(2) 115m²

Q3.03 Fitted-out as an office with full IT service, fax, PC, monitor, secure and open filing is required.

5.35.4. Private Secretary to the Presiding Officer
(1) 32m²

Q2.04 Located off the open plan space at 5.35.5, Members and Ministers wishing to consult the Presiding Officer and Deputy Presiding Officers will access through this office which should be fitted out as a workspace with desk, PC, monitor, TV, telephones and filing. Visitors' chairs and a small table are required.

5.35.4.1. Deputy Private Secretary to the Presiding Officer

Q2.04 (1) Located in the same room as the private Secretary to the Presiding Officer

5.35.5. Staff

- Q3.03 (5) An open plan space with full IT services, provided with screened desk layout, filing, fax and photocopier.
- 5.35.5.1. Media Relations Staff
(4) 44m²
- Q3.06 An open plan space with full IT services, provided with screened desk layout, filing, fax and photocopier.
- 5.35.6. Storage
- Q3.03 Secure filing storage, mail point, paper store, coats.
- 5.35.7. Presiding Officer
(1) 65m²
- Q2.02 The access to the Presiding Officer's Room should be close to the Debating
Q2.21 Chamber.
If there is a direct lobby connection this must be carefully soundproofed.
- It is intended both as a retiring room and a meeting room and should be fitted with lounge furniture, table and chairs, IT, telephones, Annunciator, etc.
- A toilet compartment of 5m² containing WC, wash-hand basin and shower should be located off the room.
- 5.35.7.1. Presiding Officer's Research Staff
(2)
- Q2.03 Located adjacent to the Presiding Officer's room with full IT, Fax, TV and filing Facilities.
- 5.35.8. Deputy Presiding Officers
(x 2) (2) 35m²
- Q2.01 The rooms of 15m² each should form part of a suite of rooms off the lobby to the
Q2.08 chamber.
It is unlikely that they will be used for meetings and should be equipped as offices with a position for PC, monitor, TV and telephone.
- 5.35.8.1. Deputy Presiding Officers' Research Staff
(x2) (4) 45m²
- Q2.01A Two staff located in two separate rooms adjacent to the offices of the Deputy
Q2.08A Presiding Officers. Equipped as 5.35.7.1
- 5.35.8.2. Special Advisor / Private Secretary to PO/DPOs'
(1)
- Q3.03 Located adjacent to the PO/DPOs' Offices and equipped as 5.35.7.1
- 5.35.9. Waiting Area for PO/CE Guests
- Q2.03 (x1)

- 5.35.10. Toilets
15m²
- Q2.32 Provide separate WC and wash-hand basin compartment for male and female.
Q3.22
- 5.35.11. Parliament Support Facilities in Queensberry House
- Provide Parliament Support Facilities as laid out in Change Request Form SDK/22/60/015. Area to be confirmed according to location in Queensberry House.
- Q3.02 Queensberry House Dining room is to be provided. The room will be suitable for meetings of 14 persons and be capable of being used for sit down dinners.
- Q3.01 A finishing kitchen is to be provided. This will service the meeting room required above and other adjacent meeting facilities.
- Q4.01 A Bathroom and lounge facility is required. This facility will be shared by the Presiding Officer and Deputy Presiding Officers, and should be located close their offices.
- 5.35.12. Multi-purpose Room
37m²
- T1.03 A room close the debating chambers is to be provided, for the use of the Presiding Officer and Deputy Presiding Officers. The requirements of the room are laid out as follows.
- The room should be approximately 25m² in size, and be located close to the Debating Chamber. Furnishings should be simple and support the meeting function rather than office space.
- Entrance to this room should be through a lobby, which should also be a staff room for clerking support. This area should be large enough to accommodate to desks and support functions such as printers and fax, as well as space for a TV.
- The full range of IT links will be required.
- 5.36. **Communication Directorate**
- 5.36.1. There are a number of directorates each with a director and a number of divisions.
- The Communication Directorate includes Public Information and Library.
- 5.36.2. Director
(1) 17.2m²
- C3.02 The Director will hold meetings with the staff in this room.
- The room should be fitted with desk, storage, IT services, telephones and a meeting table for 6/8 persons.
- 5.36.3. Personal Assistant
(1)
- C3.01 Working for the Director dealing with diary, correspondence, minutes and agendas

for meetings.

The space is equipped with desk, filing, secure filing, and full IT services, telephone and fax.

5.36.4. Information Systems Staff
(27) 212m²

C3.01 Part of the staffing structure for this service is located in the Public Area or manning the Public Information Desk.
An office of 15m² is required for the Head of Service fitted with desk, chairs, IT, etc. and a meeting table for 4 persons.

The staff will be accommodated in a structured open space fitted out with desk, IT, filing, etc.

The storage of information is provided within the area.

The preferred location of this facility is adjacent to the Public and Press Area.

5.36.4.1. Records Management

5.36.4.1.1 Paper Keepers

The storing and recording of data will be both a paper and IT activity.

The area should have a workspace for 5 paper keepers with filing storage.

This is likely to be short-term storage converted to IT or binned after a prescribed period.

There will be 3 Records Management Assistants, one operator who will be a manager, for whom desks, PCs and a scanner are required.

5.36.4.1.2 Storage
104m²

UB.19 Provide an area for storage of records, filing, etc. This should be in moveable racking with security controls, and include a fireproof safe.

5.36.5. Printing, Photocopying, Storage

CG.01 Provide an enclosed room for the above uses with workspace, printer and photocopier, adjacent to the Library.

5.36.6. SPICe [Scottish Parliament Information Centre]
(41) 515.6m²

CG.01 The Information Centre as with other information services should be IT based.

CG.06

CG.07

CG.08

FG.13

QG.12

It will provide a small paper located reference base, records of Parliamentary procedures, Bill and Official Report. To facilitate this, an electronically operated mobile racking systems will be installed.

The Library will provide Members and staff with a research/reference base.

Space should be allowed for a reception desk for enquiries, workspaces with IT

services, some book storage and shelving for periodicals, manuals and Government publications.

A workroom of 25m² is also required within the total area.

This should have photocopying, sink and storage. This room should be IT linked to the Archive Storage.

Twelve research staff require a workstation within the area in structured open space, with desks/shelving, IT services.

The document supply centre will be part of the Library and will require access to 5.36.5.

- 5.36.7. Toilets
37.5m²
- DG.21 Provide both male and female toilets for 40 persons on a basis of 30/70 male to
DG.22 female.
- 5.36.8 Broadcasting Office
(5) 56.7m²
- P1.01 Room for five people with all required IT and Broadcasting Facilities, Phones faxes etc. Space for multiple TV monitors also required.
- 5.36.9. Information Technology
- 5.36.9.1. Head of Corporate IT Services
(1) 15m²
- C2.03 An enclosed room with space for a meeting with four persons.
Fitted with table, desk chairs filing and full IT services.
- 5.36.9.2. Contracts Manager and Contracts Staff
(1) (16) 122m²
- C2.01 This accommodation is provided in structured open space.

The Contracts Manager's space should have filing, storage and IT services. A table with six chairs should be provided as a workspace and for meetings.
- 5.36.9.3. Development Manager, IT Support Staff, IT Admin Support
(18) 130m²
- C2.01 This accommodation is provided in structured open space with desks, filing, shelving and full IT services.

The mail point, fax, coat storage should be in this area.
- 5.36.9.4. Photocopier / Storage
- C2.01 An enclosed storage space for the combined use of Information Technology.

The photocopier may be located in the store, which will require secure filing provision.

5.37. **Directorate of Clerking & Reporting**

5.37.1. The Directorate of Clerking and Reporting provides support services for the Parliamentary and Committee business, including the official reporting of proceedings.

The area needs to be located close to Committee Rooms and Debating Chamber. The Chamber Desk should be on the route from MSPs' rooms to the Chamber.

5.37.2. Director of Clerking & Reporting
(1) 20m²

T2.21 The Director of Clerking and Reporting will hold meetings with their staff in this room.

The room should be fitted with desk, storage, IT services, telephones and a meeting table for 6/8 persons.

It should be entered from a lobby area, part of the personal assistant's room.

5.37.3. Personal Assistant
(1) 12m²

T2.22 Working for the Director of Clerking and Reporting dealing with diary, correspondence, minutes and agendas for meetings. The room is equipped with desk, filing, secure filing, and full IT services, telephone and fax.

5.37.4. Chamber Office

5.37.4.1. Head of Chamber Office
(2) 18m²

T1.02 The Head of Chamber Office will hold meetings with Members and clerks in this room. There should be seating for up to 8 people around a meeting table. The room should also be fitted with a desk, 2 storage cabinets (one with a lockable internal security box), IT services, a printer, a TV monitor providing live broadcast feed and a telephone. The room should be provided with natural light and blinds.

A dedicated space in the open plan area – immediately adjacent to the Head's cellular room – is required for the Head's personal secretary. This space should be demarcated with privacy screening and should be provided with natural light and blinds. Because of the confidential nature of much of the personal secretary's work, a dedicated printer should be available within the space allocated. There should be room for 2 storage cabinets (one with a lockable internal security box).

5.37.5. **Chamber Office Staff**
& (37) 269m²

5.37.6.

TG.01 The Chamber Office Clerk Team Leaders (CTL), Senior Assistant Clerks (SAC),
T1.01 Assistant Clerks (AC) and Support Staff should be grouped in teams according to the committee or unit they work for. There are currently 8 teams in total. The total number of staff in the Chamber Office, including the Head and his/her personal

secretary, is 39. The current team structure is:

Business Team: 1 CTL, 1 SAC, 1 AC and 2 support staff

Chamber Desk Team: 1 CTL, 1 SAC, 2 AC and 4 support staff

Europe and Subordinate Legislation(including Public Petitions) Teams: 2 CTLs, 1 SAC, 3 ACs and 1 support staff (Given that these two teams share some staff, it will be necessary for them to be seated together)

Legislation Team: 1 CTL, 1 SAC, 1 AC and 1 support staff

Non-Executive Bills Team: 1 CTL, 1 SAC, 1 AC and 2 support staff

Procedures Team: 1 CTL, 1 SAC, 1 AC and 1 support staff

Standards Team: 1 CTL, 1 SAC and 2 support staff.

Other team-specific requirements are:

The Procedures and Standards Teams both require to be located in relatively quiet areas. A greater degree of privacy is required for the Standards Team

The Business Team should be located close to the Debating Chamber and preferably adjacent to the Chamber Desk Team. The Business Team has a need for some privacy for discussion of politically contentious issues

The Chamber Desk Team should be next to the Chamber Desk, with direct access and visual contact. Any dividers between the staff and the Chamber Desk must be transparent.

Chamber Office staff teams may continue to change as committee structures and work demands change. The key requirement for accommodation is therefore flexibility. This should be achievable in a number of open plan areas.

The 8 Clerk Team Leaders will each require 15 m2 in structured open space, to include individual desks, seating for two visitors, storage, screening and IT services. Each CTL should be able to view a monitor providing live broadcast feed. Each will need to be seated with the rest of their team.

Each team should have its own space, with access to windows, natural light and blinds. Each should have its own printer and its own filing area, capable of holding 3-4 storage cabinets. Each should also be able to view a monitor providing live broadcast feed. Teams should be separated in some way, to minimise noise and other disturbances.

Each open plan area should contain:

a central filing area

four tables together for collating papers

a fax point. (There should also be a fax point positioned close to the Head's personal secretary)

a small enclosed area for a photocopier and shredder. Heavy-duty photocopiers capable of handling large volumes of work are required and the surrounding enclosures should therefore provide a degree of sound baffling to prevent disturbing nearby staff.

Access to a meeting room with seating for ten is required. Whilst this can be shared with other users, it should be close to the majority of Chamber Office staff. This room could also be used for quiet study, thereby removing the need for a separate facility.

5.37.7.

Chamber Desk

35m²

- T1.01 The Chamber Desk should have space for four persons, set out to allow room for one desk able to seat two people opposite each other and a meeting table to seat two MSPs whilst waiting to speak to Chamber Desk staff.
- The room must be close to the Debating Chamber and must be on the route taken by MSPs to the Chamber.
It is not necessary for it to be close to Official Report.
- The Chamber Desk should have an IT point, a telephone point and a monitor providing live broadcast feed. If the room has access to natural light, blinds should be provided.
- 5.37.8. Clause Deleted
- 5.37.9. **Photocopier, Storage**
- T1.01 An enclosed secure room for the storage of Bills, Papers, Amendments, etc and for photocopying.
- 5.37.10. Annunciator
- 5.37.11. **Toilets**
24.35m²
- Provide both male and female toilets for 30 persons on a basis of 30/70 male to female.
- 5.37.12. Committee Office
- 5.37.12.1. Head of Committee Office
(2) 20.2m²
- T3.41 The Head of Committee Office will hold meetings with Members and clerks in this room. There should be seating for up to 8 people around a meeting table. The room should also be fitted with a desk, 1 storage cabinet (with a lockable internal security box), IT services, a printer, a TV monitor providing live broadcast feed and a telephone. The room should be provided with natural light and blinds.
- A dedicated space in the open plan area – immediately adjacent to the Head's cellular room – is required for the Head's personal secretary. This space should be demarcated with privacy screening and should be provided with natural light and blinds. Because of the confidential nature of much of the personal secretary's work, a dedicated printer should be available within the space allocated. There should be room for 2 storage cabinets (one with a lockable internal security box), together with a dedicated small photocopier and a small stationery cupboard.
- 5.37.13. to 5.37.15. **Committee Office Staff**
(46) 444m²
- T2.60 The Committee Office Clerk Team Leaders (CTL), Senior Assistant Clerks (SAC),
T3.40 Assistant Clerks (AC) and Support Staff should be grouped in teams according to
T3.60 the committee or unit they work for. There are currently 12 teams in total. The total number of staff in the Committee Office, including the Head and his/her personal secretary, is 48. Some committees share staff and these should be located together. The list below indicates which committees should be adjacent to each other. The current team structure is:

Audit Committee/Finance Committee Teams: 1 CTL, 2 SAC, 2 AC and 1 support staff
Equal Opportunities Committee/Social Justice Committee Teams: 1 CTL, 2 SAC, 2 AC and 1 support staff
Local Government Committee/Health and Community Care Committee Teams: 2 CTLs, 2 SAC, 2 ACs and 1 support staff
Enterprise and Lifelong Learning Committee/Education, Culture and Sport Committee Teams: 2 CTL, 2 SAC, 2 AC and 2 support staff
Transport and the Environment Committee/Rural Development Committee Teams: 2 CTL, 2 SAC, 2 AC and 2 support staff
Justice 1 Committee/Justice 2 Committee Teams: 2 CTL, 2 SAC, 2 AC and 1 support staff.

There is also provision for 1 “floating” assistant clerk and for 3 support staff (in addition to the Head’s personal secretary). The support staff work direct for the Head and should therefore be located close to the Head’s Office (whilst being within the open plan area).

Committee Office staff teams may continue to change as committee structures and work demands change. The key requirement for accommodation is therefore flexibility. This should be achievable in a number of open plan areas.

The 10 Clerk Team Leaders will each require 15 m² in structured open space, to include individual desks, seating for two visitors, storage, screening and IT services. Each CTL should be able to view a monitor providing live broadcast feed. Each will need to be seated with the rest of their team.

Each team should have its own space, with access to windows, natural light and blinds. Each should have its own printer and its own filing area, capable of holding several storage cabinets. The number and size of cabinets required by each team will vary according to the committee. Figures indicating likely requirements based on current usage are attached at Annex 1. Each team should be able to view a monitor providing live broadcast feed. Teams should be separated in some way, to minimise noise and other disturbances.

Ideally, each team should have a small seating area for staff to meet MSPs/guests, particularly at short notice. This should consist of 3 soft chairs and a small table, partitioned by sound baffling for privacy. If it is not possible to provide each team with such a seating area there should, as a minimum, be one seating area per open plan area.

Each open plan area should contain:

Four tables together for collating papers.

A fax point. (There should also be a fax point positioned close to the Head’s personal secretary).

An enclosed area for a small photocopier and a shredder. The surrounding enclosures should provide a degree of sound baffling to prevent disturbing nearby staff.

These should be grouped together for ease of working.

In addition, the Committee Office should have a dedicated photocopying/filing area. This should be in a self-contained area so as to minimise noise and disturbance to staff. This area should contain 3 or 4 high speed photocopiers as well as four tables together for collating papers. There should be storage space for copying paper, stationery, a paper guillotine, shredder etc.

Ideally, there should be a dedicated meeting room for use by Committee Office staff. This should include a meeting table and seating for 15.

5.37.16. Photocopier / Storage
22m²

T3.27 An enclosed secure storage room for Committee documents, minutes, etc, filing and photocopying.

5.37.17. Toilets
11m²

T1.74 Provide both male and female toilets for 40 persons on a basis of 50/50 male to
T2.74 female.

5.37.18. Directorate of Legal Services

Space is required for a team of 13, including the Director. Allowance should be made for 10 lawyers and 3 administrative support, but it should be possible for a lawyer's desk to become an admin desk if required.

Entry into the Directorate should be via a controlled access door. All the lawyers, including the Director, require sufficient privacy to work quietly on concentrated study, and cabinet/shelf space for reference, personal papers etc.
Law Library space is required (books and study area).

A dedicated meeting room is not required provided that there is easy access to meeting rooms of various sizes i.e. to accommodate 2 to 13 persons.

5.37.18.1. Director of Legal Services
(1) 19m²

Q4.05 The Director of Legal Services has a cellular office with desk, seating, and full IT services including parliamentary feed (either TV or webcast) and a meeting table, preferably circular, to accommodate 4/6.

Legal and Admin teams
(12)

5.37.19. Administrative Team (3)

Q4.04 Consisting of
Personal Secretary (1)
Typist/Admin Support (1)
Admin Assistant (1)

The administrative team sits together in an open plan area, which is adequately screened from the lawyers. This admin area will include space for photocopier, shredder, fax machine and 1 or 2 printers. (Depending on the overall layout 1 printer might be located separately with lawyers). The Directorate's paper files will be stored centrally in the Directorate's space (not with individual lawyers) and the filing

cabinets should be readily accessible to the admin team. A secure filing compartment is required either within the Director's office or next to the PS.

5.37.20. **Legal Team**
(9)

Q4.07 The 3 Senior Assistant Legal Advisers require cellular space or demarcated space
Q4.03 within open plan surrounded by privacy screening, each with space to confer with a
colleague. The other assistant legal advisers (6, including trainee, p/t consultant etc)
Q4.02 are in structured open space.

5.38. **Directorate of Corporate Affairs**

5.38.1. This Directorate controls all the services provided to the Parliament.

They are not necessarily all co-located as some of the divisions such as Security and Facilities require being in specific locations in the building close to their main areas of activities.

5.38.2. Director of Access and Information
(1) 27m²

Q3.04 The Director will hold meetings with their staff in this room.

The room should be fitted with desk, storage, IT services, telephones and a meeting table for 6/8 persons.
It should be entered from a lobby area, part of the personal assistant's room.

5.38.3. Personal Assistant
(1)

Q3.03 Working for the Director dealing with diary, correspondence, minutes and agendas for meetings.

The room is equipped with desk, filing, secure filing, and full IT services, telephone and fax.

5.38.3.1. Corporate Policy Unit
(4) 42m²

Q3.03 Located close to the Director of Corporate Affairs and reporting to the Chief Executive.

The room is equipped with desk, filing, secure filing, and full IT services, telephone and fax.

5.38.3.2. Head of Corporate Services
(1) 20m²

Q3.05 Should be accommodated in a cellular office space, incorporating a desk & chair, meeting table and five chairs.

5.38.3.3. PS to Head of Corporate Services
(1) 25m²

- Q3.03 Working for the H.C.S. dealing with diary, correspondence, minutes and agendas for meetings.
- The room is equipped with desk, filing, secure filing, and full IT services, telephone and fax.
- Accommodation shared with PS to Director of Corporate Affairs
- 5.38.4. Finance
- 5.38.4.1. Head of Finance, & Finance
(12) 161m²
- C1.05 The Head of Finance should be accommodated in a cellular office space of 15m²,
C1.06 incorporating a desk & chair, meeting table and five chairs.
- Staff accommodation is provided in structured open space, with desks, screening, IT services.
- The desking should be planned to reflect the various roles within the division. Storage, fax, mail point, coats and photocopier should be incorporated in the area.
- 5.38.5. Allowances (10) 100m²
- QG.06 This accommodation is provided in structured open space with desks, screening, IT
QG.07 services.
- All the spaces required are of the same size and, in addition, storage, fax, mail point and coats should be incorporated in the area.
- Photocopier space will be shared with others in the Directorate.
- 5.38.6. Photocopier, Storage
12m²
- C2.04 An enclosed storage space for the combined use of Finance and Personnel, Travel and Subsistence and Payroll / Pensions / Allowances.
- The photocopier may be located in the store, which will also require secure filing provision.
- 5.38.7. Toilets / Showers
20m²
- C1.17 Provide both male and female toilets for 30 persons on a basis of 50/50 male to
C2.13 female with appropriate showers.
C2.14
- 5.38.8. Personnel
- 5.38.8.1. Head of Personnel Office
(1) 20m²
- T2.41 An enclosed room with desk and table with four chairs - possible use as an interview room.

All enclosed rooms in Personnel require higher level of soundproofing. Provide IT services, filing, secure filing.

- 5.38.9. Deputy Head of Personnel
(1) 22m²
- T2.42 Accommodated in a cellular office space, due to the confidential nature of their work, located next to meeting room
- Services, etc. as Support Staff space.
- 5.38.10. Personnel Officer, Training & Development Manager, Support Staff
(7) 154m²
- T2.40 In structured open space with screens, desks, filing, fax and storage.
- Layout should allow for overview of entrance, meeting room and Head of Personnel Office.
- 5.38.10.1. Pay & Pensions Manager, Support Staff
(6)
- T2.40 This accommodation is provided in structured open space, with desks, screening and IT services.
- All the spaces are of the same size except the Pay Team Leader, which is a net 12m².
Storage, filing, secure filing, fax, mail point and coats should be incorporated in the area.
- 5.38.11. Meeting Room
20m²
- T2.43 Table and chairs for eight persons, and requires to be soundproofed to higher level. No internal glazing is required.
- 5.38.12. Procurement Office
- 5.38.12.1. Head of Procurement Office & Staff
(14) 127m²
- C2.06 Head of Procurement to be accommodated in cellular office space of at least 15m²
C2.05 due to the confidential nature of their work.
- Staff accommodation is provided in structured open space with desks, screening and IT services.
- Fax, mail point and filing should be incorporated in the area.
- 5.38.13. Photocopier, Storage
12m²
- C2.04 An enclosed storage space for the combined use of Personnel and Procurement.
- The photocopier may be located in the store, which will require secure filing

provision.

5.38.13.1. Moved to 5.36.8.

5.38.13.2. Trade Union Office
11m²

QG.04

Space for Union Officials to undertake work within the Parliament.

5.38.14. Moved to 5.36.9.1.

5.38.15. Moved to 5.36.9.2.

5.38.16. Moved to 5.36.9.3.

5.38.17. Moved to 5.36.9.4.

5.38.18. Moved to 5.36.4.1.1.

5.38.19. Moved to 5.36.4.1.2.

5.38.20. Clause deleted

5.39. **Catering**

5.39.1. There are 4 groups within the Parliament building who require to have catering facilities provided for them to a greater or lesser degree – Members of Parliament, Staff, Press and the Public.

The level of catering also depends on the working hours of the Parliament and if this works into the evening, 8-9 p.m., the facility will have to be maintained.

Provision has also been made in the accommodation for dining; receptions for sponsored groups, companies who with the Parliament's approval may make use of the facilities.

The flexibility to use Committee Rooms as dining spaces has also been built in by the incorporation of finishing kitchens and stores.

The principle of the catering provision is based on the use of a large kitchen for preparation and cooking with finishing kitchens for Members' Dining Rooms and Committee Rooms.

5.39.2. Kitchen
(12) 156m²

UB.50 This is the main cooking area for the building preparing a range of meals from
UB.51 snacks to full dinners.
UB.53

UB.128 There should be direct access to the Staff Restaurant servery and by either
UB.38 dedicated lift or heated trolley to the other kitchens.
UB.45

FG.03 The other elements of the catering unit are grouped around the kitchen.

The equipment is likely to be in an island configuration with stainless steel benching and sinks around the walls.

All the finishes will be washable and easy clean. Kitchen extract ventilation discharges should be located to ensure that there is no re-entrainment of air into

intakes.

- 5.39.3. Preparation
(4) 15m²
UB.44 This area close to the kitchen will be used mainly for vegetable preparation and requires equipment, sinks and bin storage.
- 5.39.4. Pot Wash
(2) 17m²
UB.37 Sited between the kitchen and preparation area, it requires sinks, worktops, dishwasher (for large items) and bin storage.

The floor must be properly drained with grease traps and gullies.

This applies to all kitchen/servery areas.
- 5.39.5. Cold Room and Freezer
56.2m²
UB.39 Accessible directly from the kitchen, the area is divided into 2 equal but self-contained compartments and should be of a demountable proprietary design.
UB.40
UB.41
UB.42 Care must be taken in siting of the compressor equipment to minimise noise and
UB.48 condensation.
FG.06
5.39.6. Cleaner/Detergent Store
(1) 4m²
UB.49 The cleaners' store, as part of the kitchen, requires special ventilation, as toxic chemical fumes could be present because of the cleaning processes.

All the equipment, shelving and sinks must be stainless steel or ceramic and the finishes washable.
- 5.39.7. Office
(2) 10m²
UB.43 This office is for 2 persons, the catering manager and assistant and must have a
FG.04 view over the kitchen area and may be an internal space, which will require mechanical ventilation as it is likely to be occupied during the full working day by at least one person.

It must be designed to have access without passing through the kitchen at 5.39.2.
- 5.39.8. Store
25m²
UB.46 The store, which is for kitchen supplies, should be close by the office and capable of
UB.47 the supervision of deliveries from the office.

It is essential that a dry atmosphere be maintained.
- 5.39.9. Servery
(6) 100m²

- FG.02 This servery is for the Members and staff restaurant with direct access from the kitchen for personnel by self-closing doors, but the food route should be via pass-through hot and chilled cupboards.
There should be generous circulation areas around the various carousels serving a range of hot and cold foods, special meals and non-alcoholic drinks.
- It is essential that a first impression of the catering areas is one of quality created by good design and that this is carried through all the catering spaces whatever the level of function.
- Care must be taken in the design of access for kitchen staff to and from the servery and the ventilation must be designed to prevent kitchen smells circulating through the building.
- 5.39.10. Members' and Staff Restaurant
(4) 331m²
- FG.01 The restaurant should have seating for 160 persons.
- It should be laid out in an informal non-institutional manner and reflected in the decoration and furniture. The meals are self-service tray to table to dishwasher.
- It does not allow for seating all members and staff at the same time.
- The servery and restaurant may be at a different level from the kitchen requiring a service lift for trolleys, refuse and stores.
- This area should have a broadcast feed via a TV monitor.
- 5.39.11. Coffee Lounge
40m²
- FG.15 This is an extension of the Members' and Staff Restaurant.
- The intention is to provide a comfortable seating area for coffee takers after a meal.
- The seating should be lounge chairs with tables.
- It is a non-smoking area - separate smoking rooms are provided.
- This area should have a broadcast feed via a TV monitor.
- 5.39.12. Dishwash (Carousel)
(4) 40m²
- FG.05 The dishwasher area is usually remote from kitchen and servery but adjacent to the dining room.
- It is designed to deal with crockery, cutlery and glass.
- Allowance should be made for the wash to be based on a carousel tray system with staff returning trays to the conveyor.
The Carousel deals with the maceration of soft food.

- 5.39.13. Cleaner
(1) 5m²
- This cleaner's cupboard has the same use as 5.39.6 - access from the Dishwash area.
- EMBT/RMJM Statement of Compliance [Letter 1089/TJK/LM – B4 14 February 2003]:
A large cleaners' room [18m²] is located adjacent to the main kitchen.
- EMBT/RMJM Statement of Compliance [Letter 1089/TJK/LM – B4 (01.14) 1 April 2003]:
- We understand that, as part of discussions through the catering meetings, it is proposed that cleaners' sinks be incorporated into kitchen areas to deal with the specific issues you raise in your letter. [HPT queried the proximity of cleaners' facilities close to areas where there are likely to be liquid spillages.]
- 5.39.14. Switchroom
5m²
- Because of the high electrical loads of the various pieces of equipment, a switchroom is required as part of the kitchen complex.
- 5.39.15. Members' Dining
(2) 130m²
- T1.22 This is intended as a formal dining room with waiter service, where Members, their guests and the Press by invitation only, can dine.
- The layout should provide 60 dining spaces.
- If all Members wished to dine together this would have to be set up in the combined Members'/Staff Restaurant.
- Visiting delegations with some Members could use this space.
- 5.39.16. Private Dining
(2) 79m²
- T1.23 Located close to Finishing Kitchen, and members Dining, this room can be used for invited parties, Members' guests and delegations.
- (A sliding, folding partition between the Members' and Private Dining Rooms would allow greater flexibility.)
- 5.39.17. Finishing Kitchen
(2) 68m²
- T1.24 This provides food for the Members' Dining Room and the Private Dining Room.
- It would be served by a catering dedicated lift from the main kitchen with meals conveyed by trolley.
- The Finishing Kitchen, which may operate when the main restaurant is closed, should function as a self-contained unit.

Space has to be reserved for trolleys, refuse and goods to be loaded on to the lift.

The finishes are the same as the kitchen.

5.39.18. Dishwash/Servery
(1)

T1.24 A dual use space as servery/dishwash for Members' Dining and Private Dining within an enclosed area, finishing kitchen serves directly to Members' Dining Room.

One of the stores is located next to Dishwash/Servery.

5.39.19. Clause deleted

5.39.20. Lounge/Guest (MSP)
(1) 60m²

FG.10 Located close to the Members' / Staff Restaurant. Members who have invited guests to dine may use this lounge for coffee or as a meeting place with an accredited visitor.

Coffee by waiter service is provided from the Finishing Kitchen.
Fitted with lounge chairs, low tables and newspaper/magazine rack.

5.39.21. Bar (including Counter and Storage)
(3) 150m²

T1.21 This area is the only licensed space in the building apart from drinks served with meals in the Dining Room.

The bar is available to Members, Guests and accredited invited Press.

It should be possible to move through the bar and the lounge into the Members' Dining Room.

Secure storage of 30m² for wines, spirits and beers is required at the same level, accessed from the lift in the Finishing Kitchen.

All these areas for Members and Executive Staff need to have monitors and Division Bells, via voice alarm.

Furnishings and decoration should reflect the quality of the Parliament building.

This area will have a broadcast feed via a TV monitor.

5.39.23. Clause deleted

5.39.24. Clause deleted

5.39.25. Cleaners
(x 2) 10m²

Of 5m² each, as part of the Members' Restaurant complex, fitted with sink, racking for equipment and a cupboard for stores.

EMBT/RMJM Statement of Compliance [Letter 1089/TJK/LM – B4 14 February

2003]:

A large cleaners' room [18m²] is located adjacent to the main kitchen.

EMBT/RMJM Statement of Compliance [Letter 1089/TJK/LM – B4 (01.14) 1 April 2003]:

We understand that, as part of discussions through the catering meetings, it is proposed that cleaners' sinks be incorporated into kitchen areas to deal with the specific issues you raise in your letter. [HPT queried the proximity of cleaners' facilities close to areas where there are likely to be liquid spillages.]

5.39.26. Clause deleted

5.39.27. Tea Points
(x 30)

Each tea point unit will be approximately 1800mm x 600mm x 2050mm (LxBxH), incorporating water heater for tea/coffee, fridge, a sink for washing up and cupboards for storage of paper towels etc.

To be distributed throughout the complex as follows,

5 at Upper Basement Level
4 at Garden Level
1 at Mezzanine level
4 at First Level
7 at Second Level
5 at Third Level
3 at Fourth level
1 at Fifth Level

5.39.28. Stores
(x 4) (2) 60m²

These stores are distributed as follows.

Two are part of main kitchen complex, one is related to Committee Rooms and the other close to the Press Conference area.
They are fitted with racking and shelving for tables' chairs and secure storage for small items.

EMBT/RMJM Statement of Compliance [Letter 1089/TJK/LM – B4 14 February 2003]:

General [non function – specific] stores are located as follows:

LB010	Lower Basement
UB004	North Core MSP
Ub005	North Core MSP
Q003	Garden Level QBH
Q015	Garden Level QBH
P203	Press Tower
M344	MSP South Core [currently undesignated]
T417	Tower 2 Level 4
C010	off main SPICe area

- 5.39.29. Clause Deleted
- 5.39.30. Staff Changing
64m²
- UB.30 Toilets and changing for all kitchen staff are to be provided as part of the kitchen
UB.31 complex.
- There will be separate facilities for male and female as follows:
- a) Male 1 WC, 1 urinal, 2 WHBs.10 lockers
b) Female 3 WCs, 3 WHBs, 20 lockers
- In addition, 1 shower is provided in each area.
- These facilities are for the sole use of the kitchen staff. All fittings and fixtures must be vandal-proof and robust.
- WC flushes should be foot operated, and wash-hand basins knee, foot or sensor operated.
All hand towels must be disposable.
- 5.39.31. Public Cafeteria
(4) 168m²
- DG.01 It is intended to provide snacks/sandwiches and a fixed menu.
DG.02
- Drinks from a vending machine will be available during the flexible hours worked by the Press.
- The service to this area will be limited.
- There should be tables and seating for up to 60 persons.
- 5.39.32. Finishing Kitchen/Dishwash
(2) 43m²
- DG.09 This will combine with the Cafeteria to provide a servery and wash up area.
- The kitchen will rely entirely on meals prepared in the main kitchen, provided by trolley access from the controlled area.
- 5.39.33. Store/Vending
5.2m²
- DG.10 A store is provided for the area of Press Cafeteria/Finishing Kitchen, accessed from the kitchen, with an area accessed from the Cafeteria with sink, hot water boiler and cupboard.
- 5.39.34. Smoking Room
(x 1) 60m²
- (2001) Paper A designated smoking room is to be provided to service the whole of the complex.
40 The room should have a lobby entrance and walls and ceilings should be sealed to prevent smoke spreading into other parts of the building.

Furnishings must be carefully selected related to the use of the room. The facility will be provided at,

MG.25 Garden Level: general use, this facility abuts the western gable of QBH.

5.40. **Facilities Management**

5.40.1. The management and provision of services such as engineering, cleaning and maintenance, may be in-house or contracted out.

The schedule of accommodation will apply in either case.
The Facilities Manager will be the Head of the Division within the Directorate of Corporate Affairs.

5.40.2. Facilities Manager
(1) 22m²

UB.90 A suite of rooms is required to house the Facilities Manager and staff.

This should preferably be on the ground floor near to the main entrances and Security.

The manager's room is an office with full IT facilities and printout for BMS. It should have desk, table, filing and secure filing.

5.40.3. Facilities Staff
(15) 131m²

UB.88 There will be fifteen staff in an open plan office with a meeting room including the;
Health & Safety Officer
FM Office Service Manager
FM Support Manager
Deputy Head of Facilities Management
and
Twelve- (12) support staff.

All personnel will require a standard desk layout with storage, desktop IT and telephony; in addition the Deputy Head FM will require sufficient space for meetings with up to two (2) people at their desk. Other Facilities staff will be located throughout the building.

The BEMS control will be located in this room and the lighting control system, for monitoring by the Engineers.

The area will be set out as an office with desks, filing, full IT and telephones.

5.40.4. Help Desk
(4) 40m²

UB.88 A structured open office space with four desks, IT, filing and shelving.

Purpose is to allow MSPs, Staff, etc to obtain advice on building problems, information and services.

5.40.5. Office Manager Debating Chamber / Committee Room Manager

(2)

UB.88 To manage the equipment, booking and facilities within these two areas.

Two desks, IT, filing and shelving.

5.40.6. Engineer's Workshop/Office, Toilet and Shower
(3) 49m²

UB.33 The Engineer requires an office of 10m² for record keeping activities in the building
UB.34 including servicing, materials supply, faults and repairs.
UB.121

A workbench for minor repairs with a power tool supply, desk, chairs and racking to be provided.

The WC, WHB and shower are in a separate, single compartment.

5.40.7. Telephone Enquiries
(2) 20m²

DG.07 A manned telephone enquiry room is required, equipped with a text telephone system, to operate separately from The Scottish Office system.

This will have 2 persons on duty during working hours and can be remote from other users.

5.40.8. Mail Room / Screen Dispatch Receipt
(20) 86m²

UB.26 The mailroom receives all parcels and deliveries, which are security screened before being passed for sorting and distribution.

This is done during normal working hours and franking and despatching of mail after hours.

The mailroom will be fitted out with screening apparatus, sorting tables, scales, pigeonhole racking and mail sack holders.

5.40.8.1. Clause Deleted

5.40.8.2. Post Office Facility
QG.08 27m²

5.40.9. Trolley Store Area
20m²

UB.57 A trolley store area for 25 trolleys is required.

The porters will operate from this area and from the loading bay, stores, etc.

One of the lifts should be next to this area and dedicated to the messenger and porter service only.

5.40.10. Mail/Porters/Receptionists Mess Room, Changing and Toilet facilities
81m²

- UB.83
UB.142
UB.145
- The means of delivery into the building will be through the loading bay; there is therefore a need for this room to be located near to that area. Separate rooms for male and female showers toilets and lockers should be provided with a communal messing area.
- 5.40.11. PABX
52m²
- UB.77
- This room should be at ground level, preferably with one external wall to receive the main telephone and broadcasting intakes into the site.
- This external wall should be strengthened to offer protection in the event of a bomb blast.
- The access floor (approx. 600mm clear) will provide connection ways by cable trays to the 4 vertical risers for distribution to the upper floors.
- Cooling will be required to maintain operating conditions; 100% standby, stand-alone cooling is required.
- No water, waste or soil pipes should pass through or over the rooms and water tanks should be located at a distance.
The under floor cableway area will need to be waterproof.
- The walls should be smooth with no projections and capable of supporting equipment racks.
[See DATA SHEETS]. The room must be free from condensation.
- 5.40.12. Communications Room
(4) 124.1m²
- UB.06
UB.76
UB.81
UB.92
- This space has 2 functions and should be divided equally with access from one to the other.
- The first area contains servers and hubs for the whole IT system in the building.
- The second area is the workspace for IT staff and a teaching area.
- All the space should be secure from flooding as 5.40.11 and external windows must have laminated glass and will be wired for security with relays to the Security Room.
- The double doors will have security locks, with wired glass viewing panels.
- Racking for equipment is required in the server area.
- Cooling to the server room is necessary to ensure the equipment continues to perform in periods of excessive heat; 100% stand-by, stand alone cooling is required.
- Full IT, telephone and fax services.
- There are likely to be 6 staff in the teaching/work area.
- 5.40.13. IT
(x7) 169.9m²

UB.35 IT requires on each floor, processor rooms of 20m² each. The rooms should be
 UB.94 located next to each vertical riser. These rooms must be secure and free from any
 P1.03 risk of water ingress, either externally or internally. Water tanks, cooling equipment
 CG.04 should be at a distance. To link these rooms to the Communications and PABX
 M5.02 rooms at ground floor, a duct 600 wide x 300 deep is required running horizontally
 T2.02 under the access floor.
 T3.28

5.40.13.1. IT/Telecomm Server Rooms

Rooms to be provided in the general configuration as shown below. Exact Positioning and configuration to be agreed.

Queensberry House	20m ²
MSP Block (2)	30m ²
Towers	16m ²
Chamber	16m ²

The Specification for these rooms is to be as 5.40.13.

5.40.14. Vertical Risers and Servers (x 4)

Amendment Provided to meet the service requirements of the building.

No:
SDK/22/7/A-
0007: These will require cooling.

The ducts will be shared between IT and telephones.

Text amended to reflect agreed design. There should be a direct cable route between the riser and the server compartments. All ducts must have a fire resistance of 2 hours with 1-hour self-closing doors.

The floors at each riser should be accessible over the whole length with removable covers.

5.40.15. Stores (x 3) 60m²

UB.24 General stores dispersed throughout the office and working areas of the building and
 UB.28 not in the Debating Chamber, Committee Rooms or service areas such as Catering
 UB.89 which have their own storage.

Natural light is not required; the rooms can be part of the internal cores or intersections.

They require racking and secure filing.

5.40.16. Lighting / Store 14m²

UB.25 Depending on the system adopted, space for equipment and storage is allowed.

5.40.17. Printing (4) 56m²

UB1.04 This space should be centrally located at ground floor with good access internally
UB1.05 and externally.

The area divides into 2 parts, one space of 25m² where orders are received and processed and discussion takes place on layouts, etc.

The remainder of the space is a holding area for receipt and distribution of printed material.

There should also be workspace for a technician drafting layouts and carrying out trial prints.

It is assumed that bulk printing will be contracted out. Suitable ventilation is required, including dedicated extract.

5.40.18. Toilets / Showers
30m²

UB.142 The number of toilets in this area assuming a 50/50 split male/female are:
UB.145

	WCs	WHBs	URINALS
MALE	3	3	3
FEMALE	2	3	-

Two shower compartments are provided in this area. Hanging space for cleaning staff's coats should also be provided.

5.40.19. Furniture Store
29m²

UB.58 This store should be located close to the goods lift on the ground floor with access to the loading bay.

The main items stored will be desks, chairs, tables, etc but with computer or word processing equipment stored from time to time.

This room does not require natural light but must be ventilated and secure.

5.40.20. Paper Store
17m²

UB.54 The Paper Store will be used to hold bulk supplies.

It should be located near to the Loading Bay.

The supplies will be distributed from the goods lift to open plan and office areas throughout the building.

5.40.21. Racking and shelving is required.
Cleaners' Store
52.1m²

DG.11 This store, close to the goods lift on the ground floor, will be used to store cleaning
QG.13 materials, paper towels, soap, etc and will be used as a distribution centre to
QA.06 Cleaners' Rooms, Toilets, etc.

UB.15
M3.22

The room does not require natural light.

Racking and shelving is required and fitting out as 5.40.20.

EMBT/RMJM Statement of Compliance [Letter 1089/TJK/LM – B4 14 February 2003]:

The main cleaners store is allocated at UB013.

EMBT/RMJM Statement of Compliance [Letter 1089/TJK/LM – B4 (01.14) 1 April 2003]:

Obviously, cleaners' rooms have been allocated where possible in "space left over after planning". we would envisage that cleaning of Towers could be undertaken from the main cleaners' room at upper basement, with the Chamber and Press Tower complex cleaned from D014 at garden level. As per my previous letter [see comment at 5.40.22], it may be possible to reallocate space to increase cleaning facilities should this be required.

5.40.22.

Cleaners' Rooms
(x 3) 48.9m²

QG.01
UB.32
M2.22

The Cleaners' Store (5.40.21) will be used as a Cleaners' Room on the Ground Floor.

The 3 other rooms are distributed throughout the building.

They do not require natural light but must be well ventilated.

There should be a cleaners' sink, shelving, racking and coat hooks for cleaners' outdoor clothes.

EMBT/RMJM Statement of Compliance [Letter 1089/TJK/LM – B4 14 February 2003]:

Cleaners rooms are also allocated at UB033, off the public café finishing kitchen at D014, Q001 and Q101 [garden level QBH], M247 [MSP South Core] and Q410 [QBH fourth floor]. as described under 5.29.8 above, if required additional cleaners rooms could be formed by relocating general stores.

5.40.23.

Paper Shredder / Refuse
17m²

UB.29

All paper is shredded at the work place. Storage is required for shredded paper and bulk items.

The room should be close to the Loading Bay.

A compactor may be used to bale paper, the collection of which will be contracted out.

A secure area is required for non-shredded material.

- 5.40.24. Refuse Recyclable
35m²
- UB.59 This store should be sited close to the Kitchen but accessible from the loading bay for wheeled bins.
- This is not a working area for the separation of materials, which will be organised at source in the kitchens, restaurants, and break areas and on the office floors.
- The Caterer requires waste disposal to all kitchens and this will affect the drainage design.
- 5.40.25. Refuse
8m²
- UB.59 All other waste will be put directly into wheeled containers.
- An area off the loading bay is required where the bins can be accessed from within the building and by the Refuse Contractor, under supervision by the Security Guard.
- 5.40.26. Delivery / Loading Bay
(2) 100m²
- Amendment No: SDK/22/7/A-0007:
- The Delivery / Loading Bay is required for the delivery of bulk goods such as furniture, equipment, consumable and catering supplies and for the despatch of refuse.
- Mail Room deliveries and pick-ups will also be handled via the loading bay.
- CRF
SDK/22/60/01
56
Reference to Sniffer system deleted.
- The area must be designed to allow the parking of 3 Ford Transit-type vans.
- The area must be ventilated to prevent fumes or smells penetrating into the rest of the building.
- The Security Room at 5.27.8 should be sited to give clear views of approaching traffic, pedestrians and callers.
- An entryphone system is required from the loading bay entrance to the Security room with a facility to switch this out of hours to the Security Control Room at 5.27.4. The loading bay must be security controlled at all times.
- 5.40.27. Stores
(x 4) 66m²
- UB.05
UB.08
FG.07
LB.04
P2.13
CG.02
QG.02
QG.09
QG.15
- On each floor a general store of 15m² is required which can be made available to the Facilities Manager.
- This should have racking and shelving with 2 hour fireproof walls and doors and need not have natural light.
- 5.40.28

Amendment
No:
SDK/22/7/A-
0007:

Reference to
showers
provided
specifically to
this area
deleted as
general
facilities
provided at
5.41.3. &
5.41.13.

5.41. **Miscellaneous**

5.41.1. There are a number of areas, which do not fall into a particular category.

5.41.2. Fitness Room (Members and Staff only)
62.3m²

M1.22 The Client will produce the detailed layout of the room, once the dimensions are known.

Finishes robust with enhanced ventilation need not have natural light.

This room must have an assistance alarm.

5.41.3. Changing Rooms
(x 2) 48.2m²

MG.22 Two changing rooms are required one male, one female.

MG.23 They should have locker space, 3 showers, and a WC and wash-hand basin.

Access should be direct from the Fitness Room lobby.

A suitable accessible changing facility should be provided close to the fitness room.

5.41.4. Distinguished Visitors' Room
25m²

Amendment
No:
SDK/22/60/A-
0007

CRF Nos.
SDK/22/60/01
55

Requirement
deleted. Room
now occupied
by External

Liaison Unit
[5.35.3.2.]

5.41.5. Car Parking
1,975m²

UB.11 Within the building 65 car park spaces are to be provided. The access to these spaces is controlled and the methods are described in the Services Section.

The entrance and exit will be covered by a Security Officer.

There should be direct access by lift, which must be located next to the Officers' booth and be capable of being controlled by the Officer, to the floors above. The carpark area and specifically all entrances and exits must be covered by CCTV camera with any doors/shutters being alarmed.

The parking bays must be clearly numbered and each user will be given a designated bay. Lighting levels must be above normal parking provision.

There are, 6 dedicated parking spaces for disabled people.

5.41.6. Crèche
210m²

TG.61 The crèche for the children must be designed in accordance with the standards laid
TG.63 down by The City of Edinburgh Council, Social Work Department, in their document,
TG.78 "Quality in Caring Standards for Full Day Group Care"; a copy of the relevant
TG.80 sections will be supplied to the designer.
TG.81

The crèche should be at ground floor level, with access for disabled people and close to drop off points.

The division of the area depends on the age range of the children, but assuming a total of 25 children, most aged 2 or under, the playroom area should have a clear floor space of at least 92.5m² (3.7m² per child).

This should be divided into separate areas for different age groups, with activity, noisy, and sleeping areas.

Demountable partitions will assist in varying the size of space requirements.

In addition, an area of 6.5m² is required for children's toilets (one toilet and wash-hand basin for every 10 children aged between 2 and 5).

This area should also have adequate space for the storage of potties, and facilities for washing and changing babies.

There should also be a system for the disposal of nappies and the contents of potties.

Space and plumbing for a washing machine will also be required.

A kitchen area of 12.5m² should be positioned close to the area where children will be fed, and should be of a large enough size to allow access for children under supervision.

The kitchen should not be located next to the toilets.

An area of 25m² should be provided for storage of buggies, cloakroom and display area.

An enclosed outdoor play area of 200m² is also required.

All of these areas must be totally secure and accessed from an entrance, which has no link with the main building.

Staff accommodation of 50m² could be provided on the first floor level if necessary.

An office (20m²) is required for the storage of records and other documentation, and to allow staff to meet with parents in private.

A break area / locker area (20m²) allows staff to take breaks away from the children and also to leave personal belongings, coats, etc.

A separate staff toilet and showering facilities should also be provided.

5.41.7. First Aid Rooms
(x 2) 28.9m²

PG.02 There should be lobby access from any corridor and each room will have an en-suite
QG.10 WC/wash-hand basin compartment.

Care should be taken in the layout to allow for the manoeuvring of a wheeled stretcher or invalid chair.

One of these rooms should be sited close to the main kitchen and the other in the main staff area and close to a toilet for disabled people and a lift capable of accommodating a stretcher.

Communication and alarms will be wired to the Security Room to call for assistance. Various items of furniture are required – couch and 2 chairs, bedside table, and inspection lamp and storage unit.

5.41.8. Baby Changing/Nursing Mother Room
(x2) 27m²

TG.43 There are two rooms each of 15m².
TG.62

One room should be in the area where access is available to the Public and the other in the MSPs' Staff area.

Each room will have an en-suite WC/Wash-hand basin compartment and should also be sited close to a toilet for disabled people.

It will be fitted out as the First Aid Rooms with the addition of a mobile changing trolley.

[The heights of the baby changing facility should be accessible an knee-space should be provided below the units.]

5.41.9. Cash Dispenser

This should be located off the Concourse at 5.32.13 and be available to the

Members and Staff.

The space provided must be secure with walls of 300mm brick or block, which must be full height floor to ceiling structure.

There are particular specifications put forward by the Banks for security, safes and doors - these can be incorporated at detail design stage within the area provided.

The clear wall dimension containing the safe and cash dispenser must not be less than 2.500 wide.

Access for the delivery of cash should be considered.

5.41.10. Multi-Purpose Room #2
28m²

Q1.05 A small non-denominational room for contemplation is required.
It should be simply furnished and decorated and suitable and accessible for daily use by members and staff of the Parliamentary Building.

A denomination wishing to hold a service will provide their artefacts.

The seating should be designed so that it does not exclude disabled people.

5.41.11. Standby Generators

There is reference to this requirement in the Services Section.

It is unlikely, given the exhaust fumes from the diesel generating sets, which these would be in the building.

They may have to be sited in a landscaped area with vehicle access for oil deliveries and repairs.

5.41.12. Meters, Intakes and Plantrooms

No specific allowance is made in the schedule of accommodation for these items, which are a product of the engineering design.

The space allocated should be kept to a minimum, compatible with the Health and Safety Requirements, and is contained within the 20% allowed for stairs, lifts, plant rooms and circulation.

5.41.13. Cyclists' Changing
64m²

UB.16 At the ground floor, off the Members' and Staff Entrance, a Changing and Shower
UB.17 Room for cyclists is required.

Separate male and female provision is required for changing, but flexible in layout so that account can be taken of a change in demand.
Fifty lockers with bench seating should be provided.

Five shower compartments each for male and female with a WC and wash-hand basin complete the requirements.

The entrance to this unit, if sited before swipe or proximity card controlled access to the building, should have a swipe/proximity control and be overlooked by the Security Officer controlling the building entrance.

5.42. **External**

5.42.1. There are a number of requirements that affect the siting and access elements of the Parliament building.

5.42.2. Taxi Rank

A taxi rank for 6 vehicles is required, located outside the security railings and gates.

The taxi will only enter the Parliament building grounds when called by Security to pick up a passenger or when cleared by Security to proceed into the pick up bay at the Members'/Staff entrance.

5.42.3. Coach Parking

Coaches are not allowed into the site and a setting down point should be provided.

Parking for coaches will be at a distance in Local Authority Parks or if co-ordinated visits to the Holyrood area may be in co-provided parks.

Visitors on foot should be able to pass through secure controlled gates into the Parliament site.

(The coach setting down point is now provided by Dynamic Earth.)

5.42.4. Secure Railings and Gates

This is referred to at Section 4.

Security and implementation will depend on the site.

In a Greenfield site a 25m clear zone from the building to the nearest car parking or access point on a highway is required.

The railings can be within this zone and monitored by a PIDS and CCTV system. Gates are controlled by Security and are monitored and lockable remotely.

At Holyrood the perimeter of the site may be the building edge and this will require blast-proof construction when the 25m clear zone is reduced.

5.42.5. CCTV

The external areas of the building car park, landscaped areas and entrance gates for pedestrian and vehicles will be monitored by a CCTV camera system, adjusted via a PIDS alarm system. [See Services Section 8.]

5.42.6. Speakers' Green

It is hoped to incorporate a landscaped area where Members can be interviewed for TV and Radio.

This should be within the site and care should be taken in the siting to produce an appropriate background.

A TV/Broadcast pillar point will be provided. There should also be an outside broadcast link to a unit sited outside the site.

5.42.7. Gatehouse

SG.09 Security will require a gatehouse and / or a dedicated control point at the main
SG.10 vehicle and pedestrian entrances to the site.
SG.11

This should have controls, telephones linked to the Security Room.

It is a building with office space access to cars on both sides and suitable for 2 persons to work in.

To offer the required protection, the building must be secure with laminated glass and security doors.

There should be toilet and tea making facilities.

5.42.8. Cycle Storage
45m²

UB.14 Provision has to be made for dry secure storage for bicycles.

This may not be in the building but part of a car parking area, a cycle route will be part of the access into the site and gates and barriers will have to be designed accordingly.

Allow for storage of 50 bicycles.

5.43. **Sound Enhancement Facilities**

Amendment No. Fixed Infra-red and Induction Loop systems

SDK/22/7/A-0007: Note: Sound Enhancement facilities to MSP desks in the Chamber and positions at Committee tables are provided via the Audio and Electronic voting Console.

CRF No.
SDK/22/60/01
73

Provision of sound enhancement facilities as agreed at SMT meeting of 24 May 2002.

D1.01 Chamber Floor [officials at the rear]
TG.60 Small Committee Room 1
T1.40 Small Committee Room 2
T1.60 Small Committee Room 3
T4.60 Small Committee Room 4
TG.40 Large Committee Room 5
T4.40 Large Committee Room 6

D2.01	Chamber Galleries [Public, Press & Visitors] Fixed Infra-red systems
Q1.06	Learning Resource Centre
P1.02	Chamber Conference Room [Press]
TG.20	Videoconference Room 1
T3.29	Videoconference Room 2
T2.43	Personnel Meeting Room Portable Infra-red systems
	These are not provided to specific rooms but would be expected to facilitate areas such as Multi-purpose rooms, Garden meeting rooms' etc.
	Fixed Induction Loop systems
FG.13	Security desk at Pass Holders Entrance
CG.01	SPICe front desk
DG.06	Reception desk - main hall [Participation Services]
DG.19	Reception desk - main hall [Security]
T1.01	Chamber Desk
Q1.04	Reception desk
DG.03	Shop till
FG.02	MSP - Staff Restaurant Till
DG.02	Public Cafeteria Till
T1.21	Bar Till
FG.15	Coffee Lounge Till
TG.61	& Crèche
TG.63	
DG.05	Classroom

DRAFT

6. Schedule of Accommodation

Clause Deleted

DRAFT

7. BUILDING FABRIC

7.1. Regulations

- 7.1.1. The project must comply in all respects with all relevant statutory instruments and regulations and all necessary approvals will be obtained.
- 7.1.2. This requirement will apply regardless of any Crown immunity in respect of the development and to a standard no less than that of a building without Crown immunity.
- 7.1.3. The City of Edinburgh Council is the Planning Authority for the area and “application” must be made to them for planning approval. The procedure for this will be managed by the Client, with the Designer providing all information in discussion and documentation.
- 7.1.4. The Crown is not required to make a formal application for a Building Warrant for Building Regulation approval, but must meet the Regulation requirements. The Scottish Parliament will appoint a Consultant to whom applications will be made for approval under the Regulations and the issue of a Certificate of Occupation. A Fire Certificate will be applied for and issued by the HM Inspectorate of Fire Services
- 7.1.5. In addition to the requirement 7.1.4 to comply with all regulations, including fire regulations the requirements of the current issue of “the PACE Crown Fire Standards” shall be complied with.
- 7.1.6. The Client will appoint an independent Planning Supervisor who will ensure that the “Construction Design and Management Regulations” (CDM) are applied to the design and construction of the Parliament Building. To ensure that all parties - Design Team, Quantity Surveyor and Client are aware of their responsibilities; the Planning Supervisor will conduct a series of workshops at the beginning of the design process.

7.2. Quality Assurance, Certification and Standards

- 7.2.1. The use of quality assured contractors and suppliers is preferred. Products and materials should have product conformity certification (e.g. BSI Kitemark, BSI Safety Mark or CARES Scheme), or product approval (e.g. British Board of Agreement Certificate).
- 7.2.2. Reference to British Standards shall be interpreted as permitting the use of an equivalent alternative national technical specification of any member state of the European Community.

7.3. Prohibitions

- 7.3.1. The use of the following materials or components is expressly prohibited:-
1. High Alumina cement or concrete
 2. Woodwool slabs for permanent shuttering.
 3. Asbestos or asbestos based products.
 4. Cement or additives for concrete containing calcium chloride.
 5. Aggregates subject to Alkali reaction.
 6. Urea Formaldehyde Foam.
 7. Silicate brick or tiles.
 8. PCB Transformers.

9. Equatorial hardwoods from a non-renewable source.
10. Re-wireable fuses.
11. Ionising lightning conductors.
12. Halon/CFCs.
13. Vermiculite unless fibre free.
14. Timber treated with penlachorophenol.
15. Lead, lead paint or other materials containing lead, which may be ingested, inhaled or absorbed.
16. Materials containing fibres with a thickness of 3 microns or less and a length of 200 microns or less, unless appropriately sealed to prevent fibre migration.
17. Chipboard for flooring (other than as an infill material to steel raised floor panels) and cill boards.

Other materials generally known or thought to be deleterious to health or in contravention of any relevant British Standard Specification or Code of Practice.

- 7.3.2. The use of the following materials, components or systems is strongly discouraged and will only be permitted if it is proved that alternatives are not available.

Materials emitting environmentally damaging gases where alternatives, less damaging to the environment, are available.

2. Magnetic water softeners.
3. PVC twin and earth wiring systems.

7.4. **Design Philosophy and Building Life**

- 7.4.1. The building must be suitable in all respects for the Client's purpose.
- 7.4.2. The building must satisfy the requirements of the Building User Brief while providing in all respects a working environment which is pleasant, environmentally friendly, energy conserving and with minimum maintenance.
- 7.4.3. The design team should assess alternative designs to produce the most cost effective overall solution consistent with these objectives.
- 7.4.4. The following criteria must be adopted by the design team; the use of low maintenance materials; maximise the use of daylight and natural ventilation; avoid over complicated design features or systems which are expensive to operate and maintain and costly to replace.
- 7.4.5. The building must operate effectively and efficiently throughout its design life of 100 years and materials and components must be carefully selected whose design life cycles are relative to the overall design life of the building. For statistical concepts the design life of the structure should be taken as 100 years.
- 7.4.6. Materials and components should not be incorporated which require premature replacement because of their dependency or relationship to elements, which have a shorter life span.
- 7.4.7. Where they meet the above criteria preference should be given to indigenous materials used, quarried or grown in Scotland. Brick is considered to be an unsuitable material for the external cladding of this building.
- 7.4.8. On the assumption that all materials are regularly maintained in accordance with the procedures which will be defined in the maintenance manuals, the appointed designer will be asked to give an anticipated life for a list of elements.

7.5. **Structure, Drainage**

7.5.1. Full structural design calculations should be prepared by or under the direct supervision of a Chartered Civil or Structural Engineer and should be independently checked and certified by a Chartered Engineer.

7.5.2. Foundations should be of a design, type and construction method suitable for:

The Design Life of the Building
The sub-soil conditions
The structural loads

Such that there will be no deleterious effects on the completed structure, finishes and fabric and on any adjoining building or structures.

7.5.3. The form of construction should allow for the maximum possible flexibility in the installation and distribution of services within the Building and comply with Security requirements.

7.5.4. Floor loadings should be in accordance with the relevant British Standard recommendations typically as follows:

Assembly areas with fixed seating	4.0kN/m ²
General Office accommodation	4.0kN/m ² Plus 1.0kN/m ² for partitioning
Plantrooms	7.5kN/m ²
Corridors, stairs, etc.	5.0kN/m ²
Roofs (maintenance)	1.5kN/m ²
Roofs (terrace)	5.0kN/m ²
Wind loads	BS 6399: Part 2:1997

7.5.5. Specific concentrated loads in areas such as stationery storage, strong rooms, etc. should be accommodated by distributing the load or by local strengthening of the structure.

7.5.6. Floor slabs should be designed to have no discernible vibration response to footfall excitation due to low natural frequency characteristics.

7.5.7. The underground foul and storm systems should be designed to the requirements of BS 8301 and BS 6367 and in accordance with Part M of the Building Regulations, Scotland.

7.5.8. The storm water drainage should collect discharge from the buildings, roads, car parks, etc. subject to the requirements of the SEPA and the Drainage Authority.

The foul drainage system should collect soil and waste discharges from the buildings and outfall to the public sewer.

The systems should be gravity-fed and designed to allow for possible uneven settlement, which may occur over the sections of the infilling.

7.5.9. The effect of the proposed development on adjoining structures should be evaluated with particular regard to:

Foundations
Security
Design Effects (e.g., wind venturi effect)
Rights of Light
Construction Noise & Vibration
Offensive Emissions

- 7.5.10. The physical characteristics of the site should be assessed to ensure suitability for the development with particular reference to the following, and remedial action taken where required.

Existing use
Previous use
Airborne pollution
Ambient noise levels
Likelihood of subsidence
Likelihood of flooding
Existing services
Soil contamination
Soil condition and ground bearing capacity
Mine workings
Levels
Adjacent structures
Levels of electromagnetic and radio frequency interference
Proximity to land fill site
Air traffic control height restrictions

7.6. **External Finishes (General)**

- 7.6.1. External finishes should be sympathetic to the surroundings both in respect of adjacent building, landscape and the local environment.

- 7.6.2. Finishes should have regard to the overall life of the building and provide an envelope which will satisfy the desired visual appearance throughout the working life of the building.

The finishes should address any environmental concerns of the particular site, be easy to maintain, have a low cost in use and be wind resistant and watertight in accordance with the British Standards.

7.7. **External Envelope Walls/Cladding**

- 7.7.1. The external walling should be designed to give maximum durability with minimum maintenance.

- 7.7.2. The preference is for stone or reconstituted stone, depending on location, as an external finish, compatible with the requirements of the Planning Authority.

- 7.7.3. Any ties, fixing anchors, etc are to be austenitic stainless steel.

- 7.7.4. A cladding and infill panel system must be designed to be sufficiently strong to resist any stress or thermal movement and must be in accordance with the relevant British Standards.

- 7.7.5. All fixings for cladding or infill panels must be of non-ferrous composition.

7.8. **External Envelope Windows**

- 7.8.1. Windows shall be designed to give adequate ventilation without creating draughts and should be impervious to rain penetration when closed.

Relevant to the building location, the window design should be based on the exposure classifications defined in BS.6375.

- 7.8.2. They should be double-glazed as a minimum and selected to provide maximum durability with minimum maintenance.
- 7.8.3. Adequate provision should be made for the installation of internal Venetian blinds over windows facing any direction south of the east-west axis.

EMBT/RMJM Statement of Compliance [Letter 1089/TJK/LM – B4 14 February 2003]:

Blinds are capable of being post fixed if required at windows through out the Assembly Buildings.

- 7.8.4. All external glazing should be cleanable from the inside, wherever possible.
- 7.8.5. Locks should be provided to all windows at ground floor level and wherever windows are readily accessible from the outside of the building.
- 7.8.7. Where particular action has to be taken, when the building line infringes the 30m car parking rule, window frames and glazing must be designed to resist blast and to mitigate the effect on the building interior.

7.9. **External Envelope: Roofs**

- 7.9.1. The preference, wherever possible, is for pitched roofs and should be clad in slate, tiles or metal cladding appropriate to the location.
- 7.9.2. Internal gutters and syphonic drainage systems should be avoided.
- Snow-boards are required in large areas of pitched roofs.
- 7.9.3. All roofs should have appropriate safety facilities to allow safe inspection with access ways protected with designated walkways and hand rails, lighting and warning notices.

7.10. **Basements**

- 7.10.1. Basements should be avoided wherever possible and, if unavoidable, used for plant rooms, car parking or storage.
- 7.10.2. Where basements are necessary to meet the site and design criteria the methods of ensuring watertightness must be agreed with the Client's technical advisers.

7.11. **Floors**

- 7.11.1. On each storey, floors shall be on a common level throughout or connected by a suitably graded ramp.

7.11.2. Floors in office areas and where access is required for IT and power cabling must have raised access floors.

These should be full access type “medium” structural grade.

There must be a clear void of not less than 250mm for IT/fibre optic wiring.

The minimum clear floor void must take account of the detailed engineering solutions, and any specific IT cabling requirements.

The floor void depth should be agreed with the Client.

7.11.3. Specialist finishes may be required in specific areas as identified in the Room Data Sheets.

7.11.4. Plant Room finishes must be resistant to spillage of oil, battery acid and water treatment chemicals.

They must be waterproofed and capable of draining.

7.12. **Walls**

7.12.1. The inner leaf of all external walls and the walls to toilets, stairs, lift lobbies and similar common areas should preferably be of brick or block construction.

7.12.2. In areas other than plant rooms (where a fair-faced finish is acceptable) the wall finish should preferably be plaster or tiling where appropriate (e.g. toilets, kitchens, and shower rooms).

Laminate finishes are also acceptable in these areas.

7.13. **Partitions**

7.13.1. Partitions for subdivision of office space may be of proprietary dry construction steel framed; plasterboard faced type that is capable of withstanding normal office traffic.

Partitions should be medium grade standard.

7.13.2. The design should achieve a minimum standard of 45 dB averaged normalised sound difference between rooms and between rooms and corridors.

Amendment
No:

SDK/22/7/A-
0007:

Text amended
to reflect
agreed design

Conference, Committee and rooms specified in the Room Data sheets where privacy is required will have a higher rating.

EMBT/RMJM Statement of Compliance [Letter 1089/TJK/LM – B4 14 February 2003]:

The design complies with the statement under 7.13.2. Plasterboard partitions typically have a minimum acoustic rating of 45Db. With reference to clause 7.13.4, it has been agreed that where glazed partitions occur the dB rating to be achieved on site is to be 35Db.

- 7.13.3. These values should be achieved “as erected” and are the arithmetical mean of the level of difference over the range 200 Hz to 2,500 Hz mean frequencies.
- 7.13.4. Where glazing has to be incorporated in the partitions, a sound attenuation as close as practicable to that specified should be achieved.
- 7.13.5. To maintain the overall acoustic integrity of partitions suitable sound barriers and sealing of gaps with acoustic sealant must be provided.
- 7.13.6. The ceiling/access floor must achieve the same sound rating as the partition where this does not span floor slab to structural ceiling.
- 7.13.7. Partitions abutting heater casings, ducts or trunking should achieve the same sound barrier rating as the partitions.

Cross talk attenuators must be fitted to ducts to maintain the sound rating of the partition.
- 7.13.8. Doors, frames, door seals and thresholds should be selected and detailed so that they maintain the sound attenuation of the partition.

7.14. **Doors**

- 7.14.1. The minimum standard for internal doors and doorsets should be hardwood veneered in hardwood frames.

Doors to be solid core: no chipboard, and to comply with British Standards for fire doors, glazing, dimensional accuracy.
- 7.14.2. Doors should be self-finished for ease of maintenance and provide a minimum clear opening of 800mm with glazed panels where appropriate.
- 7.14.3. External doors should provide a secure barrier when locked. The design of doors and their surrounds must prevent the ingress of water and draughts.
- 7.14.4. Where entrance doors lead to a reception area or security lobby or an atrium, a secondary screen with doors must be provided to form a draught lobby.
- 7.14.5. Loading bay doors shall be a sliding/folding shutter of equal mild steel leaves with a glazed panel in each, one personnel door, track and pneumatic operation with manual emergency operation.

EMBT/RMJM Statement of Compliance [Letter 1089/TJK/LM – B4 14 February 2003]:

There are no loading bay doors.

7.15. **Ceilings**

- 7.15.1. The provision of ceilings will in many cases depend on the heating, ventilation and lighting design.

Ceilings should where services, wiring and lighting runs above should be fully

accessible.

7.15.2. Ceiling tiles should be of metal construction with patterning selected to minimise maintenance.

7.15.3. Where the ceiling is a fire barrier account must be taken of the effects of penetrations such as light fittings, vents, etc and the integrity of the fire barrier maintained.

7.16. **Fittings/Ironmongery**

7.16.1. Ironmongery/door furniture must be first quality, preferred finish as satin anodised aluminium.

7.16.2. All locks should be on a master keyed system with two keys provided for each lock.

Suiting requirements must be agreed with the Client.

7.16.3. All doors to offices, etc require suited mortice locks, lever handles, card holder/room numbers, kicking plates to both sides and door closers where necessary.

Locks should have a lever override from within the room.

7.16.4. Corridor and pass doors should have push plates and kick plates to both sides.

7.16.5. Doors to plant rooms shall have panic latches in place of handles and ironmongery on fire escape doors shall be to the satisfaction of HM Inspectorate of Fire Services & the fire authority.

7.16.6. The minimum requirement for entrance doors is a 5-lever mortice lock with lever override. The Client may require additional security fixtures.

7.16.7. Internal/external safety and directional signage should be provided as a minimum.

7.17. **Internal Finishes**

7.17.1. A variety of finishes are available for the designer. The preferred option is a hard plaster finish but other finishes, which are durable, easily maintained and sustainable, are acceptable.

7.17.2. All wall finishes should be as durable and maintenance free as possible particularly in heavily trafficked areas.

8. SERVICES

8.1. Introduction

The aim of the project is to produce a building, which shall act as an exemplar project.

Wherever possible the integration of energy efficient and environmentally conscious design principles which demonstrate an economic construction cost and result in benefits for the building users, shall provide a quality internal environment at a beneficial cost for maintenance and energy consumption.

The building shall incorporate the engineering services in a harmonious manner to reduce dependence on major plant but still provide the service security and resilience necessary to run the Scottish Parliament without any disruption, unless in the most exceptional circumstances.

When considering the application of various techniques analysis of the environmental impact must be considered to ensure that no long-term effects are overlooked, on either local or global environments.

The project must demonstrate that the best advantage is to be made of the fabric of the building in influencing the internal environment with the optimised selection of envelope materials and components.

The materials being of a sustainable nature in the construction of the building is considered advantageous especially if they contribute to the life expectancy of the building and assist positively in the reduction of energy usage during the life term of the engineering systems.

Where engineering services are integrated into and rely upon the building fabric for their performance, the building must still allow operational flexibility without any additional energy use.

The engineering services solutions adopted must provide the building users with the ability to have suitable local control over their own environment with only limited intervention from the facilities management, during periods of operation and use.

Dependence on non-sustainable and deleterious materials is not considered satisfactory.

The building and its services shall be approached in a fully integrated manner to construct a landmark building, which provides the example of 'best practice' in all respects.

The building design shall aim to provide, a good quality working environment whilst meeting stringent performance, cost and environmental criteria.

The integrated design approach shall ensure that the optimum building form, fabric, orientation, and space planning shall make a full contribution to these aims.

Practical measures alongside innovative systems shall all be utilised including the maximum use of natural lighting and ventilation via windows, passive cooling and solar design, renewable resources and recycled materials.

The impact of transport both during and after construction shall be reduced as much as possible, the use of local suppliers, labour, fuel and other resources is therefore encouraged.

Effective and ongoing management and control strategies shall be implemented to ensure the building continues to achieve high standards of performance throughout its life.

Good quality operating and maintenance documentation shall be provided to enable planned preventative maintenance programmes to be effectively implemented.

8.2. **Environmental Aims**

The building shall be designed to be environmentally friendly in global, regional, local and internal aspects. In particular the following concerns shall be directly addressed by the design team.

- Improve the local environment
- Minimise ozone depletion
- Minimise global warming
- Minimise water and air pollution
- Minimise non renewable resource depletion including fossil fuels and rain forests
- Avoid radon and methane contamination
- Avoid Legionnaires disease and spread of legionella
- Minimise the effect of ionising and electromagnetic radiation
- Avoid the use of irritants and toxic substances
- Avoid sick building syndrome
- Maximise the reuse and recycling of materials
- Enable planned preventative maintenance to be used
- Minimise water use
- Reduce waste
- Avoid recognised deleterious materials

8.3. **Compliance**

The following documents, whilst not exhaustive, provide a basis for compliance

- Fire Precautions Act
- Local Planning Authority requirements and bylaws
- The Building Standards Regulations (Scotland)
- The Health and Safety at Work Act, Workplace (Health Safety and Welfare) Regulations Construction (Design and Management) Regulations, RIDDOR Regulations, and all other safety legislation
- The Clean Air Act
- British Standards, and Codes of Practice
- CIBSE guides, technical memorandum and commissioning codes.
- Electricity at Work and IEE Regulations
- BSRIA, HSE and BRE publications
- Statutory Instruments
- Institute of Plumbing (IOP)guide
- LPC Regulations
- The Public Health Acts
- Shops Offices and Railway Premises Act
- Petroleum (Consolidation) Act, Highly Flammable Liquids and Liquefied Petroleum Gases Regulations.

The Pressure System and Transportable Gas Containers Regulations
Control of Pollution Act
Asbestos Regulations
Food and hygiene regulations
EC regulations and directives
Water, local water authority, SEPA and British Gas bylaws and technical memoranda, etc
Institution of Gas Engineers publications
Assorted specialist publications identified in the body of the text
Other relevant good practice
British Council for Offices Publications

8.4. **Assessments and Appraisals**

A number of assessments and appraisals shall be carried out including:
Thermal and air movement simulations
Fuel appraisal
Load and running cost estimates
Environmental Assessments
Innovative design or materials
Daylight Linking Simulation

Each assessment and appraisal report shall be provided to the client at an early stage and prior to formal adoption of the design.

8.4.1. Thermal and Air Movement Simulations

A thermal and air movement simulation shall be carried out on a mathematical model using ESP software.

Criteria used within the model shall be agreed with the client.

The model shall demonstrate compliance with the brief, room data sheets and relevant design guides including the CIBSE Guide and agreed criteria.

The simulation report shall include detailed information on the following areas and their interaction:

Open plan office areas
Cellular office areas
Mixed open plan and cellular office areas
Debating Chamber
Atria or high spaces

The extent of the information to be included in the report shall be agreed with the client.

The model shall include analysis of the site microclimate based on actual weather data.

RMJM BS, Statement of Compliance [Letter Ref: 1089/IMH/SP/NA 29 August 2003]:

The following have been carried out, and submitted to the Client:

Cellular office areas, namely MSP office, as it has the smallest opening window area. this included analysis of internal temperature, and air quality for varying percentage window opening areas, and external wind velocities.

Debating Chamber
Committee Rooms
Underground Car Park
MSP Foyer
Public Foyer

8.4.2. Fuel Appraisal

In determining the most suitable fuel for the development, a fuel appraisal and investigation shall be carried out and a report provided for client approval prior to any decision being adopted.

Consideration shall be given to sustainable and renewable energy sources including, CHP, co-generation, heat pumps, sewage sludge, gas, wind and solar power, etc.

Where fossil fuels are proposed consideration shall be given to all forms including coal.

The appraisal shall also include details of environmental impact from the primary source to final use.

Where fuel storage is required there shall be sufficient for 3 weeks operation at the average winter load.

Where any fuel supply is interruptible either by contract or other anticipated means, alternative plant, equipment, controls, storage, etc. shall be provided to enable the building to operate as normal through the interruption.

RMJM BS, Statement of Compliance [Letter Ref: 1089/IMH/SP/NA 29 August 2003]:

This was carried out during the early stages of the project, and a report was submitted to the client

8.4.3. Environmental Assessments

A Building Research Establishment Environmental Assessment Method (BREEAM) assessment shall be commissioned.

The assessment shall be carried out by an accredited assessor.

The building shall achieve either a 'very good' or 'excellent' rating.

An environmental impact statement shall be provided to supplement the BREEAM assessment and include statements on; ozone depletion, global warming, air pollution / contaminants, fuel and refrigerants, materials and other relevant issues agreed with the client.

Where there may be unusual environmental impact of any feature, a report by an agreed expert shall be commissioned.

Those aspects considered to have an unusual environmental impact shall be agreed with the client as the design progresses.

The existing site environment shall be surveyed and detailed measurements /

records taken to act as a measure of the building's performance. The survey shall include the following aspects;

- Perimeter noise survey (day and night)
- Air quality including offensive emissions
- Existing services
- Electromagnetic and radio interference levels
- Adjacent structures and other features

RMJM BS, Statement of Compliance [Letter Ref: 1089/IMH/SP/NA 29 August 2003]:

BREEAM assessments were carried out for MSP Building, Queensberry House and office elements of the Assembly Building. All of which received the best possible rating available i.e. "EXCELLENT".

RMJM BS, Statement of Compliance [Letter Ref: 1089/IH/LAM/B4 24 September 2003]:

In our opinion, it was not deemed necessary to provide an environmental impact statement as supplementation to the BREEAM assessment. The BREEAM assessment carried out achieved the desired objective and was successful in achieving excellent ratings for each of the three buildings assessed.

8.4.4. Load and Running Cost Estimates

The building shall be designed to minimise primary energy consumption.

Energy conservation shall be addressed for all aspects of the building in the widest context, i.e., minimising transport requirements and materials selection.

An integrated approach shall be demonstrated by the designer.

Annual energy consumption for each energy source shall be calculated based on agreed criteria using CIBSE prediction techniques and expressed in kWh/sq. m. Energy consumption values shall in general meet or improve on the 'good practice' category as defined in the Energy Efficiency Office Guidelines document 'Energy Consumption Guide 19.

Annual running cost estimates shall be prepared based on CIBSE data for estimated plant life and give net present costs discounted over the building life.

Running cost estimates shall include all aspects of maintenance and replacement including labour costs and specialist technical support.

The report shall include an elemental breakdown to enable detailed analysis.

RMJM BS, Statement of Compliance [Letter Ref: 1089/IMH/SP/NA 29 August 2003]:

Load and running cost estimates have been carried out and issued for MSP Building and Queensberry House. A similar exercise for the remaining elements of the building is presently underway, and is expected to be complete by the beginning of September 2003.

8.4.5. Innovative Design or Materials

The use of innovative designs and materials are encouraged where there is a clear advantage over a more traditional approach.

Where such innovation is to be considered the designer should obtain the client's approval in principle to proceed.

The designer shall provide an assessment of the degree of innovation and evaluate the potential risks of adoption including:

The consequences of any failure of the innovation to the client and any other interested parties.

The likelihood of any failure by considering; the design complexity, confidence in the design, construction complexity versus skills and experience of contractors, and the newness of the product or application.

Confirmation that the equipment suppliers are aware of the use, have approved the application of specific products and are prepared to provide an adequate warranty.

Whether the product or system complies with any national or recognised standards.

Details on previous uses of the design or materials.

8.5. **Mechanical Ventilation and Air Conditioning**

8.5.1. Overview

The general concept of the building is to be that of a mixed mode operation, i.e., provision of natural ventilation openings along with mechanical ventilation, comfort cooling, air conditioning and specialised systems as required.

Generally displacement ventilation systems shall be preferred although these shall not be appropriate in all situations.

Careful consideration shall be given to select the appropriate system for each area with particular attention to:

Flexibility in use and for future partition layouts.

Energy efficiency, i.e. terminal re-heats on systems with mechanical cooling are generally inappropriate.

Noise and vibration control.

Heat reclaim.

Zoning and grouping of systems.

System types described below are used throughout this section:

Air Conditioned - Provision of air which may be warmed or cooled and have humidity raised or lowered.

The desired atmospheric conditions are between 18-22°C in winter and 21 - 24°C in summer with a relative humidity of between 40-60%.

Close Control Air Conditioning - Provision of an air conditioning system operating

within close temperature and humidity level tolerances.

Comfort Cooled - Provision of air, which has been cooled and is capable of setting internal and solar heat, gains throughout the year.

The desired conditions are 21-24°C in summer with no relative humidity control.

Ventilated - where air movement is induced to the space either by natural or mechanical powered system.

8.5.2.

Amendment

No:

SDK/22/7/A-

0007:

Textual
change in title.

Foyer, Exhibition and Open Plan Offices

Deletion of
reference to
"top hoppers"

The majority of spaces within the building shall be provided with a mechanical ventilation system to supplement the natural ventilation via openable windows.

Facilities shall be included to:

Vary supply and extract fan volumes to pre-cool the building structure, responding to zonal controls at the minimum energy cost.

The system shall be sufficiently flexible to enable areas of high cellurisation, poor indoor air quality or temperature to be mechanically ventilated while other areas are naturally ventilated.

Provision to prevent mechanical ventilation operation in areas with open windows or top hoppers.

Deletion of
reference to
"top hoppers"

Maintain minimum humidity levels preventing static build up.

RMJM BS, Statement of Compliance [Letter Ref: 1089/IMH/SP/NA 29 August 2003]:

The provision of humidification systems is energy intensive, and has been excluded from all office areas, as a consequence of the low energy aspirations for the building. The majority of office areas are naturally ventilated in any case, and so humidification of these areas would be inappropriate.

Reference to
"top hoppers"
replaced with
"natural
ventilators".
Textual
change "...and
security
system **via the
BMS**"

Provide a means of user control of natural ventilators to room occupants in open plan areas away from the building perimeter, which can be overridden if required by the BMS and security system, via the BMS.

8.5.3.

Toilet and Changing Facilities

Toilet and changing facilities shall be provided with independent mechanical supply

and extract ventilation systems, which may be either central or local, depending on building layout.

RMJM BS, Statement of Compliance [Letter Ref: 1089/IMH/SP/NA 29 August 2003]:

Ventilation of toilet and changing areas is achieved by dedicated duty and standby extract systems. Make up air is introduced from adjacent corridor areas via ceiling mounted transfer grilles, which meets compliance with Building Control and CIBSE recommendations.

Each system shall provide a high quality internal environment with care being paid to achieving effective removal of smells, privacy between adjacent facilities, and air movement towards urinals and water closets.

Extract systems shall incorporate twin fans with automatic changeover and duty sharing.

Local extract systems shall also incorporate a run on timer linked to presence detection or light switch.

Toilet and changing facility extract systems shall not be connected to any other type of room with the exception of cleaners' cupboards and refuse stores.

8.5.4. Meeting Rooms

Amendment
No:
SDK/22/7/A-
0007:

Text amended
to reflect
design
provision.

Provision shall be included for room users to adjust the internal conditions within pre set limits.

Comfort cooling systems shall not generally operate when rooms are unoccupied.

Facilities shall be included to provide a 'set back condition' and linking to either presence detection, air quality monitoring or other appropriate automatic sensing.

Comfort cooling and mechanical ventilation shall also be inhibited from operation when external windows are opened.

8.5.5. Security

Provision to security areas shall be independent from adjacent areas and shall generally operate for 24 hours a day throughout the year.

Comfort cooling systems shall be incorporated into rooms containing high equipment loads or occupancies including the security room, security monitor room incident room and police room.

The incident and police rooms shall be subject to intermittent usage and therefore a 'set back condition' facility shall be provided to each room, linked to either presence detection, air quality monitoring or other appropriate automatic sensing.

Mechanical ventilation shall be provided to all other security rooms within the building.

Both mechanical and comfort cooling systems shall be independent of central plant.

RMJM BS, Statement of Compliance [Letter Ref: 1089/IMH/SP/NA 29 August 2003]:

The development of the building prohibited the installation of individual comfort cooling systems. In order to maximise efficiency however, pipe circuits have been separately zoned to provide dedicated zoning for cooling units serving Security, IT and Comms Rooms, and other such areas requiring permanent cooling.

8.5.6. Public Areas

Comfort cooling shall be provided to the classroom, shop and exhibition space.

Consideration shall be given to comfort conditions within the general public areas and whether mechanical ventilation with minimum humidity control shall need supplementary comfort cooling or other measures.

Provision of zonal controls and regimes shall require careful consideration.

Where local control facilities exist they shall be lockable and vandal resistant.

RMJM BS, Statement of Compliance [Letter Ref: 1089/IH/LAM/B4 24 September 2003]:

Consideration was given to providing the general public area [exhibition space] with mechanical ventilation. This was however deleted during the design process in favour of natural ventilation for a variety of reasons including:

- Reduced capital costs
- Lower energy consumption
- Considerable savings in excavation costs that would otherwise have been necessary to house the associated mechanical plant
- Savings in space requirements for vertical risers
- Building aesthetics

With regard to installation of humidifiers clearly this is not feasible for naturally ventilated space, especially with solid floor and ceiling finishes.

8.5.7. Press Area

The press rooms, press conference and gallery Press room shall be provided with comfort cooling systems.

The area shall be subject to intermittent usage and therefore a 'set back condition' facility shall be provided on a room by room basis linked to either, presence detection, air quality monitoring or other appropriate automatic sensing.

8.5.8. Debating Chamber

The debating chamber, upper viewing gallery and foyer shall be air-conditioned.

Amendment
No:
SDK/22/7/A-

The controls and system proposed shall be capable of a fast response to wide load swings.

0007:

Text amended
to reflect
design
provision.

The equipment selections and installation shall provide a very low noise level within the chamber and gallery in particular.

Air conditioning shall be provided to the Radio control rooms, interview rooms, live commentary rooms and translation booths.

RMJM BS, Statement of Compliance [Letter Ref: 1089/IMH/SP/NA 29 August 2003]:

Air conditioning with temperature and all year humidity control is very energy intensive due to the re-heating of the air which is required. It was therefore recommended by RMJM BS to delete this requirement.

It is further noted elsewhere in the Brief ref section 8.5.1 "Energy Efficiency i.e. terminal re-heats on systems with mechanical cooling are generally inappropriate."

8.5.9.

Debating Chamber - Ancillary Accommodation

Amendment

No:

SDK/22/7/A-

0007:

Text amended
to reflect
actual design.

The video conference room shall be comfort cooled.

Comfort cooling shall be provided to conference rooms, committee rooms, Whips' offices, party leaders' rooms, speakers' room, radio room, and party rooms. Provision shall be included for room users to adjust the internal conditions within preset limits.

The controls and system proposed shall be capable of a fast response to changes in occupancy and internal load swings.

Particular attention shall be paid to the control of intrusive noise emission from the mechanical systems.

8.5.10.

Members

Comfort cooling shall be provided to the fax / photocopier room, video conferencing room(s) and meeting rooms.

Provision shall be included for room users to adjust the internal conditions within preset limits to meeting rooms.

8.5.11.

Clerk of Parliament

Amendment

No:

SDK/22/7/A-

0007:

Removal
reference

of
to

Comfort cooling shall be provided to serve the Clerk and Meeting rooms.

Each shall be provided with the facility for room users to adjust the room conditions within pre set limits.

"Parliament
Manager" in
title and text
body.

Close control air conditioning shall be provided for PABX, communications and ITSD rooms.

Full duty and standby facilities shall be provided to each room with automatic changeover and duty sharing.

The printing area shall be air-conditioned including any adjacent paper store and collation areas.

Local extract provision shall be made to photocopiers, etc. with direct connections wherever possible. Local extract and general extract shall be directed directly to outside and not recirculated.

RMJM BS, Statement of Compliance [Letter Ref: 1089/IMH/SP/NA 29 August 2003]:

It is noted that there is a contradiction in the brief between this clause and 8.24.4 which stipulates comfort cooling only for ITSD rooms. This has subsequently been clarified with the IT department. Accordingly,

The following units have temperature and humidity control:-

T2 AC 2/01 – T2 AC 2/02	Comms room [tower 4]
T3 AC 3/01 – T3 AC 3/02	Comms room [tower 3]
UB AC/05 – UB AC/06	PABX [upper basem't]
UB AC/07 – UB AC/08	Large Comms room [upper basem't]
UB AC/09 – UB AC/10	Large Comms room [upper basem't]
UB AC/11	Paper Store [upper basem't]
UB AC/12 – UB AC/13	Comms room [upper basem't]
LB AC/01 – LB AC/02	Comms room [West basem't]
LB AC/03 – LB AC/04	Comms room [under press tower]

The following units have temperature control only:-

P AC 2/01 – P AC 2/02	IT room [press tower]
UB AC/03 – UB AC/04	IT room [upper basem't]
UB AC/14 – UB AC/15	IT room [upper basem't]
C AC G/01 – C AC G/02	IT room [Canongate building]
UB AC G/01 – UB AC G/02	IT room [upper basem't]

8.5.12. Smoking Room

The smoking room shall have a dedicated extract system suitably sized to provide 100% fresh air through mechanical ventilation.

The discharge shall be located to prevent re-entrainment by the air intakes.

8.5.13. Committee Rooms

Committee Rooms shall generally be provided with air conditioning.

Provision shall be included for the room users to adjust the internal conditions within pre-set limits.

The air conditioning system shall not generally operate when the rooms are

unoccupied.

Facilities shall be included to provide a “set-back” condition linked to a presence detector, air quality monitor or other appropriate automatic sensing device.

RMJM BS, Statement of Compliance [Letter Ref: 1089/IMH/SP/NA 29 August 2003]:

Air conditioning with temperature and all year humidity control is very energy intensive due to the re-heating of the air which is required. It was therefore recommended by RMJM BS to delete this requirement.

It is further noted elsewhere in the Brief ref section 8.5.1 “Energy Efficiency i.e. terminal re-heats on systems with mechanical cooling are generally inappropriate.”

8.5.14. Catering

Comfort cooling shall be provided to MSP and executive dining, restaurant, lounges and bar.

Provision of electrostatic filtration shall be made within the smoking lounge and bar and extract directed to outside with no recirculation.

RMJM BS, Statement of Compliance [Letter Ref: 1089/NREP/FMcK 21 February 2003]:

As there is no re-circulation the need to electrostatically filter the extracted air does not exist.

The kitchens and dishwash areas shall have mechanical supply and extract ventilation and be provided with canopies/ventilated ceilings as appropriate.

The systems shall be manufactured from durable materials; stainless steel is generally preferred, to give long life.

Provision shall be made for regular cleaning of all elements of the kitchen and dishwash area systems and fans shall have motors ‘out of the airstream’.

Dishwash extract systems shall not be connected to any other areas and be designed with suitable condensate drainage provision.

Store areas associated with the kitchens shall have mechanical supply and extract ventilation including the freezer and chiller condensers.

8.5.15. Facilities

Amendment
No:
SDK/22/7/A-
0007:

Text amended to reflect the agreed design.

The paper store shall be air-conditioned.

Local extract provision shall be made to photocopiers, etc. with direct connections wherever possible.

RMJM BS, Statement of Compliance [Letter Ref: 1089/NREP/FMcK 21 February 2003]:

LEV shall be in accordance with photocopier manufacturers' recommendation.
Local and general extract shall be discharged directly to outside and not recirculated.

Store areas shall be provided with mechanical supply and extract systems.

Amendment

No:

SDK/22/7/A-

0007:

CRF

SDK/22/60/01

49. Delete
requirement
for toxic fume
alarm

8.5.16. Miscellaneous

Comfort cooling shall be provided specifically to the fitness room.

Additionally a repeat remote adjustment shall be included to be located at an agreed position.

Vandal and tamper resistant controls shall be provided to enable the shop staff to adjust conditions locally within set limits.

Underground/covered parking facilities shall wherever possible be naturally ventilated.

Should natural ventilation provision not be possible, mechanical supply and extract including smoke extract shall be provided, suitable to meet all the Statutory Regulations and British Standards.

Plant areas shall wherever possible be naturally ventilated with attention to prevent noise nuisance by various means to adjacent properties, building users and pedestrians.

Plant and louver positioning shall be such that they are aesthetically pleasing when viewed either from inside or outside the building.

Fire fighting lobbies and stairs shall wherever possible be naturally ventilated.

Should natural ventilation provision not be possible stair pressurisation systems shall be installed to meet BS 5588 and all other relevant regulations and design guides.

Mechanical ventilation [supply and extract] is generally:-

Offices 6 air changes / hour

Stores 1 air change / hour

Toilets 10 air changes / hour

There is no smoke extract during fire. There is a provision for smoke clearance after a fire in accordance with PACE regulations.

Illuminated "Room Occupied" indicators shall be provided to all committee rooms, control rooms, meeting rooms and video conferencing rooms.

8.6.

Heating Installation

The heating installation shall be capable of intermittent operation.

All necessary measures including equipment sizing and controls shall be included to ensure that areas attain their correct temperatures following unoccupied periods, i.e., weekends, recess, bank holidays, etc.

The room temperatures to be maintained are those detailed in the room data sheets or alternatively the CIBSE guide.

The system shall generally comprise a two-pipe low temperature hot water system with perimeter heat emitters with a reverse return pipework arrangement.

The system shall be zoned and controlled to take account of the differing functions, operating hours, orientation and thermal characteristics of each area.

The positioning of emitters and controls shall take account of future potential partitioning layouts and be integrated with the internal façade arrangements, i.e. window mullions.

Emitters shall each be fitted with a thermostatic radiator valve (TRV) complete with adjustable limit stops (upper and lower) and lockshield valve. In public area these shall be tamper proof.

In areas with air conditioning or comfort cooling radiators shall be fitted with two port control valves in lieu of TRVs, which shall be sequenced with the comfort cooling / air conditioning to prevent conflict.

Heating circuits shall be divided into suitable sub zones with automatic weather compensated controls.

Care shall be exercised to ensure that minimum pump flows are maintained, TRV seating pressures not exceeded and zones are not over sized.

Heating distribution circuits shall be provided with adequate balancing, flow measuring, isolating and flushing facilities.

Heating independent of central plant shall be provided to the car park and goods entrance security rooms.

Heating to the car park, which has natural ventilation openings to atmosphere in excess of 70m², is not conducive to low energy design, and has not been included

Entrance areas shall incorporate the following facilities:

Means of draught reduction including 'air locks' or rotating doors and air curtains.

Underfloor heating supplemented as appropriate by other types of heat emitter. Provision of separate switchable and output controlled heaters to each receptionist desk position.

Higher comfort levels adjacent to seating areas

Reception desks are underfloor heated by local floor zones. These zones can be controlled independently of the general floor area. It is not practical to control the

heating to individual desks without the provision of a radiator at each desk.

Seating areas are underfloor heated / cooled as required.

Glazing areas, particularly curtain walling, shall incorporate design features to prevent cold down draughts and minimise cold radiative effects.

The debating area concourse shall be provided with underfloor heating supplemented as appropriate by other types of heat emitter.

The loading bay shall be provided with high level radiative heat emitters and warm air curtains above the door.

The loading bay is external. Heating is not appropriate.

A means of back up heating shall be provided to the first aid rooms and the nursing mother rooms.

Both nursing mothers' room and first aid room are internal rooms and subsequently have very little heat loss. It should be noted that it is unusual to fit two radiators when one will suffice. Temporary electric fan heaters may be fitted however, should the radiators serving these rooms ever become defective.

Pipework and emitters within public areas, crèche, disabled toilets and other appropriate areas shall not exceed 43°C surface temperature at any point.

8.7.

Automatic Controls & Building Management Systems

A full BEMS system shall be provided complete with all necessary sensors, control elements, front end, software routines, control panels, wiring, etc.

Devices shall be provided for all systems under the control of the BEMS.

Controls shall be DDC (Direct Digital Control) and shall operate on a distributed (or standalone) basis, i.e., with or without the BEMS 'front end'.

The BEMS shall be fully integrated with other building services functions including, fire alarms, access control, lighting control, loading shedding, lifts, audio visual, etc.

Consideration was given during the early part of the design stage to integrate the BEMS with other building services functions. RMJM BS in conjunction with HPT reviewed Lonworks, Echelon Systems etc. However, as there were no completed systems installed at the time, it was decided that this route would carry an unacceptable element of risk, and the decision was taken in conjunction with the client to abandon this particular route.

The BEMS shall provide facilities to operate the mechanical services, safely; to maintain the design conditions within agreed tolerances and conserve energy through application of energy routines.

The BEMS shall undertake all control status and condition monitoring, alarm signalling and reporting plant operating and switching (time or otherwise) functions and shall include maintenance and inventory scheduling and life safety/security monitoring.

Reports shall be readily generated via printer in both text and/or graphics format.

The requirement for maintenance and inventory scheduling was indeed specified and the BEMS specialist offered a system called "MAXIMO". It was however deemed unsuitable by Facilities Management, SP, as they required a PPM system, which is capable of integration with their FM Help desk.

Facilities shall be included for automatic selection of the most appropriate central plant for any given set of criteria, including 'free cooling'.

Fully automatic duty sharing and duty/standby arrangements for plant shall be incorporated including facilities of lead/lag selection.

Local outstations shall be situated adjacent to the plant they control or within adjacent control panels and shall continue to operate should the communication network or the front end fail.

The front end shall include a PC, colour screen, modem, printer and software.

The printer shall allow text and graphic outputs in black and white and colour.

The software shall be graphics driven via a touch screen, text based systems shall generally not be acceptable unless provided as an addition to graphics.

Motor control panels shall be located in each plantroom providing power to equipment, full control and monitoring of plant via run/fail lamps, a digital display and keypad, and selector switches for manual/automatic/off control.

Panels, outstations, PC and wiring shall each have a minimum 25% spare capacity to allow subsequent enhancements, with a minimum of 10% spare capacity at any final distribution point.

Control panels shall be manufactured to a minimum of IP54 rating and shall have steel plinths where applicable.

Controls wiring shall be of the structured type and fully integrated with the building structured cabling system.

RMJM BS, Statement of Compliance [Letter Ref: 1089/NREP/FMcK 21 February 2003]:

Wiring is "stand alone", not integrated with structured cabling.

The BEMS system architecture shall be fully open, allowing seamless protocol interface with the system it controls.

The BEMS system must be year 2000 compliant.

The software shall include all necessary algorithms, etc. to enable the system to 'learn' and hence predict when plant shall be operated to achieve and maintain conditions (optimum start/stop) including morning boost, night set back, frost protection, automatic shut down and restart under fire conditions.

Plant time schedules shall automatically include for weekends, leap years, Christmas and New Year bank holidays for the next 50 years with provision for additional holidays, etc. to be added by users.

The PC and control panel digital display/pads password protected providing a

minimum of four levels of access.

All central or local plant, fans, comfort cooling equipment, etc. shall be linked to the BEMS system to enable full monitoring of parameters, run/fail, start/stop and set point adjustment from the BEMS.

In addition all walk-in fridges and freezers (4 number in total) shall be linked to the BEMS and monitored on a 24-hour basis. The BEMS will go into alarm status should the temperatures fall outwith pre-set limits.

The BEMS system shall be capable of interfacing with any adjacent Scottish Office site or via the PSTN/ISDN via modem to a central bureau/other sites.

Positive indication of plant operation/failure shall be provided via flow switches, sensors, etc.

Inferred operation by starter/contactor operation shall generally not be acceptable.

All incoming services shall be fully metered with a pulsed meter or other means, which shall be linked to the BEMS giving on screen emulation of readings and status.

In general, ventilation, comfort cooling or air conditioning shall be inhibited should any natural ventilation hoppers or windows be open in any particular zone.

Amendment No: Any natural ventilation hoppers throughout the building shall be capable of being opened / closed either by room occupants or remotely by BEMS or security systems control.
SDK/22/7/A0007:
Delete reference to "top hoppers"

Careful consideration shall be given to ensure flexibility.

The BEMS shall allow visual access to demonstrate the engineering systems and their use of energy in a real time situation.

This is to be achieved by use of a read only terminal and screen, located in the publicly accessible area of the building (final location to be agreed with the client).

8.8.

Acoustics

Careful consideration shall be given to the acoustic performance of services and their interaction with the building in general.

Generally noise ratings due to mechanical plant shall not exceed NR35 for cellular offices and meeting rooms and NR40 for open plan offices.

Where partitions, floors or ceilings have been erected the acoustic performance of services elements penetrating them shall be equal to the partition itself.

This shall include perimeter continuous convector casings, suspended floors/ceilings continuous diffuser/grilles, etc.

Plant air intakes/discharges, roof mounted plant, flues, etc. shall be sited and designed such as not to cause a nuisance to surrounding properties and to be 5dB below existing noise levels.

Particular attention shall be taken to provide a low level of noise within the debating chamber to ensure good speech audibility.

In planning, consideration shall be given to locating plantrooms containing rotating plant away from acoustically sensitive areas.

All systems containing rotating plant shall be isolated from the building structure sufficiently to prevent vibration transmission.

Rainwater pipes running through occupied spaces (including voids) shall be insulated to prevent noise nuisance to the space.

8.9. **Central Energy Plant**

An integrated approach shall be taken to the provision and selection of central energy plant including boilers, chillers, heat pumps, cogeneration plant, alternative energy sources, etc.

The combined output of all energy sources shall be sufficient to meet the maximum heating, cooling and hot water service demands.

The maximum demands shall be ascertained from the thermal simulation or by reference to criteria and calculation methodology as recommended by the CIBSE.

This shall include external ambient conditions, heat loss and gain calculations, plant margins for intermittent operation, equipment efficiencies, system losses and room criteria as detailed on room data sheets.

Heat gains shall not be included in the calculation of the maximum heat loss.

Particular attention shall be made to ensure a seamless, automatic transition from one source to another as load and other factors vary.

Plant shall operate fully automatically and shall be unattended.

There shall be provision included for backup in the event of failure in one module or element of a source, however plant efficiency shall not be compromised by oversizing individual sources.

Consideration shall be given to a modular approach to central plant to reduce the risk of failure and provide efficient operation.

Boiler, chiller, etc. output and number of modules shall be determined by assessing

Consequences of failure or maintenance downtime

Turndown ration being capable of satisfying low heat loads at a good efficiency

Access for future replacement and maintenance

Compatibility and availability of spares

Should boiler plant be installed a minimum of 2 boilers each rated at 100% of the installed load shall be required.

Where central cooling requirements exceed 200kW at least two refrigeration machines shall be utilised; each rated at 50%.

Low temperature, low-pressure hot water (LTHW) boiler systems are preferred unless linked to absorption chillers. Consideration shall be given to the use of

condensing boilers.

Boiler plant and pressurisation units, auxiliaries, controls and fuel supplies shall be complete with all necessary safety devices in accordance with HSE recommendations and British Standards and codes of practice.

Boilers and refrigeration plant shall not be located in the same plantroom.

Separate flues shall generally be provided for each boiler, hot water generator, engine, etc.

Flue systems shall be constructed of materials resistant to the attack from the products of combustion and be insulated; double skin stainless steel construction is preferred.

Where common headers are proposed they shall be sized to accommodate all the plant connected.

Shut off dampers shall be installed to each boiler should access for maintenance be envisaged internally to the boiler.

Should a flue dilution system be proposed fans shall be of the bifurcated type and shall include all necessary safety interlocks and other design features required to comply with British Standards.

Where domestic hot water cylinders are primarily fed with LTHW from boilers, immersion heaters shall be provided, as back up.

Boilers and chillers, etc shall be prevented from firing/running in the absence of water circulation or a low-pressure alarm. Primary pump overrun timers shall be incorporated to dissipate residual heat or cooled to prevent high or low temperature lockout respectively.

Provision shall be made to ensure that manufactures minimum flows through boilers, chillers, etc are maintained at all times and that specified flow and return temperatures are obtained.

Equipment selections shall be best practice in all respects. SO₂, CO and NOX emission levels shall be reduced as far as practicable with boilers, generators, CHP plants, etc incorporating lean burn engines, catalytic converters and other reduction measures.

All emissions of plant shall be agreed with the client before formal adoption of the design.

Circulating pumps shall be duplicated and shall be arranged as duty/standby with automatic change over and duty sharing.

Where the central cooling requirements exceed 200kW an appraisal shall be carried out in conjunction with the fuel appraisal to determine the most appropriate system type.

The appraisal shall include all system types analysed and conclusions reached, and be submitted to the client before formal adoption of the selection.

RMJM BS, Statement of Compliance [Letter Ref: 1089/IMH/SP/NA 29 August 2003]:

Detailed investigative reports were produced into the possibility of using desiccant cooling, and ground water cooling as alternatives to conventional air cooled chillers.

Desiccant cooling despite being the most efficient in terms of energy consumption and maintenance costs proved to be more expensive under life cycle cost analysis.

Conventional chillers and ground water proved to be the most cost effective in total cost terms over the study period of 100 years, and the design proceeded on this basis following a further detailed geotechnical report by Over Arup into the anticipated yield of the aquifer.

Consideration shall be given to absorption chillers operating in conjunction with CHP/ cogeneration or boiler plant.

Consideration shall be given to heat rejection to air or ground water.

Consideration shall be given to provision of eutectic energy storage to provide either load lopping or base load cooling.

Evaporative condensers, wet cooling towers and sprayed wet cooling coils in air handling units shall not generally be used.

Should any of these systems be proposed the designer shall include all necessary design features, permanent water treatment systems, etc as required by HSE guidance and CIBSE recommendations to minimise the risk of Legionnaires disease.

These systems shall only be used with the written approval of the client.

Full consideration shall be given to the provision of alternative energy sources either as a contributor or sole provider to central energy requirements.

In addition to environmental and fuel assessments, alternative energy sources shall include unique considerations which shall be assessed including;

Their variable nature and measures required to provide storage, etc.

Their maintenance levels.

Way-leaves and approvals from statutory bodies, etc.

Effects on performance between servicing/ cleaning.

All plantrooms shall include the following:

Provision for safe access and maintenance.

Provision for removal of the largest and heaviest item without plant/system or plantroom dismantling.

Where plant is sectional, provision for the largest/heaviest section is required.

Lifting beams shall be provided to enable plant to be moved to a suitable position for craneage.

Consideration shall be given to heavier plant i.e. boilers, chillers, generators, sub-stations, water storage, etc being at ground level.

Air intakes shall be sited away from sources of air contamination

Provision for locked access by authorised personnel only with internal panic latches on doors.

8.10.

Fuel Services

Gas installations as required shall be provided to boiler houses and kitchens and shall comply with all relevant regulations and codes of practice including Gas (Safety in Use) Regulations, British Gas Transco Regulations and Requirements, and Institution of Gas Engineers publications.

Each building shall be provided with only one gas service pipe wherever possible.

Gas intake/meter rooms shall be located close to the point of entry and be purpose built solely for the use.

Manual and automatic shut-off valves shall be located immediately outside each area served.

Automatic valves shall shut on fire detection (not fire alarm test), fusible link or gas sniffers in boiler houses, etc and shall automatically reset.

A main shut off valve shall be located at the point of entry.

All valves and pipework shall be clearly identified and schematic diagrams affixed adjacent to intake, and each area served.

Gas pipework shall be routed externally wherever possible.

If routed internally it shall be segregated from other services and located in naturally ventilated enclosures.

RMJM BS, Statement of Compliance [Letter Ref: 1089/IMH/SP/NA 29 August 2003]:

Due to the concentration, and density of other services, it has not been possible to segregate gas pipework in isolation. whilst this may be a requirement of the Building User Brief, it is not a requirement of "Utilisation Procedures IGE/UP/2: GAS INSTALLATION PIPEWORK, BOOSTERS AND COMPRESSORS ON INDUSTRIAL AND COMMERCIAL PREMISES" as published by The Institute of Gas Engineers [September 1994]. Nor does it contravene guidance, and recommendations outlined in BS8313: 1989: British Standard Code of Practice for Accommodation of building services in ducts.

The ceiling void, and in particular the route of the high level gas pipework in the upper basement, is naturally ventilated, and currently exceed actual requirements.

With regard to natural ventilation of vertical risers occupied by gas pipework. we

are currently investigating the actual gas pipe routes, and will liaise with EMBT/RMJM to agree grille aesthetics before finalising any instructions deemed necessary.

Fuel oil installations as required shall be provided to boiler houses, generators, etc and shall comply with all relevant regulations and codes of practice including the 'Shell Industrial Oil Fuels' booklet.

Oil storage vessels shall be contained within an impervious bund, which shall be provided with a sump and manual hand pump.

A fillguard shall be located at each filling point incorporating an audible alarm for high level. An impervious catch pit shall be located beneath the fill point.

The fill point shall be fitted with a lockable cover.

All necessary duty and standby transfer pumps, valves, pipework, fittings, etc. shall be provided as required. All oil fuel systems shall be fully automatic and linked to the BEMS for monitoring and control.

Electrically operated fire valves and manual isolating valves shall be installed adjacent to each area served and the main storage vessels.

Oil storage and delivery temperatures shall be maintained at recommended levels with provision of direct or indirect heating.

All pipework shall be laid to fall and underground pipework is generally not preferred.

Coal installations as required shall be provided to boiler houses, etc and shall comply with all relevant regulations and codes of practice including British Coal publication 'Industrial Solid Fuel Plant' and other publications.

Consideration shall be given to delivery methods to minimise use of road transport and also dust generation.

Minimum storage bunkers shall be provided internally of either 20 tonnes or 3 week's usage, whichever is the larger.

Storage bunkers shall be automatically monitored for carbon monoxide build up.

Full provision shall be made of conveyors, bunkers, screw feeds, ash handlers and storage, etc. for a complete installation. Fuel and ash handling systems shall be fully automatic and linked to the BEMS for monitoring and control.

Sludge gas systems shall incorporate all necessary storage and safety systems including flame traps, pressure relief and excess gas systems.

Gas storage shall be provided for at least 8 hours gas production with automatic shut off and anti vacuum devices.

All necessary ancillary plant shall be provided including purging plant, controls, gas boosters, pipelines, scrubbers, etc. to provide a complete working installation.

All systems shall be fully automatic and linked to the BEMS for monitoring and

control.

8.11. **Water Treatment**

A raw water analysis shall be carried out in the early stages of design.

Dependant on the results and operational characteristics of the various systems, appropriate permanent plant and treatment shall be provided as necessary.

All water systems shall be chemically cleaned and flushed prior to use / handover which ever is the sooner; to BSRIA recommendations.

Pipe work systems shall incorporate all necessary flushing facilities including full bore flushing valves, flushing loops, flexible connections, drain valves and back flushing valves, etc as appropriate to aid maintenance and flushing of systems.

All necessary water treatment shall be carried out to minimise the risk of Legionnaires disease.

Domestic water systems including all pipework, tanks, calorifiers, etc shall be chlorinated in accordance with BS6700 prior to use / handover whichever is the sooner.

Following chlorination, samples shall be taken for analysis.

Should the results be unacceptable at any of the test points, the chlorination and testing shall be repeated until acceptable results are obtained?

Acceptable test criteria shall be agreed with the Water Authority and the client.

Water storage tanks shall be positioned and constructed so that water is stored below 20degC.

8.12. **Domestic Water Supply, Storage & Distribution**

Water storage shall be provided to safeguard against mains failure for a 24-hour period or such other period as the supply authority may require.

Consideration shall be given to storage on a block by block basis.

Water storage shall not be located above any communications room or switchroom (at any level).

Mains water services shall be provided to kitchens, staff and rest rooms, first aid rooms, dining areas, vending points, tea points, bar, crèche and the following nominated drinking water outlets,

1. Public Cafeteria
2. Within the Main Hall and adjacent to any public reception seating areas
3. Adjacent to the First Aid rooms
4. Within the Crèche facility
5. Adjacent to the Fitness room

Flushing cisterns fitted to urinals shall be fitted with a time switch or other no less effective device to provide water economy.

Water closets shall be designed for a maximum flush of 6 litres and be of the dual flush type.

The use of spray taps shall be avoided.

Shower rooms shall be fitted with thermostatic mixing valves with adjustable height spray outlets.

Dependant on plant selections, consideration shall be given to separate hot water and heating systems to provide efficient load matching particularly during the summer period.

All hot and cold water shall incorporate the design features and provisions identified in the published recommendations of the water bylaws, HSE, CIBSE & IOP in respect of precautions against Legionnaires disease, risk to public health and other general provisions.

All necessary design detailing and precautionary devices shall be incorporated to prevent back flow or back siphonage from any draw off point.

Individual isolating valves/stopcocks shall be incorporated to each water connection.

All water storage tanks, equipment, service pipes, trace heating and drinking water outlets shall be provided with permanent identification labels detailing the service and function.

All elements of the domestic water system including tanks, equipment and pipework shall be insulated.

Provision shall be made for watering points at agreed locations for soft landscape maintenance.

Provision shall be made for bib taps with hose connections at agreed locations in each plantroom, building perimeter, roof area, car park, refuse room and delivery bay.

Where necessary these shall be protected against frost.

RMJM BS, Statement of Compliance [Letter Ref: 1089/IH/LAM/B4 24 September 2003]:

Bib taps have not been provided in all the areas indicated in the Brief. The following confirm the installed locations and reasons for non-conformance with the Brief.

Plantrooms

Bib taps have been provided in suitable locations in the main Assembly building plantrooms, the MSP boiler and water tank rooms and the external chiller compound plantroom.

Bib taps are not provided in satellite mechanical and electrical plantrooms.

Building Perimeter / Roof Areas

Bib taps are not provided for above areas, the landscape architects advised that there was no requirement for watering points for landscaping or green roofs.

Car Park

HPT instructed that no facility was required.

Refuse Areas

Bib taps have been provided in these areas.

8.13.

Drainage and Waste Systems

All sanitary fittings, sinks, gulleys and the like shall be connected to soil waste and drainage systems which shall be designed and installed in accordance with British Standards, Codes of Practice and the IOP guide.

Adequate facilities for maintenance and inspection shall be provided for all soil and waste pipework. Rodding points shall be provided as necessary above the flood level of the fitting.

A trap shall be provided to all sanitary appliances and other points of discharge into the system to provide an adequate water seal preventing air from the system entering the building. Tubular traps are preferred for urinals and for sanitary fittings where the trap is concealed. All traps shall be removable, accessible and provided with an adequate facility for cleaning.

Plantrooms and other spaces with infrequently used traps or gulleys shall incorporate automatic water replenishment.

Discharge stacks shall have an internal diameter not less than the largest trap discharge pipe connected.

Plantrooms above ground level or with basements below shall be tanked to fall and provided with gulleys.

Drains and gulleys running beneath the building and internal manholes shall be avoided.

All drains shall be arranged to accommodate settlement of surrounding matter and thermal movement.

Land drainage systems shall be provided where necessary to obviate the risk of flooding.

PVC pipework and fittings shall not generally be used, cast iron being preferred. Gulleys shall be provided at each bib tap.

RMJM BS, Statement of Compliance [Letter Ref: 1089/IMH/SP/NA 29 August 2003]:

Gulleys are provided below, or in near proximity to the locations where bib taps are installed.

Gulleys shall be adequately protected to prevent blockage.

Rainwater pipework running through the building shall be insulated and vapour

sealed.

Systems shall wherever possible be gravity type.

If however pumping is required fully automatic duplex pumps shall be provided with duty/standby arrangement and duty sharing which shall be linked to the BEMS.

Overflows shall be sited such as to be conspicuous on the outside of buildings. Each overflow shall connect to only one source. Where overflows discharge internally, tundishes shall be provided in accordance with water authority requirements. Overflows shall be fitted with vermin and insect guards.

8.14.

Fire Services

The fire services within the building shall comply with the requirements of HM Inspectorate of Fire Services, the local Fire Authority, client's fire consultant, Building Regulations and British Standards including BS 5588 and the current issue of the PACE Crown Fire.

The nature and functions of the building shall be adequately defined to HM Inspectorate of Fire Services, the Local Fire Authority and fire consultant to enable appropriate precautions to be advised.

The scope and provision of dry/rising mains, hoses reels and sprinkler installations shall be determined by the above.

Provision of dry/wet rising mains shall comply with relevant British Standards and Codes of Practice.

Hydraulic hose reels installation shall comply with relevant British Standards and Codes of Practice.

Sprinkler installations shall comply with the relevant British Standards, Codes of Practice and LPC regulations.

Note: Portable and hand-held extinguisher requirements are detailed elsewhere.

Flow and pressure tests shall be carried out on the mains water supply to determine the need for sprinkler water storage.

Should sprinkler water storage be required tanks and duty/standby pumps shall be provided in compliance with British Standards, Codes of Practice and LPC regulations.

A diesel standby pump complete with day storage fuel tank shall be provided to any sprinkler tank pump room.

Sprinklers shall not be installed within PABX, Communications, Security and ITSD rooms which shall be protected as described in 8.29 - Safety Systems.

8.15.

Electrical Power Distribution

In designing electrical mains distribution systems consideration shall be given to :

Nature of the site
Grouping of buildings

The capacity of standard equipment
Initial and projected load densities
Security of supplies

For economy in switchgear provisions and to minimise distribution losses, consideration shall be given to distribution at medium voltage.

The complete distribution system shall provide a secure and flexible arrangement.

Routing and segregation of services shall take into consideration the need to avoid potential interference between power and IT supplies / communications links.

Dual supplies or ring mains shall be considered for the main distribution networks.

Sub-stations shall be sited in accessible locations with direct road access, as close as possible to the load centre, or nearest to the heaviest load.

The electrical distribution system shall include for 25% spare capacity over and above the system calculated maximum demand.

The method of protection against indirect contact shall be earthed equipotential or automatic disconnection of supply (E.E.B.A.D.) and the earthing system employed shall be TN-C-S unless stated otherwise.

(TN-C-S is an electrical system consisting of a single source of electrical energy and an installation having a separate neutral and protective conductors throughout the system).

The distribution system shall incorporate automatic power factor correction equipment where power factor penalties would otherwise be incurred.

The correction shall be introduced in steps to correct to a minimum of 0.97 lagging.

Automatic maximum demand monitoring/control and status indications shall be incorporated into the BEMS facility.

The routing of external supply and distribution cabling shall generally follow physical features, e.g., roads or fences, etc. and shall avoid areas of likely future development.

Where cables pass under roadways and made up areas they shall be contained in suitable cable ducts.

All main switches, circuit breakers or isolators shall have provision for locking in the "Off" position to prevent unauthorised operation.

Provision shall also be made for locking in the "On" position where appropriate for safety reasons (e.g.. Temporary earthing).

All equipment shall be clearly and permanently marked to identify its function.

All switch and fusegear shall be clearly and permanently marked to identify the circuits they control.

Rewireable fuses shall not be used.

Precautions shall be taken to restrict access to intake or switchrooms to authorised personnel only.

The preferred protective devices for main and sub main switchgear are HRC (High Rupturing Capacity) fuses, air circuit breakers or moulded case circuit breakers (MCCBs).

Main and sub main distribution cables shall preferably be multicore PVC insulated, steel wire armoured with LSF (low smoke and fume) oversheath.

Where appropriate to take advantage of higher current ratings XLPE (cross-linked polyethylene) insulation may be considered.

All cables shall have a full sized neutral conductor.

All cables shall be of appropriate type, size and current carrying capacity and the preferred wiring system for small power and lighting final circuits is single core LSF insulated cables enclosed in metallic conduit/trunking, complete with separate CPC.

Distribution boards shall be sited as near as practicable to the centre, of the area served.

Distribution boards shall incorporate suitably rated miniature circuit breakers for supplying final circuits, complete with integral isolator.

All distribution boards shall be capable of accepting RCDs (Residual Current Devices) to designated circuits. Consumer units shall not be used.

A minimum of 20% spare SP&N or TP&N ways for future extensions shall be incorporated in all distribution boards/consumer units, without affecting the stipulated number of ways.

Each final circuit shall be connected to a separate way in the distribution board.

The design and installation of these systems shall be in full compliance with BS: 7671.

The building shall have raised access floors with integral service outlet boxes. Floor boxes shall provide services to a three metre square grid and be capable of being moved to any point within this grid.

Boxes shall be three compartments unless stated otherwise.

Each box shall be equipped with switched socket outlets and outlet plates/apertures to accommodate IT accessories.

The preferred distribution arrangement for underfloor power services is a "Plug-in" bus bar system.

Separate hard-wired supplies shall be installed for cleaning sockets. These shall be of a non-standard type.

Switched socket outlets in each space shall be on the same phase.

Where different phased supplies are present in the same location, (i.e. open plan areas) then the outlets shall be labelled to warn the user of a potential voltage in excess of 240v.

Care shall also be exercised when planning layout of furniture with desk wiring facilities.

Cables incorporating reduced section CPC shall not be used for power distribution unless an additional CPC is provided.

The designer shall liaise fully with:-

The Local Authorities and utility companies

All power supplies which are associated with architectural equipment i.e. (windows, doors, etc)

All power supplies, associated with mechanical services including water services (water heaters, etc)

Suitably sized containment systems shall be installed to accommodate the cabling requirements of all the IT, BEMS, etc systems.

To provide sufficient flexibility to extend the structured cabling to support wireless connectivity in the MSP Block, twin 13amp sockets should be installed within the electrical service riser to power up the wireless control equipment.

Miscellaneous

All wall mounted electrical equipment shall be mounted at heights as outlined in the Scottish Building Standards and the current edition of the Regulations for Electrical Installations as compiled by the Institute of Electrical Engineers.

8.16.

Standby Power Supplies

Standby electrical generation facilities shall be allowed to provide supply security to allow the continuous operation of the building under a full mains fail condition. The standby generation plant shall be capable of supplying the full electrical requirements of the building without having to implement load shedding facilities.

The standby generation equipment shall be located adjacent to the main supply locations.

Standby generators shall preferably be diesel driven and shall be provided with sufficient fuel storage to allow unattended continuous operation at full load for a minimum period of 72 hours.

The design, installation and equipment shall comply with the relevant British Standards and Regulations.

All systems shall have the facility to be linked to the BEMS to allow for full monitoring of the equipment.

Floor loadings to be checked prior to the location of all equipment.

8.17. Un-Interruptible Power Supply (UPS)

UPS facilities shall be included to provide full continuity of supply to the full range of IT and security systems within the building, for a minimum coverage of 30 minutes.

The facilities shall include standby batteries, static/rotary inverters and auto/manual bypass switches.

The UPS facilities shall conform to the requirements of BSEN 50091 Part 1.

Ventilation requirements should be met where non-sealed batteries are used.

All systems shall have the facility to be linked to the BEMS to allow for full monitoring of the equipment.

Floor loadings to be checked prior to location of all UPS equipment.

Software facilities shall be provided to initiate the logical shutdown of IT equipment.

8.18. **Fire Alarm Installation**

A fire alarm detection system shall be provided throughout the development.

The system shall be designed as type P1 and shall be fully addressable with modem links to an external agency or adjacent building.

The preference is for a fully addressable P.C. based system.

The fire alarm detection system shall conform with BS:5839 and all relevant codes of practice and shall be designed and installed with due regard to the following matters:-

The building shall be sub divided into separate alarm/detection zones with display facilities capable of showing the state of each separate zone.

Main annunciator/control panels shall be easily accessible to both the occupier and the fire brigade and the siting shall be agreed in conjunction with the client and the local fire brigade.

Each building entrance shall have its own slave display panel.

Sounders shall provide an audibility level at least 5dB higher than any ambient noise level or a minimum of 65 dB; whichever is the greater, throughout all accessible areas of the building.

In areas of high background noise and/or where necessary for users with impaired hearing, consideration shall be given to providing distinct visual alarm indication in the form of flashing xenon lights to supplement audible sounders.

These provisions shall be agreed with the fire consultant, and disability access consultant.

Due care shall be taken in siting sounders to overcome the attenuation from pairs

of closed doors in series (e.g., lobbies to toilet accommodation, etc).

Wiring systems shall be capable of sustained operation in the event of fire and resistant to mechanical change.

The preferred system is multi-core MICS cable with red LSF oversheath.

A standby power system shall be available to maintain the operation of fire alarm systems in the event of simultaneous mains failure in accordance with BS: 3116 and BS: 5839.

Call points shall be sited in accessible positions on exit routes and shall be agreed with the fire authority. Glass installed in these units shall be of the non-splinter type.

Where extra low voltage systems are used the electrical supply shall be from a safety-isolating transformer in accordance with 'SELV' requirements.

The mode of operation of any mechanical ventilation systems under a fire alert and the provision of any specific smoke control ventilation systems shall be agreed with the fire consultant.

An interface facility for controlled doors and mechanical systems, including cabling shall be allowed for.

Provision of evacuation strategy to be agreed with client.

The system shall include for 25% spare capacity for future expansion.

8.19. **Electromagnetic Compatibility (EMC)**

All equipment installed shall comply with the relevant British and European Standards and directives with regard to EMC.

Careful consideration shall be given to the planning and siting of all equipment, which could potentially be a source of interference.

Electronic equipment shall not be connected to common power lines which also serve plant or equipment of a type which may present a source of interference through heavy current or by transient loads which could degrade the power supply.

Power cables shall wherever practical adopt different routes to IT cables to avoid or reduce the level of potential interference.

Where parallel runs are unavoidable cable spacing and segregation facilities shall be sufficient to minimise the mutual effect.

8.20. **Interior Lighting Services**

Interior lighting designs shall be developed in close co-operation with interior designers and architects to ensure the solutions adopted provide the required environment both in terms of visual appearance and technical performance.

Energy conservation shall be considered as an integral part of lighting design and utilisation and care shall be exercised to ensure the intended lighting systems are energy efficient and cost effective.

Illumination levels and the limiting glare index shall be in accordance with the recommendations of the CIBSE 'Code for Interior Lighting' and the following requirements for typical spaces:-

Space	Illumination Level at 0.85m above F.F.L.
Offices, conference rooms, kitchens, computer rooms, IT rooms	500 lux
Debating Chamber and Committee Rooms	250 lux horizontal / 500 lux vertical (4100°K)
Public areas	300 lux
Corridors, rest rooms, plantrooms, stores	150 lux
Toilets	100 lux
Car parking	200 lux
Offices	As CIBSE LG3 and EEC display screen directives
Limiting Glare Index	
Debating Chamber, conference rooms, public areas, computer rooms, toilets, rest rooms, IT rooms etc.	19
Kitchens, stores, plantrooms	22

8.20. Contd. The lighting installation shall facilitate access to luminaires for routine maintenance, cleaning, relamping and repairs.

The method of fixing luminaires into suspended ceiling shall facilitate easy removal and replacement.

Cable management systems shall be provided to accommodate cabling with disconnectable flexible connections to light fittings in suspended ceilings.

The layout of trunking or other containment systems shall be designed to minimise disruption during future changes in partitioning layouts.

Lighting of stairways and common areas shall be supplied from separate circuits from those serving office areas.

For interior lighting the preferred light sources are 26mm diameter linear and/or compact source triphosphor/krypton filled lamps having correlated colour temperature of 3500°k and compact fluorescents.

Uplighters where provided for background/effect purposes, shall be lamped with either metal halide (MBI) or in areas where colour rendering is important metal halide fluorescent (MBIF) lamps.

All fluorescent luminaires shall incorporate high frequency control gear.

The lighting to all office areas or other areas where visual display terminals may be used shall be designed in accordance with the recommendations of CIBSE lighting design guide LG3 and comply with all HSE guidance and EEC display screen directives.

Luminaires shall use low brightness reflectors having category 1 or 2 performance.

Vandal-proof luminaires shall be provided in all car parking, unobserved public areas and arranged so as not to allow the public access to lighting controls.

Automatic switching controls with overriding manual ON/OFF facilities shall be provided where practical and economically viable in order to give the following benefits:

Energy conservation

Staff convenience and safety

Flexibility in terms of expansion or changes in working patterns.

Selection of varying lighting levels to suit the task.

Programmable facilities for varying time management (e.g., cleaning, security, lunchtime, abnormal working, etc).

Daylight linking.

Automatic control of lighting by presence detectors shall also be considered for toilets, storerooms, cellular offices or areas, which may be unoccupied for long periods.

Wherever possible, switching arrangements shall enable reduced lighting levels to be used for out of normal hours purposes.

Lighting in large spaces shall be switched in suitable conveniently located groupings to reflect the working practice and with due regard to flexibility to accommodate future changes to partition layouts.

A minimum of one switch per row shall be provided and with rows arranged to be switched parallel to window walls.

Dimming controls shall not be provided other than in the debating chamber, committee rooms and conference rooms or where specifically required by the client.

RMJM BS, Statement of Compliance [Letter Ref: 1089/IMH/SP/NA 29 August 2003]:

Dimming controls are provided in each of the Committee rooms, the Video conference, the Chamber conference room and the Debating Chamber, on appropriate light sources. Dimming controls are also provided in the restaurant/bar areas and in the Public / Exhibition foyer including facilities for the exhibits.

The use of a telephone switching system for localised control of individual or groups of lighting shall be considered.

8.21. **Emergency Lighting**

Internal emergency lighting shall be provided to the accommodation in accordance with the requirements of BS: 5266, CIBSE TM12, ICEL standards, all current EC Directives and the requirements of the fire consultant in respect of lighting of fire escape routes.

8.22 Clause Deleted

8.23 Clause Deleted

8.24. **Information Technology**

Sufficient external cable ducts including 100% spare capacity shall be provided from the building to the closest public highway to enable connections to be made to the locally available communication networks of private and public companies.

To provide increased security of supply and service, duplicate entries to the building are to be allowed for (at an alternative location).

The development shall be provided with all necessary facilities, provisions and cabling infrastructure, which shall support the present and future needs of voice and data services.

The cabling topology shall be conventional "Tree and Branch" (Hierarchical star) which can:

Support centralised and distributed systems.

Facilitate centralised points of management and maintenance.

Be configured to support bus, ring and tree topologies.

A common cabling infrastructure which supports both voice and data fully meshed fibre and multi-pair copper backbone shall be used.

The cabling infrastructure shall support as a minimum the following computing and voice platforms which shall include:

Data

RS 232/ RS 485

Token ring at 4 & 16 Mbps

IBM317 x communications Controller

Synchronous and Asynchronous

Data rates up to 19.2kBps (Direct)

CuDD [ANSI(x379.5)TP-PMD]

AppleTalk

100VG Anylan

Ethernet at 10 and 100 Mbits/s

AS/400, IBM System 36/38

FDDI at 100 Mbps

Asynchronous Transfer Mode

Voice

ISDN Services

ACD Systems

AT&T Definity

All commercially available 2/4 wire analogue and digital available services.

Baseband Video Transmission

(Composite and RGB)

Provision for Video Conferencing

The development shall be provided with all necessary facilities and provisions to accommodate IT equipment associated with specific parliamentary information systems:-

Electronic Voting

Parliamentary Website

Electronic Record of the Proceedings of Parliament and its Committees

Electronic Mail Including Voice Mail, Scheduling, etc

Links with Westminster

Corporate Databases

The cabling infrastructure shall be capable of supporting the requirements of an intelligent building system and a building energy management system.

Amendment No.

SDK/22/7/A-

0007:

CRF:

SDK/22/60/0157-

A1

To accommodate a cashless vending system, appropriate cabling will need to be available to supplement the cash loaders / cash readers [till points] as follows:-

Cash Loaders to be located

Ground Level near to ATM

First Level near to MSP lounge / dining

Structured

cabling to support

cash loaders /

cash readers [till

points]

Cash Readers [till points] to be located

Garden Level restaurant [2 tills]

Garden Level coffee lounge

Public Cafeteria

First Level MSP lounge / dining [possibly 2 tills: one for food and one for bar]

It is possible that at a later date there will be a requirement to provide these facilities within a retail outlet and, incorporate it into the vending machines.

Dedicated equipment rooms, rising ducts, equipment closets and cable management systems shall be incorporated into the designs to provide for current technology together with the inherent flexibility, wherever practicable, to accept new technology and future changes to the planned use of IT systems by the occupiers.

Provision for both voice and data outlets shall be made at every floor outlet box and via containment systems where raised access floors are not available.

“Clean earth” systems shall be provided to dedicated items of IT and where recommended by the manufacturers.

8.24.1.

Patch Panels

The patch panels used for the IT system shall be termination block type with IDC 110 presentation.

Generally the IT patch frames shall be wall mounted within equipment rooms or riser cupboards, for intermediate distribution frames and floor standing within central communications rooms, for main fibre distribution frames and shall be housed in proprietary glass fronted enclosures.

The system shall include intermediate frames to ensure structured cabling distance limitations are adhered to allow support of named systems.

The copper backbone terminations shall be terminated on krone block type frames in the PABX room.

The use of wall mounted or freestanding frames will be determined by the layout of the PABX room.

8.24.2. Cabling Strategy

The system backbone shall comprise of multi-pair copper and multi-core fibre to support the distributed equipment.

The backbone shall be configured such that resilience is built in to avoid one point of system failure.

The cabling strategy shall comprise of category 5 grade products or higher specification and be designed and installed in accordance with BS: 7671 and manufacturers guidelines.

The system shall be designed to prevent physical interference from unauthorised personnel.

8.24.3. Design Parameters Copper (Horizontal)

The design shall be based on a common information outlet (IO) configuration and adapted to support voice, video, data and other services through the use of appropriate baluns and adapters.

Amendment SDK/22/7/A- 0007:

Delete reference
to floorboxes

The horizontal cabling shall be twisted pair and shall be run direct from the associated equipment room(s) to floor boxes.

Basket containment will be utilised under the raised floor.

Suitable containment, where applicable, must be provided to surface mounted outlets.

Miscellaneous wall mounted connections shall be directly wired to the equipment frame.

These shall be wired as 2 No RJ45 information outlets.

Fibre (Inter and Intra Floor)

Multi-core 62.5/125-micron fibre terminated using ST11 connectors shall be run from each communications room to each equipment room forming a fully meshed

configuration.

Multi-core 62.5/125-micron fibre terminated using ST11 connectors shall be run between each equipment room on each floor forming a physical ring structure.

Copper (Inter and Intra Floor)

Multi-core cable shall be run from each PABX room frame to each equipment room; 2 and 3 pair modularity shall be used throughout to make best use of installed cabling.

Cat 5 cable or higher specification shall be run from each communications room to each equipment room and terminated within the associated equipment panels.

Cat 5 or higher specification cables shall be run between each equipment room on each floor forming a physical ring structure.

Cat 5 cable shall be run between equipment rooms on different floors.

The insulation material used must be low smoke (meeting IEC 1034), zero halogen (meeting IEC 754-2) and be flame retardant.

In addition, complete pre-loomed cables must meet the flame spread and fire retardant requirements according to IEC 332-3, Class C.

The system shall include for 25% spare capacity for future expansion with final distribution panels having a minimum of 10% spare capacity.

8.24.4. Equipment Rooms Environmental Systems

The PABX room and communications room shall have close control air conditioning units installed generally as detailed in 8.5.1.

The systems shall have 100% independent stand-alone standby facilities.

The intermediate ITSD / patching rooms shall be comfort cooled utilising ceiling-mounted cassette units (preferred) to maximise the floor space.

Leak detection shall be installed in these areas (below and above) linked to an alarm output locally and through the BEMS system.

Attention is drawn to the requirements laid down in the PACE Crown Fire Standards in relation to the Fire protection to Server and Equipment Rooms

8.25. **Debating Chamber**

The main parliamentary debating chamber and ancillary areas shall be fully fitted out with the following systems and facilities:

- Central broadcasting facilities
- Infra-red translation
- Loop hearing
- Voice alarm system
- Division bell system
- Electronic voting system

Speaker queuing system
Pager system
Official Report facilities

Amendment No:
SDK/22/7/A-

0007:

Replace
"Hansard" with
"Official Report"

Amendment No:
SDK/22/7/A-

0007:

Provision of
Palan System, or
similar will be
determined at
each election to
the Parliament
making best use
of the available
technologies at
that time.

Security / fire interface

Palan system
Archive storage and internet access

Central Broadcasting Facilities

The central broadcasting facilities consist of several mediums comprising the following:

Sound systems (voice reinforcement and broadcast)

CCTV systems (digital)

Official Report recording (transcription)

Amendment No:
SDK/22/7/A-

0007:

Replace
"Hansard" with
"Official Report"

Text broadcasting

Amendment No:
SDK/22/7/A-

0007:

Replace
"Hansard" with
"Official Report"

All sound systems shall be **combined** and controlled through a central rack system with the broadcasting system quality being maintained within the other sound systems (i.e., voice reinforcement and Official Report).

The system shall be arranged to allow the sound system(s) to be broadcast independently from the vision/text.

In conjunction with the sound broadcasting, TV broadcasting shall be relayed and controlled from the broadcasting control room for onward transmission by landlines to the local transmission station.

The landlines shall be installed by others to a point in the PABX room.

Satellite and cable facilities shall also be provided as required.

The CCTV system shall operate in conjunction with the voice enhancement system and speaker queuing system as follows:

Upon entering the chamber the MSPs shall have the choice of sitting at any of the positions available to them.

Their coded access chip card or approved similar key shall be inserted into the card reader located at that position which shall record their presence within the chamber to the Speaker and to the 'IT' network.

At each of the MSP positions there shall be a microphone and local loudspeaker with volume control.

During a debate the MSP shall signal his requirement to join the debate to the Presiding Officer via a call button located on or adjacent to the microphone (via the 'IT' network).

The calls shall be logged in a queuing system recorded on a monitor at the Presiding Officer's position, which shall be duplicated at the controller's station in the broadcasting room.

The Presiding Officer shall have the facility to activate and de-activate the microphone of any MSP at any time as well as having an emergency "Cut Off" device.

The Presiding Officer should have the ability to turn his/her own microphone on and off.

Upon activation of a microphone the fully functional automatic cameras shall immediately pan and zoom in on the MSP speaking.

A piggy back small camera shall also give the broadcasting producer a wide-angle view of the chamber.

The repeat monitors in the broadcast control room will enable the producer to pre-set the cameras to the next MSP in turn to speak.

The pictures from these cameras shall be received in the broadcast control room where they shall be broadcast via landlines to the local transmitter station, to large screens in the public areas and to the franchised companies (if required).

The facility for viewing of parliamentary proceedings shall be through the internal broadcasting network with voting information being provided on MSP computer screens within the buildings through the networked 'IT' system.

The broadcasting system shall also relay chamber proceedings to the public areas and to MSPs' private areas.

Amendment No:
SDK/22/7/A-
0007:

Replace

"Hansard" with
"Official Report"

In an area adjoining the debating chamber, there shall be an Official Report facility for recording all proceedings within the chamber by manual scribe and electronic means.

This facility will be operated by the franchised broadcasting company.

The Official Report facility shall also be transmitted to the library facility (24-hour delay) and archive storage with text overlay (date, time, etc) for all committee rooms, debating chamber, etc.

Committee Rooms

Amendment No:
SDK/22/7/A-
0007:

The large Committee Rooms shall also be broadcast through the broadcast control room (after editing) on a delayed transmission with "Real Time" broadcasting via an emergency disconnect to the franchise broadcasting company.

Replace
"Hansard" with
"Official Report"

The Official Report facility shall also be transmitted through the franchise control room and the information recorded as per the debating chamber.

The committee rooms shall also have data points for general use and video conferencing.

The small committee rooms will have localised portable studios as well as a link to the main broadcasting studio.

The committee rooms may be operational at the same time as the debating chamber therefore duplicate facilities will be required.

Amendment No:
SDK/22/7/A-
0007:

Interpretation Facilities

Replace
"Translation" with
"Interpretation"

Infra-red interpretation units shall be located within the chamber and committee rooms and they shall use head mounted microphones suitable for language translation and loop hearing enhancement for low level speech.

Individuals shall be able to hear the interpreted broadcast by wearing infrared receiving units with the earphone sets.

Interpretation booths will be required complete with acoustic treatment between booths and externally.

Electronic Voting System

The electronic voting system is critical to operation of the Parliament and must be extremely reliable and efficient. Any malfunction or breakdown is likely to significantly interrupt the proceedings of the Parliament.

Specification Requirements:

The current electronic voting system is independent of the Parliament's main IT network (although there is a link to allow the transmission of voting results), and this is considered by users to be a significant drawback.

It is suggested therefore that it should be possible for the Holyrood system to be fully integrated with the main IT network. This would allow Clerks to access other network facilities (e.g. Word and e-mail) from their desks in the Chamber and allow easier and more comprehensive distribution of voting results.

The system will have three main user groups – Clerks, Members and those Parliamentary staff responsible for the publication and dissemination of voting results. The requirements of each of these groups are broadly as follows:

Clerks

User interface which is easy to use and understand;

Ability to set up sequence of votes in advance i.e. type in motion numbers and titles before Decision Time to improve efficiency;

Database of Members with unique identifiers, party and constituency details;

Variable voting times;

Variable results output i.e. total results by category of vote (Yes, No, Abstain, No Vote), by member within category, by party, by alphabetical list etc.;

Automatic generation of voting results form to be passed to Presiding Officer for announcement immediately following the completion of each vote.

Members

Console or screen for registering vote, with appropriate security facilities e.g. chip card or PIN;

Clear indication of when electronic vote is in progress, and category of vote entered by Member;

Indicator informing member that vote has been successfully recorded and the category of the recorded vote;

Ability to change category of vote during voting period if an error has been made;

Other Parliamentary Staff

Output of results to be tailored to requirements of Official Report to simplify process of recording votes.

System should be able to order results by category of vote and, within each category, list each member alphabetically and include party and constituency details;

Results in an agreed format to be automatically transmitted to Official Report, Press Office, Business Managers and others following verification by Clerks.

Ancillary Systems

Broadcasters will be provided with a feed for radio to the Media Centre. The BBC and two of the Radio companies will provide their own sound booths in the Media Centre and connection will be provided to the commentary booths overlooking the Debating Chamber

Amendment No:
SDK/22/7/A-
0007:

Provision of
Palan System, or
similar will be

The debating chamber shall have a Palan monitor system connected through the 'IT' structured system from disabled user(s).

determined at each election to the Parliament making best use of the available technologies at that time.

The voice alarm system shall be interconnected to the 'IT' structured system and the fire and security systems to broadcast emergency messages and voting messages over the 'IT' structured network.

Press broadcasting stations shall be strategically located within the Parliament building in key locations for the use of the media. A voice link (telephone) shall be installed from each of these points linked back to the broadcast control room.

These units shall be suitable for internal use only and have barred access to external lines.

Amendment No:
SDK/22/2/A-
0007:

CRF Nos:
SDK/22/60/0153
Confirmation of gas suppression provision as a result of Risk Assessment Exercise carried out by WS Atkins

Inergen Gas Suppression Systems will be provided to the following Broadcasting Services Rooms,

Termination Control Room UB.106
Apparatus Room UB.97

The main broadcasting control rooms shall have close control air conditioning units installed generally as described in 8.5.1 (Overview).

The system(s) shall have 100% independent stand-alone standby facilities.

Ancillary Areas

A media broadcasting studio independent to (but linked to) the main broadcasting studio shall be provided.

This studio may not be located on the Parliament site.

Feeds of the Chamber and Committee Room coverage will be permanently available to the Broadcasters' offices.

8.26.

Lifts

Lifts shall be provided in all buildings other than single storey with a preference for a minimum of two lifts per building to enable a service to be provided in the event of breakdown or essential maintenance on one lift.

All lifts shall comply with the requirements of BS: 5655. In addition the lifts in Tower 1, Tower 2 and the Press Tower shall comply with BS 5588, Part 8. This will assist in the evacuation of disabled people from the Visitors Gallery in the Debating Chamber

and also the Committee Rooms in Towers 1 and 2.

The lift provision for passenger service shall be based on a requirement for conveying 16% of the occupants requiring a lift service within a 5 minute period with a maximum waiting time of 30 seconds.

A full traffic analysis shall be provided.

The lifts at the public entrance shall be large capacity type and be separate from the MSP/staff lifts.

Where basements are provided at least one lift shall serve the basement level (if applicable) or such greater number as may be required to comply with the passenger service requirements identified above.

Multi-lift installations shall be grouped collectively and arranged with interconnecting control systems.

A specifically designed goods lift shall be provided for the transportation of items not suitable for passenger lifts.

The goods lift shall be located in a suitable position to facilitate the easy transport of goods to and from the building.

A specifically designed kitchen lift shall be provided for the transportation of kitchen waste, raw foodstuff and cooked meals.

The kitchen lift shall be located in a suitable position to facilitate the easy transportation of goods between all kitchens and dining areas.

RMJM BS, Statement of Compliance [Letter Ref: 1089/IMH/SP/NA 29 August 2003]:

No lift has been provided specifically for kitchen use. Discussions with EMBT/RMJM and the catering consultant concluded that the method of handling kitchen supplies/waste avoided the need for a specific lift.

Specific goods lifts shall not be accessible to the public and shall not be located in the same lobby as passenger.

Fire fighting lifts shall be provided where necessary to comply with Building Regulations.

Any lift designated a fire fighting lift shall comply with BS: 5588 and the recommendations of the relevant fire officer.

Lifts shall have doors giving a minimum clearance of 800mm and with minimum platform dimensions to suit the particular application.

Lift wheels shall not be situated above a space which is accessible to people.

All lifts within a lift group shall serve the same occupied floors except where high rise speed lifts are provided.

All lifts shall be provided with car top controls.

Hydraulic lifts may be used where shown to be cost effective, electric lifts are preferred and all lifts shall be of a type with a proven record of service of not less than 5 years.

The client shall require to approve the lift manufacturer prior to any order being placed.

Passenger lifts shall have:

Visual and audible information displays.

An internal hand rail 1000mm above floor level.

Information displays at each landing identifying the location of each lift.

Control systems, which ensure the lift stops only at those levels, required.

Microcomputer based programmable or self-adaptive control systems to provide flexibility of lift service to meet changing traffic patterns.

An emergency telephone or intercom connected to the security control room.

Inductive coupling facilities shall be provided to assist users with hearing difficulties.

Flush car and landing doors shall be power operated preferably two-panel centre opening types.

Where telephones are considered inadvisable due to the risk of vandalism an alarm system shall be provided linked to a 24 hour attended service.

Attendant controls shall be housed in one enclosure with a lockable door.

Lifts, which are specifically provided for goods use only, shall be suitably sized to accommodate the desired goods load and shall have suitable automatic controls.

Recommended lift speeds for goods and service lifts are 0.5m/s and 0.38 m/s respectively. Passenger lift speeds shall as a minimum comply with BS: 5655 Part 6 recommendations.

Lift car interior lighting shall be:

Arranged to provide an illumination level of 200 lux at floor level.

From a minimum of two mains operated fluorescent lamps suitably enclosed and operated by independent control.

Arranged to have emergency lighting provided by means of a self contained unit.

Arranged with facilities to automatically switch off the internal car lights when the lift is not in use over extended periods.

Lift shaft lighting shall be by fluorescent compact lamps complete with emergency packs controlled from the motor room and lift pit by two way switching facilities.

Lift control systems shall allow for directional collective operation and all installations shall be provided with close levelling controls.

Lift controls shall incorporate Braille/tactile heads and be of a suitable type and mounted at a suitable height for operation by disabled users.

Communications to the lift car shall be provided to re-assure passengers in the case of emergency and to give clear instructions to the rescue party when freeing trapped passengers.

Means of freeing trapped passengers and instructions for their use shall be prominently displayed in lift motor rooms.

Suitable portable access ladders shall be provided to facilitate access to the lift pit(s) and each lift pit shall be provided with a 13 amp RCD protected switched socket outlet.

The lifts will **not** be used for building purposes.

8.27.

Amendment No:
SDK/22/7/A-
0007: Reference
to "Escalators"
deleted

Escalators

8.28.

Lightning Protection

Lightning protection shall be provided where assessment in accordance with BS: 6651 indicates it is required.

Systems shall be of types that are recognised by BS: 6651 and shall be designed in accordance with this standard.

Down conductors shall be concealed (if structure is not utilised).

Lightning protection systems shall be connected to the electrical system earth and to relevant building elements in accordance with BS: 6651 and IEE Regulations (BS: 7671).

Suitable protective devices shall be incorporated into all electrical systems / circuits as necessary to safeguard against transient pulses caused by a lightning strike.

Procedures should be put in place to ensure proving of continuity from air termination network to earth point.

8.29.

Safety Systems

All sensitive rooms and areas of the building, i.e., IT rooms, Communications, PABX, security, etc. shall have the following systems installed:-

V.E.S.D.A.

Localised suppression

Moisture detection

The V.E.S.D.A. system shall be fully zoned and be interfaced to the building fire detection system.

The moisture detection system shall have local visual and audible indication with a duplicate facility in the security office.

All IT, computer or PABX cabinets shall have a local pressurised suppression system with individual canisters of a clean extinguishing agent (an electrically non-conducting, volatile or gaseous fire extinguishant that does not leave a residue upon evaporation).

All systems shall be zoned and interfaced to the building fire detection system.

The broadcast control rooms, archive storage, etc shall be protected by a gas suppression system of the "Inergen" type.

Stair Refuge areas shall be provided throughout the complex to assist in the evacuation of disabled people, whether MSPs, staff or members of the public. These facilities will typically include the following items,

Xenon beacon
Manual call point
Two-way intercom with "push to talk" button and reassurance lamp.

8.30. **Emergency Systems - Test Facilities**

All building services systems which are required to indicate, or operate during an emergency situation shall have suitable test facilities provided to enable regular testing to be carried out.

The design of such test facilities shall, wherever practicable, enable normal services to be maintained without interruption during testing, in particular it shall not be necessary to isolate essential systems during any regular emergency system testing regime.

8.31 **Clause Deleted**

8.32. **Year 2000 Compliant Software**

It is believed that software which uses only digits for the year shall not be able to cope with the date being changed from /99 to /00.

It is therefore essential that all software on the project, which includes BEMS, lifts, lighting, control systems, fire alarms, security systems, etc is Year 2000 compliant.

8.33. **Information Considerations and Planning**

This section highlights the considerations, which are to be considered when planning the building services information requirements.

The areas to be covered are:-
Record Drawings
Commissioning Information
Operation and Maintenance Information
Familiarisation/Training Sessions
Plant and System Warranties.

8.33.1. **Operation and Maintenance Information**

The information is to be provided in both hard copy and computer based documentation systems.

The computer based documentation system shall incorporate text-based information and CAD drawings and shall be capable of being interfaced to the building management system.

The information to be incorporated into the Operation and Maintenance package is

as follows:-

How To Use The Manual
Emergency Information
Contractual and Legal Information
Systems Description and Design Intent
Asset List / Equipment Schedule
Parts Identification and Recommended Spares
Spares Policy
Operation
Fault Finding
Modification Information
Names and Addresses of Manufacturers
Manufacturers' literature.
Commissioning Data
Maintenance
Lubrication
Disposal Instructions

Index of Plans and Drawings

8.33.2. Record Drawings

Drawings are to be provided in both hard copy and the latest AutoCAD format on computer disk.

The requirements for building services drawings are as follows:-

8.33.3. Electrical Installations

Layout drawings shall indicate:-

Cable origin, path, destination, loading, conductor metal and size, insulation type and colour (if required for identification), number of cores in cable, number of cables in trunking

Whether cables conduit and trunking are concealed in wall chases, screed, cast in-situ or run on the surface

The location route and depth of underground cables.

Layout drawings shall show the following:-

HV/LV switchboards (panels)

Primary cable/trunking distribution routes

Distribution switch gear

Trunking tray and ladders in switch rooms and plant rooms

Single/three phase wiring and cable routes including sub-circuits

Electrical equipment including isolators, starters, socket outlets, control equipment and other associated equipment

Sections through riser and ceiling voids

Lighting configuration including distribution boards, switch locations and circuit identification

Lightning conductors and air terminals

Emergency lighting luminaires and supply circuits
Earth electrodes and test clamps

Main earthing terminal

Cables providing specialist earth circuits

IT and telephone cabling

The identification and location of cabling concealed within the building structure or buried underground, including the depth and point of entry to the building of power and telephone cabling.

Schematic drawings shall detail the following:

Electrical system including cable size, type and number of cores

Fire alarm systems

Other ancillary systems e.g. ancillary, public address, etc.

Production drawings of factory-built equipment shall form part of the record drawings.

Emergency lighting and general lighting.

8.33.4. Mechanical Installations

Layout drawings shall show the following:-

The installation of mechanical services, including the size and route of ductwork and pipe-work.

Arrangement of plant in plant rooms including identity, size and rating of plant.

The identification and location of services concealed within the building structure or buried underground, including the depth and point of entry to the building of water and gas services.

The location and identification of pipework regulating, isolating and control valves.

The location and identification of regulating dampers and fire/smoke dampers including access points.

The location of air distribution grills, diffusers and terminal units, including identification tag.

The location of acoustic silencers, including identification tag.

Details of vibration dampers.

Schematic drawings shall detail the following:-

Heating, ventilating, air-conditioning and piping/plumbing systems, including flow rates, temperatures and pressures.

Arrangement of control systems including, where appropriate sensors, field controllers/out-stations and control panels, including identification tags.

Detailed wiring and controls drawings shall be provided for all equipment supplied under the mechanical contract, which shall indicate:-

Origin, route and destination of each cable.

Cable identification method and colour.

Conductor size and number of cores (including spare cores), insulation type/rating, name/number of British Standard or industry code to which cable complies.

Power supply cables and their fuse reference.

Joints and draw boxes.

8.33.5.

Familiarisation/Training Sessions

Production drawings of factory-build equipment shall form part of the record drawings.

A programme of comprehensive structured training is to be tabled, including options on the level of training, that is "off site" and "on site" system training.

The programme shall be co-ordinated with the testing and commissioning programmes to take maximum benefit of these site activities.

Completion of training is a requirement for Practical Completion.

It is recommended that training sessions with a high technical content are divided into two parts.

The first part shall be held in a classroom environment, where a systems overview can be provided and the final format of the Operation and Maintenance package can be explained.

This session shall be followed by a tour of the building to allow specific elements of the systems to be identified and their operation demonstrated.

It may be appropriate to include in the contract details of the following:-

The provision for the installation contractor, in conjunction with equipment suppliers/manufacturers, to carry out operator training is to be included.

If the client intends to out-source all or part of the maintenance work, this shall be arranged well in advance of the training to ensure attendance of the maintenance contractor.

A requirement to attend the training session(s) shall be included in the contract

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