Primary School Design Guidelines

Revision 1 dated November 2009
## Contents

1.0 **Introduction** 3  
  1.1 General 3  
  1.2 Design Guidance Suite 3  
  1.3 Design Team Procedures 4  
  1.4 Application 4  
  1.5 Further information 5  

2.0 **Project Brief** 6  
  2.1 Brief 6  
  2.2 Typical 16 Classroom schedule 7  

3.0 **Planning a Primary school** 8  
  3.1 Introduction 8  
  3.2 Curriculum 8  
  3.3 The School timetable 8  
  3.4 Areas and heights 9  
  3.5 Wall to floor ratio 9  
  3.6 Grouping of spaces 9  
  3.7 Circulation 10  
  3.8 Construction programme 10  
  3.9 Sample Room Layouts 10  

4.0 **Room Data Sheets** 11  
  4.1 Application 11  
  4.2 Schedule of Rooms 11  
  4.3 General requirements 11  
  4.4 Classrooms 13  
  4.5 Library/ General Resource Area 16  
  4.6 Multi-Purpose Room 17  
  4.7 Special Education Teacher [SET] Support Room 18  
  4.8 Administration / General Office 19  
  4.9 Teachers/ Staff room 20  
  4.10 Principal/ Deputy Principal’s Office 21  
  4.11 General Purpose Room 22  
  4.12 General Purpose Room Toilet Suite 24  
  4.13 Adult toilets including Universal Access 26  
  4.14 General Storage including Safe, Cleaners, & External Stores 27  
  4.15 Electrical Metering and Electrical Distribution Centre 28  
  4.16 Data Communication Centre 29  
  4.17 Heating Centre (Boiler house) 29  

5.0 **External Facilities** 30  
  5.1 Site 30  
  5.2 Landscaping 30  
  5.3 Car-parking & Set-down/Pick up areas 30  
  5.4 Rainwater Recovery 30  
  5.5 External Play Areas 31  

Appendix A 32
1.0 Introduction

1.1 General

(a) These Primary School Design Guidelines state the specific design requirements and room inter-relationships applicable to the design of primary schools.

(b) They should be read in conjunction with TGD-020 General Design Guidelines for Schools which describes the general design principles of school design (Primary and Post-primary), and TGD-021 Construction Standards for Schools.

(c) This document, in conjunction with the other relevant design guidance (see below), is intended both as a design tool-kit for the Client* & Design Team and as part of a set of reference documents for the evaluation of design submissions.

* In the case of Primary Schools, where the site is owned by the Department of Education and Science, the Department is the client, but for the purposes of this document the term “Client” shall also encompass the School Authorities.

1.2 Design Guidance Suite

(a) The Primary School Design Guidelines is part of a suite of Department of Education and Science [DoES] design guidance documents for Primary and Post-primary schools which include:

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>General Design Guidelines for Schools</td>
<td>020</td>
</tr>
<tr>
<td>Construction Standards for Schools</td>
<td>021</td>
</tr>
<tr>
<td>Primary School Design Guidelines</td>
<td>022</td>
</tr>
<tr>
<td>Post-primary School Design Guidelines</td>
<td>023</td>
</tr>
<tr>
<td>Post-primary Fixed furniture Details</td>
<td>024</td>
</tr>
<tr>
<td>Post-primary Room Layouts</td>
<td></td>
</tr>
<tr>
<td>Mechanical &amp; Electrical Building Services Engineering Guidelines for Temporary Accommodation School Buildings</td>
<td>001</td>
</tr>
<tr>
<td>Mechanical &amp; Electrical Building Services Engineering Guidelines for Primary School Buildings</td>
<td>002</td>
</tr>
<tr>
<td>Mechanical &amp; Electrical Building Services Engineering Guidelines for Post-primary School Buildings</td>
<td>003</td>
</tr>
<tr>
<td>Information &amp; Communication Technology (ICT) Infrastructure Guidelines for Primary Schools</td>
<td>004</td>
</tr>
<tr>
<td>Information &amp; Communication Technology (ICT) Infrastructure Guidelines for Post-primary Schools</td>
<td>005</td>
</tr>
<tr>
<td>Energy Information Form</td>
<td>006</td>
</tr>
</tbody>
</table>

All of the above Guidance Documents are available on the Department of Education & Science web-site at www.education.ie.

(b) This Suite of Design Guidance documents is intended to assist in the design and proper planning of buildings in response to the educational needs of a particular school as determined in the brief formulation process.

Continued overleaf
1.0 Introduction (continued)

1.2 Design Guidance Suite (continued)

(c) These Guidelines and the other relevant documents in the Design Guidance suite should be read in conjunction with

- The Brief,
- The Design Team Procedures and
- All other DoES Technical Guidance Documents published on the Department’s web-site.

*Always check the Department’s web-site for the most up-to-date version.*

(d) In applying these guidelines to projects, clients and design teams will be obliged to comply in full with the current Design Team Procedures, DoES Technical Guidance Documents and other guidance issued by the Department, except as stated in 1.4 Application below.

(e) The above Suite of Design Guidance documents replace all previous Design Guidelines both Primary and Post Primary.

1.3 Design Team Procedures

(a) The Design Team Procedures [DTPs] set out the scope of service for all consultants individually and collectively for all projects stating the requirements and principles for each stage of the design and construction process starting with Project Analysis, and proceeding through the design stages to Tender Documents, obtaining tenders, Construction and Final Account.

(b) The DTPs apply to all construction projects funded in part or in total by the Department of Education & Science unless otherwise directed by the Department in writing.

1.4 Application

(a) These Primary School Design Guidelines together with TGD-020 General Design Guidelines for Schools and TGD-021 Construction Standards for Schools apply to all Primary construction projects funded in part or in total by the Department of Education & Science (unless otherwise directed by the Department in writing) where a decision to commence architectural design and planning has been confirmed in writing by the Planning and Building Unit.

(b) The scope of the building project will be the schedule(s) of accommodation and other briefing instructions as agreed between the Client and the PBU.

(c) Where it is proposed to construct a new school these guidelines and all associated documents in the suite of Design Guidance should be applied in full.

*Continued overleaf*
1.4 Application (continued)

(d) The dimensions and areas stated in this document and the schedule of new build accommodation apply to the new build portion of the project only.

(e) In the case of existing school buildings, where an extension, conversion or renovation is proposed, a flexible pragmatic approach will be applied by the PBU. The dimensions, areas, and room designation in the existing building will be retained except where the PBU specifies otherwise (based on educational need).

(f) In existing buildings, the room, dimensions, and areas will be as specified in the Future Use of Existing Accommodation.

1.5 Further information

(a) This document and all other Guidance Documents mentioned above are available on the Department of Education & Science web-site at www.education.gov.ie.

Always check the Department's web-site for the most up-to-date version.

(b) For further advice on these guidelines or any other matters relating to this document, please contact:

Department of Education and Science,
Planning & Building Unit,
Portlaoise Road,
Tullamore,
Co. Offaly.
Telephone: (057) 9324300
Fax: (057) 9351119
2.0 Project Brief

2.1 Brief

(a) Each project will have an agreed written Brief setting out the scope of works and the Client’s requirements for that project. Every brief will comprise (where applicable):

(i) A Schedule of Overall Accommodation
(ii) A Schedule of Future Use of Existing Accommodation (with room areas)
(iii) A Schedule of Residual Accommodation (extensions to existing)
(iv) A schedule of alterations to existing accommodation, where necessary for the implementation of that project only (if required)
(v) A provisional Schedule of essential remedial works applicable to that project only (see also Design Team Procedures)
(vi) A Cost Limit for New Build per square metre (if applicable).

(b) In all cases the determination of the brief will be based on an assessment of overall medium-to-long term educational need, and the capacity and suitability of existing accommodation to provide for this need.

(c) For Primary School projects, this brief is determined by the Planning and Building Unit [PBU], in agreement with the relevant School Authority as follows:

(i) The School Planning Section of the Planning and Building Unit [PBU] first determines the projected long-term enrolment for the school.
(ii) Then based on the current design guidelines, staffing levels, and current area norms, the School Planning Section determines a Schedule of Overall Accommodation.
(iii) The PBU then assesses the Educational Suitability of the existing accommodation and prepares both a Schedule of Future Use of Existing Accommodation and a Provisional Schedule of Alterations & Remedial works (if applicable).
(iv) The deficit in accommodation (i.e. the difference between the Schedule of Overall Accommodation and the Schedule of Future Use of Existing Accommodation) is called the Schedule of Residual Accommodation and the total area indicated is the Total Floor Area (area limit) of new build to be funded.
(v) The Schedule of Residual Accommodation plus the Future Use of Existing Accommodation, plus the Provisional Schedule of Alterations & Remedial works (if applicable) and the applicable cost limit all form part of the brief for the project.

(d) The Project Brief setting out the scope of works must be agreed in writing by both the School Authority and the Planning & Building Unit before the appointment of Design Consultants, and before commencement of Stage 1 Preliminary Design.

Continued overleaf
### 2.2 Typical 16 Classroom schedule

(a) Below is an example of a 16-classroom schedule of overall accommodation. It must not be taken as an accurate or typical 16-Classroom schedule for all schools.

- **The number, sizes and types of rooms may not match your schedule of overall accommodation, as each schedule is determined individually based on a range of factors including the number of pupils and teachers. Always refer to the schedule of accommodation for your own school project.**

<table>
<thead>
<tr>
<th>No. of spaces</th>
<th>Area (m²)</th>
<th>Description of Space</th>
<th>Total Area (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>80.0 m²</td>
<td>Classroom(s) incl WCs &amp; storage</td>
<td>1280.0 m²</td>
</tr>
<tr>
<td>1</td>
<td>195.0 m²</td>
<td>General Purpose Room</td>
<td>195.0 m²</td>
</tr>
<tr>
<td>1</td>
<td>8.0 m²</td>
<td>General Purpose Room Servery</td>
<td>8.0 m²</td>
</tr>
<tr>
<td>1</td>
<td>20.0 m²</td>
<td>P.E. Equipment Store</td>
<td>20.0 m²</td>
</tr>
<tr>
<td>(1)</td>
<td>13.0 m²</td>
<td>WC Area [4 No.] associated with General Purpose Room</td>
<td>13.0 m²</td>
</tr>
<tr>
<td>1</td>
<td>60.0 m²</td>
<td>Library &amp; Resource Area combined (incl storage)</td>
<td>60.0 m²</td>
</tr>
<tr>
<td>1</td>
<td>13.4 m²</td>
<td>Multi-Purpose Room</td>
<td>13.4 m²</td>
</tr>
<tr>
<td>2</td>
<td>13.4 m²</td>
<td>Special Education Tuition Room(s)</td>
<td>26.8 m²</td>
</tr>
<tr>
<td>1</td>
<td>16.0 m²</td>
<td>Administration/General Office</td>
<td>16.0 m²</td>
</tr>
<tr>
<td>1</td>
<td>50.0 m²</td>
<td>Teachers &amp; Staff Room</td>
<td>50.0 m²</td>
</tr>
<tr>
<td>1</td>
<td>13.4 m²</td>
<td>Principal's Office</td>
<td>13.4 m²</td>
</tr>
<tr>
<td>12.0 m²</td>
<td></td>
<td>2 Dual use Staff/Universal Access WCs with shower</td>
<td>12.0 m²</td>
</tr>
<tr>
<td>(1)</td>
<td>35.0 m²</td>
<td>General Storage, incl safe,cleaner's &amp; external</td>
<td>35.0 m²</td>
</tr>
<tr>
<td>(1)</td>
<td>2.0 m²</td>
<td>Electrical</td>
<td>2.0 m²</td>
</tr>
<tr>
<td>(1)</td>
<td>4.0 m²</td>
<td>D.C.C.</td>
<td>4.0 m²</td>
</tr>
<tr>
<td><strong>Sub-Total</strong></td>
<td></td>
<td></td>
<td><strong>1748.6 m²</strong></td>
</tr>
<tr>
<td>6.0%</td>
<td>104.9 m²</td>
<td>Internal Walls/Partitions @ 6.0%</td>
<td>104.9 m²</td>
</tr>
<tr>
<td>18.0%</td>
<td>314.7 m²</td>
<td>Internal Circulation @ 18.0%</td>
<td>314.7 m²</td>
</tr>
<tr>
<td>16.0 m²</td>
<td></td>
<td>Boiler House</td>
<td>16.0 m²</td>
</tr>
<tr>
<td><strong>TOTAL (Rounded up to nearest m²)</strong></td>
<td></td>
<td></td>
<td><strong>2185.0 m²</strong></td>
</tr>
<tr>
<td>Plus maximum 25m² per stairs per floor [where approved by PBU only]</td>
<td></td>
<td></td>
<td>0.0 m²</td>
</tr>
<tr>
<td><strong>External:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>585.0 m²</td>
<td>2 External Ball Court(s)</td>
<td>1170.0 m²</td>
</tr>
<tr>
<td>1</td>
<td>430.0 m²</td>
<td>1 Junior Play Area</td>
<td>430.0 m²</td>
</tr>
<tr>
<td>26</td>
<td></td>
<td>26 Car Parking Spaces for Teaching &amp; non-teaching staff</td>
<td></td>
</tr>
</tbody>
</table>
3.0 Planning a Primary school

3.1 Introduction
(a) This guidance document, together with TGD-020 General Design Guidelines for Schools and the schedules of accommodation, should be used as a starting point for developing a design specific to the school.

(b) The Schedule of Overall Accommodation, Schedule of Future Use of Existing Accommodation and Schedule of Residual Accommodation (extensions to existing) lists the accommodation to be provided (refer to 2.0 the Brief for description of how these schedules are determined).

(c) TGD-020 General Design Guidelines for Schools describes the general design principles for schools (both Primary and Post-primary) including the Design Philosophy, the Built Environment, Health & Safety, Building Location & Orientation, Universal Access, Security, External Circulation and the general principles applying to the internal layout.

(d) This document provides detailed information on the spaces required (both internal and external), their area, height and any special requirements applicable to those spaces.

3.2 Curriculum
(a) The Primary School Curriculum 1999 incorporates current educational thinking and effective pedagogical practices. Its implementation has represented an exciting opportunity for change and renewal in primary schools. It celebrates the uniqueness of the child and provides a structured national framework that aids teachers in planning the learning experiences most useful to the child at the various stages of his or her development. It is designed to cater for the needs of children in the modern world.

(b) Building upon the child-centred philosophy of *Curacłąm na Bunscoile* (1971), the 1999 curriculum incorporates new learning objectives and embraces new approaches and methodologies. Its design reflects six curriculum areas: Language, Mathematics, Arts Education, Physical Education, Social Environmental & Scientific Education (SESE) and Social Personal & Health Education (SPHE).

(c) The Primary Curriculum articulates a progressive and developmental learning experience for children as they proceed up through the primary school. It is laid out at four levels - infant classes, first and second classes, third and fourth classes and fifth and sixth classes.

3.3 The School timetable
(a) In agreement with the education partners a standardised school year is implemented in Irish primary schools. The minimum number of teaching days per school year is 183 full school days. Generally, schools close for summer vacation during the complete months of July and August. Schools currently also have breaks of two weeks off during both Christmas and Easter and two shorter mid-term breaks of up to five working days at Halloween and in February.

(b) A full school day comprises a period of not less than five hours and forty minutes. Schools are permitted to reduce the school day by one hour for children in infants and first class where desired. In order to meet the needs of the communities which they serve schools can, with some flexibility, determine the start time within their daily timetable while maintaining the integrity of the school day. (continued overleaf)
3.0 Planning a Primary school (continued)

### 3.3 The School Timetable (continued)
A possible version of a full day in one school, for example, may be 9.20 am to 3.00 pm, while others may be 8.50 am to 2.30 pm or 9.00 am to 2.40 pm

### 3.4 Areas and heights

(a) The areas of all spaces in the Schedules of Accommodation are net areas, measured to the internal faces of the enclosing walls. The Total Floor Area (area limit) in the schedules is the “total of all enclosed floor space measured to the internal faces of the enclosing walls” and corresponds with the National Standard Building Elements definition.

(b) Ceiling heights should be considered in the context of the size and function of the space and should take into account the physical environment within that space. In larger rooms such as the General Purpose room the height should be in proportion to the size and take into account the function and any special requirements.

(c) The minimum finished floor to ceiling height for all teaching spaces is 3.0m except those shown in the room data sheets and room layouts or as required for the proportion of a room.

### 3.5 Wall to floor ratio

(a) The wall to floor ratio is one measure of the cost efficiency of a building layout (the lower the wall to floor ratio the more efficient the building layout).

(b) Designers should balance the need to minimise the wall to floor ratio (for efficiency of layout and cost reasons) with the educational, planning and design requirements as set out in this document and TGD-020 General Design Guidelines for Schools.

### 3.6 Grouping of spaces

(a) Spaces can be broadly described as Teaching and Learning spaces (including the General Purpose Room), Administrative spaces and Ancillary spaces.

(b) Teaching and Learning spaces should be given priority with regards orientation, daylight and ventilation.

(c) The following rooms/spaces are frequently used by visitors/community and should be located so that it is not necessary to enter the general teaching areas most frequently used by students:
   - Principal’s Office (if in schedule of accommodation).
   - General Office.
   - General Purpose Room.
   - Multi Purpose Room.

### 3.7 Circulation

(a) The design solution for the school should ensure ease of circulation and orientation for students, staff and visitors. On accessing the school via any entrance, it should be possible to move to any point in the school without meeting an area of congestion. The minimum clear width of corridors shall be 1.8m.

(continued overleaf)
3.0 Planning a Primary school (continued)

3.8 Circulation (continued)  
(b) Where a public access balcony is provided, designers in determining the balustrade height, should consider the risk associated with projectiles [school bags, books, and pupils] being dropped over the handrail. A height of not less than 1,400mm is recommended.

(c) Entrance lobbies should be secure controlled lobbies with a door control mechanism provided to the internal access doors of the lobby. Matwell/ matting carpet should be provided to the main front and rear entrance lobbies.

3.8 Construction programme  
(a) Where construction work is being carried out on the same site as an operational school or portion of that school, and such work is unavoidable, particular care should be taken to minimise disruption to the school curriculum. Consideration must be given to the School’s policy on Health and Safety in planning and organising this construction activity.

(b) The Construction programme must also take account of the internal school timetable. Tasks that are likely to be disruptive should be programmed to be carried out outside school hours or during holidays.

(c) Refer also to Health and Safety sections in the Design Team Procedures

3.9 Sample Room Layouts  
(a) Sample layouts of the following rooms are appended to this document. These Room Layouts are recommended as best practice, if the Design Team decides not to use these layouts then the Design Team must demonstrate to the Department’s satisfaction that any alternative layout meets with the Department’s guidelines.

- Classroom including WC & storage
- Library/ Resource Room
- Administration / general office
- Principals office
- Kitchenette unit details

(b) These layouts may have been amended or up-dated subsequent to the last revision date of this document. The most up-to-date version can be found on the Department Web-site at www.education.ie.

(c) Further examples of these layouts or other sample room layouts may also be added to the web-site so designers should regularly check the web for the up-to-date list.

(d) Where a designer uses an alternative layout or where a room layout is not given, the width to length ratio shall provide comfortable and flexible usage of the space.

(e) Where alternative room layouts to those in the Department’s website are offered, the designer shall demonstrate the suitability of such layouts and how the same functionality, or better, is being achieved.

(f) In all cases (whether a Sample Room Layout is available or not) the guidance provided in this document on teaching spaces, administrative spaces, ancillary spaces and the General Purpose room shall also apply.
4.0 Room Data Sheets

4.1 Application (a) Room data sheets are provided for all spaces including Teaching, Administrative, and Ancillary Spaces. General requirements applicable to all or most rooms are listed below. These requirements are deemed to apply unless otherwise stated in the relevant data sheet.

4.2 Schedule of Rooms (a) The following is a schedule of Primary School rooms for which data sheets are provided. (The number and size of rooms varies depending on the number of Classes and Teachers.):

<table>
<thead>
<tr>
<th>Room Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 General Classroom(s) incl WC’s &amp; Storage</td>
</tr>
<tr>
<td>2 General Purpose Room (Junior &amp; Senior)</td>
</tr>
<tr>
<td>3 General Purpose Room Servery</td>
</tr>
<tr>
<td>4 PE Equipment Store</td>
</tr>
<tr>
<td>5 Toilets associated with GP Room</td>
</tr>
<tr>
<td>6 Library and Resource Area</td>
</tr>
<tr>
<td>7 Multipurpose Room</td>
</tr>
<tr>
<td>8 Special Education Teacher [SET] Room(s)</td>
</tr>
<tr>
<td>9 Administration / General Office</td>
</tr>
<tr>
<td>10 Teachers/Staff Room</td>
</tr>
<tr>
<td>11 Principal’s Office</td>
</tr>
<tr>
<td>12 Adult toilets incl. Universal Access with shower</td>
</tr>
<tr>
<td>13 General Storage incl. Safe, Cleaners, &amp; External</td>
</tr>
<tr>
<td>14 DCC</td>
</tr>
<tr>
<td>15 Electrical</td>
</tr>
<tr>
<td>16 Boiler House</td>
</tr>
</tbody>
</table>

4.3 General requirements Design Considerations (a) Natural day lighting should be exploited when designing rooms, to minimise the dependence on artificial lighting. Glare must be avoided. Windows for teaching spaces should have a horizontal vista. See TGD-020 General Design Guidelines for Schools (Primary and Post-primary).

(b) Ventilation should be natural ventilation by means of permanent wall vents and windows with opening sections. Vents should contain baffles for noise, wind and rain. See also TGD-020 General Design Guidelines for Schools (Primary and Post-primary). The ventilation area provided through permanent vents (whether in walls or windows) and opening sashes shall meet/exceed the current Technical Guidance Documents to the Building Regulations, and shall be designed to suit the class environment having regard to the high levels of occupancy generally.

(c) Windows generally should be double glazed, easy to clean and maintain, and have high and low level opening sashes. The position and size of opening window sashes must take into account ease of operation, natural ventilation requirements and maintain an adequate level of safety. Stays or restrictors should be used on all opening windows both high and low level.

(d) Doors should be easy to open and close. Care should be taken in the design of the door, frame, and opening mechanism to protect against injury to fingers, etc. An adequate glazed viewing panel in the solid core door from all rooms to the corridors should be provided for the benefit of small children.
4.0 Room Data Sheets (continued)

4.3 General Requirements (continued)

(e) A good quality daylight distribution is required in each room with the average day lighting factor for each room to be in the range 4.5 to 5.5% with the emphasis on an even light distribution throughout the space. A schedule of all rooms and associated daylight factor is to be provided.

(f) All spaces should have the benefit of 1/3 high and 2/3 low level natural ventilation opening sections in the windows. Tilt and turn windows are not appropriate. The window design with respect to geometry and opening sections must be based on overheating calculations which should take into account the air tightness standard. Adequate natural ventilation should be achievable without draughts.

Security
(g) Refer to DoES TDG-020 General Design Guidelines for Schools (Primary & Post-primary)

Acoustics
(h) The objective is to provide acoustic conditions in schools that (a) facilitate clear communication of speech between teacher and student, and between students, and (b) do not interfere with study activities. Refer also to TGD-020 General Design Guidelines for Schools for performance standards on Indoor Ambient Noise Levels, Rain Noise, Airborne Sound Insulation between Spaces, Impact Sound Insulation of Floors, and Reverberation in Various Spaces.

Finishes
(i) Floor finishes must safe, hardwearing and suitable for their intended use. Designers should consider the Health and Safety implications of the selected flooring (e.g. non-slip, chemically resistant, etc.) and in particular the risks associated with junctions between surfaces with different slip resistances. Floor finishes will normally be a sheet flooring consistent with the room’s use and Health & Safety considerations

(j) Wall finishes generally to be durable, resistant to wear & easily cleaned

Mechanical & Electrical Building Services Engineering
(k) Refer to DoES TGD-002, 004 & 006 Mechanical & Electrical Building Services Engineering Guidelines

(l) Provisions for Information and Communications Technology (ICT) should be in accordance with TGD-004, Information & Communication Technology (ICT) Infrastructure Guidelines for Primary Schools.

Furniture & Fittings
(m) Fixed furniture and fittings (e.g. sink & units to wet areas, hat & coat hooks and rails, kitchenette units, translucent blinds, shelving, etc.) are described in the relevant Room Data Sheets and are part of the Building Contract. White boards and notice boards shown on the typical room layouts are deemed to be fixed furniture and are part of the Building Contract.

(n) Loose furniture and equipment (e.g. tables, desks, chairs, Soap or Towel dispensers, bins etc.) are not part of the Contract.
4.0 Room Data Sheets (continued)

### 4.4 Classrooms

<table>
<thead>
<tr>
<th>Sample Room Layout</th>
<th>Area</th>
<th>Min clear height</th>
</tr>
</thead>
<tbody>
<tr>
<td>TGD 022 – D01 &amp; D02</td>
<td>80 m² incl. WCs &amp; Storage</td>
<td>3.0 m</td>
</tr>
</tbody>
</table>

**Classrooms**

(a) Classrooms are used for whole-class, group and individualised teaching and learning in general across the subjects of the curriculum. For pupils, the classroom environment is very important. The shape of the classroom and interior areas, the colour scheme of the walls, the layout of furniture and flooring, the amount of light, and the room arrangement will all influence how pupils learn.

(b) The orientation of Classrooms and their location relative to the external environment must be considered in the planning of the school. Glare must be avoided where practicable or controlled by means of translucent blinds. Refer also to TGD-020 General Design Guidelines for Schools 4.4 Passive Energy.

(c) A floor to ceiling height of 3.15m (e.g. multiple of standard concrete block size) is required, taking into account an even distribution of natural light and natural ventilation across the whole floor area of the room.

(d) In designing the Classroom the class group that will use the room (agreed in conjunction with the school authority) should be taken into account. Careful consideration should be given to the activity zones within teaching spaces, and to the positions of chalkboards, white and green boards, and pin-boards. The position of these boards should be determined at design stage and should not conflict with the location of surface mounted services.

(e) Due consideration should also be given to the room furniture layout so that a number of flexible layout options are available for consideration and discussion with the School Management.

(f) A suitable water-resistant, durable, easy clean sheet vinyl/linoleum/rubber floor finish should be used with a slip resistance of R09 to DIN: 51130.

**Classroom Storage Area**

(g) Storage in classrooms should be provided in presses associated with the space and within the overall classroom area limit. A separate classroom storage room is not recommended.

(h) Each Classroom should be provided with a main storage unit containing a minimum of 9500mm of 600mm deep heavy duty adjustable shelving and 9500mm of 300mm deep heavy duty adjustable shelving. In addition 6000mm of 300mm deep shelving should be provided, this can be a separate open shelving unit or form part of the overall storage unit. No part of the shelving should be greater than 2200mm above FFL.

(i) The main storage area shall be designed so that it can be screened off from the Classroom area by means of sliding doors or other similar arrangement. The layout should allow for some lockable doors. The door surfaces should be suitable for hanging posters, artwork, teaching materials, etc.

*Continued overleaf*
4.0 Room Data Sheets (continued)

4.4 Classrooms (continued)

Cloaks
(j) Each Classroom should have a dedicated space of not less than 3.0 linear metres for the storage of cloaks. It should include a rail with 30 coat hooks easily reachable by the pupils of that age group (fixed 750mm – 900mm above FFL) and sufficient space in front to allow for putting on or taking off the coats without obstructing circulation.

(k) The cloak space should be so located that it doesn’t interfere with the operation of the space within the class or any teaching activity zone. The consequences of storing wet or damp coats should also be considered in the design and location of the Cloaks Area.

IT Area
(l) Each Classroom shall have an I.T. or Computer area designed to accommodate five workstations. This area should be located and arranged so as not to be a distraction to other teaching activities. Note: I.T. facilities shall be provided on the teaching wall. Refer to sample room layout TGD022 – D01 & D02 appended to this document and available on the Department website.

(m) Refer also to DoES TGD 004 Information and Communication Technology (ICT) Infrastructure Guidelines for Primary Schools.

Wet Area
(n) Each Classroom shall have a wet play area. The wet area serves to support the teaching of a number of subjects such as arts and crafts, nature, science, etc.

(o) It should contain a floor mounted kitchenette unit at least 3200mm long x 600mm deep x 760mm high (closed off with unit doors) with 1500 x 500mm stainless steel double bowl double drainer sink & single swivel on/off mixer tap (refer to TGD 002) with 3200mm x 300mm high tiled splash back above unit. Mains drinking water should be provided at sink.

(p) The worktop height should be 760mm for all classrooms (including Junior and Senior Infants).

En-Suite Toilets
(q) 2 WCs should be provided en-suite to each classroom. These toilets should, unless unavoidable, be located on an external wall.

(r) They must be adequately and naturally ventilated to the external air, directly or ducted. (In addition to any openable window).

(s) The doors should be easy to open and close (with pull-handles on the lobby doors at low level suitable for children). Internal W.C. doors may be undercut to assist air movement. Door transfer grilles are not permitted.

(t) All lockable doors should have an external thumb-turn override.

(u) Toilets for all Classrooms should be separated by a full height partition and accessed via separate lobbies.

Continued overleaf
4.0 Room Data Sheets (continued)

4.4 Classrooms (continued)

(v) One wash-hand basin [WHB] incorporating a single low pressure drop anti-scald percussion spray tap per WC is required. It is recommended that all W.C pans (including those for Junior and Senior Infants) be standard height pans.

(w) All lobbies must also be adequately naturally ventilated to the external air.

(x) The provision for hand drying facilities shall be paper towel or cotton/linen towels. Hand dryers are not permitted. The toilets should have adequate space for disposable hand towel dispensers and a refuse bin for the disposal of paper towel.

(y) Hand towel dispensers, soap dispensers and refuse bin are loose furniture and fittings and are not part of the construction contract. Mirrors, toilet roll holders, and grab-rails to Universal Access W.C.s are part of the contract.

(z) A suitable water-resistant, durable, easy clean sheet vinyl/linoleum/rubber floor finish should be used with a slip resistance of R10 to DIN: 51130.

Finish

(aa) Refer to 4.3 General Requirements, and to TGD-021 Construction Standards for Schools and also to sample room layout TGD022 – D01 & D02 appended to this document and available on the Department website.

Mechanical & Electrical Building Services Engineering

(bb) Refer to Mechanical & Electrical Building Services Engineering Guidelines DoES TGD-002, 004 & 006 and to sample room layout TGD022 – D01 & D02 appended to this document and available on the Department website.

Furniture & Fittings

(cc) Refer to 4.3 General Requirements and also to sample room layout TGD022 – D01 & D02 appended to this document and available on the Department website.
4.0 Room Data Sheets (continued)

4.5 Library/General Resource Area

<table>
<thead>
<tr>
<th>Sample Room Layout</th>
<th>Area</th>
<th>Min clear height</th>
</tr>
</thead>
<tbody>
<tr>
<td>TGD 022 – D03 &amp; D04</td>
<td>60 m²</td>
<td>3.0 m</td>
</tr>
</tbody>
</table>

Design Considerations
(a) The Library/General Resource Area comprises 2 interlinked rooms capable of use as a single space. There should be a (45db) acoustic folding partition between each functional area.

(b) Windows with a horizontal vista should be provided in both functional areas. Glare must be avoided where practicable or controlled by means of translucent blinds. See also TGD-020 General Design Guidelines for Schools

(c) Both the Library and the General Resource area may be used for a variety of supplementary teaching and learning purposes and other uses. The Designers should consult with the School Board of Management to ascertain the intended uses, but should also ensure that the design is flexible enough to cater for unforeseen activities.

(d) When designing the Library/General Resource Area, due consideration should be given to the room furniture layout so that a number of flexible layout options are available for consideration and discussion with the School Management.

Special Requirements
(e) The Resource Area should have an I.T. or Computer area designed to accommodate 6 work stations. This area should be located and arranged so as not to overly distract from other activities. (Refer to the DoE&S TGDs and to sample room layout TGD022 – D03 & D04 appended to this document and available on the Department website).

Finishes
(f) Refer to 4.3 General Requirements, and to TGD-021 Construction Standards for Schools (Refer to sample room layout TGD022 – D03 & D04 appended to this document and available on the Department website).

Mechanical & Electrical Building Services Engineering
(g) Refer to Mechanical & Electrical Building Services Engineering Guidelines DoES TGD-002, 004 & 006 and also to sample room layout TGD022 – D03 & D04 appended to this document and available on the Department website.

Furniture & Fittings
(h) Refer to 4.3 General Requirements and also to sample room layout TGD022 – D03 & D04 appended to this document and available on the Department website

Continued overleaf
4.0 Room Data Sheets (continued)

<table>
<thead>
<tr>
<th>Sample Room Layout</th>
<th>Area</th>
<th>Min clear height</th>
</tr>
</thead>
<tbody>
<tr>
<td>n/a</td>
<td>As schedule</td>
<td>2.7 m</td>
</tr>
</tbody>
</table>

**Design Considerations**

(a) This Room may be used as a
- A Medical Inspection Room
- A Psychologist’s Room,
- Teacher /Parent Interview Room,
- A Special Education Tuition Room (depending on school size),
- Staff Room (depending on school size).

(b) The Multi-Purpose Room should ideally be located near the main entrance to the school and the administration area, in order to facilitate the above functions. The design and layout of the room should facilitate eye and ear testing programmes. The room may also, from time to time, be used as a Sick Bay and a section should be provided within the room for this, with space for a bed/bench.

(c) A floor to ceiling height of 2.7m is required, taking into account an even distribution of natural light and natural ventilation across the whole floor area of the room.

(d) Windows with a horizontal vista should be provided. See also TGD-020 General Design Guidelines for Schools

**Acoustics**

(e) A high level of acoustic separation between adjoining spaces will be required to facilitate psychological assessments and hearing tests. Refer to 4.3 (h) General Requirements, and to TGD-021 Construction Standards for Schools

**Special Requirements**

(f) To facilitate medical inspections, the room should be provided with a sink (single bowl, single drainer), worktop, and storage presses. Mains drinking water and hot water should be provided at the sink, see Drawing No. TDG 022 – D07 appended to this document and available on the Department website.

**Finishes**

(g) Refer to 4.3 General Requirements, and to TGD-021 Construction Standards for Schools see also Drawing No. TGD022 – D07 appended to this document and available on the Department website.

(h) A suitable water-resistant, durable, easy clean sheet vinyl/linoleum/rubber floor finish should be used with a slip resistance of R09 to DIN: 51130

**Mechanical & Electrical Building Services Engineering**

(i) Refer to Mechanical & Electrical Building Services Engineering Guidelines DoES TGD-002, 004 & 006

**Furniture & Fittings**

(j) Refer to 4.3 General Requirements and also see Drawing No. TGD022 – D07 appended to this document and available on the Department website.

(k) The room design and layout should facilitate the provision of a desk and chair, a suitable table and chairs for interviewing and filing cabinets for record storage, if required.
4.0 Room Data Sheets (continued)

4.7 Special Education Teacher [SET] Support Room

<table>
<thead>
<tr>
<th>Sample Room Layout</th>
<th>Area</th>
<th>Min clear height</th>
</tr>
</thead>
<tbody>
<tr>
<td>n/a</td>
<td>As schedule</td>
<td>2.7 m</td>
</tr>
</tbody>
</table>

**Function**

(a) In addition to the allocation of special needs assistants within classrooms, there may be a number of types of teaching posts allocated to meet the supplementary learning needs of some pupils. These can include Learning Support Teachers, Resource Teachers, Visiting Teachers and other supplementary services, Home School Community Liaison coordinators, Early Start personnel and coordinators now working under the DEIS initiative of the Department. The school may also have Speech & Language services provided by external personnel.

(b) Support teachers such as learning support teachers and resource teachers can provide additional teaching support for pupils in the mainstream classroom in collaboration with the class teacher. They may also provide more intensive and focused tuition for small groups of pupils in a separate smaller room, to be known as the Special Education Tuition room.

(c) Some children enrolled in mainstream primary schools may have significant physical or mental difficulties and/or learning needs. In accordance with their assessed needs, these children may be enrolled in a mainstream class or in a special class established by the board of management in the school. Where separate dedicated accommodation is required this will be as listed in the Schedule of accommodation.

(d) Where the Department has approved a specialist teacher allocation, the design should take account of the provisions below

**Design Considerations**

(e) The Special Education Tuition room should be located near the Multi-Purpose Room. In all instances support teachers will use the Multi-Purpose Room as an office when necessary. Confidential documents should be kept in the General Office.

(f) Special Education Tuition rooms are teaching spaces and their orientation and location should be considered in that context. Refer also to TGD-020 General Design Guidelines for Schools 4.4 Passive Energy

(g) In designing Special Education Teacher Rooms consideration should be given to the room furniture layout so that a number of flexible layout options are available for consideration and discussion with the School Management.

(h) Windows with a horizontal vista should be provided. See also TGD-020 General Design Guidelines for Schools

**Finishes**

(i) Refer to 4.3 General Requirements, and to TGD-021 Construction Standards for Schools

**Mechanical & Electrical Building Services Engineering**

(dd) Refer to Mechanical & Electrical Building Services Engineering Guidelines DoES TGD-002, 004 & 006

**Furniture & Fittings**

(j) Storage for confidential documents and files for the Specialist Teachers listed above shall be provided in the General Office.
4.0 Room Data Sheets (continued)

4.8 Administration / General Office

<table>
<thead>
<tr>
<th>Sample Room Layout</th>
<th>Area</th>
<th>Min clear height</th>
</tr>
</thead>
<tbody>
<tr>
<td>TGD022 – D05</td>
<td>As schedule</td>
<td>2.7m / 3.0 m</td>
</tr>
</tbody>
</table>

Design Considerations

(a) The General Office is the first point of contact for all the visitors and should be located near the main entrance and easily visible from the entrance doors. There should be a clear line of vision to the main entrance from the office. It should be located near to the Principal’s office but not necessarily directly accessed from it.

(b) The General Office should have a secure counter hatch opening directly to the Entrance Foyer for queries from visitors or students. The counter and hatch opening should facilitate wheelchair users and should be located so that a group of people waiting at the hatch/counter are out of the main circulation route and will not obstruct circulation through the school.

(c) A Waiting Area in the Entrance Foyer off the main circulation and adjacent to the General Office should be provided.

Special Requirements

(d) A glazed viewing panel between the Office and the Entrance Foyer must be provided. A glazed panel should also be provided in the solid core door to the corridor.

(e) A Door Control Mechanism shall be provided to control the internal access doors of the entrance lobbies operated via the administration office or Principal’s Classroom. The control mechanism shall be located so that visual contact between the controller and the door is possible.

(f) A panic alarm point shall be provided linked to the intruder alarm system (if one is to be provided).

(g) A PABX system shall be installed in the general office, and be capable of taking a minimum of three exchange lines and extension to the Principal’s Office or Classroom, Staff Room. Refer to DoES TGD-002, 004 & 006 Mechanical & Electrical Building Services Engineering Guidelines

Finishes

(h) Refer to 4.3 General Requirements, and to TGD-021 Construction Standards for Schools and also to sample room layout TGD022 – D05 appended to this document and available on the Department website

Mechanical & Electrical Building Services Engineering

(i) Refer to Mechanical & Electrical Building Services Engineering Guidelines DoES TGD-002, 004 & 006 and also to sample room layout TGD022 – D05 appended to this document and available on the Department website

Furniture & Fittings

(j) The design of the General Office should facilitate the following: a photocopier, general filing, filing cabinets, roll books, confidential documentation storage, Public Address System, etc. Refer to 4.3 General Requirements and also to sample room layout TGD022 – D05 appended to this document and available on the Department website
4.0 Room Data Sheets (continued)

4.9 Teachers/Staff room

<table>
<thead>
<tr>
<th>Room Layout</th>
<th>Area</th>
<th>Min clear height</th>
</tr>
</thead>
<tbody>
<tr>
<td>n/a</td>
<td>As schedule</td>
<td>2.7m / 3.0 m</td>
</tr>
</tbody>
</table>

**Design Considerations**

(a) The Teachers/Staff Room should be located near the reception/general office area.

(b) Members of the public should not be able to gain direct access to this room without first reporting to the reception.

(c) The staff room is an integrated social and work area. The separation of these functions can be achieved by the arrangement of furniture. The emphasis on the design and furniture layout is relaxation and an area with easy chairs etc., should be provided.

(d) An area for computers should be integrated with the normal work area. Lockers when provided should not be intrusive. Refer also to *DoES TGD 004 Information and Communication Technology (ICT) Infrastructure Guidelines for Primary Schools*.

(e) Provision for a staff telephone should be included.

**Special Requirements**

(f) The Teachers/Staff Room should be fitted out with built-in kitchen units, see Drawing No. TDG 022 – D07 appended to this document and available on the Department website.

**Finishes**

(g) Refer to 4.3 General Requirements, and to *TGD-021 Construction Standards for Schools*.

(h) A suitable water-resistant, durable, easy clean sheet vinyl/linoleum/rubber floor finish should be used with a slip resistance of R09 to DIN: 51130

**Mechanical & Electrical Building Services Engineering**

(i) Refer to *Mechanical & Electrical Building Services Engineering Guidelines DoES TGD-002, 004 & 006* and see Drawing No. TDG 022 – D07 appended to this document and available on the Department website.

**Furniture & Fittings**

(j) The room should not be used for the storage of sensitive materials etc. These should be stored in the General Office.

(k) Refer to 4.3 General Requirements and see Drawing No. TDG 022 – D07 appended to this document and available on the Department website.

*Continued overleaf*
4.0 Room Data Sheets (continued)

### 4.10 Principal/Deputy Principal's Office

<table>
<thead>
<tr>
<th>Room Layout</th>
<th>Area</th>
<th>Min clear height</th>
</tr>
</thead>
<tbody>
<tr>
<td>TGD 022 – D06</td>
<td>As schedule</td>
<td>2.7m</td>
</tr>
</tbody>
</table>

#### Design Considerations

(a) The Principal’s Office should be located near the General Office but need not be accessed directly from it. The layout should afford the Principal every opportunity to engage in administrative functions appropriate to the role with a reasonable level of privacy.

(b) Members of the public should not be able to gain direct access to this room without first reporting to the reception.

(c) See also 4.08 Administration/General Office

#### Special Requirements

(d) A glazed panel should be provided in the solid core door to the corridor.

#### Acoustics

(e) Adequate acoustic separation from adjacent rooms, circulation, etc., must be provided. Refer to 4.3 (h) General Requirements, and to TGD-021 Construction Standards for Schools

#### Finishes

(f) Refer to 4.3 General Requirements, and to TGD-021 Construction Standards for Schools and also to sample room layout TGD022 – D06 appended to this document and available on the Department website

#### Mechanical & Electrical Building Services Engineering

(g) Refer to Mechanical & Electrical Building Services Engineering Guidelines DoES TGD-002, 004 & 006 and also to sample room layout TGD022 – D06 appended to this document and available on the Department website

#### Furniture & Fittings

(h) Refer to 4.3 General Requirements and also to sample room layout TGD022 – D06 appended to this document and available on the Department website

*Continued overleaf*
4.0 Room Data Sheets (continued)

4.11 General Purpose Room

<table>
<thead>
<tr>
<th>Room Layout</th>
<th>Area</th>
<th>Min clear height</th>
</tr>
</thead>
<tbody>
<tr>
<td>n/a</td>
<td>as schedule</td>
<td>4.2m</td>
</tr>
</tbody>
</table>

General Purpose Room Servery

<table>
<thead>
<tr>
<th>Room Layout</th>
<th>Area</th>
<th>Min clear height</th>
</tr>
</thead>
<tbody>
<tr>
<td>n/a</td>
<td>as schedule</td>
<td>2.7m</td>
</tr>
</tbody>
</table>

The General Purpose Room Store

<table>
<thead>
<tr>
<th>Room Layout</th>
<th>Area</th>
<th>Min clear height</th>
</tr>
</thead>
<tbody>
<tr>
<td>n/a</td>
<td>as schedule</td>
<td>2.7m</td>
</tr>
</tbody>
</table>

General Purpose Room

(a) The General Purpose Room is a teaching area that caters primarily for the teaching and learning of physical education. It may also be used for the teaching of other subjects across the curriculum. The GP room may also be used for general school assembly and occasionally for other functions requiring a large assembly area.

(b) The General Purpose Room should have a minimum height suitable to its proposed function. A minimum floor to ceiling height of 4.2m throughout the room should be provided taking into account an even distribution of natural light and natural ventilation across the whole floor area of the room. Where a Junior and Senior G.P. room are linked together for common usage (very large schools only), the height should reflect the greater floor area.

(l) The General Purpose Room should be designed to allow for community use outside of normal school hours without having to open the main part of the school to gain access. Toilet facilities should also be located near the General Purpose Room to facilitate their use by children and adults outside of hours (without having to access the main part of the school).

(c) Chairs used for adults should be capable of being stacked for storage. Where children’s chairs are required these can be obtained from the Classrooms.

Special Requirements

(d) Sharp angles and projections must be avoided for Health & Safety reasons. Radiators should be recessed. Doors should be easy to open and close.

(e) Care should be taken in the design of the door, frame, and opening mechanism to protect against injury to fingers, etc., and adequate vision panels for small children should be considered.

(f) The size, location and extent of opening sashes to windows should be carefully considered in the context of the height of the windows and must take into account ease of operation, natural ventilation requirements and Health and Safety.

Continued overleaf
4.0 Room Data Sheets (continued)

4.11 General Purpose Room, Servery & Store (continued)

(g) Glazing down to floor level should be avoided. Window sill heights should normally be at least 900 mm above finished floor level, high level glazing to facilitate ball games etc in the GP Room is preferable – see also TGD-020 General Design Guidelines for Schools (Primary and Post-primary) Section 3.4

(h) Stays or restrictors should be used on all opening windows both high and low level. Roof-lights should also be considered to provide an even distribution of natural light. Glare must be avoided.

(i) Lighting should be functional with switching provision allowing for separate control of artificial lighting, to complement varying levels of natural lighting within the hall. Recessed and pendant light fittings should be avoided. Light fittings should be robust and protected from damage during sport and play.

General Purpose Room Servery

(j) The General Purpose Room Servery should be linked directly to the General Purpose Room by means of a hatch with a roller shutter. Separate access to the Servery is required

(k) The Servery shall be provided with built-in kitchen units, see Drawing No. TDG 022 – D07 appended to this document and available on the Department website. Mains drinking water should be provided at the sink.

(l) A suitable water-resistant, durable, easy clean sheet vinyl/linoleum/rubber floor finish should be used with a slip resistance of R09 to DIN: 51130

The General Purpose Room Store

(m) The General Purpose Room Store is for Physical Education equipment, and should be designed with the width greater than the depth and wide access doors to facilitate storage of such equipment.

(n) The General Purpose Room Store should open directly off the GP room

(o) The layout of the storage area should be based on sizes of equipment to be stored and should take access and ease of removal into account.

Acoustics

(p) Refer to 4.3 (h) General Requirements, and to TDG-021 Construction Standards for Schools

Finishes

(q) The floor build-up and finish in the General Purpose Room should be suitable for the intended purpose and use of the room. Appropriate footwear should be worn by all users, which will not damage or mark the surface.

(r) Refer also to 4.3 General Requirements, and to TGD-021 Construction Standards for Schools

Mechanical & Electrical Building Services Engineering

(s) Refer to Mechanical & Electrical Building Services Engineering Guidelines DoES TGD-002, 004 & 006
4.12 General Purpose Room Toilet Suite

<table>
<thead>
<tr>
<th>Room Layout</th>
<th>Area</th>
<th>Min clear height</th>
</tr>
</thead>
<tbody>
<tr>
<td>n/a</td>
<td>As schedule</td>
<td>2.7m</td>
</tr>
</tbody>
</table>

**Design Considerations**

(a) The General Purpose Room Toilet Suite should be located adjacent to the GP Room with access from both the GP room and the main school to allow for use by the staff and visitors during school hours and for after hours activities where the main body of the school is closed.

(b) They should also be available for use by the children when using the external hard play and grassed areas.

(c) The General Purpose Room Toilets Suite should consist of male toilets, female toilets and a universal accessible toilet (with shower facilities).

(d) Unless unavoidable they should be located on an external wall naturally ventilated to the external air directly or ducted. (This is in addition to any openable window).

(e) Lobbies to all toilets must also be adequately naturally ventilated to the external air.

**Special Requirements**

(f) Bowl urinals should not be specified.

(g) Hot and cold water should be provided to all wash hand basins.

(h) The doors should be easy to open and close (with pull-handles on the lobby doors at low level suitable for children). Internal W.C. doors may be undercut to assist air movement. Door transfer grilles are not permitted.

(i) All lockable doors should have an external thumb-turn override. Care should be taken in the design of the door, frame, and opening mechanism to protect against injury to fingers, etc.

(j) If more than one toilet cubicle is being provided for male / females then the cubicles should be separated by a full height partition and each pair of toilets should be accessed via separate lobbies.

(k) One wash-hand basin [WHB] incorporating a single low pressure drop anti-scald percussion spray tap per WC is required. It is recommended that all W.C pans be standard height pans. Where feasible, wash hand basin should be located back-to-back on partition walls.

(l) The Universal Access toilet with universal access shower shall be fully equipped with grab-rails etc, and capable of accommodating a changing bench and a lifting hoist. The room should be sized accordingly. A disabled person's alarm shall be provided in all Universal Access WCs, comprising a pull chord with an audio unit located outside the room.

(Continued overleaf)
4.11 General Purpose Room Toilet Suite (continued)

Finishes
(m) Refer also to 4.3 General Requirements, and to TGD-021 Construction Standards for Schools

(n) A suitable water-resistant, durable, easy clean sheet vinyl/linoleum/rubber floor finish should be used with a slip resistance of R10 to DIN: 51130

Mechanical & Electrical Building Services Engineering
(i) Refer to Mechanical & Electrical Building Services Engineering Guidelines DoES TGD-002, 004 & 006

Furniture & Fittings
(j) Refer to 4.3 General Requirements.

(a) The provision for hand drying facilities shall be paper towel or cotton/linen towels. Hand dryers are not permitted. The toilets should have adequate space for disposable hand towel dispensers and a refuse bin for the disposal of paper towel.

(k) Hand towel dispensers, soap dispensers and refuse bin are loose furniture and fittings and are not part of the construction contract. Mirrors, toilet roll holders, and grab-rails to Universal Access WCs are part of the contract.
4.0 Room Data Sheets (continued)

4.13 Adult toilets including Universal Access

<table>
<thead>
<tr>
<th>Room Layout</th>
<th>Area</th>
<th>Min clear height</th>
</tr>
</thead>
<tbody>
<tr>
<td>n/a</td>
<td>As schedule</td>
<td>2.7m</td>
</tr>
</tbody>
</table>

**Design Considerations**

(b) All sanitary facilities in the school, other than those in classrooms should be available for use by staff and general public visiting or using the school facilities.

(c) The toilets should, where possible, be located on an external wall and shall be adequately and naturally ventilated to the external air directly or ducted. This shall be in addition to any openable window.

(d) Lobbies to all toilets must be adequately naturally ventilated to the external air.

(e) All lockable doors should have an external thumb-turn override.

(f) Bowl urinals should not be specified.

(g) At least one Universal Access toilet should be provided on each floor level (this includes Universal Accessible toilet with shower in GP Room Toilet Suite)

See also TGD-020 General Design Guidelines for Schools – Universal Access

**Special Requirements**

(h) Doors should be easy to open and close. They may be undercut to assist air movement. Door transfer grilles are not permitted.

**Finishes**

(i) A suitable water-resistant, durable, easy clean sheet vinyl/linoleum/rubber floor finish should be used with a slip resistance of R10 to DIN: 51130

(j) Refer also to 4.3 General Requirements, and to TGD-021 Construction Standards for Schools

**Mechanical & Electrical Building Services Engineering**

(k) Refer to Mechanical & Electrical Building Services Engineering Guidelines DoES TGD-002, 004 & 006

**Furniture & Fittings**

(l) Refer to 4.3 General Requirements

(m) The provision for hand drying facilities shall be paper towel or cotton/linen towels. Hand dryers are not permitted. The toilets should have adequate space for disposable hand towel dispensers and a refuse bin for the disposal of paper towel.

(n) Hand towel dispensers, soap dispensers and refuse bin are loose furniture and fittings and are not part of the construction contract. Mirrors, toilet roll holders, and grab-rails to Universal Access WCs are part of the contract.
### 4.0 Room Data Sheets (continued)

#### 4.14 General Storage including Safe, Cleaners, & External Stores

<table>
<thead>
<tr>
<th>Room Layout</th>
<th>Area</th>
<th>Min clear height</th>
</tr>
</thead>
<tbody>
<tr>
<td>n/a</td>
<td>varies</td>
<td>2.7m</td>
</tr>
</tbody>
</table>

#### Design Considerations

(a) The number, designation, and arrangement of storage areas or rooms, is at the discretion of the Board of Management in consultation with their Design Team. However the design should ensure that adequate storage (both internal and external) is provided within the area limits.

(b) General Storage is deemed to include such items as books, stationery and office supplies, cleaning equipment, gardening equipment, audio/video, etc. The number and type of stores to be provided shall be agreed before architectural planning commences.

(c) Classroom storage is already provided within the allocated area for each classroom. See 4.4. Classrooms. Separate storage associated with the G.P. Room is also provided (to include P.E. Equipment such as mats, vaults, chairs, etc.) See Section 4.13 General Purpose Room Store

(d) Internally storage may be provided either in dedicated storage rooms or as recessed cupboards to the circulation. The areas given above may be grouped together or spread over a range of uses and dispersed throughout the school.

(e) Storage areas that contain chemicals, cleaning agents, etc. must be suitable for the intended purpose, provide adequate security, and be properly ventilated.

(f) The Cleaners’ Stores should be provided with a heavy duty cleaners’ sink in fireclay/ stainless steel with integrated splash back and bucket grating.

(g) Where a Safe Store or Secure Store is to be provided the door and frame should be of a sufficient standard to safeguard the contents, i.e. steel sheeted security door and frame. It should not be on an external wall and should have suitable security protection to floors, walls, and ceiling. The level of physical protection should take into consideration the presence or otherwise of a monitored intruder alarm system.

#### Finishes

(h) Refer to 4.3 General Requirements, and to TGD-021 Construction Standards for Schools

#### Mechanical & Electrical Building Services Engineering

(i) Provision of low temperature protection in stores should be provided via distributor pipes or pipe coils only. Radiators are not to be located in stores. Lighting provision should reflect the use of the space.

(j) Refer to Mechanical & Electrical Building Services Engineering Guidelines DoES TGD-002, 004 & 006

#### Furniture & Fittings

(k) Two rows of fixed/adjustable fitted shelving suitable for intended use should be provided to two walls in each store as part of the Contract. Any supplementary shelving required may be added later by School Authorities. Refer also to 4.3 General Requirements
### 4.0 Room Data Sheets (continued)

#### 4.15 Electrical Metering and Electrical Distribution Centre

**Design Considerations**

(a) Location of electrical switchgear must conform to the latest edition of National Rules for Electrical Installations as published by the Electro Technical Council of Ireland Ltd.

(b) The Electrical Utility Provider is ESB Networks, and its requirements are set out in the latest edition of its National Code of Practice for Customer Interface. Any particular solution must be in conformity with this code.

(c) The above facilities should be centrally located to optimise the electrical services distribution and should not present difficulties for services distribution from adjoining plant spaces or rooms.

(d) The particular solution will be determined by the size of the building and its electrical load level. For large electrical loads ESB Networks may require a dedicated ESB Sub-station and adjoining Customer (School’s) Switch Room.

(e) However it is envisaged that most Primary Schools will not require a dedicated ESB Sub-station. Such schools will require a location for ESB equipment and Customer’s Main Isolator to conform to the above mentioned regulations and Code of Practice. Acceptable solutions are an Outdoor Metering Enclosure, located in an external recess, or a Dedicated Switch Room.

(f) If an Outdoor Metering Enclosure is proposed this can house the Electrical supplier’s isolator, switchgear, meter, etc. The School’s electrical controls and distribution equipment can be housed on the ground floor recessed off circulation areas within built fire stopped construction with appropriate door self closers and locks.

(g) If a switch room is required, this should be housed in a dedicated room located on the ground floor with an external wall and door and also have internal access. With this solution a Fireman’s Emergency Switch should be provided in the secure entrance lobby at high level in accordance with current standards and codes of practice.

(h) For the Primary Schools the ESB equipment and the Main Electrical Isolator should be located at Ground Floor within 2 metres of an external door. This should be recessed off circulation areas within built fire stopped construction with appropriate door self closers and locks. The School’s electrical controls and distribution equipment should also be housed on the ground floor recessed off circulation areas within built fire stopped construction with appropriate door self closers and locks. With this solution a Fireman’s Emergency Switch should be provided in the secure entrance lobby at high level in accordance with current standards and codes of practice.

(i) Refer also to DoES TGD-002 Mechanical & Electrical Building Services Engineering Guidelines for Primary School Buildings
4.0 Room Data Sheets (continued)

4.16 Data Communication Centre

Design Considerations
(a) A dedicated Data Communication Centre (DCC) must be provided, size 2m x 2m x full ceiling height (min 2.7m) and shall have no windows. This room shall house the Main Distribution Facility (MDF).

(b) The DCC shall be suitably positioned off the circulation area or off a general store (subject to fire regulations) and be located in the main building. The location should, as far as practicable, be such that the cable run (actual cable length) to all network points is within the limit of 90 metres. Only where this is not physically possible an Intermediate Distribution Facility (IDF) shall be provided as detailed in TGD-004 Information & Communication Technology (ICT) Infrastructure Guidelines for Primary Schools.

(c) The room door shall be fitted with a key operated lock as part of the master key suite of keys.

(d) The DCC shall be naturally ventilated with air inlets at low level and air outlets at high-level opening to the corridor or to the store. Ventilation to the outside is generally not required.

(e) The enclosure to this room should give a 30-minute fire rating; intumescent passive fire protection shall be used where necessary.

(f) Refer also to DoES TGD-002 Mechanical & Electrical Building Services Engineering Guidelines for Primary School Buildings

4.17 Heating Centre (Boiler house)

Design Considerations
(a) The heating centre shall be located at ground level within the building with external doors only, opening outward. It shall be of a square shape (not L shaped or rectangular).

(b) It shall be reasonably convenient to an access road and shall be positioned centrally so as to minimise distribution runs and it must not be annexed to or positioned on the periphery of the building.

(c) The building design in the vicinity of the heating centre plant room shall allow for appropriate sized and accessible distribution zones for the primary services to and from the heating centre on more than one side and must also include reasonable capacity to accommodate future additional services.

(d) Where the Electrical Distribution Centre, metering enclosure or substation is located close to the heating centre plant room, care must be taken to ensure that their location does not restrict the distribution zones for primary services from the heating centre plant room.

(e) Refer also to TGD-004 Information & Communication Technology (ICT) Infrastructure Guidelines for Primary Schools.

(f) All boiler flues shall be located on the back wall of the boiler room opposite the doors and shall rise vertically through the building to the atmosphere.
5.0 External Facilities

5.1 Site

(a) The designers should make the maximum use of the site provided which should be reflected in their design proposal. The layout should be designed to minimise the need to dispose of excavated material off-site. See also TGD-020 General Design Guidelines for Schools (Primary and Post-primary) Construction & Demolition Waste Management

(b) The site constitutes the building, playing fields, any agreed supplementary area, and access which should be designed to ease the management of the school. Sites should generally be of regular shape, reasonably level, have good road frontage, be without obstruction and have reasonable space for developing a set-down/pick-up area.

(c) In assessing site suitability, the location and adequacy of public utilities, including Gas, Mains Water, Telecom, Electricity, Foul & Surface Water drains, and the cost of connecting into them, shall be taken into account.

5.2 Landscaping

(a) Provision should be made for the preparation and landscaping of the area around the school and between the school and the site entrance. Such landscaping should be simple, cost effective and easy to maintain. The Designers should consider the natural paths and routes through the site to the school entrances in determining the appropriate location and the extent of paths provided. Large areas of hard landscaping should be avoided.

(b) Design Teams should consider the design of landscaping elements to promote more imaginative play and complement the teaching environment in their design proposals. External space for planting, weather recording, sundials etc., should all be explored.

(c) An allowance for planting of trees and shrubs should be made. Such shrubs and trees should help define the site boundaries and external circulation routes, and should be hardy, durable and low maintenance.

(d) In a new school site, the cost of the main entrance gates and front boundary treatment is included in the External Works Allowance.

(e) The provision of other boundary fencing and walls does not form part of the External Works Allowance. Where for security reasons, boundary protection is required, the cost should be minimised, subject to the suitability of the boundary treatment for the location. If such boundary protection is still required, the nature, cost and scope of the works should be indicated at the earliest stage and a submission made to the Department justifying the additional cost of such works.

5.3 Car-parking & Set-down/Pick up areas

(f) Refer to TGD-020 General Design Guidelines for Schools (Primary and Post-primary) - External Circulation for guidance on Car-parking & Set-down/Pick up areas

5.4 Rainwater Recovery

(g) The provision of water storage tanks associated with rain water harvesting should be addressed. Where rainwater recovery is practicable appropriate water storage tanks should be provided.

(h) In rural schools the provision of a well on the school site to provide water for flushing toilets etc merits consideration as part of the design process.
5.0 External Facilities

5.5 External Play Areas

Ball Courts & Junior Play Area

(a) In new schools, the hard surfaced games courts and junior play area should be provided as specified in the schedule of accommodation. The area of hard play is inclusive of ball-courts and junior play but exclusive of roads, paths, etc.

(b) In the case of an extension to an existing school, the existing hard courts should be retained where possible. If additional courts are required to provide the total specified in the Schedule of Overall Accommodation, the cost of these courts should be assigned to the External Works Allowance.

(c) Laying out a variety of courts within a single multi-use games area makes supervision easier and extends the range of games. The location of the hard play area should be considered in the context of future expansion of the school in order to eliminate future disruption, nugatory expenditure, and rebuilding at a later stage.

(d) Hard-play areas may be designed to cater for occasional use as overflow car parking and should be located adjacent to the external vehicular circulation. The location of play areas shall be integrated into the external environmental education plan.

(e) Separation of Junior and Senior hard play areas should be agreed in discussion between the school and the Department.

(f) A ball-court area is 585 m² (19.50 x 30.00) approx. It includes a 1m run-off space around the playing area and shall be properly graded, drained and appropriately lined. Poles with hoops and backboards for basketball shall be supplied and fitted (as part of the contract) The courts shall be marked for basketball and a 2.4m high power coated weld mesh fence around the courts, with lockable access gates should be provided.

(g) Where more than one court is provided then the fence should surround the group of courts and not individual courts.

(h) Sockets shall be provided at the half way point on each court for possible future installation of volleyball poles and net.

(i) Adequate surface water drainage shall be provided from all hard play areas without compromising the safety of the user during play. In providing such drainage, consideration must be given to the possibility of some games being played across the basketball courts.

(j) A 150 mm duct with draw wire should be provided to allow for possible future services to hard play areas from the nearest internal services position (e.g. plant room/switch room/store etc.).

Soft Play Area

(k) The residual site area after the development of hard play area should be seeded for grass.

(l) Where site area and configuration permits, an area should be reserved suitable for use as a practice playing field. The levelling and preparation of this area for use as a pitch is not part of this brief and the cost of such work should not be included in the Project costs.
ELEVATION: A-A

ELEVATION: B-B

ELEVATION: C-C

ELEVATION: D-D

ELEVATION: E-E

MECHANICAL AND ELECTRICAL SERVICES FOR TYPICAL PRIMARY CLASSROOM - TO BE READ IN CONJUNCTION WITH TGD 002, TGD 004 AND TGD 009.

Each teaching space shall be controlled via two port motorised valves with electrically powered digital thermostats with a lockable range of ±2 degrees Celsius ±/±1.5 degrees.

All thermostatic blending valves on the hot water services are to be connected to the cold water distribution service. Mains water is only required at the classroom sink.

All lights fitted with automatic lighting controls must also have a manual on/off switch.

Lighting control is classroom teaching spaces should be such that all lights in the space are linked to one sensor such that all lights respond in the same manner to the control signals.

Lighting controls in classrooms are to be arranged on the basis of availability with day/night switches to dim lights as required to off, in response to the daylight sensor.

Lighting Controls in ensuites to be based on manual on/off switching with automatic presence detection only. One linear high frequency fluorescent lighting per cubicle and lobby will suffice.

IT Area (no. 4 on plan) Data Trunking to contain 5 no. data points and 10 no. 15 A socket outlets.

Teaching wall to have 2 no. twin 13 A socket outlets, 1 no. digital room thermostat, 1 no. two way PA locations as shown on drawing. Power and data to the sockets on the teaching wall will be run in separate 20mm galvanised steel conduit above skirting level as indicated. No other sockets are required.

BUILDING SERVICES ENGINEERING SYMBOLS

Light Sources (Fixed 700mm above FDL)

Twin outlet 13A socket outlets (Fixed 800mm above FDL)

Puck Accessory Sockets (Fixed 700mm above FDL)

Lighting Riser (Fixed 300mm above FDL)

Network point (Fixed 300mm above FDL)

Water Supply (6 & 9 masts) 30mm water
toilet

Room Thermostat (Fixed 1500mm above FDL)

Radiators, heating coils,

to floor surface mounted fluorescent light fittings 15

Lamps and plinths off signs, automatic dimming version,
to floor surface mounted fluorescent light fittings 15

Lamps and plinths off signs,
celling mounted daylight movement sensor

daylight sensor

daylight sensor

GARDEN

See Drawing TGD 002 - 001 for reference numbers on elevations with general description.

NOTES

1. This document is published by the Department of Education & Science and provides guidance in relation to the requirements for a Typical Primary School Classroom. The document should be read in conjunction with the Technical Guidance Documents for Primary School Buildings as published by the Department of Education & Science, available at www.education.ie/technicalguidance/technical_guidance_documents.htm.

2. Where works are carried out in accordance with the guidance in this document, however, they must be carried out in accordance with Technical Guidance Documents for Primary School Buildings as published by the Department of Education & Science. However, the adoption of an approach other than that outlined in the guidance is not precluded provided that the relevant requirements of the Technical Guidance Documents are complied with.

3. Please do not scale the drawing; use figured dimensions.

4. All dimensions given in millimetres.

5. All room dimensions are internal dimensions.

6. Area - net internal area of the room (including access to outside classroom).

7. All elevations are internal-external elevations.
A good quality daylight distribution is required in each room with the average daylight factor for each room to be in the range 0.7 to 0.9% with the emphasis on an even light distribution throughout the space. A schedule of all rooms and associated daylight factors is to be provided.

All spaces should have the benefit of 10% high and 35% low level natural ventilation opening sections in the windows. Tilting and turn windows are not acceptable. The window design with respect to geometry and opening sections must be based on overshadowing calculations which should take into account the site light source standard. Adequate natural ventilation should be achievable without draughts.

Controlled background ventilation openings to comply with the building regulations should be provided in addition to any such openings.

If rooms must be north facing due to site restraints, efforts should be made to achieve solar penetration in the rooms.

Blank to classroom windows shall be manually operated chain driven roller blind systems with high density woven materials manufactured to a 5% openness factor. Blinds shall be installed in the blinds as necessary to meet the requirements of the South East Standard. Performance including safety requirements. Materials used in the manufacture of the blinds should be tested and certified by the manufacturer in accordance with BS 1319:1996.

A test certificate is issued in accordance with BS 1319:1996 as a condition of the safety of furnishings and fittings. Where play areas are present, and这意味着 the fire safety of furnishings and fittings in places of assembly should be supplied by each item specified.

A typical library/general resource area is shown in the diagram. The area includes a radiator zone, window zone, library, general resource area, and elevations A-A, B-B, and C-C. The room dimensions will vary depending on site of school.

TYPICAL LIBRARY/GENERAL RESOURCE AREA

NOTES:
1. This document is published by the Department of Education & Science and provides guidance in relation to the requirements for a Typical Library General Resource Room. The document should be read in conjunction with the Technical Guidance Documents for Primary School Buildings as published by the Department of Education & Science. http://www.education.wales.gov.uk/document_libraryCreates the Technical Guidance Documents for Primary School Buildings as published by the Department of Education & Science. However, the adoption of an approach other than that outlined in this guidance is not precluded provided that the relevant requirements of the Technical Guidance Documents are complied with.
2. Please do not scale the drawings. Use figure dimensions.
3. All dimensions given are in millimetres.
4. All dimensions shown are 'internal dimensions'.

DEPARTMENT OF EDUCATION & SCIENCE
An Roinn Oideachais agus Ollscoileachta
PLANNING AND BUILDING UNIT

See Drawing: TGD 002 - D04 for electrical symbol legend,

PRIMARY ROOM LAYOUTS

TYPICAL LIBRARY/GENERAL RESOURCE ROOM PLAN (Drawing 1 of 2)

SCALE: 1:20

DATE: Nov '98

REV.: A

STAGE: DEPARTMENT ADDED SERVICES

PREPARED BY: C.D.

END NO: TGD 002 - 004

DEPARTMENT OF EDUCATION & SCIENCE
An Roinn Oideachais agus Ollscoileachta
PLANNING AND BUILDING UNIT
Each teaching space shall be controlled via two port motorised valves with electrically powered digital thermostats with a lockable range of 21 degrees Celsius +/- 3 degrees.

All lights fitted with automatic lighting controls must also have a manual on/off switch.

Lighting control should be such that all lights in the space are linked to one sensor such that all lights respond in the same manner to the control signals.

Lighting controls are to be are based on absence detection to turn off lights and daylight sensing to dim lights as required to off, in response to the daylight sensors.

General Resource Room - Dado Trunking (5 no. data network points and 20 no. 13 A socket outlets), 1 no. twin 13 A socket outlets, 1 no. digital room thermostat, 1 no. two way PA locations as shown on drawing.

Library to have 3 no. twin 13 A socket outlets, 1 no. data network point, 1 no. digital room thermostat, 1 no. two way PA locations as shown on drawing. Power and data to the sockets on the teaching wall will be run in separate 20mm16mm gauge steel conduit above skirting level as indicated.

No other sockets are required.

See Drawing TGD 002 - D03 for reference numbers on elevations with general description.
TYPICAL PRINCIPAL'S OFFICE

Note: if the General Office adjoins the Principal's Office a link door between offices may be required.