



PLANNING and BUILDING UNIT

Design Team Procedures

Third Edition, August 2007

Revision 1 dated 19th February 2008

**Planning & Building Unit
Department of
Education and Science
Tullamore, Co. Offaly.**

**Telephone: (057) 9324300
Fax: (057) 9351119**

Web: <http://www.education.ie>

Applicable to all Capital Works projects funded in part or in total by the Department of Education & Science (unless otherwise stated) where the Design Team was appointed after 1st August 2007.

(Where the Design Team was appointed prior to 1st August 2007 the [Design Team Procedures, Second Edition, August 1983](#) and associated Practice Notes and any [Design Team Procedures \[DTP\] circulars](#) which have amended or updated the 1983 edition.)

List of Revisions

Revision 1
Dated 19th
February 2008

Addition of **Clause 4.28(j) Payment by Contractor for temporary utilities (water, electricity, gas, telecommunications, etc.) consumed during the works.**

Text:

The Preliminary Section of the Bill of Quantities shall also include appropriate clauses regarding payment by the Contractor for temporary utilities (water, electricity, gas, telecommunications, etc.) consumed during the works as follows:

(i.) Greenfield Site

Main Contractor to pay all costs (connection fees, connections, standing charges, bills, disconnection, re-instatement) and comply with all requirements.

(ii.) Works within or adjacent to an existing functioning school:

The Main Contractor shall be permitted to connect into existing utility services subject to each utility being metered individually and the metering system proposed being approved in writing by the Employer's representative in consultation with the Building Services Engineer. The metering system, connections etc. proposed must also be in accordance with all current regulations, legislation and Health and Safety requirements.

The meter reading for the appropriate utility should be jointly read, recorded and agreed by the Contractor and the School not later than 10 days before an application for payment by the Main Contractor. The amount due from the Contractor to the school (on presentation of Invoice by the School) should be the number of units consumed in the billing period multiplied by the full cost per unit of the particular utility including VAT to be paid within 30 days.

If the Contractor fails to honour a valid invoice the Contract terms should permit the Employer's Representative to deduct the amount so due from any monies owed or which may become due to the Main Contractor

Contents

1.	Introduction	5
1.1	Application	5
1.2	Project Stages	5
1.3	Approvals	6
1.4	Terms of Engagement	6
1.5	Stage Fee Payments	8
1.6	DoES Technical Guidance Documents	9
1.7	Energy Performance Directive 2002/91/EC	9
1.8	Responsibility of the Design Team	9
1.9	Construction Contracts	9
1.10	Stage Submissions	10
1.11	Project Administration	11
1.12	Health & Safety	12
1.13	Area Limits	13
1.14	Cost Limits	13
1.15	Basic Building Cost	13
1.16	External Works Allowance	14
1.17	Abnormal Works	14
1.18	Work to Existing	14
1.19	Fixed Furniture and associated fittings	14
1.20	Allowable limits/viability thresholds	15
1.21	Contingencies	15
1.22	Pre-Planning & Cost Control Procedures	15
2.	Project Brief	16
2.1	Brief formulation	16
2.2	Additional Floor Area/ Works	17
3.	Stage 1 – Preliminary Design	18
3.1	Objectives	18
3.2	Health & Safety	18
3.3	Project Viability	19
3.4	Review of Brief	19
3.5	Assessment of Site & Location Suitability (New Build)	20
3.6	Sub-Soil Investigations	21
3.7	Topographical Survey	22
3.8	Archaeology, Special Conservation areas, protected structures/ etc	22
3.9	Scope of essential Work to Existing Buildings	23
3.10	Consultation with Statutory Authorities	24
3.11	Client Consultation	25
3.12	Preliminary Sketch Design	25
3.13	Cost Control	27
3.14	Project Viability Review	28
3.15	Stage 1 Report	29
3.16	Executive Summary	30
3.17	Architectural Report	30
3.18	Civil/ Structural Report	31
3.19	Building Engineering Services	32
3.20	Quantity Surveyor	32
3.21	Stage 1 Client Approval	33
3.22	Planning Development Meeting [PDM]	33
4.	Stage 2 – Design	35
4.1	Objectives	35
4.2	Stage 2 Sub-stages	35
4.	Stage 2a – Developed Sketch Design	36
4.3	Health & Safety	36
4.4	Developed Sketch Design	36
4.5	Work to Existing Buildings	37
4.6	Cost Control	37
4.7	Clerk of Works	38
4.8	Stage 2a Report	38
4.9	Executive Summary	39
4.10	Architectural Report	39
4.11	Civil/ Structural Report	40
4.12	Building Engineering Services Report	40
4.13	Quantity Surveyor's Report	41

	4.14	Stage 2a Client Approval	41
	4.15	Design Stage Review Meeting	42
4.0		Stage 2b – Detailed Design	43
	4.16	General	43
	4.17	Statutory Approvals	43
	4.18	Construction Contracts	44
	4.19	Risk transfer	44
	4.20	Specialists	45
	4.21	Detailed Design	46
	4.22	Detail Design Cost Control	47
	4.23	Enabling Contracts	48
	4.24	Pre-qualification of Contractors	48
	4.25	Employer named Specialists	49
	4.26	Client Consultation	49
	4.27	Client Progress report	50
	4.28	Bill of Quantities	51
	4.29	Conditions of Contract	53
	4.30	Tender conditions	54
	4.31	Pre-Tender Cost check	54
	4.32	Stage 2b Report	54
	4.33	Authorisation to proceed to Tender	55
5.		Stage 3 – Tender Action and Award	56
	5.1	Pre-Tender check list	56
	5.2	Tender Competition	56
	5.3	Tender Submissions	57
	5.4	Tender Report	58
	5.5	Client Approval	59
	5.6	School Building Section Authorisation	59
	5.7	Letter of Intent	59
	5.8	Notice to unsuccessful tenderers	59
	5.9	Client notification	60
	5.10	Tender Acceptance/ Contract Execution	60
	5.11	EU Contract Award Notice	60
6.		Stage 4 – Construction	61
	6.1	General	61
	6.2	Employer's Representative	61
	6.3	Payments	62
	6.4	Contractors Claims	62
	6.5	Construction Cost Control	62
	6.6	Project Reviews and Progress Reports	64
7.		Stage 5 – Handover and Final Account	65
	7.1	General	65
	7.2	Safety File	65
	7.3	Certificate of Substantial Completion	65
	7.4	Hand-over	66
	7.5	Draft Final Account	66
	7.6	Penultimate Certificate (Final Account)	67
	7.7	Final Account Report	68
	7.8	Defects Period	68
	7.9	Final Account Report Supplement	68
Appendix A		Sample Area Re-Conciliation Sheet	69
Appendix B		Stage 1 Completion Certificate	70
Appendix C		Stage 2a Completion Certificate	73
Appendix D		Stage 2b Completion Certificate	76
Appendix E		DoES Project Review Form	77
Appendix F		Change Order Request Form for Client/SBS Approval	79
Appendix G		Draft Final Account Summary	80
Appendix H		Final Account Report	81

1. Introduction

- 1.1 Application**
- (a) These Procedures, the [Design Team Procedures \[Third Edition 2007\]](#), apply to all construction projects funded in part or in total by the Department of Education & Science [DoES] unless otherwise stated. For small scale devolved projects including Summer Works projects designers should refer to Technical Guidance Document TGD007.
 - (b) They replace the previous [Design Team Procedures, Second Edition, August 1983](#) and associated Practice Notes. They also replace the [Design Team Procedures for Small/Medium Projects 1990](#), and any [Design Team Procedures \[DTP\] circulars](#) prior to the issue of this Document, which have amended or updated the previous Design Team Procedures.
 - (c) They set out the principles for each stage of the construction process starting with Project Analysis, and proceeding through the design stages to Tender Documents, obtaining tenders, Construction and Final Account.
 - (d) They should be read in conjunction with the Briefing documentation and the scope of service [Conditions of Engagement Schedule B] for the particular project or project category.

- 1.2 Project Stages**
- (a) The Department of Education and Science [DES] Project Stages have been amended to match those identified in the Department of Finance Conditions of Engagement. The new Project stages are as follows:

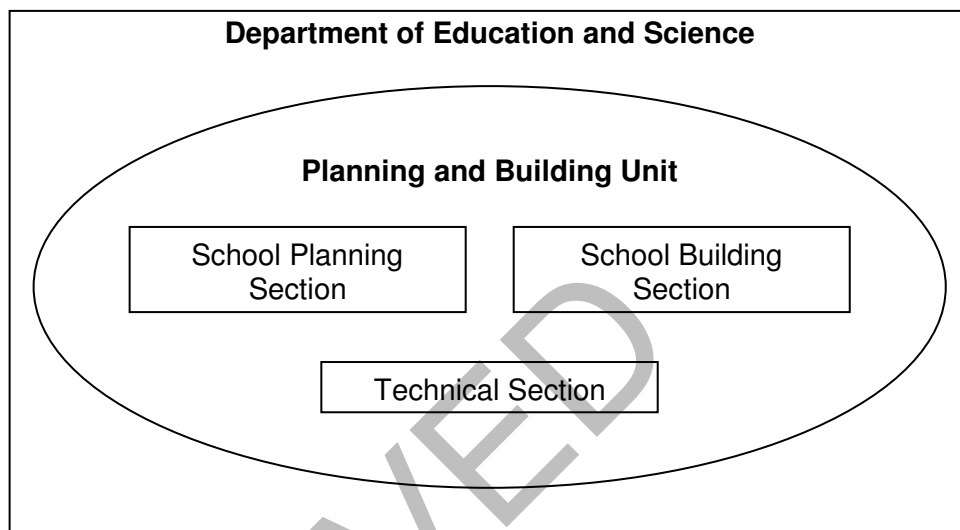
STAGE 1	PRELIMINARY
STAGE 2	DESIGN STAGE 2a - Developed Sketch Design STAGE 2b - Detailed Design
STAGE 3	TENDER ACTION, EVALUATION, AWARD
STAGE 4	CONSTRUCTION
STAGE 5	HANDBOOK OF WORKS and FINAL ACCOUNT

- (b) Stage 1 PRELIMINARY replaces the former DoES Stage 1 – Site Suitability, and Site Report and Stage 2 – Initial Sketch Scheme.
- (c) Stage 2 DESIGN encompassed the former DoES stages 3, 4 and 5.
 - i. Stage 2a Developed Sketch Design replaces the former DoES Stage 3.
 - ii. Stage 2b Detailed Design replaces the former Stages 4 – Detailed Design and 5 – Bill of Quantities.
- (d) Stage 3 TENDER ACTION, EVALUATION, AWARD replaces the former DoES Stage 6 – Tender Action and Report.
- (e) Stage 4 CONSTRUCTION replaces the former DoES Stage 7 – Post Contract Cost Control.
- (f) Stage 5 HANDBOOK OF WORKS replaces the former DoES Stage 8 – Practical Completion & Hand-over, and DoES Stage 9 - Final Account.

1. Introduction (continued)

1.3 Approvals

- (a) Stage approval requirements are as set out in this document. The Unit/Sections within the Department of Education and Science referred to in the context of stage approvals are as follows:



- (b) Where this document is used for projects other than Primary and Post-primary (e.g. 3rd level) a chart setting out the relevant organisational structure, the roles and responsibilities of the various parties, and the reporting structure for the particular project should be included with the briefing information.

1.4 Terms of Engagement

- (a) The terms of engagement for consultants shall be the Department of Finance Conditions of Engagement available on the Department of Finance website at www.Finance.gov.ie. The scope of service shall be as set out in [Schedule B of the Conditions of Engagement](#) and this document.
- (b) The scope of service will include all work required to design and construct the project in a competent and professional manner; prepare all documentation and reports required by these procedures; obtain all necessary approvals whether Client, School Building Section, or statutory approvals, all in accordance with these Design Team Procedures or as otherwise modified by the briefing information.
- (c) Consultation with the client should be an on-going process during the stages and is included in the Consultant's time for the performance of the stage (unless essential information or approvals are withheld by the Client without cause).
- (d) The periods for approvals by the School Building Section at the end of Stages 1 and 2a respectively are outside the performance periods indicated in Schedule B of the Conditions of Engagement as well any work arising from a client change (where approved by the School Building Section only).

Continued overleaf

1. Introduction (continued)

1.4 Terms of Engagement (continued)

- (e) The normal full Design Team comprises an Architect, a Quantity Surveyor, a Civil/Structural Engineer, a Building Services (Mechanical & Electrical) Engineer and Project Supervisor Design Process. These consultants are required to provide all services necessary for the delivery of the project unless otherwise stated in the Invitation to Tender.
- (f) The Design Team Leader will be the Architect (unless otherwise stated).
- (g) The applicable fees shall be as set out in the accepted Tender Submission. The following are the normal minimum/maximum percentages for each stage:

All Consultants (except PSDP)

Stage 1	Stage 2a	Stage 2b	Stage 3	Stage 4	Stage 5	Total
Max 20%	Max 20%	Max 30%	Min 5%	Min 20%	Min 5%	100%

- (h) Fees will be tendered on the basis of a fixed price lump sum or (where the project cannot be adequately defined) a Percentage fee (capped). Where a tender submission is on the basis of a Percentage fee (capped) the fee will be fixed on the basis of the approved Stage 1 project cost.
- (i) Where a Tender Submission is on the basis of a Fixed-Price Lump Sum, tenderers are expected to have read the briefing information and satisfied themselves as to the scope of service required. Only exceptional abnormal works which could not have been reasonably inferred from the briefing information will be considered for the purposes of fee adjustments.
- (j) Whether a Tender Submission is on the basis of a Fixed-Price Lump Sum or Percentage Fee (capped), all changes to the scope of service will be dealt with under Clause 10 of the Conditions of Engagement. For a change increasing the Services for a stage or stages, the lump sum shall be increased by an amount proportionate to the increase in Services. Time charges will not apply. Where the scope of works (and scope of service) is not well defined, the onus rests with the Design Team to define the scope at the earliest possible stage, and not later than completion of Stage 1.
- (k) It is deemed that the fee (as adjusted at Stage 1 completion) includes the full scope of services required to complete the project. No further fee adjustments will apply with the exception of Client changes (approved by the School Building Section) and unforeseen or disproportionate Planning or Fire Certificate conditions (e.g. particularly onerous requirements for access roads or attenuation tanks).
- (l) The fixed fee (as adjusted at Stage 1 completion), whether lump sum or % (capped) will be applicable to all DTP stages. Fee adjustments for Client changes or Planning and Fire Certificate conditions will be allocated pro-rata across the applicable stages.

1. Introduction (continued)

1.5 Stage Fee Payments

All Stages

- (a) The Design Team members may only submit a Fee invoice for a stage when all the Stage requirements have been completed and accepted by the Client (Including the submission of a compliant Stage Completion Certificate where applicable). In all other instances a fee invoice will be rejected.

Stage 1 and 2a

- (b) The Design Team members may submit a Fee invoice on stage completion when:
- (i) Notified that in accordance with these procedures a PDM was not required (Stage 1 only)
 - (ii) authorisation has been given by the Client and School Building Section to progress to the next stage, or
 - (iii) the Client and SBS have signed off on the Stage submission (but for other reasons have not authorised the commencement of the next stage).
- Such authorisation and/or sign-off at (ii) and (iii) above normally take place at the PDM or Design Review Meeting.
- (c) Where the Stage submission has been rejected by either the Client or the SBS, a fee invoice may not be submitted until their stated requirements have been satisfied in full.

Stage 2b

- (d) No fee Stage 2b fee payment will be made unless a correctly completed Stage 2b Completion Certificate was received by the School Building Section from the client no later than 10 working days prior to going to Tender. (A Fee invoice may not be submitted with this Completion Certificate.)
- (e) After 15 working days from the receipt by the SBS of a compliant Stage 2b Completion Certificate, a fee invoice may be submitted if:
- (i) the client (in accordance with these procedures) has authorised the project to proceed to tender, or
 - (ii) the project has been deferred or abandoned (for reasons other than failure to comply with the Design Team Procedures).

Stage 3

- (f) A Fee invoice may be submitted on issue of Letter of acceptance to the successful Contractor (in accordance with these procedures).

Stage 4

- (g) Pro rata Interim fee payments during the construction stage of the project may be made at the discretion of the School Building Section. The first of these payments shall be sought no sooner than three months after the commencement date for the contract and thereafter at 3 monthly intervals. The basis of the pro-rata payments shall be the commencement date on site compared with the (most recently adjusted) anticipated substantial completion date. The final Stage 3 payment shall be on foot of an invoice submitted with or after the receipt of the Substantial Completion certificate.

Stage 5

- (h) A Fee invoice may be submitted on issue of the Defects Certificate.

1. Introduction *(continued)*

- 1.6 DoES Technical Guidance Documents** (a) The Design Team are required to read and comply with all applicable DoES Technical Guidance Documents (available at www.education.ie) including the relevant General Design Guidelines, the applicable Primary or Post-primary Design Guidelines, the Construction Standards Guidelines and the Building Services (Mechanical & Electrical) Engineering Guidelines.
-
- 1.7 Energy Performance Directive 2002/91/EC** (a) In addition to the relevant Design Guidelines and DoES Technical Guidance Documents, the Design Team and the Building Services (Mechanical & Electrical) Engineer are required to read and comply with the [European Union Directive 2002/91/EC](#) on the energy performance of buildings and in particular Article 5 and 6.
-
- 1.8 Responsibility of the Design Team** (a) Under the [Conditions of Engagement, Clause 8](#), the Client and the Design Team have a duty to co-operate in a reciprocal manner. This duty shall be deemed to include reciprocal co-operation between the individual members of the Design Team and shall include such issues as informed consultation, timing, taking account of parties priorities to minimise problems and delays.
- (b) Although all members of the Design Team have a distinct role to play, they must fully understand and accept the interdependence of all members of the Design Team for effectively implementing the objectives implicit and explicit in the applicable Department of Education & Science Design Guidelines, and other briefing documents.
- (c) The Design Team has a joint responsibility to comply with these Procedures in full, and for carrying out the design cost control process.
-
- 1.9 Construction Contracts** (a) The applicable Construction Contracts will be the Department of Finance [Public Works Contract for Building Works Designed by the Employer](#), and the [Public Works Contract for Minor Civil Engineering and Building Works Designed by Employer](#) available at www.Finance.gov.ie
- (b) The [Public Works Contract for Minor Civil Engineering and Building Works Designed by Employer](#) may be used for contracts with a construction value of less than €5.0m excluding VAT.
- (c) [The Public Works Contract for Building Works Designed by the Employer](#) shall apply to all contracts with a construction value of over €5.0m excluding VAT and all projects below that value where the nature and complexity of the projects warrants its use.
- (d) The Schedule to both contracts shall be completed in accordance with the [Public Works Contract for Building Works Designed by the Employer Schedule Part 1 template](#) available at www.education.ie
- (e) While the Department of Finance Construction Contracts are 36 month fixed price Contracts, to avoid the payment of an excessive premium for future construction inflation, the Design team should seek to ensure that the contract duration is no longer than 24 months.
- (f) The applicable Price Variation clause shall be PV1 the Proven Cost method.
- Continued overleaf*

1. Introduction (continued)

1.8 Construction Contracts (continued)

- (g) All construction projects with a construction value of over €1.0m excluding VAT will be required to include a Bill of Quantities as a pricing document. Projects of less than €1.0m may also require a Bill of Quantities where the nature and complexity of the project warrants it. In all cases the risk of discrepancies in the Bill of Quantities will be an Employer risk.
- (h) A decision on whether to transfer to the Contractor the risk of items of archaeological interest, unforeseen ground conditions, unforeseeable utilities in the ground, and unforeseeable delays in relocation or disconnection of utilities will depend on the nature and complexity of the project. The procedures for risk transfer in these Design Team Procedures shall apply. In general principle, risks which cannot be measured should not be transferred.

1.10 Stage Submissions

- (a) The Design Team Procedures place strong emphasis on the Design Stages of a project and allow flexibility for discussion and the resolution of design problems at the initial stages.
- (b) The early stages are structured so that a straightforward project can progress quickly and with minimal checkpoints. Projects where the development options are not so clear-cut have more checkpoints and time for consideration. In this way all projects can continue to move forward and abortive work can be avoided.
- (c) Formal Stage Submissions to the Client are required at all stages and sub-stages. The content, format and presentation requirements for each stage are described under the relevant section. The onus rests with the Design Team to provide complete information at each stage in accordance with these procedures.
- (d) Formal Stage Submissions to the School Building Section are always required at Stage 1 and Stage 2a. Stage submissions at other stages are not required unless otherwise stated in the Briefing documents, or as otherwise requested in writing by the School Building Section.
- (e) Whether or not a formal stage submission to the School Building Section (through the client) is required, the School Building Section reserves the right to request separate submissions for any and all of the Stages or sub-stages in a project.
- (f) As is the prerogative of any Client or Funding Agency, the School Building Section also reserves the right to check, inspect, make suggestions or request alterations as appropriate to any part or aspect of any submission or project.

Planning Development Meeting [PDM]

- (g) To provide a forum for discussion, resolution of design issues, to agree an appropriate design strategy for a project, and where appropriate to sign-off on the **Stage 1 PRELIMINARY DESIGN** submission, a PLANNING DEVELOPMENT MEETING will be arranged by the School Building Section if required.

Continued overleaf

1. Introduction (continued)

1.9 Stage Submissions (continued)

- (h) See [Section 3.22 Planning and Development Meeting](#) for further details including information requirements and minimum notice.

Design Stage Review Meeting

- (i) To review the [Stage 2a DEVELOPED SKETCH DESIGN](#), and where appropriate to sign-off on the Stage 2a submission a DESIGN STAGE REVIEW MEETING (see [section 4.15](#)) will be arranged by the School Building Section if required.
- (j) See [section 4.15 Design Stage Review Meeting](#) for further details including information requirements and minimum notice.

1.11 Project Administration

- (a) In the case of Community and Comprehensive Schools and some Primary Schools the Minister for Education and Science is the Client. In all other cases the relevant School Management Authorities or the Vocational Educational Committee is the Client.
- (b) All Stage submissions by Design Teams, at each stage of the project shall be made directly to the Client. In all cases the Design Team shall confirm in writing that the submission as presented complies in full with the brief and the relevant requirements of that stage.
- (c) In all cases the Client must satisfy themselves that the submission complies in full with the Brief agreed between the Planning and Building Unit and the Client for that project and the relevant Stage submission requirements in these procedures.
- (d) Where a Stage Submission to the School Building Section is required, the Client should forward its Submission to the School Building Section with a covering note confirming that it is satisfied that it complies with the brief.
- (e) All formal correspondence and communications to and from the Planning and Building Unit (including formal stage submissions) shall be from or through the Client to the designated officer of the Administrative Section handling the project.
- (f) The School Building Section may respond to the Client to communications originating from the Design Team with comments, questions, objections, which shall be taken into consideration by the Design Team..
- (g) No Client and/or the School Building Section response or failure to respond to any communication originating from the Design Team constitutes or implies any review or verification by the Client and/or the School Building Section, or relieves the Design Team from any responsibility or liability.
- (h) All approvals to proceed from one stage/sub-stage of Design to the next stage/sub-stage must be obtained in writing whether from the Client or the School Building Unit as appropriate (see paragraph (a) above). Verbal approval does not constitute official approval.
- (i) Where such approval of the School Building Section is required it will always be issued in writing to the Client by the designated officer of the administrative section of the School Building Section only or directly to the Design Team where the Minister is the Client.

1. Introduction (continued)

- 1.12 Health & Safety**
- (a) All Designers are required to comply in full with the [Safety, Health & Welfare at Work Act, 2005](#) and the [Safety, Health & Welfare at Work \(Construction\) Regulations 2006](#).
 - (b) In particular all Designers must ensure that all current regulations relating to safety, health and welfare at work are taken into account in the design of all building projects. The [Safety, Health & Welfare at Work \(Construction\) Regulations 2006](#) requires designers to ensure that the project is capable of being constructed safely, used safely and maintained safely.
 - (c) Each Design Team member and the Design Team as a whole must consider Safety in the design from the initial design decisions to the handover of the building to the Client.
 - (d) In particular all designers must, both individually and collectively, identify, at all stages of the design process, any hazards that the design may present during construction and subsequent use and maintenance.
 - (e) Where possible the hazards should be eliminated or the risk reduced. This is best carried out by a collective review of the Health & Safety issues with appropriate decisions at an early stage in the design process and continuously reviewed throughout the project.
 - (f) Where hazards cannot be eliminated provision should be made for control of those risks, and the transfer of the necessary information on those control measures and any outstanding risks together with any design assumptions to the Project Supervisor Design Process [PSDP] so they can be dealt with in the Preliminary Safety and Health Plan.
 - (g) It is the responsibility of the Design Team (including the PSDP) to ensure that the project is designed and constructed in accordance with the above Regulations.
 - (h) No Client and/or School Building Section communication with the Design Team constitutes or implies any review or verification by the Client and/or the School Building Section, or relieves the Design Team from any such responsibility or liability.
 - (i) All Design Team members should individually and collectively record the design risk assessment process carried out and the decisions based on those risk assessments at each design stage, and provide to the PSDP a copy of those written records.
 - (j) While all Designers must co-operate with both the PSDP and the Project Supervisor Construction Stage [PSCS], the primary responsibility for safety in design rests with each designer individually and collectively.
 - (k) Designers should also refer to and comply with the Health and Safety Authority Guidance document on [Designing for Safety](#).

1. Introduction *(continued)*

1.13 Area Limits

- (a) The Total Floor Area (area limit) for a Project is the total area in the agreed Schedule of New Build Accommodation.
 - (b) The floor area for individual spaces shall be measured to the faces of the dividing walls, and the total floor area shall be measured to the inside face of the external walls.
 - (c) The area of internal walls shall be calculated separately and indicated on the applicable Schedule of Accommodation Reconciliation Form (see [Appendix A](#)).
-

1.14 Cost Limits

- (a) The Building Cost Limits for all Educational Buildings consist of two elements:
 - (i) The Basic Building Cost [BBC] Limit, and
 - (ii) The External Works Allowance [EWA]
 - (b) The BBC and EWA are two distinct cost limits and must not be added together to form an overall cost limit for the purposes of cost planning or for the analysis of tenders. The School Building Section will determine both the BBC and the EWA.
 - (c) The BBC and EWA are both maximum amounts and Design Teams are required to evaluate all Elements of the project on a proper value-for-money basis to ensure that the project is of a durable construction with low maintenance and within the cost limit. The BBC and EWA, together with appropriate allowances for fixed furniture and associated fittings, are considered to be sufficient for the Project Cost.
 - (d) However, where in the professional opinion of the Design Team in consultation with the Client, exceptional costs in excess of BBC and EWA will arise and can be justified, then, such costs should be submitted for consideration under the heading of "Abnormal Works". (See also [Section 1.13 Abnormal Works](#).)
 - (e) The Building Cost Limits include supplies, services and wastes to fixed furniture and associated fittings. (Including extract ducting from fume cupboards and associated fans, fixed wiring to computer benches, etc.)
-

1.15 Basic Building Cost

- (a) The Basic Building Cost (BBC) is expressed as a cost per square metre of the new build floor area and provides for the cost of the superstructure and substructure of the building, together with the appropriate proportion of Preliminaries, Insurances and Value Added Tax.
 - (b) The relevant Basic Building Cost will be that available on the Department's website (www.education.ie) at the beginning of a project.
-

Continued overleaf

1. Introduction (continued)

-
- 1.16 External Works Allowance**
- (a) The External Works Allowance (EWA) provides for normal external works associated with the new build element of the project and is expressed as a % of the BBC.
 - (b) The EWA is deemed to include all work in the National Standard Building Elements (-0) Site Series, viz (10), (20), (30), (40), (50), (60), (70) and (80) together with the appropriate proportion of associated Preliminaries, Insurances and Value Added Tax. Elements (50) and (60) of the EWA include for all work up to the point of entry into the Building.
-
- 1.17 Abnormal Works**
- (a) Abnormal Costs are exceptional Project Specific Costs, which must be individually itemised, justified and agreed with the School Building Section. Abnormal Costs do not form part of the BBC or EWA but shall be separately identified in the relevant section of the standard Cost Plan. [Refer to the DoES Building Cost limits available on the Department's website (www.education.ie) for further information on what is included as part of the BBC]
 - (b) The Design Team is required to investigate, justify and quantify all abnormal costs prior to the completion of Stage 1.
 - (c) Abnormal Costs shall include an appropriate proportion of Preliminaries, Insurances and Value Added Tax.
-
- 1.18 Work to Existing**
- (a) Work to existing buildings shall be treated in the same manner as abnormal costs. Such work must also be individually identified, investigated, itemised, justified and agreed with the School Building Section. Work to existing buildings does not form part of the BBC or EWA but shall be separately identified in the relevant section of the standard Cost Plan form.
 - (b) In analysing the estimated cost of works to existing buildings, the unit cost (cost per square metre) of all elements shall be established by dividing the total cost of work to existing by the floor area of the existing building, excluding only the area of existing building where no work is required.
 - (c) The Design Team are required to investigate, justify and quantify all Works to Existing (identified in the brief) and any other work to existing (essential to complete the project) prior to the completion of Stage 1. Costs for Works to Existing shall include an appropriate proportion of Preliminaries, Insurances and VAT.
-
- 1.19 Fixed Furniture and associated fittings**
- (a) The Building Cost Limits exclude the costs of fixed furniture and associated fittings and loose furniture and equipment. Fixed furniture and associated fittings are costed separately by the Design Team and included as part of the Building Contract. Loose furniture and equipment is excluded from the project cost and is not part of the Building Contract.
 - (b) For further information on furniture and fittings see the relevant Primary or Post-primary Design Guidelines.

1.0 Introduction (continued)

1.20 Allowable limits/viability thresholds

- (a) To allow the Design Team to carry out reasonable site and archaeological investigations without prior reference to the School Building Section, allowable limits may be included in the Briefing Information issued to the Design Team. The cost of necessary site and archaeological investigations within the approved limit will be borne by the Client and funded by the Department of Education & Science. Refer also to [3.6 Site Investigations](#), [3.7 Topographical Survey](#) and [3.8 Archaeology](#)
- (b) Where no allowable limits are set the following defaults will apply:
- | | |
|-------------------------|---------|
| (i) Site Investigations | €10,000 |
| (ii) Archaeology | €10,000 |
- (c) To permit the Design Team proceed to the completion of Stage 1 without prior reference to the School Building Section, viability thresholds for external works, abnormal works and work to existing may be included in the Briefing Information issued to the Design Team. As long as the above costs don't exceed the stated limits The Design Team may proceed to completion of Stage 1 without prior School Building Section consultation. Thereafter the cost limits will be as agreed with the School Building Section. Refer also to [3.9 Work to Existing](#), [3.13 Cost Control](#) and [3.14 Project Viability review](#)
- (d) Where no viability thresholds are set the following defaults will apply:
- | | |
|--|-----------------------------|
| (i) EWA - new build | 12.5% of BBC |
| (ii) EWA - existing & refurbishment projects - | 10% of BBC |
| (iii) Abnormals | 15% of BBC |
| (iv) Work to Existing Buildings | 70% of equivalent new build |

1.21 Contingencies

- (a) The Department of Finance Public Works Contracts specifically exclude the use of contingencies in building Contracts. Consequently the Design Team must ensure that appropriate cost provision is made for design development throughout the design stages of a project, and that the works are fully designed and detailed before going to Tender.
- (b) The limitations on the authority of the Employer's Representative to perform its functions or powers under the Contract are not intended to be a de facto contingency. Rather it is for use in exceptional circumstances only. The onus rests with the Design Team to fully design and detail a project before going to tender. (see also [6.2 Employer's Representative](#) and [0.1\(e\)](#))

1.22 Pre-Planning & Cost Control Procedures

- (a) The Design Team must undertake thorough pre-planning of the project at the earliest possible stage and in any event before tenders are invited, and carry out the Design Cost Control Procedures in this document.
- (b) In particular the Design Team shall note that a Stage submission in excess of the area and cost limit agreed is not acceptable. The development of the design at any stage, based on proposals in excess of the agreed area limit or cost limit, will result in delays in the Project, and abortive work at the Design Team's own expense.
- (c) The Building Unit's current Outline Cost Plan, Cost Plan and Cost Analysis forms shall be used in all submissions (available at www.education.ie). All data entries must be completed, together with outline specification notes.

2. Project Brief

2.1 Brief formulation

- (a) Each project should have a clear and unambiguous Brief setting out the scope of works and the Client's requirements for that project.
- (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 accommodate this need.
- (c) For Primary and Post 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 first determines the projected long-term enrolment for the school.
 - (ii) Then based on current design guidelines, Educational Worksheets (Post-Primary Schools only), 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 Educational deficit in accommodation 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 allowed.
 - (v) In the case of Post-primary schools the above schedules will have already been issued to the Client for comments/ acceptance leading to agreed schedule/s between the Client and the School Planning Section.
 - (vi) The Schedule of Residual 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 Briefing Documents for every project will normally include the following:
 - (i) A Planning and Building Unit site and building location report (Brief Formulation Report)
 - (ii) An agreed schedule of overall accommodation (with room areas)
 - (iii) A schedule of residual accommodation i.e. new build (for extension projects)
 - (iv) A Cost Limit for New Build per square metre (if applicable)
 - (v) A Schedule of alterations to existing accommodation (if applicable)
 - (vi) A provisional schedule of essential remedial works (if applicable)
 - (vii) Viability thresholds for external works, abnormal works and works to existing (if applicable)
 - (viii) Allowable Limits for Site and Archaeological Investigations (if applicable)
- (e) The Project Brief setting out the scope of works must be agreed in writing by both the School Authority and the Planning and Building Unit before the appointment of Design Consultants, and before commencement of Stage 1 PRELIMINARY DESIGN.

2. Project Brief (continued)

2.2 Additional Floor Area/ Works

- (a) It is considered that the project brief is sufficient to meet all educational requirements; however, in exceptional circumstances the client may elect to provide additional floor area/works at their own expense. (This provision does not apply to schools using Generic Designs and cases where the Department is the Client.)
- (b) Proposals for additional floor area/works must be notified by the client to the Planning & Building Unit before final agreement and acceptance of the Schedules of Accommodation. Such proposals must include details of the additional floor area/works and the method of financing.
- (c) Documentary evidence (e.g. a letter from a recognised financial institution) of the ability to fund the additional area must be provided by the client with the Stage 2a Submission.
- (d) All works arising from the additional floor area/works must be separately identified in Stage Submissions and in tender documentation. In calculating the cost of such works a proportionate element of on-costs shall be included (e.g. associated external works and abnormal works, preliminaries, insurances, bond). Such works will then be the basis for a separate contract between the client and the Contractor.
- (e) The Client will be responsible for all payments to the Contractor for these works. Professional fees arising from these works will also be the subject of a separate contract between the client and the Design Team and the client will be responsible for all fee payments for these works.
- (f) Any increase in the cost of the approved scheme arising from the provision of the additional floor area/works (e.g. structure increase due to increased loading and/or increased spans, phasing costs, additional preliminaries costs, etc.) will also be the responsibility of the client.

3. Stage 1 – Preliminary Design

3.1 Objectives

- (a) The Design Team objectives for [Stage 1 Preliminary Design](#) are to:
- (i) Review all information provided whether as part of the brief or otherwise and satisfy themselves that the project is viable.
 - (ii) Establish/confirm the suitability or otherwise of the location for the proposed works and to establish and analyse all or any site factors which may impact on such suitability including the design and cost implications of linking new and existing buildings or constructing stand alone buildings.
 - (iii) Where the project is in part or in total the repair/replacement of a building element(s), or a refurbishment project, to fully determine the scope and extent of the works necessary.
 - (iv) Explore and evaluate the options available for meeting the project brief and to demonstrate, through comparison of options, that the recommended option achieves an acceptable balance between the design (architectural, engineering and health & safety), educational, and economic requirements of the project.
-

3.2 Health & Safety

- (a) First the Design Team must review all the briefing information provided (including applicable Design Guidance documents, DoES Technical Guidance Documents, and any drawings or Technical Reports from any source) and assess for themselves any hazards and risks pertaining to the project.
 - (b) Where possible the hazards should be eliminated or the risk reduced. This is best carried out by appropriate choices at the initial design stage.
 - (c) Where these hazards and risks cannot be eliminated early provision should be made for control of those risks. Where any such hazards and risks present any insurmountable H&S issues such as to make the project unviable, the DT must notify the Client who in turn must notify the School Building Section. (see [3.3 Project Viability](#))
 - (d) Next the Design Team should anticipate any potential danger to the school pupils, staff and visitors as a result of work taking place near to, or within areas where educational services are being provided, and seek to eliminate those hazards or reduce the risk through design, choice of location, phasing, programming of works, etc.
 - (e) In particular the arrangements for safe access and exit of construction traffic during construction should be considered at the initial sketch design stage.
 - (f) In preparing the initial sketch design, designers must at all times take Health & Safety into account.
-

[Continued overleaf](#)

3. Stage 1 – Preliminary Design (continued)

3.3 Project Viability

- (a) Where as part of the [Stage 1 PRELIMINARY DESIGN](#) or from information from other sources, the Design Team become aware that:
- (i) there are insurmountable H&S issues
 - (ii) some or all of the information provided is not accurate and such inaccuracies will materially affect the viability or cost of the Project
 - (iii) there is no suitable building location on the site (within the given project parameters),
 - (iv) where the site and location evaluations identify substantive difficulties that will materially affect the viability or cost of the Project, and
 - (v) the proposed alterations and/or remedial works are not viable in the context of the overall condition of the building and the relative condition of other elements,
- Then the Design Team must notify the Client who will in turn notify the School Building Section.
- (b) The School Building Section will then re-assess the entire project and its viability in consultation with the Client and the Design Team.
- (c) Where the Project remains viable, but the Brief needs to be changed, the School Building Section will amend the brief and re-issue it including where necessary Schedules of New Accommodation and the Schedule of Future Use for Existing Accommodation.
- (d) If the School Building Section after reviewing all the information deem that the Project is no longer viable or cannot be constructed safely even with changes to the brief, the project may at the School Building Section's discretion be postponed or abandoned and the Design Team's services postponed or terminated.

3.4 Review of Brief

- (a) Depending on the Project, the brief may be well-defined (with an existing Site analysis or Feasibility Report) or limited to a schedule of Accommodation and cost limits.
- (b) Whether the Brief is well defined (as for Primary and Post-Primary School Projects) or not, the Design Team (DT) must review all the information provided (including any drawings or Technical Reports from any source) and satisfy themselves that the information presented is substantially correct and that where the information is not accurate that such inaccuracies will not materially affect the viability or cost of the Project.
- (c) The Schedule of Alterations to existing Accommodation (if applicable) and provisional schedule of essential remedial works (if applicable) are both based on the presumption that such alterations and remedial works are economically viable in relation to the equivalent new build cost and that no insurmountable Health and Safety issues pertain.
- (d) Where the Design Team is satisfied that some or all of the information provided is not accurate and that such inaccuracies will materially affect the viability or cost of the Project, including the possibility that the Schedules of New Accommodation and the Schedule of Future Use for Existing Accommodation will have to be re-assessed, the Design Team must notify the Client who will in turn notify the School Building Section. (see [3.3 Project Viability](#))

3. Stage 1 – Preliminary Design (continued)

- 3.5 Assessment of Site & Location Suitability (New Build)**
- (a) Since Abnormal Costs are largely determined by the suitability of the site (where applicable), and the possible locations on the site for the buildings or works, a careful evaluation of all possible locations on site must be carried out by the full Design Team.
 - (b) Where the Brief clearly defines a particular location on a site the Design Team must evaluate the briefing information provided and must assess the viability (of that location only) using this procedure.
 - (c) Where the Briefing information does not specify a particular location on site, or includes the assessment of more than one location on the site for suitability for the building works this procedure applies to all those locations.
 - (d) The evaluation (whether of a single location or multiple locations) shall be in a written format with the evaluation criteria clearly indicated and applied to all the options. The evaluation criteria should include:
 - (i) Health and safety considerations both during construction and in use.
 - (ii) Good planning, including suitability of the site(s) for intended educational function, universal access, security, environmental considerations, and buildability.
 - (iii) General suitability including the availability, location and adequacy of access to the site(s) including access for construction, building(s) location & orientation, allowance for expansion, locations of external facilities and any possible planning restrictions.
 - (iv) The availability, location and adequacy of Public Utilities including water supply for domestic and fire fighting where required, gas, electricity, telephone, TV and internet services, foul and surface water disposal,
 - (v) Site levels and ground conditions, including the sub-soil conditions for the possible site locations.
 - (vi) The design and cost implications (including fire) of linking new and existing buildings or constructing stand alone buildings.
 - (vii) Any other factors relevant to the site(s) under consideration.
 - (viii) The cost implications of the above.
 - (e) Where there are no suitable building locations on the site, and/or that the site and location evaluations identify substantive difficulties that will materially affect the viability or cost of the Project, the Project Viability procedure above applies.
-

Continued overleaf

3. Stage 1 – Preliminary Design (continued)

3.6 Sub-Soil Investigations

Site Investigations

- (a) As a general principle the Design Team must ensure that detailed information is available on the sub-soil conditions for the recommended location.
- (b) Where the Design Team's Conditions of Engagement include the assessment of more than one location for the building works the Design Team should first evaluate the different locations on other known criteria.
- (c) Unless detailed information already exists on the ground conditions for the particular location or possible site locations, and where a location is otherwise suitable for the new building and may be selected as the preferred location the Civil/Structural Engineer should arrange to have a Site Investigation carried out on those location(s).
- (d) If this investigation is limited to one location the investigation shall include trial holes and/or bore holes sufficient to determine the actual ground conditions with a high degree of certainty.
- (e) If the investigation includes more than one realistic option for preferred location the investigation should be limited to the information required to assess the viability of those locations. In this case a further more detailed investigation (as above) will be required to confirm the recommendations of the Design Team.
- (f) The Civil/Structural Engineer (or where there is no Civil/Structural Engineer the Design Team Leader) should seek tenders from at least 3 suitable firms detailing the scope of the work, (e.g. the locations, spacing and number of the trial holes/borings etc).
- (g) The terms and conditions should include a warranty as to the accuracy of the locations of the holes/borings and the factual findings, but not the interpretation.
- (h) The Civil/Structural engineer shall consider the lowest suitable tender in the context of the allowable limit in the Briefing information or if none the default in [Section 1.20 Allowable Limits/Viability Thresholds](#). If the Engineer is satisfied that all investigations can be completed within the allowable limit for site investigations (including topographical surveys), the Engineer may proceed to appoint that firm on behalf of the client.
- (i) The cost of necessary site investigations within the allowable limit will be borne by the Client and funded by the Department of Education & Science
- (j) Where the cost of site investigations will exceed the allowable limit for site investigations the Engineer should seek approval from the School Building Section through the client for such expenditure prior to appointment

Ground Contamination

- (k) Where a desk study reveals the possibility of ground contamination, the above sub-soil investigations should be extended to investigate this possibility.

Continued overleaf

3. Stage 1 – Preliminary Design (continued)

- 3.7 Topographical Survey**
- (a) The purpose of such a survey (if required) is to assist in the assessment of the relative suitability of particular locations and the applicable abnormal costs.
 - (b) Where the relative levels, inverts/cover levels and/or eaves/roof levels of existing buildings are required to assess the relative suitability of particular locations or location, to set the building level, or necessary for the Planning submission a Topographical Survey should be undertaken.
 - (c) Where the proposed or suitable building location(s) is (are) substantially level or verifiable without recourse to a topographical survey, and the exact invert/cover levels are not necessary for the assessment of the location and setting the building level, no topographical survey should be carried out.
 - (d) If a survey is needed the Civil/Structural Engineer (or where there is no Civil/Structural Engineer the Design Team Leader) should seek tenders from at least 3 suitable firms detailing the scope of the work and the level of detail required using the same procedure as for site investigations.
 - (e) The Civil/Structural engineer shall consider the lowest suitable tender in the context of the allowable limit in the Briefing information or if none the default in [Section 1.20](#). If the Engineer is satisfied that all investigations (including sub-soil investigations) can be completed within the allowable limit for site investigations, the Engineer may proceed to appoint that firm on behalf of the client.
 - (f) The cost of such Topographical Survey(s) within the approved limit will be borne by the Client and funded by the Department of Education and Science
 - (g) Unless otherwise stated in the brief, or authorised in writing by the School Building Section, the survey is to the external walls and corners of a building and does not include for internal building surveys or detailed external surveys (such as elevation surveys). The Eaves and Ridge levels should be included as part of the survey
 - (h) Building Surveys where required and unless otherwise stated are part of the duties of the Architect

- 3.8 Archaeology, Special Conservation areas, protected structures/ etc**
- (a) The Architect or Design Team Leader is expected to carry out a desk top study of the likelihood that Archaeological artefacts may be located on the site or proposed building location or that the site may be part of a conservation area or contain protected structures.
 - (b) Where such a possibility exists the Architect and Design Team shall investigate further to determine, where possible, the impact and cost of such site restrictions on the possible site locations.
 - (c) Where the Architect has information to indicate that Archaeological items of value may be located on the site or proposed building location, the Architect should consult a suitably qualified archaeologist to assess the scope of archaeological services required.

Continued overleaf

3. Stage 1 – Preliminary Design (continued)

- 3.8 Archaeology, Special Conservation areas, protected structures/ etc (continued)**
- (d) Where the scope of service is limited, he/she may negotiate a fee for those services. Where the scope is more extensive (e.g. where investigative work is required), he/she should obtain fixed price quotations from a minimum of 3 Archaeologists for that defined scope of service together with an hourly/daily rate for additional unforeseen services.
 - (e) Where in the view of the Architect there is reasonable cause to engage an Archaeologist and where the total cost of the archaeological advice and the likely cost of any investigative work is within the allowable limit (See [Section 1.20.](#)) the Architect may proceed to engage that Archaeologist as a sub-consultant to the Architectural firm and to seek prices for the necessary investigative work (complying with the written archaeological advice). The same procedure for tender evaluation as for site investigations should be used.
 - (f) Where the Architect has information to indicate that Archaeological items of value may be located on the site, and the cost of engaging an Archaeologist and carrying out the investigative work will exceed the allowable limit, the Architect should seek approval from the School Building Section through the Client for such expenditure prior to appointment of the Archaeologist.
 - (g) As a general principle, where there is a reasonable risk that items of Archaeological interest may be located on the site, appropriate site investigations should be carried out to eliminate or mitigate that risk up to and including an enabling contract to resolve any archaeological issues.
 - (h) The cost of such professional Archaeological advice and investigative work will be borne by the Client and funded by the Department of Education & Science only where within the allowable limit or approved in advance.
-
- 3.9 Scope of essential Work to Existing Buildings**
- (a) Where the Design Team's Terms of Engagement include the evaluation of one or more existing building(s), or where a Schedule of Alterations to existing Accommodation and/or a provisional Schedule of essential Remedial works is provided with the brief, the Design Team must make a careful evaluation of those existing building(s) identified in the Brief and in particular the elements requiring remedial works.
 - (b) The objective of the evaluation is to confirm the accuracy and completeness of the Briefing information provided ([see also 3.4 Review of Brief](#)) and to determine whether the accommodation proposed in the brief can be retained in that building cost-effectively.
 - (c) This evaluation shall be in a written format with the evaluation criteria clearly indicated.
 - (d) The Evaluation of those existing building(s) should normally include an assessment of the following:
 - (i) The condition of the major building elements (e.g. roof, windows, mechanical and electrical, etc.) and the level of maintenance carried out by the Client.
 - (ii) Compliance with universal access requirements.

Continued overleaf

3. Stage 1 – Preliminary Design *(continued)*

3.9 Scope of essential Work to Existing Buildings *(continued)*

- (iii) The extent and scope of essential remedial and/or replacement Works with an economic appraisal of possible solutions taking into account design life.
- (iv) The availability, location and adequacy of access for construction, and any other Health & Safety implications
- (v) The Health & Safety implications of work to an existing building including whether the building should remain in occupation during construction work.
- (vi) Consideration of how the works can be carried out while maintaining the building function in operation (if applicable), and where alternative accommodation is unavoidable, the extent and duration of decanting required
- (vii) Whether Planning Permission and/or Fire Certificate will be required
- (viii) Any other factors relevant to the building(s) being assessed, and
- (ix) The cost implications of all the above
- (e) The evaluation criteria for the particular elements shall include an assessment of the viability of the remedial works in the context of Health & Safety, the overall condition of the building and the relative condition of other elements.
- (f) If the Design Team is satisfied that, within the given project parameters identified in the Brief (and the viability threshold herein), the proposed alterations and/or remedial works are not viable in the context of (i) Health & Safety, (ii) the overall condition of the building and (iii) the relative condition of other elements, the Design Team must notify the Client who will in turn notify the School Building Section. (see [3.3 Project Viability](#))

3.10 Consultation with Statutory Authorities

- (a) The Design Team should also consult with the relevant Local Authority Planning Section and Roads Section to determine what constraints if any apply to the particular project and to ascertain the likely conditions which may apply.
- (b) Where the Design Team is aware (either from the above consultations or otherwise) that particular conditions may apply, these conditions should be included in the sketch design proposals and costed either as part of the Basic Building Cost, External Works Allowance, or Abnormal Works as applicable (refer also to [Section 3.13 Cost Control](#)).
- (c) Additional Design Team work including revision to design proposals arising from Planning or Fire Certificate conditions which should have been foreseen at Sketch Design stage are deemed to be part of the scope of service and not a change to the Conditions of Engagement.

Continued overleaf

3. Stage 1 – Preliminary Design *(continued)*

3.11 Client Consultation

- (a) Having reviewed the brief, assessed the viability of the project, evaluated the location options, and in the case of refurbishment, fully determined the scope and extent of the works, the Design Team should be aware of all the available options and their cost implications.
- (b) At this point, before work commences on preliminary design (Up to this point the Design Team will not have developed sketch designs, other than to the extent of identifying the likely “footprint” of the building and determining whether it can be accommodated on the preferred site), the Design Team should now report to the Client both verbally and in writing.
- (c) In all cases the Design Team must present to the client the site/location evaluation (whether of a single location or multiple locations) in a written format with the evaluation criteria clearly indicated and applied to all the options, and obtain the client’s agreement to the choice of preferred location. (This written evaluation will also be required for the Planning Development Meeting report.)
- (d) Where the project is viable and in the judgement of the Design Team can be constructed safely within the area and cost limits, this is a pro forma report informing the client of progress.
- (e) Where the project cannot be constructed safely within the area and cost limits, the Design Team must so inform the Client and summarise (in writing) the reasons. Where in the view of the Design Team the project is unviable or where substantive increases in area or costs (outside the allowable limits) is unavoidable the Client must notify the School Building Section. (see [3.3 Project Viability](#))

3.12 Preliminary Sketch Design

- (a) Having reported to the client confirming the project viability (and where appropriate getting agreement from the PBU through the client for an amended project brief) and having obtained agreement to the preferred location the Design Team can now develop preliminary sketch designs.
- (b) These Preliminary sketch design proposals should develop on the agreed project parameters as above. They should give an indication of the spatial inter-relationships (e.g. block plans) for the preferred site/location.
- (c) The preliminary sketch design process shall comply fully with the written brief (and any agreed amendments), the agreed Schedules of Accommodation, the approved cost limits, and all other applicable Department of Education and Science Technical and Design Guidelines [available at www.education.gov.ie under Technical Guidance].
- (d) The extent and detail of the sketch design development will vary from project to project, but must be sufficient to demonstrate that the recommended proposal achieves the best balance between the design (safety, architectural and engineering), educational, and cost requirements for the project; and represents value for money.

Continued overleaf

3. Stage 1 – Preliminary Design *(continued)*

3.12 Preliminary Sketch Design *(continued)*

- (e) The Design Team shall consider all aspects of a range of possible sketch design solutions in an integrated manner. In particular the building services (M&E) and structure should be sufficiently investigated and developed to ensure that the best architectural, structural and environmental options are chosen to provide a safe, cost effective, durable, and flexible design solution. A design solution involving a separate new block may sometimes be optimal.
- (f) For extension projects or building replacement projects, consideration must be given at this stage to how the existing school can continue to operate safely, effectively, and economically during the construction phase of the project, while at the same time keeping decanting costs and disruption to a minimum. (See also [Section 3.2 Health and Safety](#))
- (g) The design shall allow for the possibility of future expansion. All sketch proposals must show an expansion zone (up to 33%, in the case of new primary and post primary schools) and should indicate the design philosophy for future expansion.
- (h) The potential for adding a further extension should be identified where there are existing school buildings. Where provision has been made in a previous project for future expansion, this shall be taken into account in the design options.
- (i) The circulation routes should be designed so that the circulation will work effectively if the building is further expanded.
- (j) The building services (M&E) and services routes should be so positioned as to allow for such expansion without major disruption to the fabric of the building. Where the project is an extension to an existing school/building, the overall circulation on the site, and within the existing buildings, shall also be taken into account.
- (k) In the context of both safety and durability, the Design Team should consider the choice of materials and methods of construction carefully and make preliminary choices which will ensure that the building is easy to build and safe (both during construction and in use).
- (l) A proposed location for the Contractor's compound and a safe methodology for access and egress of Construction traffic must also form part of the sketch proposals
- (m) The Design Team must also where possible integrate sustainability into the building design and operation processes for new and renovated facilities within stated budget parameters.
- (n) The Design Team should define sustainable design priorities and goals, develop appropriate sustainable design strategies and determine performance standards to guide the design and decision-making process.

Continued overleaf

3. Stage 1 – Preliminary Design (continued)

3.13 Cost Control

- (a) Having consulted with the client, and prepared preliminary designs, the Design Team should further consider the cost implications under each of the Cost Plan headings

Basic Building Cost

- (b) If the BBC exceeds the maximum allowed BBC, the Design Team should review the proposals to reduce the cost to within the approved limit

External Works Allowance

- (c) The Design Team may proceed to completion of Stage 1 as long as the EWA doesn't exceed the allowable limits for either new build or extensions to existing schools and refurbishment projects. (see [Section 1.20 Allowable Limits.](#))
- (d) If the EWA exceeds either of those figures the Design Team should review the scope of external works to ensure that the maximum allowance is not exceeded.
- (e) After the completion of Stage 1 the EWA is thereafter as agreed with the School Building Section.

Work to Existing Buildings

- (f) Work to existing buildings shall be separately identified in the relevant section of the standard Cost Plan form. Such works must be individually identified, investigated, justified and costed.
- (g) To achieve the greatest possible cost certainty the Design Team is required to carry out such investigations as are required to identify the full cost of such works without unreasonable disruption. All options must be examined in order to mitigate the extent of those Works.
- (h) The Quantity Surveyor should then estimate the overall cost of refurbishment works in the existing building or discrete section of a building and benchmark those costs as a percentage of the equivalent new build cost (i.e. compare the cost of refurbishing the existing building against the cost of providing the same level of accommodation in new build on the same site).
- (i) The Design Team may proceed to completion of Stage 1 as long as the cost of works to existing doesn't exceed the viability threshold (see [1.20](#)) for that building or discrete section of a building.
- (j) Thereafter the schedule of Works to Existing and their costs are as agreed with the School Building Section.

Fixed Furniture and associated Fittings

- (k) The full extent and cost of all fixed furniture and associated fittings shall be determined at this stage and separately identified in the relevant section of the standard Cost Plan form.

Abnormal Costs

- (l) Where any costs arise which do not form part of the BBC, the EWA, Fixed Furniture and associated Fittings or work to existing (as above), such works must be individually identified, investigated, justified and costed.

Continued overleaf

3. Stage 1 – Preliminary Design (continued)

3.13 Cost Control (continued)

- (m) Abnormal Works or additional costs relating to Abnormal Works or works to existing (see below) which should have been identified at this stage and subsequently arise will not be funded by the Department unless they are essential for the execution of the overall project and cannot be deferred.
- (n) Where Abnormal Costs relate to the preliminary design proposals (as distinct from the location and site) the Design Team should review the preliminary design proposals and where possible amend them to eliminate those abnormal works.
- (o) Again to achieve cost certainty the Design Team are required to carry out such investigations as are necessary to identify the full cost of those works and all options must be examined in order to mitigate the extent of those Abnormal Works.
- (p) The Design Team may proceed to completion of Stage 1 as long as the abnormal costs don't exceed the viability threshold (See Section 1.19)
- (q) Thereafter the schedule of Abnormal Works and their costs are as agreed with the School Building Section.

3.14 Project Viability Review

- (a) If the BBC exceeds the approved BBC; the EWA, the cost of abnormal works, or the refurbishment cost of a building or discrete section of a building exceed the relevant viability threshold (see [Section 1.20](#)), the viability of the project should be questioned.
- (b) In all cases the Design Team must review their preliminary design proposals and where possible amend them to eliminate or mitigate the cost overrun.
- (c) Where the BBC, EWA and/or Abnormal Costs cannot be reduced to within the allowable limits, but in the view of the Design Team given the nature of the project are reasonable costs and value for money, the Design Team in consultation with the Client may proceed to the completion of Stage 1 if they are satisfied and can demonstrate that exceptional circumstances exist which can be fully justified and that all mitigation measures have been taken to minimise those costs.
- (d) Where the BBC, EWA, and/or Abnormal Costs are above the viability threshold and the cumulative costs do not represent value for money, the viability of the project is questionable and the Design Team should notify the Client who in turn should notify the School Building Section. (See [Section 3.3 Project Viability](#))
- (e) Where the cost of works to an existing building (or discrete sections of a building) exceeds the viability threshold, the retention of that building or section of a building is questionable and the Design Team should notify the Client who in turn should notify the School Building Section as above. (See [Section 3.3 Project Viability](#))
- (f) Where the project is viable and can be constructed safely within the area and cost limits, the Design Team can proceed to the Stage 1 submission with or without a PDM (see [Section 3.22](#))

3. Stage 1 – Preliminary Design (continued)

- 3.15 Stage 1 Report**
- (a) Having consulted with the client, prepared preliminary designs and determined the viability of the project at this stage, the Design Team should prepare a written report of progress to date. This report is the Stage 1 PRELIMINARY DESIGN report.
 - (b) It is required for all projects, both to record the evaluation and assessment process and the design decisions taken, and to provide a written record of the recommendations for examination and written approval by the Client. It is also a pre-requisite for a Planning Development Meeting (see 3.22)
 - (c) The report should be in A4 Portrait format, with Drawings (preferably in A4 or A3 format) of sufficient scale to show the necessary information either attached as an appendix or included in the body of the document.
 - (d) The report and all attached drawings/ documents must be labelled with the document or drawing title and the Stage number clearly visible.
 - (e) The report should contain an Executive Summary, Main Report for each Consultant and relevant Appendices all as described below. Refer to DoES TGDs 001-006 for M&E report format.
 - (f) The report should be prepared and assembled by the Design Team Leader in consultation with the other Design Team members (including the Project Supervisor Design Process) and with contributions from those other Design Team members where appropriate.
 - (g) The extent and detail of the report will vary from project to project, but will always include a review of the project brief and an assessment of its viability, an evaluation of the site location(s), the recommended sketch design proposals, and an analysis of the cost implications both of the site and location factors and the design proposals being adopted.
 - (h) In the case of refurbishment/ repair works it must also include an evaluation of scope of essential Work to Existing Buildings with an assessment of the viability of those works within the scope of the brief in the context of the overall condition of the building and the relative condition of other elements.
 - (i) The report must be prefaced with a [Stage Completion Certificate](#) signed by the Client and all the Design Team Members (where the Department is the client a client signature is not required). A copy of the [Stage 1 COMPLETION CERTIFICATE](#) is attached at [Appendix B](#) and includes all the required information listed overleaf.

Continued Overleaf

3.0 Stage 1 – Preliminary Design (continued)

3.16 Executive Summary

- (a) The Executive Summary shall include (where applicable):
1. A review of the project brief (including summary approved amendments) and an overall project viability assessment.
 2. Completed [Area Re-conciliation Sheet APPENDIX A](#)
 3. Health & Safety report on any hazards and risks (including review of briefing information) and the measures being taken to eliminate, mitigate or control those hazards/risks.
 4. A summary of the evaluation of possible locations (or assessment of the location stated in the brief) and their/its viability, with a summary of the cost implications of the preferred location compared to other possible locations under consideration.
 5. For work to existing buildings, a summary of the scope of essential remedial/alteration works (within the scope of the brief), with an assessment of their viability in the context of the overall condition of the building and the relative condition of other elements.
 6. Summary of the general design concept and how it meets the brief within area and cost limits with a summary of the cost implications of the proposed design solution.
 7. An updated programme indicating the time (in weeks) required by the Design Team for each of the main stages of work as set out in the Design Team Procedures.

3.17 Architectural Report

- (a) The Architectural report shall include (as applicable):
1. Evaluation of the site and all possible locations thereon (or assessment of the identified site & location) as at [3.5 Assessment of Site & Location Suitability \(New Build\)](#)
 Evaluation of scope of essential Work to Existing Buildings (where applicable) with an assessment of the viability of those works in the context of the overall condition of the building and the relative condition of other elements.
 This evaluation should include a condition report on those buildings with details of age, existing materials and method of construction, structural condition, mechanical and electrical services (with the age and condition of each of the respective services and recommendations on each element), and the nature and extent of any defects or hazards, their cause, and the scope of remedial or replacement work required.
 2. A report on the availability, location and adequacy of the proposed access and any special requirements of Statutory Authorities (with appropriate reference to the Civil/Structural Engineer's report below).
 3. Any other requirements of Statutory Authorities and in the case of remedial works comment on whether Planning Permission and/or Fire Certificate will be required.
 4. A copy of the Archaeological report (where appropriate).
 5. An Architect's Report describing the general design concept and a short appraisal of alternative design solutions considered, with conclusions and recommendations.

(continued overleaf)

3.0 Stage 1 – Preliminary Design (continued)

3.16 Architectural Report (continued)

The report should illustrate, with appropriate reference to the individual reports from the other members of the Design Team, how particular site features or site problems are being dealt with and generally how the proposed design will facilitate speedy and economical construction.

For extension projects, the report must also consider how the extension can be constructed while safely keeping the existing school in operation and minimising decanting and/or the use of temporary accommodation. It is essential that this aspect of the project is taken into account in the appraisal of alternative solutions.

The report should also refer to the extent to which the design proposals fulfil the brief requirements and how they compare with the cost limits and area restrictions in the brief.

6. Commentary and compliance statement on the proposed building configuration and site location/orientation with specific reference to the DoES technical guidance documents on passive solar energy design and natural ventilation.
 7. Preliminary specifications describing materials and methods of construction.
- (b) And as an Appendix the following drawings:
1. A location map to 1:1000 scale, showing north point and direction of prevailing wind and how the site relates to its surroundings, with the site outlined in red.
 2. An accurate survey drawing of the site to at least 1:500 scale showing the position of existing buildings, boundaries, contours, public services and adjoining properties, particularly those in third party ownership. The school site must be clearly outlined in red and all sites/locations assessed as part of Stage 1 clearly labelled (e.g. Site A.)
 3. Site plan to 1: 500 scale showing the buildings (existing and/or new), boundaries (clearly indicated), entrances, boiler house, sub-station (if relevant), services, roads, paths, parking, play areas and any special requirements of Statutory Authorities. The north point and direction of prevailing wind should be indicated.
 4. Floor plans and roof plan to 1:200 scale (or larger) with areas of spaces (rooms, corridors, lobbies, etc.) and north point indicated thereon.
 5. Cross-sections to 1: 200 (or larger) scale through the building illustrating the relationship with site levels, the general structural solution and the design approach to natural lighting and ventilation
 6. Building Elevations to 1:200 scale or larger.

3.18 Civil/ Structural Report

- (a) The Civil/Structural report shall include (as applicable):
1. A report on the nature of the sub-soil, substantiated by trial holes and/or borings.
 2. A report on the availability, location and adequacy of water supply, surface water and sewage disposal.
 3. A report on the availability, location and adequacy of the proposed access and any special requirements of Statutory Authorities.
 4. A report on the proposed scheme, to include comments on the design solution in terms of ease, appropriateness and economy of construction.
 5. Copy of the Site Investigation Report and (where appropriate) the Topographical Survey.

3.0 Stage 1 – Preliminary Design (continued)

3.19 Building Engineering Services

- (a) The Building Engineering Services report shall include (as applicable):
1. A report on the proposed mechanical and electrical systems and the thermal performance of the building including existing systems and their capacities, formatted and completed in accordance with the technical guidance documents.
 2. Commentary on the advantages/disadvantages arising from the design which affect the services installation or the thermal performance and recommendations on same.
 3. Where the design gives rise to spaces which do not have appropriate natural day-lighting and/or natural ventilation, the areas in question should be high-lighted on the drawings, and a commentary should be provided to justify/explain the design approach.
 4. Commentary on accommodation spaces(that (as agreed with the Client) will be used outside normal school timetable hours and proposed level of service required to provide for such use on an economical cost in use basis.
 5. Review of all available fuels and an outline of the advantages and disadvantages of each and a proposed fuel strategy for design development at Stage 2a.
 6. Report on the availability, location and adequacy of electricity, gas, telephone, T.V. services and broadband.
 7. Review of the hot water strategy for design development at Stage 2a.
 8. The general logic of the intended control strategy outlining the proposed method of control and operation of all the services.
 9. A services distribution drawing indicating the proposed services distribution strategy/zones which will be developed as the design progressed
 10. Preliminary completed TGD006 Energy Information Form

3.20 Quantity Surveyor

- (a) The Quantity Surveyors' report shall include (as applicable):
1. A report on the cost implications of the preferred site/location compared to other possible sites/locations under consideration including all abnormal works relating to the site/location with due regard to the individual comments of the other members of the Design Team.
 2. A report on the cost implications of the proposed design including all abnormal works relating to the proposed design, with due regard to the individual comments of the other members of the Design Team. Where alternative design solutions have been considered, the recommended option must be supported by a cost comparison of the other options.
 3. For extension projects, the cost of decanting, phasing or temporary accommodation (if unavoidable) required to keep the school in operation during construction must be taken into account in the estimated cost and in cost comparisons of alternative solutions.
 4. Completed Outline Cost Plan on the DoES standard form (both hard copy and electronically), with work to existing identified separately in relevant section.
 5. Detailed schedule of Abnormal Costs with each abnormal identified, justified, and costed (with comments by other Design Team members as necessary) on DoES standard Outline Cost Plan with evidence that all options have been adequately investigated so as to mitigate the extent of those Abnormal Works.
 6. A report on the proposed scheme, to include comments on the design solution in terms of ease, appropriateness and economy of construction.

3.0 Stage 1 – Preliminary Design (continued)

3.21 Stage 1 Client Approval

- (a) Prior to submitting the Stage 1 PRELIMINARY DESIGN submission through the client to the School Building Section (for discussion at the PDM) the Design Team must submit the completed report to the Client.
- (b) The Design Team must discuss it in detail with the Client and ensure that its contents are fully understood and its recommendations fully supported.
- (c) The Client and the Design Team must also be satisfied that the project can be constructed safely within the area and cost limits and that the project complies with the brief requirements (including any amendments thereto).
- (d) Where the project cannot be constructed safely within the area and cost limits, the Design Team must so inform the Client and summarise (in writing) the reasons. Where in the view of the Design Team the project is unviable or where substantive increases in area or costs (outside the allowable limits) are unavoidable the Client must notify the School Building Section. (See [Section 3.3 Project Viability](#).)

3.22 Planning Development Meeting [PDM]

- (a) To review progress, provide a forum for discussion and resolution of design issues, to agree an appropriate design strategy for a project, and where appropriate, to sign-off on the [Stage 1 PRELIMINARY DESIGN](#) submission, a PLANNING DEVELOPMENT MEETING [PDM] is required unless otherwise stated in the Briefing Documents
- (b) Where a PDM is required, the Client, on the Design Team's written advice, should write to the School Building Section stating the date for completion of the Stage 1 PRELIMINARY DESIGN submission giving a minimum of 1 month notice.
- (c) **The Design Team should not indicate an unrealistic date for completion of the stage as any delays arising from the non-completion of the required information will be at their own expense.**
- (d) The School Building Section will then arrange a meeting to be held within a further month of that date. This meeting shall be attended by representatives of the Client, the School Authorities (where the Department is the Client), the School Building Section, and the Design Team.
- (e) To ensure that the PDM meeting is productive and to allow the School Building Section to sign off on the Stage, the client and the Design Team must submit the full Stage 1 PRELIMINARY DESIGN submission.
- (f) **It is essential that the client is fully aware of and in full agreement with all design decisions made up to this point and that the client has examined the information to be provided and agrees with it.**
- (g) The information required for the Stage 1 PRELIMINARY DESIGN submission is as stated above and in the [Stage 1 COMPLETION CERTIFICATE](#) at Appendix B.

Continued overleaf

3. Stage 1 – Preliminary Design (continued)

3.22 Planning Development Meeting (continued)

- (h) This Stage 1 COMPLETION CERTIFICATE must be completed and signed by the Client and all Design Team members and sent with the complete Stage(i) submission to the School Building Section no later than 1 week before the date for the PDM.
- (i) At the PDM, the School Building Section may at its discretion respond to the Design Team's submission with comments, questions, objections, to which the Design Team shall respond if practicable at the meeting.
- (j) Where in the view of the School Building Section the submission substantially meets the stage requirements the Client and the Design Team may be authorised to progress to the next stage. Such authorisation may be conditional on agreed amendments and/or supplementary information.
- (k) Where in the view of the School Building Section the submission does not meet the stage requirements or cannot, as presented, be constructed without substantive increases in area or costs (outside the allowable limits) the Client and Design Team may be requested to reconsider the submission. No Client and/or School Building Section communication with the Design Team constitutes or implies any review or verification by the Client and/or the School Building Section, or relieves the Design Team from any responsibility or liability.
- (l) Where the Briefing Documents indicate that a PDM is not required, both the Client and the Design Team must be satisfied that the project is viable and can be constructed safely within the area and cost limits and that the project complies with the brief requirements (including any amendments thereto). In all other instances, the Client must write to the School Building Section seeking a PDM in accordance with the above procedures.
- (m) The School Building Section reserves the right to organise and/or arrange group PDMs for a number of similar projects at the same time. This will take the form of a group briefing session followed by individual project consultations.

4. Stage 2 – Design

4.1 Objectives

- (a) The Design Team objectives for Stage 2 Design are to:
- (i) Develop the design and accurately cost the option agreed with the Client (and the School Building Section where applicable) at Stage 1 which best meets the design (architectural and engineering and Health & Safety), educational and economic requirements of the project.
 - (ii) Obtain statutory permissions for those design proposals.
 - (iii) Prepare detailed design drawings and specifications for that design within the cost parameters established at Stage 1 (or as later amended), incorporating any conditions arising from statutory permissions, to enable the preparation of a Bill of Quantities (or other agreed tender documentation) based on full and complete design.
 - (iv) Prepare the Bill of Quantities (or other agreed tender documentation) and all other tender documentation required.
 - (v) Prepare an accurate pre-tender cost estimate not more than 1 month before the issue of request for tenders.

4.2 Stage 2 Sub-stages

- (a) Stage 2 is divided into two sub-stages Stage 2a DEVELOPED SKETCH DESIGN, and Stage 2b DETAILED DESIGN.
- (b) In [Stage 2a DEVELOPED SKETCH DESIGN](#) the Design Team must develop the design and accurately cost the option agreed with the client and the School Building Section.
- (c) [Stage 2b DETAILED DESIGN](#) includes obtaining statutory permissions, the preparation of full Contract Documentation (i.e. the Works Requirements) including a Bill of Quantities, and an accurate pre-tender cost estimate.
- (d) On completion of [Stage 2a DEVELOPED SKETCH DESIGN](#) the Design Team must make a formal Stage 2a submission to the School Building Section, through the client.
- (e) On receipt of this submission the School Building Section will arrange a [Design Stage Review Meeting](#). This Design Stage Review Meeting will be the primary mechanism for sign-off of the Developed sketch design. (See [Section 4.15](#) below)
- (f) School Building Section agreement to proceed from [Stage 2b DETAILED DESIGN](#) to Stage 3 TENDER ACTION is not normally required (for projects within the relevant cost parameters) unless otherwise stated in the briefing documents.
- (g) The requirements for each sub stage are described in detail in the following pages.

4. Stage 2a – Developed Sketch Design

- 4.3 Health & Safety**
- (a) In developing the sketch designs, and also in the preparation of the detail design, Designers must ensure that Health and Safety is taken into account in the design process at all times.
 - (b) All designers must both individually and collectively identify, at both sketch design and detailed design, any hazards and risks that may arise and address and resolve all health and safety issues identified at Stage 1.
 - (c) As in Stage 1, where possible, the risks should be eliminated or reduced, and where they cannot be eliminated provision should be made for control of those risks, and the transfer of the necessary information on those control measures and any outstanding risks together with any design assumptions to the Project Supervisor Design Process [PSDP].
 - (d) Designers should refer to **Designing for Safety** published on the Health and Safety Authority website www.hsa.ie and in particular the section on “How Can I Design for Safety”. Designers must also comply with the Guidelines on the Procurement, Design and Management Requirements of the Safety Health and Welfare at Work (Construction) Regulations 2006, also available at www.hsa.ie. As with Stage 1, where any hazards and risks present an insurmountable H&S issue so as to make the project unviable, the Design Team must notify the Client who in turn must notify the School Building Section. (see **3.3 Project Viability**).

- 4.4 Developed Sketch Design**
- (a) The Developed Sketch Scheme should evolve from the sketch proposals approved at Stage 1, and agreed and accepted by the Client. It should not vary substantively in design, form, layout or area from that previously agreed proposal.
 - (b) The developed Sketch Scheme shall consider all aspects of the developed design in an integrated manner. In particular, where a project is being undertaken on an existing school site, the Developed Sketch Scheme must have due regard for the day to day operation of the existing educational facilities and the implications for the proposed construction programme, including phasing, state examinations, temporary accommodation, etc.
 - (c) The preliminary sketch design process shall comply fully with the written brief (and any agreed amendments), the agreed Schedules of Accommodation, the approved cost limits, and all other applicable Department of Education and Science Technical and Design Guidelines [available at www.education.gov.ie under Technical Guidance].
 - (d) The Building Services and structure shall be so designed as to ensure the efficient distribution of services in a cost effective and flexible building.
 - (e) The materials and method of construction shall be appropriate to the design and to the budget. Materials shall be durable and low-maintenance and appropriate to the function.
 - (f) On completion of **Stage 2a**, and prior to client consultation, the Design Team should be satisfied that the design proposals (agreed with the client and the School Building Section at Stage 1) as developed, can be constructed safely within the area and cost limits agreed.

4.0 Stage 2a – Developed Sketch Design

4.5 Work to Existing Buildings

- (a) Having identified, justified costed and agreed the scope of Work to Existing at Stage 1 the Design Team must develop the design proposals for Work to Existing to the extent that they can be satisfied that the works can, as developed, be constructed safely within the area and cost limits agreed.
- (b) The Design Team must carry out whatever further investigation is required (including intrusive surveys if required) to satisfy themselves as to the detailed scope and nature of the works, such that when detailed design is commenced, the works can be fully described and specified without P.C. sums or provisional sums. Where such intrusive surveys are required, the nature and extent of the investigative surveys will have been signalled at the PDM, and a maximum allowance for such works agreed.
- (c) The Architect, Civil/Structural Engineer and/or Building Services Engineer (as appropriate) should seek tenders from at least 3 suitable firms detailing the scope of the work (including making good). On receipt of these written tenders (fax & e-mail are acceptable), if the lowest suitable price is such that the Design Team (as a group) is satisfied that all intrusive surveys can be completed within the maximum allowance agreed, the relevant Design Team member may proceed to appoint that firm on behalf of the client.
- (d) The cost of necessary intrusive surveys within the agreed limit will be borne by the Client and funded by the Department of Education and Science. Where the cost of such surveys will exceed the maximum allowance the Design Team should seek approval from the School Building Section through the client for such expenditure prior to appointment.
- (e) Where detailed and/or intrusive surveys are either not possible or the results are inconclusive, as part of the stage 2a submission, the Design Team may apply (with a detailed justification) to the School Building Section for an adjustment to the cumulative limit to the Authority of the Employer's Representative to make change orders during the Construction Stage (see also Section 6.2), subject to a maximum cumulative limit not exceeding 2% of the overall contract sum.

4.6 Cost Control

- (a) The Basic Building Cost, External Works Allowance and the cost allowances for Fixed Furniture and associated Fittings, Abnormal Works, and Work to Existing agreed at the Planning & Development Meeting, must not be exceeded. (The approved cost may be adjusted in line with amendments to the published BBC)
- (b) Where cost difficulties, not previously agreed, arise in developing the agreed scheme, the Design Team must resolve these difficulties with the Client prior to proceeding with the completion of Stage 2a.
- (c) The BBC, EWA, and the cost allowances for Fixed Furniture and associated Fittings, Abnormal Works, and Work to Existing agreed at Stage 1, are deemed to be an adequate overall budgetary provision for the construction of the project.

Continued overleaf

4.0 Stage 2a – Developed Sketch Design

- 4.6 Cost Control (continued)**
- (d) Unless accompanied by a detailed explanation and justification, a Stage 2a DEVELOPED SKETCH DESIGN submission in excess of the approved area and cost limits will not be accepted and will be returned to the Design Team for reconsideration. (The only acceptable explanation and justification shall be that, even with adequate investigatory work at Stage 1 PRELIMINARY DESIGN, the increased cost was unforeseeable.)
 - (e) Where the project can be constructed safely within the area and cost limits, the Design Team can proceed to the Stage 2a DEVELOPED SKETCH DESIGN submission.
-
- 4.7 Clerk of Works**
- (a) A Clerk of Works is not normally required on every project. Where the Design Team considers that the services of a Clerk of Works are required, an application for grant-aid for this appointment must be made by the Client as part of the Stage 2a DEVELOPED SKETCH DESIGN submission.
 - (b) This application for grant aid must include the case for such an appointment and the particular circumstances which justify the need, whether full or part-time, the hours required per week and the anticipated contract duration.
 - (c) The appointment or otherwise of a Clerk of Works, on a full time or part time basis, does not relieve the Design Team of its obligations to fulfil its post contract control responsibilities as defined in the conditions of engagement for each member of the Design Team.
-
- 4.8 Stage 2a Report**
- (a) Having consulted with the client, prepared developed sketch designs and re-confirmed the viability of the project at this stage, the Design Team should prepare a written report of progress to date. The report is the Stage 2a DEVELOPED SKETCH DESIGN. This report is required for all projects, both to record the design decisions taken, and to provide a written record for examination and written approval by the Educational Authority. It is also a pre-requisite for a Design Stage Review meeting (see below).
 - (b) The report should be in A4 Portrait format, with Drawings of sufficient scale (as specified below) to show the necessary information attached as an appendix or included in the body of the document. The report and all attached drawings/ documents must be labelled, with the document or drawing title and the Stage number clearly visible. The report should contain an Executive Summary, Main Report for each Consultant and relevant Appendices all as described below.
 - (c) The report should be prepared and assembled by the Design Team Leader in consultation with the other Design Team members (including the Project Supervisor Design Process) and with contributions from those other Design Team members where appropriate.
 - (d) The report must be prefaced with a [Stage Completion Certificate](#) signed by the Client and all the Design Team Members (where the Department is the client a client signature is not required). A copy of the [Stage 2a COMPLETION CERTIFICATE](#) is attached at [Appendix C](#) and includes all the required information listed overleaf.

4.0 Stage 2a – Developed Sketch Design

4.9 Executive Summary

- (a) The Executive Summary shall include:
1. An update on the overall project viability and any additional costs arising.
 2. For work to existing, any substantive variations from the scope of works agreed at Stage 1.
 3. Completed Area Reconciliation Sheet [APPENDIX A](#) with both Stage 1 and Stage 2a areas listed.
 4. Health & Safety report on any residual hazards and risks and the measures being taken to eliminate, mitigate or control those hazards/risks.
 5. An updated programme (including the Construction programme) indicating the time (in weeks) required by the Design Team for each of the remaining stages compared with the programme agreed with the Client at Stage 1.

4.10 Architectural Report

- (a) The Architectural report shall include (as applicable):
1. Written commentary on how the developed Sketch Scheme considers all aspects of the developed design in an integrated manner (within area and cost limits) and (if applicable) how the existing educational facilities will continue to operate including any implications for the proposed construction programme, phasing, state examinations, temporary accommodation, etc.
 2. For work to existing, definitive proposals for the essential remedial/ alterations works agreed at Stage 1 with written commentary on how the existing educational facilities will continue to operate including any implications for Health & Safety, the construction programme, phasing, state examinations, temporary accommodation, etc.
 3. Confirmation that the compliance statement on the proposed building configuration and site location/orientation with specific reference to the DoES technical guidance documents on passive solar energy design and natural ventilation required at Stage 1 remains valid.
 4. Site Plan to not less than 1:500 scale extended to show site boundaries, building, boiler-house and sub-station, full site development, including contours, finished levels, entrances, roads, paths, parking, play areas, external yard and all utilities including foul and surface water drainage.
 5. Dimensioned floor plans to 1:100 scale indicating the layout of furniture and equipment. The area of all spaces together with the space names in accordance with the Schedule of Accommodation must be indicated. The north point and the direction of the prevailing winds shall also be indicated.
 6. Dimensioned sections and elevations to 1:100 scale showing floor and ceiling levels, the structure and the main services routes. The pitch of the roof shall be indicated.
 7. Roof Plan to 1:100 scale. Roof pitch or falls to be indicated including location of rainwater outlets, etc.
 8. Sections to 1:50 scale through selected portions of the building illustrating the proposed method of construction, natural lighting and ventilation, integration of services, finishes, etc.

Continued Overleaf

4.0 Stage 2a – Developed Sketch Design

4.10 Architectural Report (continued)

9. Three-dimensional drawings to illustrate the internal spatial concept.
10. Detailed dimensioned layouts of special subject rooms to at least 1:50 scale, showing layout of fixed furniture and associated fittings, loose furniture and equipment, services and general room data, all in accordance with the Department's Standard Room Layouts (where applicable).
11. Outline Specification of materials and methods of construction proposed, accompanied by a schedule of finishes. The Specification shall use generic names where possible, not proprietary names, and shall indicate the performance standards applicable.

4.11 Civil/ Structural Report

- (a) The Civil Structural report shall include (as applicable):
1. Report on the Civil/Structural Engineering proposals for the building and the site, (including main drainage and water-main layouts) and how they facilitate the safe and economic construction of the project.

The report should refer to how the design of the structure ensures the efficient distribution of services in a cost effective and flexible manner.
 2. General arrangement drawings, (including plans, and sections of the buildings to a suitable scale not less than 1:100), indicating Civil/Structural Engineering proposals for the building and the site, including main drainage and water-main layouts.

4.12 Building Engineering Services Report

- (a) The Building Engineering Services report shall include (as applicable):
1. Commentary on any design developments/changes that have occurred which may impact on the Stage 1 Report previously submitted and in particular any cost sensitive items
 2. Detailed description of the proposed mechanical and electrical systems including existing system capacities.
 3. Details of the thermal performance of the building design.
 4. Drawings to not less than 1:100 scale indicating the heating services, hot and cold water, ventilation services, soil and waste services (above ground), lighting and general electrical services including ICT. The proposed ceiling finishes shall be indicated by way of a symbol on each room and an explanatory legend on all layout drawings. Equipment positions and associated services routes shall be indicated. Primary services distribution sizes should be detailed.
 5. A sections drawing which includes at a 1:50 scale a minimum of 2 full building sectional cuts in the most heavily serviced areas. These sections should include all of the M&E services distributions i.e. both primary and secondary and all equipment relative to the areas indicated, along with the ceiling tile type, service ducts and access to same. The interaction between the building form, the structure and the services must be clearly shown
 6. A control strategy section outlining the proposed method of control and operation of all of the proposed services. This should be particularly detailed with respect to the heating and lighting services.

Continued Overleaf

4.0 Stage 2a – Developed Sketch Design

4.12 Building Engineering Services Report (continued)

7. Schematic layouts including controls for the heating, hot and cold water, gas, main power distribution and ventilation services including ventilation fans and ducts from fume cupboards (where applicable).
8. A services distribution drawing indicating the proposed services distribution strategy/zones as developed from Stage 1
9. Completed TGD006 Energy Information Form

4.13 Quantity Surveyor's Report

- (a) The Quantity Surveyors' report shall include (as applicable):
 1. A report on the cost implications of the developed Sketch Design with particular reference to any cost sensitive items (arising during Developed Sketch Design). Any increased or additional costs should be accompanied by a detailed explanation and justification with supporting evidence from other Design Team members as required.
 2. Completed Cost Plan (the Planning & Building Unit's standard Cost Plan form must be used), both hard copy and electronically. All data entries in the Cost Plan Form must be completed, together with outline specification notes.
 3. The Cost Plan shall include an itemised list and description of the extent, scope and cost of all abnormal works and works to existing buildings as agreed at the Planning & Development Meeting. Costs arising from anticipated Planning or Fire safety Certificate conditions should be included.
 4. Work to existing buildings costed separately with the relevant floor area clearly identified and the cost of this work analysed by reference to this floor area.
 5. A reconciliation between the Cost Plan and the Outline Cost Plan produced at Stage 1, including explanation of any deviations. If the scope of abnormal works or other costs exceed that previously agreed, a detailed explanation must be provided as above.

4.14 Stage 2a Client Approval

- (a) Prior to submitting the Stage 2a DEVELOPED SKETCH DESIGN Report through the client to the School Building Section the Design Team must submit the completed report to the Client.
- (b) The Design Team must discuss it in detail with the Client and ensure that its contents are fully understood and its recommendations fully supported.
- (c) The Client and the Design Team must also be satisfied that the project complies with the brief requirements (including any amendments thereto) and can be constructed safely within the area and cost limits and that. Once agreed the Design Team must formally submit the completed report to the Client.
- (d) Where the project cannot be constructed safely within the area and cost limits, the Design Team must so inform the Client and summarise (in writing) the reasons.
- (e) Where in the view of the Design Team the project is unviable or where substantive increases in area or costs (outside the allowable limits) are unavoidable the Client must notify the School Building Section. (See [Section 3.3 Project Viability.](#))

4.0 Stage 2a – Developed Sketch Design

4.15 Design Stage Review Meeting

- (a) To review the [Stage 2a DEVELOPED SKETCH DESIGN](#), (and where appropriate to sign-off on the Stage 2a submission) a [DESIGN STAGE REVIEW MEETING](#) will, be arranged by the School Building Section.
- (b) The Client, on the Design Team's written advice, should write to the School Building Section stating the date for completion of the [Stage 2a DEVELOPED SKETCH DESIGN](#) submission giving a minimum of 1 month notice. The School Building Section will then arrange a meeting to be held within a further month of that date.
- (c) The Design Team should not indicate an unrealistic date for completion of the stage as any delays arising from the non-completion of the required information will be at their own expense.
- (d) This meeting shall be attended by representatives of the Client, the School Authorities (where the Department is the Client), the School Building Section, and the Design Team.
- (e) To ensure that the [DESIGN STAGE REVIEW MEETING](#) is productive and to allow the School Building Section to sign off on the Stage, the client and the Design Team must submit the full [Stage 2a DEVELOPED SKETCH DESIGN](#) submission.
- (f) **It is essential that the client is fully aware of and in full agreement with all design decisions made up to this point and that the client has examined the information to be provided and agrees with it.**
- (g) The information required for the [Stage 2a DEVELOPED SKETCH DESIGN](#) submission is as stated above and in the [Stage 2a COMPLETION CERTIFICATE](#) at [Appendix C](#).
- (h) This [Stage 2a COMPLETION CERTIFICATE](#) must be completed and signed by the Client and all Design Team members and sent with the complete Stage(i) submission to the School Building Section no later than 1 week before the date for the DESIGN STAGE REVIEW MEETING.
- (i) At the [DESIGN STAGE REVIEW MEETING](#), the School Building Section may at its discretion respond to the Design Team's submission with comments, questions, objections, to which the Design Team shall respond if practicable at the meeting.
- (j) Where in the view of the School Building Section the submission substantially meets the stage requirements the Client and Design Team may be authorised to progress to the next stage. Such authorisation may be conditional on agreed amendments and/or supplementary information.
- (k) Where in the view of the School Building Section the submission does not meet the stage requirements or cannot as presented to constructed without substantive increases in area or costs (outside the allowable limits) the Client and Design Team may be requested to reconsider the submission.
- (l) No Client and/or School Building Section communication with the Design Team constitutes or implies any review or verification by the Client and/or the School Building Section, or relieves the Design Team from any responsibility or liability.

4.0 Stage 2b – Detailed Design

4.16 General

- (a) Having submitted the [Stage 2a DEVELOPED SKETCH DESIGN](#) and received the agreement of the School Building Section, the Client may now authorise the Design Team to proceed to [Stage 2b – Detailed Design](#).
- (b) [Stage 2b DETAILED DESIGN](#) includes three distinct tasks, (1) obtaining all relevant statutory permissions, (2) the preparation of a fully detailed design, and (3) the preparation of a Bill of Quantities and an accurate pre-tender cost estimate.
- (c) [Stage 2b DETAILED DESIGN](#) also includes all preparatory procurement tasks necessary to go to tender under national guidelines and/or EU procedures.

4.17 Statutory Approvals

- (a) The Design Team must now obtain all statutory permissions required including Planning Permission and Fire Safety Certificate. The required statutory permissions should also be obtained in respect of any temporary accommodation deemed necessary. The drawings and specifications submitted for these permissions shall not vary in substance from those agreed at Stage 2a and the Design Stage Review Meeting.
- (b) If necessary the Design Team should further consult with the Statutory Authorities to ensure that the developed sketch proposals will meet the requirements of that Local Authority Planning Section.
- (c) Design Teams must submit both the Planning Permission and Fire Safety Certificate applications prior to commencing work on detailed design.
- (d) Unless there are significant known planning risks, the Design Team may choose to proceed with detailed design prior to receipt of planning permission. Design teams should (from pre-planning consultations) be aware of the likely planning conditions and may elect to factor those into their detailed designs.
- (e) Where in the view of the Design Team there is a reasonable possibility of planning or fire certificate conditions which may substantively affect one or more elements of the Design (e.g. site works) detailed design work on these elements should not be completed until the Grant of Planning Permission and the Fire Certificate have been received and all conditions incorporated into the design.
- (f) Where any conditions requiring a substantive change to the brief or giving rise to un-anticipated additional costs are attached to the Notification of Decision to Grant Planning Permission or the Fire Safety Certificate, the Design Team (through the client) must inform the School Building Section immediately with recommendations as to the appropriate action including a recommendation to appeal if appropriate.
- (g) Where an appeal is recommended by the Design Team and the School Building Section concurs, or where an appeal is registered by a third party, the Design Team shall on behalf of the client prepare and issue all necessary documents to all relevant parties so as to allow the appeal to be determined without undue delay. The costs and time associated with this work are not part of the terms of engagement of the Design Team.

4.0 Stage 2b – Detailed Design

4.17 Statutory Approvals (continued)

- (h) Where Planning Permission is refused the Design Team should report to the Client in writing including a copy of the refusal notice and conditions. (The Client in turn should issue a copy of this report to the School Building Section.)
- (i) Where, in the view of the Design Team, a revised submission has a reasonable likelihood of obtaining permission, the Design Team should, with the Client's agreement, consult with the Statutory Authorities as appropriate and re-submit an amended proposal. Where the reasons for refusal should have been anticipated, such work is deemed to be part of the scope of work of the Design Team.

4.18 Construction Contracts

- (a) Before commencing work on detailed design the Design Team shall also consider the applicable form of Contract (See [Section 1.9 Construction Contracts](#)).
- (b) Where the appropriate form of contract is the [Public Works Contract for Building Works Designed by the Employer](#), the Design Team must determine the relevant extent of Risk Transfer (see [Section 4.19 Risk Transfer](#)).

4.19 Risk transfer

- (a) The onus rests with the Design Team to determine the appropriate level of risk transfer. The correct strategy is to assess the risk, mitigate it where possible, quantify the risk and finally to determine whether risk transfer is appropriate. Risks should not be transferred where they cannot be reasonably evaluated.
- (b) Each transferable risk must be assessed on a case by case basis for each project and justified on the basis of value for money. Where the client is better able to manage the risk it should be retained as an Employer risk. Inappropriate risk transfers will cost the Client money (e.g. unknown or unquantifiable risks). Appropriate risk transfer is when the Design Team is satisfied that Contractors tendering for a project will offer good value for carrying the residual risk.
- (c) The risk of Discrepancies in the Bill of Quantities shall in all cases be retained by the Employer. (The onus rests on the Design Team to prepare a comprehensive and accurate Bill.) In the case of the [Public Works Contract for Minor Civil Engineering and Building Works Designed by Employer](#) this is the only transferable risk.
- (d) In the case of site investigations, archaeology and underground utilities these risks will have been assessed as part of the site location assessments at Stage 1.
- (e) Also as part of the Stage 1 sketch design process, the Design Team will have determined an appropriate risk mitigation strategy. This may include enabling contracts or specialist advance contracts (e.g. archaeological excavation, contaminated ground remediation, or asbestos removal).

continued

4.0 Stage 2b – Detailed Design

4.19 Risk Transfer (continued)

- (f) The Design team shall determine whether such enabling contracts are appropriate and if so determine a program of design work to allow those enabling contracts to be carried out without delays to the overall project programme. They should also inform the client and obtain the Client's agreement to the proposed procurement strategy. Where the proposed enabling works will cause significant delays to the program or incur significant additional costs, the client in turn should inform the School Building Section and obtain agreement for the change in design and procurement strategy and additional costs.
- (g) Where the risks associated with ground conditions, archaeology and/or underground utilities are to dealt with under the main contract, the Design Team must determine whether risk transfer is appropriate.
- (h) Any significant risk of archaeological items of value should only be transferred after full archaeology investigation, and where appropriate an enabling contract. Any substantive risk transferred should be measurable and consequently capable of being costed by the Contractor.
- (i) The risk of unforeseeable ground conditions should only be transferred after a full site investigation. Any risk transferred should be minimal. Where the risk is appreciable either the risk should not be transferred, or further investigation should be done to minimise risk.
- (j) The risk of unforeseeable Utilities buried in the ground should only be transferred after full desk-top and site investigation (if required). As with ground conditions, any risk transferred should be minimal.
- (k) In the case of unforeseeable delays by Utility companies, it is a judgement call. Where such delays are critical to the programme and will have a high cost to the Contractor, risk transfer is not recommended. Where there is slack in the construction programme and such delays can be accommodated without undue disruption, risk transfer is acceptable.

4.20 Specialists

- (a) Neither the [Public Works Contract for Building Works Designed by the Employer](#), nor the [Public Works Contract for Minor Civil Engineering and Building Works Designed by Employer](#) provide for the use of nominated sub-contractors. All sub-contractors must be either "domestic" or named specialists.
- (b) Where, as part of detailed design, the scope of work can be determined and specified, and an adequate quality of workmanship achieved, the use of domestic sub-contractors is recommended.
- (c) This may include work with an element of design based on a performance specification as long as the performance specification is unambiguous, clear, achievable and capable of being competitively priced by the Main Contractor.
- (d) Where the quality of workmanship is critical to the project and cannot be achieved by a domestic sub-contractor, working off fully detailed drawings and specifications, Specialist Contractors may be used (as below).

continued

4.0 Stage 2b – Detailed Design

4.20 Specialists (continued)

- (e) Both the above contracts allow for a range of procurement methods for named specialists as follows:
 - (i) Specialists named by the Contractor
 - (ii) Specialists named by the Employer
 - (iii) Specialists novated by the Employer.
- (f) The use of specialists named by the Contractor will be the norm.
- (g) The use Specialists named by the Employer or novated Specialists should be used only in exceptional circumstances (see below).
- (h) Where the Design Team determines that one or more contractor named specialists are necessary, there is an option to require the main Contractor to submit the names of one or more specialists (in each area of specialisation) as part of the pre-qualification process, with each tenderer (if successful) being permitted to use any one of the named specialists who are deemed to meet the minimum qualification standard.
- (i) Mechanical, Electrical and Lift installations should be carried out by means of Contractor named specialists as above. All other sub-contract should be domestic.

4.21 Detailed Design

- (a) Having submitted the Planning application and Fire Certificate application, determined the appropriate level of risk transfer and considered the range and type of specialists required in the Contract, the Design Team is ready to commence work on detailed design.
- (b) The detailed design shall comply fully with the written brief (and any agreed amendments), the agreed Schedules of Accommodation, the approved cost limits, and all other applicable Department of Education and Science Technical and Design Guidelines [available at www.education.gov.ie under Technical Guidance].
- (c) The onus and responsibility remains with the Design Team to ensure that the detailed drawings are in accordance with the Planning Permission and Fire Certificate obtained, and comply with the Building Regulations.
- (d) It is essential that thorough pre-planning of the building, services and external works should take place at this stage. This pre-planning should be of such a nature that Employer's Representative change orders in the post contract stage will be kept to a minimum.
- (e) Having submitted the Planning application and Fire Certificate application, determined the appropriate level of risk transfer and considered the range and type of specialists required in the Contract, the Design Team is ready to commence work on detailed design.
- (f) The detailed design shall comply fully with the written brief (and any agreed amendments), the agreed Schedules of Accommodation, the approved cost limits, and all other applicable Department of Education and Science Technical and Design Guidelines [available at www.education.gov.ie].

Continued overleaf

4.0 Stage 2b – Detailed Design

4.21 Detailed Design (continued)

- (g) The onus and responsibility remains with the Design Team to ensure that the detailed drawings are in accordance with the Planning Permission and Fire Certificate obtained, and comply with the Building Regulations.
- (h) It is essential that thorough pre-planning of the building, services and external works should take place at this stage. This pre-planning should be of such a nature that Employer's Representative change orders in the post contract stage will be kept to a minimum.
- (i) **There is no allowance for Contingencies, Provisional Sums, or Prime Cost Sums in the Department of Finance Public Works Contracts. Consequently it is essential in so far as is practicable to ensure that the works are fully designed and detailed before going to Tender.**
- (j) **There is no provision for nominated Sub-Contracts (see Section 4.20).**
- (k) Where practicable, elements that otherwise might be designed or selected during the contract should be designed and specified pre-tender, and included in the tender documents. For example, floor and wall finishes can all be fully specified pre tender – this does not preclude the selection of a particular colour or pattern (from within the range specified) during the contract.
- (l) Items of work with an element of design based on a performance specification are permissible. However the specification must be clear and based on objective measurable standards. For example, a lift installation might be specified in terms of the dimensions, carrying capacity and relevant standards.
- (m) If the visual appearance is important, this too should be specified (e.g. brushed steel surrounds, type and size of control panel, etc).
- (n) The Design Team is not precluded from prior research to determine the range and type of goods on the market, but must not specify goods in such a manner as to unjustifiably exclude competition.

4.22 Detail Design Cost Control

- (a) The approved project cost at Stage 2a (or as reviewed and agreed subsequent to that Stage) must not be exceeded.
- (b) Where Abnormal Works arise which were not previously approved (only additional costs arising from unforeseeable Planning and Fire Certificate conditions will be considered) the Design Team shall report to the School Building Section through the Client and request an amendment to the approved costs. The procedure for justification of abnormalities shall apply.
- (c) Where the approved cost limits will be exceeded (other than as above) the Design Team must review the design and selection of materials to achieve the necessary cost reductions prior to proceeding with the completion of Detailed Design.
- (d) The production of detailed design drawings and specifications and the preparation of Bills of Quantities based on proposals in excess of the area limit or the approved cost limit or not in accordance with the Department's Guidelines will cause delays in the Project and will result in abortive work by Design Team members at their own expense.

4.0 Stage 2b – Detailed Design

4.22 Detail Design Cost Control (continued)

- (e) Any additional work arising from the preparation of the Bill of Quantities or Pricing Document before the relevant detailed design work has been substantially completed will be at the Design Team's time and expense.

4.23 Enabling Contracts

- (a) Where the Design Team have recommended one or more enabling contracts and obtained Client and School Building Section agreement for those contracts, they must ensure that adequate time is allowed both for the procurement of the relevant contractors and carrying out the works prior to the appointment of the Main Contractor.
- (b) For small enabling contracts (less than €50,000 and with a cumulative value of less than 20% of the anticipated Contract value), the relevant Design Team member should seek tenders from at least 3 suitable firms detailing the scope of the work and the terms and conditions. For larger enabling contracts the normal procurement requirements for a main contract apply including advertising on the e-tenders web-site.
- (c) Where the cost of the enabling contract(s) is (in the view of the Quantity Surveyor recorded in writing) within the assigned budget for that element of the works and will not cause additional project costs, the relevant Design Team member may proceed to appoint the lowest suitable tenderer on behalf of the client.
- (d) To ensure funding, the Design Team must inform the School Building Section (through the client). The cost of these enabling works where agreed in advance will be paid by the Client and funded by the Department of Education & Science.
- (e) Where the cost of enabling contract(s) will exceed the assigned budget for that element of the works or will cause additional project costs the Design Team should seek approval from the School Building Section through the client for such expenditure prior to award of the enabling works contract.

4.24 Pre- qualification of Contractors

- (a) The normal procedure for the appointment of a contractor will be the restricted procedure with Contract Award based on Price adjusted to include tendered daily delay rates. Separate advice on this procedure will be provided by the Department in DoES Technical Guidance Document TGD014.
- (b) Further advice on the requirements and on national construction project procurement procedures and sample pre-qualification questionnaires are available on the Department of Finance web-site at www.finance.ie
- (c) The Design team must allow adequate time for the pre-qualification of contractors (including Contractor named specialists). This is normally done in parallel with the Detail Design stage.
- (d) As part of the pre-qualification process the Design Team must notify unsuccessful applicants that they have failed to qualify. If they have failed to meet any of the qualification criteria, those criteria should be listed. If they have passed all qualification criteria, their relative position and marks relative to the lowest successful applicant should be stated.

4.0 Stage 2b – Detailed Design

4.25 Employer named Specialists

- (a) Where, in exceptional circumstances only, the Design team has recommended the use of one or more Employer named specialists and obtained Client agreement for this procurement strategy, they must ensure that adequate time is allowed for the procurement of the relevant named specialists prior to going to tender for the main project.
- (b) As with enabling contracts, the Design Team must follow the applicable procurement procedures including (for work items over €50,000 or with a cumulative value greater than 20% of the anticipated contract value) advertising on the e-tenders web-site.
- (c) Where the cost of the work item is (in the view of the Quantity Surveyor recorded in writing) within the assigned budget for that element of the works and will not cause additional project costs the relevant Design Team member may proceed to name the lowest suitable tenderer in the main contract tender documents in accordance with the terms of the Contract.

Where the anticipated cost of the work item (s) exceeds the assigned budget for that element of the works or will cause additional project costs the Design Team should seek approval from the School Building Section through the client for such expenditure prior to proceeding (see [Section 4.22 above](#)).

4.26 Client Consultation

- (a) During the preparation of detail design documents (the Works Requirements) the Design Team must keep the client informed of progress and any issues which will affect the programme or the project cost. In particular, the Design Team must submit a written report to the client when the detailed design drawings are substantially complete.
- (b) This report is required for all projects, both to record the design decisions taken, and to provide a written record of the proposals for agreement by the Client.
- (c) While the submission of a full set of detailed design documents (Drawings and specification) is not normally required, the documents should be assembled and be available to the client and/or the School Building Section for inspection if requested.
- (d) The report should be in A4 Portrait format, with Drawings of sufficient scale (as specified below) to show the necessary information attached as an appendix or included in the body of the document. The report and all attached drawings/ documents must be labelled with the document or drawing title and the Stage number clearly visible. The report should contain an Executive Summary and a report from each of the Consultants as described below.
- (e) The report should be prepared and assembled by the Design Team Leader in consultation with the other Design Team members (including the Project Supervisor Design Process) and with contributions from those other Design Team members where appropriate.

Continued overleaf

4.0 Stage 2b – Detailed Design

4.27 Client Progress report

Executive Summary

- (a) The Executive Summary shall include the following (where applicable):
1. Comment on the issues and difficulties encountered. In particular it should comment on the cost and how compliance with the agreed cost limits has been achieved.
 2. Completed Area Reconciliation Sheet [APPENDIX A](#) with Stage 1, Stage 2a and Stage 2b areas listed.
 3. Health & Safety report on any residual hazards and risks and the measures being taken to eliminate, mitigate or control those hazards/risks.
 4. An updated programme (including enabling contracts, the pre-qualification of Contractors and the Construction programme) indicating the time (in weeks) required by the Design Team for each of the remaining stages compared with the programme agreed with the Client at Stage 2a.
 5. A copy of the Grant of Planning Permission/Approval, including evidence of appeal where appropriate. Evidence should also be submitted that conditions attached to the approvals have been incorporated in the submission, and that any cost implications have been included in the Cost Plan.
 6. A Copy of the Fire Safety Certificate with explicit confirmation that conditions attached to the Certificate have been incorporated in the submission.

Architect's Report

- (b) The Architect's report shall include the following (where applicable):
1. Reference to the integration of the structure and the mechanical and electrical installation with the detailed architectural design, and how the detailed design meets the requirements for durability, low maintenance and ease of construction.
 2. Details of the proposed construction sequence and how the design has addressed health & safety issues.
 3. Site Plan to 1:500 scale showing full site development, as listed in Stage 2a.
 4. Drainage Plan to 1:100 or 1:200 scale indicating foul and surface water drains and invert levels.
 5. Dimensioned Floor Plans to 1:100 scale. The areas and names of all spaces in accordance with the Schedule of Accommodation must be indicated. The north point and the direction of the prevailing winds should also be indicated.
 6. Dimensioned Architectural Sections and Elevations to 1:100 scale showing the structure, building form and main services routes.
 7. Sufficient details to demonstrate how the building will be constructed including sections and details to not less than 1:20 scale through selected portions of the building. All sections and details must be fully annotated. (Further sections and details including 1:5 scale details will be required as part of the Works Requirements).
 8. Layout drawings, details and specifications for all fixed furniture and associated fittings.
 9. Full specification, including a detailed specification of Standards and Materials, and a full Schedule of Finishes. Materials should be described by their generic names and performance requirements where possible, and not by their proprietary name.

Continued overleaf

4.0 Stage 2b – Detailed Design

4.27 Client Progress report (continued)

Civil/Structural Engineer's Report

(c) The Civil/Structural report shall include(as applicable):

1. Full specifications and drawings indicating the structural members of the building.
2. Similar information in respect of site-works elements including main drainage and water-main.
3. Bar bending Schedules.

Building Services Engineer's Report

(d) The Building Services Engineer's Report shall include (as applicable):

1. Complete mechanical and electrical services specifications, schedules of builder's works and attendances in accordance with the Department of Education And Science Guidelines.
2. Co-ordinated drawings to a scale of not less than 1:100, or such larger scale as may be required, indicating the position(s) of all the building services equipment and associated services for the project. The proposed ceiling finishes shall be indicated by way of a symbol on each room and an explanatory legend on all layout drawings.
3. Sections drawing which includes at a 1:50 scale a minimum of 2 full building sectional cuts in the most heavily serviced areas. These sections should include all of the M&E services distributions i.e. both primary and secondary and all equipment relative to the areas indicated, along with the ceiling tile type, service ducts and access to same. The interaction between the building form, the structure and the services must be clearly shown
4. Schematic layouts including controls for the heating, hot and cold water, gas, mains power distribution and ventilation services (including ventilation fans and ducts from fume cupboards).
5. Completed TGD006 Energy Information Form

Quantity Surveyor's Report

(e) The Quantity Surveyor's report shall include:

1. A report on the cost implications of any design decisions taken at detailed design stage including a review of any Planning and Fire Certificate conditions
2. Written confirmation that the project can be constructed within the agreed cost limits if tendered at that time

4.28 Bill of Quantities

- (a) All construction projects with a construction value of over €1.0m excluding VAT will be required to include a Bill of Quantities as a pricing document. Projects of less than €1.0m may also require a Bill of Quantities where the nature and complexity of the project warrants it – otherwise a detailed schedule of rates will suffice.
- (b) While a full set of detailed drawings and specifications is not required as part of the client consultation submission, the onus and responsibility remains with the Design Team to prepare fully detailed drawings and specifications prior to the preparation of the Bill of Quantities.
- (c) Fixed Furniture and Associated Fittings shall form part of the main contract.

Continued overleaf

4.0 Stage 2b – Detailed Design

4.28 Bill of Quantities (continued)

- (d) The onus also rests with the Design Team to ensure that the preparation of a Bill of Quantities does not proceed where it is the professional judgement of the Quantity Surveyor that the design as proposed will exceed the current approved cost limits, if tendered at that time. In such an event, the Design Team and the Client shall seek clarification from the School Building Section before proceeding.
- (e) The Quantity Surveyor must not prepare the Bill of Quantities for any particular element before the relevant detailed design work has been substantially completed. In particular, the Quantity Surveyor must not prepare Bill elements and descriptions on incomplete information, drawings and specifications. The project may proceed to tender only on the basis of full information and a complete and accurate Bill.
- (f) Where the relevant consultant repeatedly fails to provide the required information and such failure is affecting the programme, the Quantity Surveyor should notify the Design Team Leader, and if required the Client.
- (g) Bills of Quantities shall be prepared in accordance with the current method of measurement of building works agreed between the Society of Chartered Surveyors and the Construction Industry Federation including any amendments required by the Department of Finance (refer also to www.finance.gov.ie).
- (h) Fully detailed Bill items for the Mechanical and Electrical services elements of the Contract will not generally be required, as long as the required work can be fully described, specified, quantified and priced on a performance specification. The Bill however shall include a full break-down of the Mechanical & Electrical services costs in accordance with the National Standards Building Elements.

Preliminaries

- (i) The Preliminary Section of the Bill of Quantities shall include the information required to complete the Schedule Part 1 (see [Schedule Part 1 Template](#) available on the web at www.education.ie)
- (j) **The Preliminary Section of the Bill of Quantities shall also include appropriate clauses regarding payment by the Contractor for temporary utilities (water, electricity, gas, telecommunications, etc.) consumed during the works as follows:**
 - (i.) **Greenfield Site**
Main Contractor to pay all costs (connection fees, connections, standing charges, bills, disconnection, reinstatement) and comply with all requirements.
 - (ii.) **Works within or adjacent to an existing functioning school:**
The Main Contractor shall be permitted to connect into existing utility services subject to each utility being metered individually and the metering system proposed being approved in writing by the Employer's representative in consultation with the Building Services Engineer. The metering system, connections etc. proposed must also be in accordance with all current regulations, legislation and Health and Safety requirements.

(continued overleaf)

4.0 Stage 2b – Detailed Design

4.28 Bill of Quantities (continued)

The meter reading for the appropriate utility should be jointly read, recorded and agreed by the Contractor and the School not later than 10 days before an application for payment by the Main Contractor. The amount due from the Contractor to the school (on presentation of Invoice by the School) should be the number of units consumed in the billing period multiplied by the full cost per unit of the particular utility including VAT to be paid within 30 days.

If the Contractor fails to honour a valid invoice the Contract terms should permit the Employer's Representative to deduct the amount so due from any monies owed or which may become due to the Main Contractor

4.29 Conditions of Contract

- (a) The Construction Contract will be the Department of Finance [Public Works Contract for Building Works Designed by the Employer](#), or the [Public Works Contract for Minor Civil Engineering and Building Works Designed by Employer](#) available at www.Finance.gov.ie as appropriate.
- (b) The [Schedule Part 1](#) must be completed in full and included in the tender documents (see template at www.education.ie).
- (c) The Design Team must not include the contract duration as award criteria, and must not allow tenderers to determine the contract length.
- (d) The contract duration shall be sufficient to ensure that the Construction work can be carried out safely in accordance with the [Safety, Health & Welfare at Work \(Construction\) Regulations 2006](#).
- (e) Performance Bonds are normally required for all construction contracts with an estimated value in excess of €635,000. Details of the cover level required and the general requirements for Performance Bonds are given in DoES [Technical Guidance Document TGD010](#).

Continued overleaf

4.0 Stage 2b – Detailed Design

4.30 Tender conditions

Template Instructions to Tenderers

- (a) The Design team should refer to the Department of Education and Science website @ www.education.ie under Technical Guidance Documents for standard instructions to Tenderers. The Template Instructions to Tenderers will be published before year end 2007. For projects proceeding to tender prior to the publication of the DoES's Template Instructions to Tenderers Design Teams should refer to the Department of Finance Template Public Works Tender Document for guidance.

Project Supervisor (Construction) Stage

- (b) The cost of acting as Project Supervisor (Construction) must be separately identified in the Form of Tender. The scope of the works to be undertaken by the Project Supervisor (Construction) must be clearly indicated in the Bill of Quantities and should include for co-operating with the Project Supervisor Design Process in the preparation and hand-over to the Client of the Safety File on Substantial Completion.

Proprietary products

- (c) Where Proprietary products are stated in the Bill of Quantities, they must always be accompanied by the words "or equivalent". The words "or equivalent" should be clearly defined in a Preamble clause to ensure that the Client's and the Design Team's interests are protected against unacceptable substitution.

Tax Clearance Procedures

- (d) A clause should be included to state that it is a condition precedent to the award of the contract that the successful tenderer for the contract must comply with current Tax Clearance Procedures (available at www.finance.gov.ie). In most circumstances, for tenderers resident in the State, this means that the successful tenderer must have a current Tax Clearance Certificate and a C2 Certificate.

4.31 Pre-Tender Cost check

- (a) A detailed pre-tender Cost Plan in the same format as the Stage 2a Cost Plan must be prepared dated not later than 1 month before going to tender.
- (b) This cost check must be completed using the DoES standard form. All data entries in the Cost Plan Form must be completed, together with outline specification notes. The Cost Plan shall include an itemised list of all abnormal works and works to existing buildings previously agreed.
- (c) The Cost Plan should be based on the completed Bill of Quantities, priced by the Quantity Surveyor, submitted in both electronic and hard format

4.32 Stage 2b Report

- (a) Having prepared full tender documentation including detailed drawings, specifications and a Bill of Quantities, and the pre-tender cost check, the Design Team should prepare a written report of progress to date. The report is the Stage 2b DETAILED DESIGN report.
- (b) This report is required for all projects, both to record the design decisions taken, and to provide a written record for examination and written approval by the Client. The report should be in the format of a supplementary report to the Client Progress report. (see 4.26 Client Consultation)

4.0 Stage 2b – Detailed Design

4.32 Stage 2b Report (continued)

- (c) The report should be prepared and assembled by the Design Team Leader in consultation with the other Design Team members (including the Project Supervisor Design Process) and with contributions from those other Design Team members where appropriate.
- (d) The report must be prefaced with a [STAGE 2b COMPLETION CERTIFICATE](#) signed by the Client and all the Design Team Members (where the Department is the client a client signature is not required). A copy of the [Stage 2b COMPLETION CERTIFICATE](#) is attached at [Appendix D](#) and includes a schedule of all the information required.
- (e) Where any of the project details, drawings and/or specifications has been changed revised copies must be submitted. In addition the following must also be provided:
 1. A summary report describing all the changes/amendments to the Client Progress report together with a Copy of the Stage 2a report with all amended project details, drawings and/or specifications attached.
 2. A detailed pre-tender Cost Plan in the same format as the Stage 2a Cost Plan dated not later than 1 month before going to tender.
 3. The Form of Tender, instructions for tendering, and a list of all tender documents, including any additional or amended drawings.
 4. Bill(s) of Quantities or Pricing Document.
 5. All other Tender documents including any details necessary for the construction of the building.
 6. Confirmation from the Quantity Surveyor that all information necessary to prepare the Bill of Quantities was provided by the other Design Team members.
 7. Confirmation that the requirements of the Local Authority (including the requirements under the Fire Safety Certificate) have been included in the Contract Documents.
 8. Confirmation that a Preliminary Health and Safety Plan has been prepared and that this plan will be included with the Tender Documents.

4.33 Authorisation to proceed to Tender

- (a) When Stage 2b is complete, the completion certificate must be filled out and submitted via the Client to School Building Section, Tullamore, no later than 10 working days prior to going to Tender.
- (b) Where the briefing material or subsequent instructions requires the approval of the School Building Section before going to tender such authorisation must be sought prior to proceeding to tender.
- (c) In all other instances as long as (i) the pre-tender Cost Plan is within the agreed cost limits and (ii) no instruction to the contrary has been received from the SBS within that 2 week period, the Client may authorise the Design Team to proceed to Tender.

5. Stage 3 – Tender Action and Award

5.1 Pre-Tender check list

- (a) By this stage, the Design Team will have determined the appropriate procurement strategy for the appointment of specialists, and in the case of novated or employer named specialists will already have carried out separate tender competitions.
 - (b) The Design Team leader will have prepared and issued a Contract Notice through the e-tenders website for the pre-qualification of the main Contractor in accordance with DoES Technical Guidance Document TGD014 and national guidance, and in consultation with the Client will already have evaluated and short-listed suitable contractors.
 - (c) Confirmation will have been obtained that the selected Main Contractors are deemed suitable to act as Project Supervisor (Construction) for the Building Project.
 - (d) All statutory approvals will have been obtained, and all tender documentation including fully detailed drawings and specifications and a Bill of Quantities will be complete and the Design Team will have obtained the written approval of the Client to proceed to Tender
 - (e) Where the briefing material requires the approval of the School Building Section before going to tender such authorisation must be sought prior to proceeding to tender.
-

5.2 Tender Competition

- (a) The form of Tender shall be the Department of Education and Science standard Form of Tender TGD009 available @ www.education.ie
 - (b) For the purposes of tender evaluation, the number of tendered days delay should be between 5% and 10% of the contract duration.
 - (c) The period for preparation of tenders shall not be less than 20 working days, except in the case of minor and emergency works where a reduced period may be used. In the case of projects where EU Directives apply, the time periods must not be less than the minimum periods specified in the Directives.
 - (d) The latest date for issuing clarifications/amendments/further information to tenderers should be a minimum of 5 working days before the date set for receipt of tenders. The onus rests with the Design Team to obtain verification from each tenderer that such clarifications/amendments/ further information have been received.
 - (e) Where the time for preparation of tenders is in accordance with 5.2(a) above, generally any request for an extension to the tender period should be resisted. However, it is important to ensure that, at all times, tendering firms have been treated in a reasonable manner and, if there are valid reasons for increasing the time allowed, the Client and the Design Team should assess the problem and grant an appropriate extension.
-

Continued overleaf

5.0 Stage 3 – Tender Action and Award

5.3 Tender Submissions

- (a) Tenders shall be evaluated on the basis of the lowest price (adjusted to include tendered daily delay costs). No other criteria shall apply.
- (b) If qualifications are attached to the Tender Form, the Design Team should not open and examine the Bill of Quantities until the qualifications are withdrawn.
- (c) If qualifications are attached to the Bill of Quantities, the Contractor should be advised that the Bill of Quantities will not be examined until the qualifications are withdrawn.
- (d) In the event of qualifications not being withdrawn, the Design Team should consult with the School Building Section before proceeding to examine the next lowest tender.
- (e) In the normal course, only the Bill of the lowest suitable tenderer should be opened. However, the Design Team should reserve the right to open all or any Bills of Quantities.
- (f) If arithmetical errors are found in the tender computation, the tenderer shall be given the opportunity to stand over his tender notwithstanding the errors or to withdraw his tender. He should be asked to confirm his decision in writing. In general a tenderer should not be afforded the opportunity of correcting his tender.
- (g) Under the Public Works Contracts, the Employer may at his/her discretion re-balance the rates to reflect a fair rate for each Bill item. This process should not be used unless the rates are self-evidently un-balanced.
- (h) If it is the intention of the Design Team to use this provision, they should so inform the Contractor and obtain the Contractor's agreement. Contractually, the Contractor is bound to accept such re-balancing and to construct the project using the revised rates. If any doubt exists regarding the operation of this procedure, the School Building Section should be contacted.
- (i) Any low rates or un-priced items should be brought to the tenderer's attention. Should the tenderer stand by his tender notwithstanding apparent pricing errors he should confirm so in writing.
- (j) Where the Design Team proposes to pass over the lowest or any tender, due to any of the above or other reasons, they should consult with the School Building Section before proceeding to examine the next lowest tender.

Continued overleaf

5.0 Stage 3 – Tender Action and Award

- 5.4 Tender Report**
- (a) On completion of the examination of the tenders, the Design Team shall prepare a preliminary report and submit it to the Client within 10 working days of receipt of tenders.
 - (b) The Quantity Surveyor and the Building Services Engineer where appropriate, should comment on the level of pricing generally and on any obvious pricing errors. Any rates which are unusually high or low, especially when considered to be below cost, and any un-priced items should be specifically commented upon.
 - (c) If the tender price exceeds the approved pre-tender cost limits the report shall provide a cost reconciliation indicating the cause of the cost over-run and identifying any possible savings needed to bring the cost within limit.
 - (d) It is noted that the Tender sum is the Contract sum and that any proposed reductions or savings are treated as Clarifications to the Contract (but forming part of the Contract Documents) and dealt with by means of Change Orders.
 - (e) Where omissions or substitutions are proposed as savings, the Design Team shall comment on the effect of such omissions or substitutions on the suitability of the building for its intended use and the durability and life of the building. The Design Team must not propose substitutions or omissions which would lower the standard of the building or external works below that required by the brief and Technical Guidance Documents.
 - (f) Where it is necessary to identify cost savings to bring the project within budget, a further 10 working days may be allowed for the submission of the preliminary tender report.
 - (a) The following information shall be accumulated into one report and submitted as a bound A4 document:
 1. A list of Tenderers and the amount of each tender received.
 2. A copy of the completed Form of Tender of the recommended contractor.
 3. Architect's report and recommendation including comment on any omissions or substitutions.
 4. Quantity Surveyor's report with comment on the level of pricing generally and on any obvious pricing errors. Any rates which are unusually high or low, especially when considered to be below cost, and any un-priced items shall be discussed with the Tenderer. If the tenderer intends to stand by his tender notwithstanding apparent pricing errors, his justification for doing so shall be included and commented on.
 5. Consulting Engineer's report on the Mechanical and Electrical section of the Bill of Quantities. Any rates which are unusually high or low, especially when considered to be below cost, and any un-priced items should be specifically commented upon.
 6. A Cost Analysis of the recommended tender (The Building Unit's Cost Analysis Form must be used and all data and specification entries must be completed in full).
 7. A reconciliation with the approved budget and, where appropriate, a schedule of reductions which may be necessary to meet cost limits. Failure in this regard will mean a delay in the completion of tender examination.

5.0 Stage 3 – Tender Action and Award

5.5 Client Approval

- (a) Subject to the requirements of these procedures, and the briefing documents, if the tender price (with the recommended omissions and substitutions) is within the approved pre-tender cost limits the Client may authorise the Design Team to proceed to the appointment of the Contractor as detailed below.
-

5.6 School Building Section Authorisation

- (a) In all cases School Building Section authorisation is required before appointment of a Contractor. Once the Client has examined the report and has accepted the content (in writing), it shall be submitted to the School Building Section as soon as possible.
- (b) Provided the Client and the Design Team is satisfied that the recommended tender is in line with the agreed budget, it is acceptable, while awaiting School Building Section authorisation, to issue a letter of Intent (Model Form) (as [Section 5.7](#)). Letters of regret to the unsuccessful tenderers may also be issued at this time (as [Section 5.8](#)).
- (c) The information required to in accordance with [Section 5.9](#) can also be compiled.
- (d) Under no circumstances, however, should the recommended contractor be instructed to enter into any commitments until formal written authorisation has been obtained from the School Building Section.
- (e) If the recommended tender including a bill of reductions exceeds the approved pre-tender budget, the client must await written authorisation from the School Building Section, before proceeding.
-

5.7 Letter of Intent

- (a) Once the Client (and where applicable the School Building Section) have given written authorisation to proceed with the appointment of the Contractor, the Design Team leader should issue a Letter of Intent (DoES model form based on Department of Finance form) requesting that the recommended contractor proceed to satisfy all typical preconditions to which acceptance of a tender would be subject, e.g. Bond, Contract Insurances, Programme, Tax Clearance, appointment of a Project Supervisor for Construction.
- (b) Under no circumstances should a Letter of Acceptance be issued subject to meeting certain conditions. This has the effect of accepting the contract sum without the protection of the Contract conditions.
-

5.8 Notice to unsuccessful tenderers

- (a) At the same time as the Letter of Intent is issued, the Design Team leader should issue letters of regret (also known as the Alcatel letter) to all the apparently unsuccessful tenderers (DoES model form based on Department of Finance form). A minimum of 14 days must be allowed for responses before a Letter of Acceptance to the successful tenderer can be issued (subject to the other requirements in these procedures).
-

Continued overleaf

5.0 Stage 3 – Tender Action and Award

5.9 Client notification

- (a) The Design Team shall satisfy themselves as to the Contractor's programme, resources and management arrangements for the project
- (b) Then, having waited a minimum of 14 days (as [Section 5.8](#) above), and before the issue of the formal letter of acceptance, the Design Team shall submit to the Client the following supplementary Tender Report information:
 - (a) Confirmation that all pre-conditions have been satisfied
 - (b) The Detailed Programme of Work and Resources related to the Detailed Programme of Work
 - (c) The Contractor's management arrangements for the Project.
 - (d) The Projected cash flow with observations on the projected Cash-flow and "S" Curve and their relationship with the agreed programme.
 - (e) Confirmation that a Project Supervisor Construction Stage [PSCS] has been appointed (by the Design Team Leader on behalf of the Client) and the PSCS has accepted that appointment (both in writing) and that the Health & Safety Authority have been notified on the correct form (again by the Design Team Leader on behalf of the Client).
 - (f) Confirmation that a project specific Health and Safety Plan has been prepared by the Project Supervisor (Construction).
- (c) The Client in turn must forward copies of this Tender Report Supplement to the School Building Section

5.10 Tender Acceptance/ Contract Execution

- (a) Once the Client has been notified that all pre-conditions have been satisfied and has received and accepted (in writing) the Tender report supplement (as [Section 5.9](#) above), a Letter of Acceptance (DoES model form based on Department of Finance form) in accordance with the Conditions of Contract may be issued to the Contractor.
- (b) **Once this letter has been issued there is a Contract in place and all the Contract terms and conditions apply! The date of Letter of Acceptance is the Contract Date. The Start Date is within 20 days of the Contract Date.**
- (c) The Architect will issue the Commencement Notice to the relevant Local Authority after consultation with the Client and the Contractor. The issue of the Commencement Notice shall be timed to allow commencement of the contract in accordance with the letter of acceptance and the Conditions of Contract.
- (d) When the contract has been signed, the Design Team shall submit to the School Building Section a copy of the priced Bill of Quantities and a copy of the Articles of Agreement and Schedule 1 & 2 of the signed and sealed Conditions of Contract (Contract must be under seal.)

5.11 EU Contract Award Notice

- (a) Where the original estimated Construction value of the project was above the EU threshold (and a Contract Notice was issued), the Design Team Leader must also issue a Contract Award Notice with the prescribed time. (This notice can be issued through the e-tenders website at www.etenders.gov.ie)

6. Stage 4 – Construction

6.1 General

- (a) All members of the Design Team are individually and collectively responsible for the effective management of the project in order to achieve its completion on time and within budget. Constant communication and information exchange between all members of the Design Team and with the Client is essential in this regard.
 - (b) Overall cost control during construction of the project shall be co-ordinated by the Design Team's Quantity Surveyor in consultation with the other members of the Design Team and in particular the Employer's Representative (usually the Architect). The Quantity Surveyor shall prepare the Financial Reviews, Interim Valuations and Final Accounts for the overall project.
 - (c) The Consultant Mechanical and Electrical Engineer shall provide information and advice to the Employer's Representative and Quantity Surveyor with respect to the mechanical and electrical services, including for the purposes of preparing Progress Reviews, Interim Valuations and the Final Account for these works.
-

6.2 Employer's Representative

- (a) The Employer's Representative [ER] shall be the Design Team Leader (usually the Architect).
 - (b) The limitations on the authority of the Employer's Representative to perform its functions or powers under the Contract shall be as stated in the [Public Works Contract for Building Works Designed by the Employer Schedule Part 1 template](#) available at www.education.ie.
 - (c) The maximum adjustment to the Contract Sum for a single Change Order shall not exceed €2,000 and the maximum cumulative value over whole contract of adjustments to the Contract Sum for Change Orders in any 3 month period shall not exceed 0.25% of the Contract Sum.
 - (d) While any act or instruction of the Employer's Representative under the Contract has effect as if it is within the Employer's Representative's authority, the Employer's Representative does not have the Employer's authority for any breaches to the specified limitations and will be responsible for any cost arising therefrom.
 - (e) The Employer's Representative may delegate in writing to named representatives any functions or powers under the Contract and revoke any delegation. In particular the Employer's Representative may delegate limited powers to the Building Services Engineer to liaise with the Contractor in connection with the Mechanical and Electrical Installation. However in all circumstances, the Employer's Representative shall not delegate the power to issue instructions or change orders. Where the Building Services Engineer has discussed and agreed in principle a recommend course of action with the Contractor, the Building Services Engineer must report to the Employer's Representative who, if he/she deem fit (within his/her limitations), may issue the requisite instruction or change order.
-

Continued overleaf

6.0 Stage 4 – Construction

6.3 Payments

- (a) Interim Certificates, based on the interim recommendations prepared by the Quantity Surveyor, shall be prepared and issued by the Employer's Representative to the Contractor and submitted in turn by the Contractor, through the Client, to the School Building Section for processing and payment. (The School Building Section will forward the certificate to the Building Unit Financial Section.)
 - (b) Original Certificates only, signed by the Employer's Representative, shall be presented to the Client for payment. Photocopies, fax copies or copies in electronic format will not be accepted.
 - (c) There is no provision for the separate identification of the amount due to Sub-Contractors as all sub-contractors (including novated, employer named and Contractor named) are domestic.
 - (d) Under no circumstances should certificates of payment be issued in respect of works not in accordance with the Stage 3 documentation and agreed schedule of accommodation, other than provided for in the Contract under limitations to the Employer's Representative's authority, except with the written approval of both Client and School Building Section or where the Client by prior written arrangement is accepting full financial responsibility.
-

6.4 Contractors Claims

- (a) If the Contractor considers that under the Contract there should be an extension of time or an adjustment to the Contract Sum, or that it has any other entitlement under or in connection with the Contract, notice must be given under sub-clause 10.3 of the Contract within 20 working days with all relevant facts provided within a further 20 working days.
 - (b) The Employer's Representative under the Contract does not have the discretion to relax this requirement and must exclude any Contractor's claims not in accordance with Clause 10.3.
 - (c) However the Employer's Representative should make the Contractor aware in writing of the limitations imposed by this clause at the start of the Contract, and may elect to remind the Contractor to submit any valid claims prior to each interim payment or at each site meeting.
 - (d) The Employer's Representative in turn must process any such claims within the permitted time limits in accordance with Clause 10.5 of the Contract. Any Contractual claims arising from the failure of the Employer's Representative to comply with Clause 10.4 shall be deemed to be a breach of Contract between the Employer's Representative and the Client.
-

6.5 Construction Cost Control

- (a) Cost control during the Construction stage is a continuous process, dictated in part by the quality and completeness of the Tender documentation, and in part by the capacity of the Design Team and in particular the Employer's Representative to minimise change and to anticipate any Contractual requirements for information.
- (b) No Client requested change shall be permitted (whether within the ER's authority or not) without prior Building Section Approval. The Contract documents represent the building requirements agreed between the Client and the Design Team and cannot be changed at will.

6.0 Stage 4 – Construction

6.5 Construction Cost Control (continued)

- (c) As a comprehensive and complete set of Tender documentation is a prerequisite for progressing to Stage 3 Tender Action, only Change Orders attributed to wholly unforeseen circumstances will be permitted.
- (d) No changes shall be allowed which would affect the Schedule of Accommodation, Room Layouts, or materially change the agreed Stage 2a submission unless previously discussed and agreed with the School Building Section.
- (e) The Employer's Representative does not have any discretion to authorise any change order for non-essential works or works which could have been reasonably foreseen.
- (f) No individual change orders above the permitted above the maximum adjustment to the Contract Sum for a single Change Order should be made without prior written approval of both the Client and the School Building Section.
- (g) No individual change order (whether within the Employer's Representative's authority or not) which could in conjunction with other possible changes have the effect of exceeding the cumulative permitted value for change orders over any 3 months shall be permitted without prior School Building Section approval.
- (h) Any request for such approvals shall be on the DoES Employer Approved Change Order request form (see [Appendix F](#)). The reason for the change order shall be fully explained and justified with comment from the relevant Design Team member including why the need was not anticipated at Stage 3.b.
- (i) In all instances the Design Team must where practicable ensure that adequate time is allowed for a considered response both from the Client and the School Building Section.
- (j) Any change orders arising from incomplete design and/or detailing by a member of the Design Team which either generate a compensation event or cause delays (whether within the 1st or 2nd threshold for delays or not) shall be the responsibility of that Design Team member who will be responsible for any cost arising therefrom.
- (k) Where additional costs occur, either due to a change order or arising from a Contractor's claim, these costs must be recorded and assessed by the Quantity Surveyor who shall include details of these costs in regular Project Reviews which must be submitted to the Client (and through the Client to the School Building Section) at each interim certificate as below.

Continued overleaf

6.0 Stage 4 – Construction

6.6 Project Reviews and Progress Reports

- (a) A Project Review report shall be prepared by the Employer's Representative and Quantity Surveyor jointly on the Project Review Form at [Appendix E](#) and submitted to the Client together with each Interim Certificate. The Client in turn shall send a copy directly to the School Building Section with the original certificate.
- (b) Each Project Review Form must be completed in full and must contain all change orders since the previous certificate.
- (c) Where any change orders outside the Employer's Representative's limitations of Authority were authorised by the Employer's Representative without approval a full explanation must be submitted. See also [Section 6.2](#)
- (d) The comments of the Employer's Representative on causes of delay (if any) and actions to mitigate such delay shall be detailed and shall include where appropriate brief statements from the Civil/Structural Engineer and Services Engineer, comparing progress to date with the agreed programme of work, highlighting any areas of delay and the action being taken to maintain the agreed programme.
- (e) The Quantity Surveyor's comments on cash-flow should compare physical execution of the building project and cash-flow with the programme of work and estimated cash flow agreed with the Contractor. Any shortfall in actual cash flow against estimated cash flow, and its relationship with progress on physical execution shall be fully explained.

7. Stage 5 – Handover and Final Account

- 7.1 General**
- (a) The onus rests with all members of the Design Team individually and collectively to ensure the effective management of the Project and with the co-operation of the Contractor to achieve a satisfactory standard of Construction and the substantial completion of all elements of the Project prior to issuing the Certificate of Substantial Completion.
-
- 7.2 Safety File**
- (a) The Project Supervisor Design Process must arrange for the provision of two copies of the completed Safety File. One copy should be forwarded to the Client and one to the Occupier (i.e. the School principal).
- (b) The Safety File should include all relevant information to enable the school to be occupied and maintained safely and future changes to be made with full knowledge of the hazards and risks. Where appropriate it should incorporate details of the building, or the mechanical and electrical services systems, manufacturers' operational instructions, supplier references, checklists, test certificates and other maintenance details.
- (c) The ER should check with the PSDP before issuing the Substantial Completion Certificate. All substantive elements (sufficient to allow safe occupation of the building) of the Safety File should be complete before Substantial Completion, and any supplementary information must be in place within three months of that date.
- (d) Where substantive elements of the Safety File are incomplete due to the failure of the Contractor or Project Supervisor (Construction Stage) to co-operate or provide the requisite information, the PSDP should so advise the Employer's Representative who should not issue Substantial Completion until the relevant information is provided.
-
- 7.3 Certificate of Substantial Completion**
- (a) It is the responsibility of the Design Team to ensure that all snags have been identified, agreed with the Client and listed for the contractor's attention.
- (b) Prior to issuing the Certificate of Substantial Completion the Employer's Representative shall ensure that the Client is satisfied that the works have been carried out to such a stage that they can be taken over and used for their intended purpose and that any outstanding items are such that their completion or rectification does not interfere with or interrupt such use.
- (c) A Draft Final Account Summary [see [Draft Final Account](#) below] shall be prepared by the Employer's Representative and Quantity Surveyor jointly in the format at [Appendix G](#) and submitted to the Client together with the Certificate of Substantial Completion. The Client in turn shall send a copy directly to the School Building Section with the original certificate.
-

Continued overleaf

7.0 Stage 5 – Handover and Final Account

7.4 Hand-over

- (a) Prior to hand over of the building the Design Team shall explain the Design Concept to the occupiers so that maximum benefit can be gained from the facilities provided.
- (b) They shall also inform the Client how to operate and maintain the building and its engineering services systems at optimum efficiency with particular emphasis on safety and energy conservation.
- (c) As soon as practicable, and no later than a month after Substantial Completion, the Employer's Representative shall issue copies of all guarantees and commissioning certificates allowed for in the Contract Documents (e.g. Roof Works, etc.) to the Client. The ER should ensure that the Works Requirements place an onus on the Contractor to provide the requisite information within this time.
- (d) At the same time as handover of the building and the issue of the Certificate of Substantial Completion to the Client, the Architect shall issue to the Client an Architect's Opinion on Compliance of the Works with Planning and Development Acts and with the Building Regulations.
- (e) At the same time as handover of the building and the issue of the Certificate of Substantial Completion to the Client, the Design Team, in conjunction with the Project Supervisor for the Design Process, shall provide comprehensive sets of the latest issue of construction drawings and specifications (architectural, structural and services drawings) to the Client and the Occupier. In addition copies must also be provided on CD-Rom in an acceptable file transfer format. These construction drawings and specifications may be included as part of the Safety File where appropriate.

7.5 Draft Final Account

- (a) During the last month of the construction period prior to Substantial Completion, the Design Team and Employer's Representative shall prepare a draft Final Account summary for submission to the client with the Certificate of Substantial Completion. This Draft Final Account Summary shall be in the format at [Appendix G](#).
- (b) Where the draft Final Account cost is within the original Contract sum plus the cost of any Change Orders within the limits of the Employer's Representative's Authority plus the cost of any Employer approved changes, School Building Section consultation is not required.
- (c) Where the draft Final Account cost is outside those limits, the Design Team must submit to the Client (and through the client to the School Building Section) a detailed explanation with the Draft Final Account Summary highlighting any discrepancies between the Draft Final Account Summary and the monthly Project Reviews.

Continued overleaf

7.0 Stage 5 – Handover and Final Account

7.5 Draft Final Account (continued)

- (e) The Design Team is reminded that the Contractor must give notice of claims within 20 working days with all relevant facts provided within a further 20 working days, and that the Employer's Representative in turn must process any such claims within the permitted time limits. There should consequently be no outstanding claims in excess of 3 months duration and any unresolved Contractor's Claims should have been recorded both on the Progress Report and in the Draft Final Account Summary
- (f) Under no circumstances should the Employer's Representative agree to a Final Account or element of the Final Account (including Contractors Claims in excess of the Employer's Representative's authority) outside the limits set in (b) above without prior Client and School Building Section approval.

7.6 Penultimate Certificate (Final Account)

- (a) Under the Public Works Contracts the period for agreeing the Final Account is a maximum of 5 months. This comprises a maximum period of 2 months for the receipt of a Final Statement and a further 3 months to issue the penultimate certificate.
- (b) Prior to the receipt of the Final Statement, and allowing sufficient time for the Contractor to complete the Final Statement, the Employer's Representative shall ensure that all apparent defects have been recorded and brought to the attention of the Contractor in writing (see also [7.3 Certificate of Substantial Completion](#)).
- (c) The Employer's Representative shall also ensure that any Change Orders required to complete the construction have been issued (and where practicable the additional cost if any agreed).
- (d) The Employer's Representative does not have the authority to issue Change Orders after the receipt of the Final Statement.
- (e) Within a period of 1 month after the receipt of the Final Statement the Design Team must submit an amended Draft Final Account to the Client identifying and explaining/justifying any additional costs over and above those already identified in the earlier report.
- (f) Once the Client has examined this report and has accepted the content in writing:
 - (i.) If the adjusted Contract sum is within the limits set in [Section 7.5\(b\)](#) above, the Client may authorise the Design Team to agree the Final Account and issue the Penultimate Certificate.
 - (ii.) Where the additional costs would have the effect of increasing the adjusted Contract sum above the limits set in [Section 7.5\(b\)](#) above, the Client must forward this amended Draft Final Account Summary to the School Building Section (with the Design Team's explanation) for consideration.

Continued overleaf

7.0 Stage 5 – Handover and Final Account

- 7.7 Final Account Report**
- (g) Within a period of 2 months after the receipt of the Final Statement the Final Account must be agreed and the Employer's Representative shall issue to the Client (and through the client to the School Building Section) a Final Account Report including a Quantity Surveyor's Report using the format at [Appendix H](#).
- (h) It shall confirm the agreement of all members of the Design Team to the adjusted Contract Sum and must include the following documents:
1. The summary section only of the Draft Final Account as outlined above.
 2. Quantity Surveyor's Final Account Report in the format at [Appendix H](#).
 3. Written Confirmation from the Project Supervisor Design Process and the Client that the completed Safety File has been handed over to the Client.
 4. A copy of the Architect's Opinions on Compliance of the Works with Planning and Development Acts and with the Building Regulations.
 5. Copies of all guarantees provided for in the Contract Documents.
 6. Completed [AREA RE-CONCILIATION SHEET \(Appendix A\)](#) listing the areas of the spaces as built compared with the areas shown in the brief, at Stage 1, and Stage 2a.
-
- 7.8 Defects Period**
- (a) On completion of the Defects Period, the Client, the School Authorities, and the Design Team must agree and confirm in writing to the School Building Section (through the Client) that the work is complete and all defects have been corrected within this period.
- (b) The final certificate can now be issued.
-
- 7.9 Final Account Report Supplement**
- (a) On completion of the Defects Period, (having agreed with the Client that all defects have been rectified), the Design Team must submit a Final Project Report to the Client (and through the Client to the school Building Section). This report should include the following Supplement to the Final Account Report:
1. The summary section only of the agreed Final Account.
 2. Written confirmation of both client and Design Team that the work is complete and all defects have been corrected within the Defects Period.
 3. The Architect's Report on the Building Works and the Contractor's performance during the Building Contract.
 4. Civil/Structural Engineer's Report on the civil/structural works and the quality of the work.
 5. Engineer's Report on the Mechanical and Electrical Services, and the quality of the Mechanical and Electrical installation.

Appendix A

Sample Area Re-Conciliation Sheet

[See www.education.ie for Sample Area Re-Conciliation Sheet in excel format]

Number	Description (amend as required)	Brief Area	Stage 1	Stage 2a	Stage 2b	Stage 4
	TEACHING SPACES (amend as required)					
1	General Classroom	49 m ²				
2	General Classroom	49 m ²				
3	General Classroom	49 m ²				
4	Lecture Rooms (interconnected)	109 m ²				
5	Group Room	29 m ²				
6	Music/Drama Area	80 m ²				
7	Science Laboratory and Preparation Area	100 m ²				
8	Science Laboratory and Preparation Area	100 m ²				
	ADMINISTRATIVE SPACES (amend as required)					
9	Deputy Principal's Office	22 m ²				
10	Pastoral Offices. (Number as per schedule)	18 m ²				
11	Meeting Room	34 m ²				
	ANCILLARY SPACES (amend as required)					
12	General Purpose/Dining Area	224 m ²				
13	Kitchenette and Store	25 m ²				
14	General Storage	40 m ²				
15	Cloaks/Lockers	22 m ²				
16	Toilets	18 m ²				
	CIRCULATION/SOCIAL/INTERNAL PARTITIONS					
	Social Areas (3%)	35 m ²				
	Circulation (15%)	175 m ²				
	Internal Division (6%)	70 m ²				
	PHYSICAL EDUCATION SPACES (amend as required)					
17	Large P.E. Hall	594 m ²				
18	Changing rooms	64 m ²				
19	Showers (2 x 4 No. with cubicle dividers)	12 m ²				
20	Toilet Cubicles (opening off Changing Rooms)	4 m ²				
21	Toilets (off main circulation)	9 m ²				
22	Control Centre (includes Instructor's facility)	9 m ²				
23	Equipment Store	20 m ²				
24	General Store	18 m ²				
25	Circulation & Internal Division	64 m ²				

Appendix B

Stage 1 Completion Certificate

[See www.education.ie for Stage 1 Completion Certificate in [Word](#) format]

As a prerequisite to a Planning Development Meeting the following form needs to be completed and submitted with the Stage 1 Report via the Client to School Building Section, Tullamore, no later than one week prior to the proposed meeting date.

If answer is no to any of the following please provide a detailed explanation

How many meetings of the full design team have taken place? (Insert number)	<input type="text"/>
Are individual reports from Design Team members signed and dated?	<input type="text"/>
Are the following documents/reports completed and included with the Stage submission?	<input type="text"/>
Is this form signed by all the Design Consultants AND the Client (where not the Department of Education and Science)?	<input type="text"/>
REPORT SUMMARY (Prepared by Design Team Leader / Architect)	Included?
1. A review of the project brief (including summary approved amendments) and an overall project viability assessment	<input type="text"/>
2. Completed Area Reconciliation Sheet APPENDIX A	<input type="text"/>
3. Health & Safety report on any hazards and risks (including review of briefing information) and the measures being taken to eliminate, mitigate or control those hazards/risks.	<input type="text"/>
4. A summary of the evaluation of possible locations (or assessment of the location stated in brief) and their/its viability, with a summary of the cost implications of the preferred location compared to other possible locations under consideration	<input type="text"/>
5. For work to existing, a summary of the scope of essential remedial/ alterations works (within the scope of the brief), with an assessment of their viability in the context of the overall condition of the building and the relative condition of other elements	<input type="text"/>
6. Summary of the general design concept and how it meets the brief within area and cost limits with a summary of the cost implications of the proposed design solution	<input type="text"/>
7. An updated programme indicating the time (in weeks) required by the Design Team for each of the main stages of work as set out in the Design Team Procedures.	<input type="text"/>
ARCHITECTURAL	Included?
1. Evaluation of all possible sites/locations (or assessment of the identified site & location) as at 3.5 Assessment of Site & Location Suitability (New Build)	<input type="text"/>
2. Evaluation of scope of essential Work to Existing Buildings (where applicable) with an assessment of the viability of those works in the context of the overall condition of the building and the relative condition of other elements. This evaluation should include a condition report on those buildings with details of age, existing materials and method of construction, structural condition, mechanical and electrical services (with the age and condition of each of the respective services and recommendations on each element), and the nature and extent of any defects or hazards, their cause, and the scope of remedial or replacement work required.	<input type="text"/>
3. Copy of the Archaeological report (where appropriate)	<input type="text"/>
4. Architects Report describing the general design concept and a short appraisal of alternative design solutions considered, with conclusions and recommendations. The report should illustrate, with appropriate reference to the individual reports from the other members of the Design Team, how particular site features or site problems are being dealt with and generally how the proposed design will facilitate speedy and economical construction.	<input type="text"/>

Continued overleaf

Appendix B

Stage 1 Completion Certificate (Page 2 of 3)

ARCHITECTURAL (continued)	Included?
<p>For extension projects, the report must also consider how the extension can be constructed while safely keeping the existing school in operation and minimising decanting and/or the use of temporary accommodation. It is essential that this aspect of the project is taken into account in the appraisal of alternative solutions</p> <p>The report should also refer to the extent to which the design proposals fulfil the brief requirements and how they compare with the cost limits and area restrictions in the brief</p> <p>Commentary and compliance statement on the proposed building configuration and site location/orientation with specific reference to the DoES technical guidance documents on passive solar energy design and natural ventilation.</p>	<input type="checkbox"/>
5. A report on the availability, location and adequacy of the proposed access and any special requirements of Statutory Authorities (with appropriate reference to the civil/Civil/Structural Engineer's report below).	<input type="checkbox"/>
6. Any other requirements of Statutory Authorities and in the case of remedial works comment on whether Planning Permission and/or Fire Certificate will be required	<input type="checkbox"/>
7. A location map to 1:1000 scale, showing north point and direction of prevailing wind and how the site relates to its surroundings, with the site outlined in red.	<input type="checkbox"/>
8. An accurate survey drawing of the site to at least 1:500 scale showing the position of existing buildings, boundaries, contours, public services and adjoining properties, particularly those in third party ownership. The school site must be clearly outlined in red and all sites/locations assessed as part of Stage 1 clearly labelled (e.g. Site A.)	<input type="checkbox"/>
9. Site plan to 1: 500 scale showing the building, boundaries (clearly indicated), entrances, boiler house, sub-station (if relevant), services, roads, paths, parking, play areas and any special requirements of Statutory Authorities. The north point and direction of prevailing wind should be indicated.	<input type="checkbox"/>
10. Floor plans and roof plan to 1:200 scale with areas of spaces (rooms, corridors, lobbies, etc.) and north point indicated thereon.	<input type="checkbox"/>
11. Cross-sections to 1: 200 (or larger) scale through the building illustrating the relationship with site levels, the general structural solution and the design approach to natural lighting and ventilation.	<input type="checkbox"/>
12. Preliminary specifications describing materials and methods of construction.	<input type="checkbox"/>
CIVIL/STRUCTURAL	Included?
1. A report on the nature of the sub-soil, substantiated by trial holes and/or borings.	<input type="checkbox"/>
2. A report on the availability, location and adequacy of water supply, surface water and sewage disposal.	<input type="checkbox"/>
3. A report on the availability, location and adequacy of the proposed access and any special requirements of Statutory Authorities.	<input type="checkbox"/>
4. A report on the proposed scheme, to include comments on the design solution in terms of ease, appropriateness and economy of construction.	<input type="checkbox"/>
5. Copy of the Site Investigation Report and (where appropriate) the Topographical Survey.	<input type="checkbox"/>
BUILDING ENGINEERING SERVICES	Included?
1. A report on the proposed mechanical and electrical systems and the thermal performance of the building including existing systems and their capacities, formatted and completed in accordance with the technical guidance documents with commentary on the advantages/disadvantages arising from the design which affect the services installation or the thermal performance and recommendations on same. <i>Continued overleaf</i>	<input type="checkbox"/>

Appendix B

Stage 1 Completion Certificate (Page 3 of 3)

BUILDING ENGINEERING SERVICES (continued)		Included?
2.	Where the design gives rise to spaces which do not have appropriate natural day-lighting and/or natural ventilation, the areas in question should be high-lighted on the drawings, and a commentary should be provided to justify/explain the design approach.	<input type="checkbox"/>
3.	Commentary on accommodation spaces(that (as agreed with the Client) will be used outside normal school timetable hours and proposed level of service required to provide for such use on an economical cost in use basis.	<input type="checkbox"/>
4.	Review of available fuels and an outline of the advantages and disadvantages of each and a proposed fuel strategy for design development at Stage 2a.	<input type="checkbox"/>
5.	Report on the availability, location and adequacy of electricity, gas, telephone, T.V. services and broadband.	<input type="checkbox"/>
6.	Review of the hot water strategy for design development at Stage 2a.	<input type="checkbox"/>
7.	The general logic of the intended control strategy outlining the proposed method of control and operation of all the services.	<input type="checkbox"/>
8.	A services distribution drawing indicating the proposed services distribution strategy/zones which will be developed as the design progressed	<input type="checkbox"/>
9.	Preliminary completed TGD006 Energy Information Form	<input type="checkbox"/>
QUANTITY SURVEYOR'S REPORT		Included?
1.	A report on the cost implications of the preferred site/location compared to other possible sites/locations under consideration including all abnormal works relating to the site/location with due regard to the individual comments of the other members of the Design Team	<input type="checkbox"/>
2.	A report on the cost implications of the proposed design including all abnormal works relating to the proposed design, with due regard to the individual comments of the other members of the Design Team. Where alternative design solutions have been considered, the recommended option must be supported by a cost comparison of the other options. For extension projects, the cost of decanting, phasing or temporary accommodation (if unavoidable) required to keep the school in operation during construction must be taken into account in the estimated cost and in cost comparison of alternative solutions.	<input type="checkbox"/>
3.	Completed Outline Cost Plan on the DoES standard form (both hard copy and electronically), with work to existing identified separately in relevant section.	<input type="checkbox"/>
4.	Detailed schedule of Abnormal Costs with each abnormal identified, justified, and costed (with comments by other Design Team members as necessary) on DoES standard Outline Cost Plan with evidence that all options have been adequately investigated so as to mitigate the extent of those Abnormal Works.	<input type="checkbox"/>
5.	A report on the proposed scheme, to include comments on the design solution in terms of ease, appropriateness and economy of construction.	<input type="checkbox"/>

Signed (Firm's Project Director)	Firm	Date
	Architect	
	Civil/Structural	
	Building Services	
	Quantity Surveyor	

I confirm that the above documents have been prepared and are included with the Stage Submission.

Signed: _____ School: _____ Date: _____
 (Chairperson Board of Management)

Appendix C

Stage 2a Completion Certificate

[See www.education.ie for Stage 2a Completion Certificate in [Word](#) format]

As a prerequisite to a **Design Stage Review Meeting** the following form needs to be completed and submitted with the Stage 2a report via the Client to School Building Section, Tullamore, no later than one week prior to the proposed meeting date.

If answer is no to any of the following please provide a detailed explanation

Has the Developed Sketch Scheme evolved from the Scheme prepared, agreed and accepted by the Client and the School Building Section at Stage 1 PRELIMINARY DESIGN?	<input type="checkbox"/>
Does the Developed Sketch Scheme comply substantively in design, form, layout or area with previously agreed submissions?	<input type="checkbox"/>
Does the Stage 2a DEVELOPED SKETCH DESIGN submission comply with ALL previously agreed area and cost limits?	<input type="checkbox"/>
Has the Stage 2a DEVELOPED SKETCH DESIGN submission taken into account (as detailed in the Stage 2a submission) the day to day operation of the existing educational facilities and the implications this might have for the proposed construction programme, including Health & Safety, phasing, state examinations, temporary accommodation, etc?	<input type="checkbox"/>
Has the services and structure been so designed as to ensure the efficient distribution of services in a cost effective and flexible building and has the above been demonstrated the Stage 2a DEVELOPED SKETCH DESIGN?	<input type="checkbox"/>
Are the materials durable and low-maintenance and appropriate to the function, and the materials and method of construction appropriate to the design and to the budget and has the above been demonstrated in the Stage 2a DEVELOPED SKETCH DESIGN?	<input type="checkbox"/>
Are individual reports from Design Team members signed and dated?	<input type="checkbox"/>
Are the documents/reports listed below completed and included with the stage submission?	<input type="checkbox"/>
Is this form signed by all the Design Consultants AND the Client (where not the Department of Education and Science)?	<input type="checkbox"/>
REPORT SUMMARY (Prepared by Design Team Leader / Architect)	Included?
1. An update on the overall project viability and any additional costs arising.	<input type="checkbox"/>
2. For work to existing, any substantive variations from the scope of works agreed at Stage 1	<input type="checkbox"/>
3. Completed Area Re-consiliation Sheet APPENDIX A with both Stage 1 and Stage 2a areas listed	<input type="checkbox"/>
4. Health & Safety report on any residual hazards and risks and the measures being taken to eliminate, mitigate or control those hazards/risks.	<input type="checkbox"/>
5. An updated programme (including the Construction programme) indicating the time (in weeks) required by the Design Team for each of the remaining stages compared with the programme agreed with the Client at Stage 1.	<input type="checkbox"/>
ARCHITECTURAL	Included?
1. Written commentary on how the developed Sketch Scheme considers all aspects of the developed design in an integrated manner (within area and cost limits) and (if applicable) how the existing educational facilities will continue to operate including any implications for the proposed construction programme, phasing, state examinations, temporary accommodation, etc.	<input type="checkbox"/>
2. For work to existing, a definitive proposals for the essential remedial/ alterations works agreed at Stage 1 with written commentary on how the existing educational facilities will continue to operate including any implications for Health & Safety, the construction programme, phasing, state examinations, temporary accommodation, etc.	<input type="checkbox"/>

Appendix C

Stage 2a Completion Certificate (Page 2 of 3)

ARCHITECTURAL (continued)		Included?
3.	Confirmation that the compliance statement on the proposed building configuration and site location/orientation with specific reference to the DoES technical guidance documents on passive solar energy design and natural ventilation required at Stage 1 remains valid.	<input type="checkbox"/>
4.	Site Plan to not less than 1:500 scale extended to show site boundaries, building, boiler-house and sub-station, full site development, including contours, finished levels, entrances, roads, paths, parking, play areas, external yard and all utilities including foul and surface water drainage.	<input type="checkbox"/>
5.	Dimensioned floor plans to 1:100 scale indicating the layout of furniture and equipment. The area of all spaces together with the space names in accordance with the Schedule of Accommodation must be indicated. The north point and the direction of the prevailing winds shall also be indicated.	<input type="checkbox"/>
6.	Dimensioned sections and elevations to 1:100 scale showing floor and ceiling levels, the structure and the main services routes. The pitch of the roof shall be indicated.	<input type="checkbox"/>
7.	Roof Plan to 1:100 scale. Roof pitch or falls to be indicated including location of rainwater outlets, etc.	<input type="checkbox"/>
8.	Sections to 1:50 scale through selected portions of the building illustrating the proposed method of construction, natural lighting and ventilation, integration of services, finishes, etc.	<input type="checkbox"/>
9.	Three-dimensional drawings to illustrate the internal spatial concept.	<input type="checkbox"/>
10.	Detailed dimensioned layouts of special subject rooms to at least 1:50 scale, showing layout of fixed furniture and associated fittings, loose furniture and equipment, services and general room data, all in accordance with the Department's Standard Room Layouts (where applicable).	<input type="checkbox"/>
11.	Outline Specification of materials and methods of construction proposed, accompanied by a schedule of finishes. The Specification shall use generic names where possible, not proprietary names, and shall indicate the performance standards applicable.	<input type="checkbox"/>
CIVIL/STRUCTURAL		Included?
1.	Report on the Civil/Structural Engineering proposals for the building and the site, (including main drainage and water-main layouts) and how they facilitate the safe and economic construction of the project. The report should refer to how the design of the structure ensures the efficient distribution of services in a cost effective and flexible manner.	<input type="checkbox"/>
2.	General arrangement drawings, (including plans, and sections of the buildings to a suitable scale not less than 1:100), indicating Civil/Structural Engineering proposals for the building and the site, including main drainage and water-main layouts. The sections should show the main service runs.	<input type="checkbox"/>
BUILDING ENGINEERING SERVICES		Included?
1.	Commentary on any design developments/changes that have occurred which may impact on the Stage 1 Report previously submitted and in particular any cost sensitive items	<input type="checkbox"/>
2.	Detailed description of the proposed mechanical and electrical systems including existing system capacities.	<input type="checkbox"/>
3.	Details of the thermal performance of the building design.	<input type="checkbox"/>

Continued overleaf

Appendix C

Stage 2a Completion Certificate (Page 3 of 3)

BUILDING ENGINEERING SERVICES		Included?
4.	Drawings to not less than 1:100 scale indicating the heating services, hot and cold water, ventilation services, soil and waste services (above ground), lighting and general electrical services including ICT. The proposed ceiling finishes shall be indicated by way of a symbol on each room and an explanatory legend on all layout drawings. Equipment positions and associated services routes shall be indicated. Primary services distribution sizes should be detailed.	<input type="checkbox"/>
5.	A sections drawing which includes at a 1:50 scale a minimum of 2 full building sectional cuts in the most heavily serviced areas. These sections should include all of the M&E services distributions i.e. both primary and secondary and all equipment relative to the areas indicated, along with the ceiling tile type, service ducts and access to same. The interaction between the building form, the structure and the services must be clearly shown	<input type="checkbox"/>
6.	A control strategy section outlining the proposed method of control and operation of all of the proposed services. This should be particularly detailed with respect to the heating and lighting services.	<input type="checkbox"/>
7.	Schematic layouts including controls for the heating, hot and cold water, gas, main power distribution and ventilation services including ventilation fans and ducts from fume cupboards (where applicable).	<input type="checkbox"/>
8.	A services distribution drawing indicating the proposed services distribution strategy/zones as developed from Stage 1	<input type="checkbox"/>
9.	Completed TGD006 Energy Information Form	<input type="checkbox"/>
QUANTITY SURVEYOR'S REPORT		Included?
1.	A report on the cost implications of the developed Sketch Design with particular reference to any cost sensitive items (arising during Developed Sketch Design). Any increased or additional costs should be accompanied by a detailed explanation and justification with supporting evidence from other Design Team members as required.	<input type="checkbox"/>
2.	Completed Cost Plan (the Planning & Building Unit's standard Cost Plan form must be used), both hard copy and electronically. All data entries in the Cost Plan Form must be completed, together with outline specification notes. The Cost Plan shall include an itemised list and description of the extent, scope and cost of all abnormal works and works to existing buildings as agreed at the Planning & Development Meeting. Costs arising from anticipated Planning or Fire safety Certificate conditions should be included. Work to existing buildings costed separately with the relevant floor area clearly identified and the cost of this work analysed by reference to this floor area.	<input type="checkbox"/>
3.	A reconciliation between the Cost Plan and the Outline Cost Plan produced at Stage 1, including explanation of any deviations. If the scope of abnormal works or other costs exceed that previously agreed, a detailed explanation must be provided as above.	<input type="checkbox"/>

Signed (Firm's Project Director)	Firm	Date
	Architect	
	Civil/Structural	
	Building Services	
	Quantity Surveyor	

I confirm that the above documents have been prepared and are included with the Stage Submission

Signed: _____ School: _____ Date: _____
(Chairperson Board of Management)

Appendix D

Stage 2b Completion Certificate

[See www.education.ie for Stage 2b Completion Certificate in Word format]

When Stage 2b is complete, this certificate must be completed and submitted via the Client to School Building Section, Tullamore, no later than one week prior to going to Tender. No Payment of Stage 2b fees will be made until the completed certificate is received by the School Building Section

If answer is no to any of the following please provide a detailed explanation

YES/NO

Does the Detailed Design comply substantively in design, form, and layout with previously agreed submissions?	<input type="checkbox"/>
Does the Stage 2b DETAILED DESIGN submission comply with ALL previously agreed area and cost limits?	<input type="checkbox"/>
Has all the information required in DTP Section 4.27 Stage 2b Client Progress Report been completed and issued to the Client?	<input type="checkbox"/>
Have all drawings, specifications and other information/documents necessary for the construction of the building been prepared?	<input type="checkbox"/>
Have the requirements of the Local Authority (including the requirements under the Fire Safety Certificate) been included in the Contract Documents?	<input type="checkbox"/>
Has a Preliminary Health and Safety Plan been prepared for inclusion with the Tender Documents?	<input type="checkbox"/>
Has a DETAILED DESIGN report (in the form of a supplement to the Client Progress Report) been prepared in accordance with Section 4.32 Stage 2b Report , with the Form of Tender, Bill of Quantities and all amended project details, drawings and/or specifications attached?	<input type="checkbox"/>
Has a detailed pre-tender Cost Plan in the same format as the Stage 2a Cost Plan and dated not later than 1 month before going to tender been prepared?	<input type="checkbox"/>
Is the detailed pre-tender Cost Plan within the agreed Stage 2a cost limits?	<input type="checkbox"/>
Is this form signed by all the Design Consultants AND the Client (where not the Department of Education and Science)?	<input type="checkbox"/>

Signed (Firm's Project Director)	Firm	Date
	Architect	
	Civil/Structural	
	Building Services	
	Quantity Surveyor	

I confirm that the above documents have been prepared and the project is ready to go to tender

Signed: _____ School: _____ Date: _____
 (Chairperson Board of Management)

Appendix E

DoES Project Review Form

[See www.education.ie for Project Review Form in [Excel](#) format]

Project Title	[title]
School:	[name & location]
Employer's Representative	[Architect]
Quantity Surveyor	[QS]

COST SUMMARY

Contract Sum (including VAT)	[Contract Sum]
Contract Sum (ex VAT)	[Contract Sum ex VAT]
Total value Client/SBS approved Change orders to date	[cumulative value ex VAT]
Total value of ER's Authority over full Contract	[3 monthly limit x Contract duration/3]
MAXIMUM CONSTRUCTION BUDGET [ex VAT]	[cumulative value ex VAT]
Total value Change Orders within ER's Authority to date	[cumulative value ex VAT]
Total Value (ex VAT) unresolved Contractor's claims	[value ex VAT]

Can Construction be completed within the above Maximum Construction Budget?

PROGRAMME SUMMARY

Commencement Date:	[Start date]
Original Substantial Completion Date:	[Original Completion date]
Anticipated revised Substantial Completion Date:	[Revised Completion date]
Progress compared to original Programme:	[weeks delay]

CASH-FLOW

Programme Cash-flow to this date	[based on original programme]
Actual Cash Flow :	[including this certificate]
Actual Cash Flow - Programme Cash-flow	[minus figure if under-spent]
Next month's certificate [from this date]:	[estimated] [month/year]
Second month's certificate [from this date]:	[estimated] [month/year]
Third month's certificate [from this date]:	[estimated] [month/year]

Quantity Surveyor's comment on cash-flow compared with anticipated cash flow for original programme.

[comment]

Appendix E

DoES Project Review Form (page 2 of 2)

DELAY EVENTS

1 st Threshold for Site Working Days	[Number of Days]
2 nd Threshold for Site Working Days	[Number of Days]
Number of Days Delay approved by ER	[days delay approved]

ER's comment on delays:

- (a) The causes of approved delay days and the contractual reasons for them.
 (b) The causes of delay (if any) other than approved delay days and the actions taken to mitigate such delay.

(Append documents and supporting evidence as required)

FINANCIAL REVIEW**Change Orders above €2,000 (or otherwise requiring Client and School Building Section approval).**

No	Approved Change Orders this certificate	Date Approved	Value (ex VAT)
[1-xx]	Cumulative approved Change orders including previous certificate	n/a	[cumulative value]
x+1	[Summary Description including reason for change]		
x+2	[Summary Description including reason for change]		
	[Add lines as required]		
[1-xx]	Cumulative approved Change orders including this certificate	n/a	[cumulative value]

Change Orders within Authority of Employer's Representative

No	Change Orders within ER's Authority	Date Issued	Value (ex VAT)
[1-xx]	Cumulative cost of Change Orders within ER's Authority including previous certificate	n/a	[cumulative value]
x+1	[Description including reason for change]		
x+2	[Description including reason for change]		
	[Add lines as required]		
[1-xx]	Cumulative cost of Change Orders within ER's Authority including this certificate	n/a	[cumulative value]

I confirm that no Change Orders have been authorised outside the limits of my authority not approved by both the Client and the School Building Section. I further confirm that no change order has been issued which will have the effect of causing or contributing to a reduction in safety, scope, quality or usefulness of the Works without the Employer's approval, whether within the financial limits of my authority or not

Signed :

Date:

[Employer's Representative]

Appendix F Change Order Request Form for Client/SBS Approval

[See www.education.ie for Change Order Request Form in Excel format]

Project Title	[title]
School:	[name & location]
Employer's Representative	[Architect]
Quantity Surveyor	[QS]

COST SUMMARY

Contract Sum (including VAT)	[Contract Sum]
Contract Sum (ex VAT)	[Contract Sum ex VAT]
Total value Client/SBS approved Change orders to date	[cumulative value ex VAT]
Total value of ER's Authority over full Contract	[3 monthly limit x Contract duration/3]
MAXIMUM CONSTRUCTION BUDGET [ex VAT]	[cumulative value ex VAT]
Total value Change Orders within ER's Authority to date	[cumulative value ex VAT]
Total Value (ex VAT) unresolved Contractor's claims	[value ex VAT]

Change Order Approval Request.

No.	Description	Date	Nett Extra Value (ex VAT)
	[The reason for each change order shall be fully explained and justified with comment from the relevant Design Team member appended as appropriate]	[date]	

Previous approved Change Orders above €2,000 (or otherwise requiring approval) within last 3 months.

No	Approved Change Orders within last 3 months	Date Approved	Value (ex VAT)
x+1	[Summary Description including reason for change]		
x+2	[Summary Description including reason for change]		
x+3	[Summary Description including reason for change]		
	[Add lines as required]		
[1-xx]	Cumulative cost of approved Change orders from start of Project to current date	n/a	[cumulative value as above]

Appendix G

Draft Final Account Summary

[See www.education.ie for Draft Final Account Summary in Excel format]

Project Title	[title]
School:	[name & location]
Employer's Representative	[Architect]
Quantity Surveyor	[QS]

PROJECT COST SUMMARY

Contract Sum (including VAT)	[Contract Sum]
Contract Sum (ex VAT)	[Contract Sum ex VAT]
Total value Client/SBS approved Change orders to date	[cumulative value ex VAT]
Total value Change Orders within ER's Authority to date	[cumulative value ex VAT]
Estimated Value unresolved Contractor's claims (Details to be appended)	[estimated value ex VAT]
Estimated Final Account Sum [ex VAT]	[cumulative value ex VAT]
Total value of ER's Authority over full Contract	[3 monthly limit / 3 x Contract duration ex VAT]

All Previous Client and School Building Section approved Change Orders

No	Approved Change Orders	Date Approved	Value (ex VAT)
1	[Summary Description]		
2	[Summary Description]		
3	[Summary Description]		
4	[Summary Description]		
	[Add lines as required]		
[1-xx]	Cumulative cost of approved Change orders from start of Project to Draft Final Account	n/a	[cumulative value]

All Change Orders within Authority of Employer's Representative

No	Change Orders within ER's Authority	Date Approved	Value (ex VAT)
1	[Summary Description]		
2	[Summary Description]		
3	[Summary Description]		
4	[Summary Description]		
5	[Summary Description]		
	[Add lines as required]		
[1-xx]	Cumulative cost of Change Orders within ER's Authority from start of Project to Draft Final Account	n/a	[cumulative value]

Appendix H

Final Account Report

[See www.education.ie for Final Account Report in Excel format]

Project Title	[title]
School:	[name & location]
Employer's Representative	[Architect]
Quantity Surveyor	[QS]

PROJECT COST SUMMARY	(Number)	Value (€)
Contract Sum (including VAT)		[Contract Sum]
Contract Sum (ex VAT)		[Contract Sum ex VAT]
Number, and cumulative cost of approved Change Orders	[number]	[cumulative value ex VAT]
Number, and cumulative cost of Change Orders within ER's Authority	[number]	[cumulative value ex VAT]
Final Account Sum [ex VAT]		[value ex VAT]
Add VAT		[VAT]
Final Account Sum [including VAT]		[value incl VAT]

All Client and School Building Section approved Change Orders

No	Approved Change Orders	Date Approved	Value (ex VAT)
1	[Summary Description]		
2	[Summary Description]		
3	[Summary Description]		
4	[Summary Description]		
	[Add lines as required]		
[1-xx]	Cumulative cost of approved Change orders	n/a	[cumulative value]

All Change Orders within financial Authority of Employer's Representative

No	Change Orders within ER's Authority	Date Approved	Value (ex VAT)
1	[Summary Description]		
2	[Summary Description]		
3	[Summary Description]		
4	[Summary Description]		
5	[Summary Description]		
	[Add lines as required]		
[1-xx]	Cumulative cost of Change Orders within ER's Authority	n/a	[cumulative value]