

**PROPOSED
BLACK MOUNTAIN COLLEGE
PILOT SCHEME**

- O -

TALGARTH

- O -

For

BLACK MOUNTAIN COLLEGE

***Lee Associates
Marlborough House
Welsh Street, Chepstow
NP16 5LR***

Tel No: 01291 629511 Fax No: 01291 627156

· CHARTERED QUANTITY SURVEYORS · CONSTRUCTION COST CONSULTANTS · CDM ADVISERS · PROJECT MANAGERS ·

CONTENTS

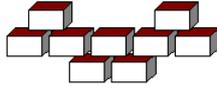
Section

1	Introduction
2	Scope of Works
3	Exclusions/Clarifications
4	Farm Site Pilot Scheme
5	Hospital Site Pilot Scheme
6	Conclusions
Appendix A	High-Level Cost Plan/Feasibility Estimates: Farm Site
Appendix B	High-Level Cost Plan/Feasibility Estimates: Hospital Site
Appendix C	High-Level Cost Plan – Blocks: Farm Site
Appendix D	High-Level Cost Plan – Blocks: Hospital Site
Appendix E	Cost per Square Metre Analyses

Revision 0

LEE ASSOCIATES

*Chartered Quantity Surveyors
Construction Cost Consultants
CDM Advisers
Project Managers*



Marlborough House
Welsh Street
Chepstow
Monmouthshire
NP16 5LR
Tel: 01291 629511

HIGH-LEVEL FEASIBILITY COST REPORT BLACK MOUNTAIN COLLEGE, PILOT SCHEME

1.0 Introduction

- 1.1 Lee Associates have been asked to prepare an initial high-level cost plan budget estimate of construction cost for the proposed Black Mountain College pilot scheme on the Troed-yr-harn Farm site. The high-level cost plan is based on an initial feasibility proposal produced by Graham Frecknall Architecture and Design, drawing Nos. 1611.19: AL.1000, AL.01.A, AL.02.A, AL.03.A, AL.04.A, AL.05.A, AL.06.A, and AL.07.
- 1.2 In addition to the above an initial high-level cost plan budget estimate of construction cost has been prepared for an alternative feasibility proposal for the proposed Black Mountain College pilot scheme on the Mid Wales Hospital site. The high-level cost plan is based on an initial feasibility proposal produced by Graham Frecknall Architecture and Design, drawing Nos. 1611.19: AL.0.10.B.
- 1.3 The high-level cost plan budget estimates are included in Appendix A and B of this feasibility cost report.
- 1.4 The high-level cost plans are based on anticipated costs per square metre on the basis of the block plans and GIFA information prepared by Graham Frecknall Architecture and are subject to design development, investigation and survey work.
- 1.5 In addition to the above, a provisional assessment of the budget costs associated with the proposed strengthening and repair work to the fabric of the existing buildings that are to be repurposed, has been made.
- 1.6 As with the initial high level cost plan for the hospital site proposals undertaken last year, the sketch proposals are block plans and, as such, lack detail information. The proposals need to be developed in more detail to enable a more robust cost exercise to be carried out. All drawn plans are interpolated from a large scale OS map, Google Earth imagery and limited photographic imagery.

2.0 Scope of Works

2.1 Farm Site

- 2.1.1 The proposals involve the refurbishment and alteration/modification of existing former farm buildings to create a new multi-purpose hall, new teaching accommodation, and support facilities. The proposals include some new build residential student accommodation and new build teaching accommodation.
- 2.1.2 The proposals include the demolition of existing structures on the site, together with the re-purposing of existing farm buildings.

PROPOSED BLACK MOUNTAIN COLLEGE: HIGH-LEVEL FEASIBILITY COST PLAN
PILOT SCHEME

2.1.3 The farm site is understood to be on different levels and the proposals would need to be developed ideally considering limiting the need for retaining walls etc., working with the existing levels. However, it is likely that some retaining walls, steps and ramps will be required and these are excluded from the high level cost plan. The extent of works related to the site levels together with the development of an access strategy will be dependent on a full topographical survey and detailed external works design. It is, therefore, anticipated that the extent of works/strategy and costs will need to be re-visited once the full site surveys have been carried out and the design solutions developed.

2.2 Hospital Site

2.2.1 The proposals involve the construction of a new multi-purpose hall, new teaching accommodation, and support facilities, together with new build residential student accommodation.

2.2.2 The proposals include the demolition of existing structures on the site.

2.2.3 The site is understood to be fairly level and the proposals would look to limit the need for retaining walls etc., working with the existing levels. This strategy will be dependent on a full topographical survey and detailed external works design. It is likely that some retaining walls, steps and ramps may be required and these are excluded from the high level cost plan. It is, therefore, anticipated that the strategy and costs will need to be re-visited once the full site surveys have been carried out.

3.0 Exclusions/Clarifications for both sites

3.1 The budget estimate is exclusive of VAT, which will be charged in addition in accordance with current legislation.

3.2 As the budget estimate is an initial high-level cost plan based on typical costs per square metre, in the absence of design/specification/survey information, the estimate would, therefore, need to be reviewed and updated as the design is developed.

3.3 The budget costs are subject to a full site investigation, topographical and measured building survey being carried out. These surveys may indicate the requirement for additional site preparation works or excavation works. The results may also influence the nature of the foundations and substructure construction. The estimate would need to be revisited to reflect the design development following receipt of ground/site investigation reports and surveys

3.4 A provisional allowance has been made for the removal of asbestos contamination. This will need to be re-visited once a full Refurbishment and Demolition survey has been undertaken and the full extent of the contamination has been assessed.

3.5 A provisional allowance has been made for the demolition of structures identified to be removed. This has been based on advice received from Wye Valley Demolition, and is an indication of cost, subject to a detailed demolitions survey. The demolition costs do not include for any temporary propping or shoring works to the existing structures and this would need to be reviewed and the allowances reviewed once the structures have been surveyed and their condition is known. It is assumed that the figures for demolition include the disposal of debris off site. This needs to be confirmed with Wye Valley Demolition.

PROPOSED BLACK MOUNTAIN COLLEGE: HIGH-LEVEL FEASIBILITY COST PLAN
PILOT SCHEME

- 3.6 A provisional allowance has been made for site clearance, in the absence of a detailed site survey/information regarding the site, existing structures and features. The provisional allowance will need to be re-visited once the extent of the site clearance has been established.
- 3.7 On the hospital site, it is assumed that the Ancillary building noted is to be demolished and the cost of this demolition is included in the figure provided by Wye Valley Demolition.
- 3.8 In the absence of any design or drainage information a provisional allowance has been made in respect of drainage works. It is assumed that the foul and surface water drainage connections are available on the site but will need to be adapted.
- 3.9 In the absence of any detailed design in terms of external works /landscaping etc. a provisional allowance has been made in respect of this, including roadway networks, footpaths, hard and soft landscaping. These allowances are based on broad areas provided by Graham Frecknall Architecture and will need to be re-visited and adjusted accordingly as the design develops.
- 3.10 Provisional sums have been included for services upgrade. It is assumed that there are existing services to the site that are available. Quotations will need to be sought from the statutory undertakings for any new/upgraded services to the site to suit the proposed repurposed accommodation; together with the proposed new buildings. The provisional sums are, therefore subject to a detailed assessment of loadings and capacity being undertaken by a Mechanical and Electrical Engineer.
- 3.11 In the absence of any information on the mechanical and electrical installations required for the new/modified accommodation, provisional allowances have been included. These will need to be reviewed once the proposals are developed and more information is available. The budget cost per square metre allowed in this high-level cost plan may need to be adjusted to reflect the level of specification/scope of works.
- 3.12 Provisional allowances have been included for the extra over costs of providing ground source heat pumps and photovoltaics to the roof (assumed to be to the South East and South West slopes of buildings A, B, C, D, E and G on the farm site; and to 550m² of the hospital site teaching building roofs and 33% of the total roof area in respect of the accommodation block). These allowances are based on broad areas provided by Graham Frecknall Architecture and will need to be reviewed once the design strategy is established and the designs developed.
- 3.13 In respect of works to the existing farm buildings on the farm site, provisional allowances have been made within the high-level cost plan for the proposed drylining lining of the external walls, together with a new insitu concrete floor slab. These allowances will need to be reviewed as the detailed design develops.
- 3.14 Provisional allowances have been made for repairs/re-pointing of the existing stonework and for timber repairs. These will need to be re-visited once the condition of the buildings has been fully surveyed and assessed.
- 3.15 It is assumed that the existing structures are structural sound. A provisional allowance for additional minor works to the existing structures has been included. This will need to be re-visited once the condition of the buildings has been fully surveyed and assessed.

PROPOSED BLACK MOUNTAIN COLLEGE: HIGH-LEVEL FEASIBILITY COST PLAN
PILOT SCHEME

- 3.16 Provisional allowances have been made for the replacement of the existing windows (with double glazed units). This has been based on an assumed area of glazing provided by the architect and will need to be re-visited once the buildings have been fully surveyed and the extent of window renewal quantified.
- 3.17 No allowances have been made for any retaining walls or any excavation, levelling/cut and fill that maybe necessary in relation to the existing site levels (with the exception on the farm site of retaining walls between Blocks G and D and Blocks D and E, as indicated on drawing AL.07). These would be viewed as abnormal costs and would need to be reviewed once the topographical survey has been undertaken and the design/engineering solution has been considered in light of the survey information.
- 3.18 In respect of the retaining walls between Blocks G and D and Blocks D and E, a provisional allowance has been made which will need to be re-viewed once the topographical survey is carried out and the design of the walls is established.
- 3.19 A provisional allowance has been made for highways upgrades in connection with planning gains sought by Highways through the planning process. This figure will need to be reviewed as the extent of any highways improvements is determined. This would be seen as an abnormal cost. The associated costs in the engagement of a transport consultant, associated costs for audits and inspections; topographical surveys in connection with highways works etc. are excluded from this provisional allowance and should be considered when reviewing allowances for fees and surveys.
- 3.20 On the farm site a provisional allowance has been made in respect of minor concrete repairs to the existing concrete frame in the location of Block G indicated as remaining. This assumes that the structure is otherwise sound and only requires very minor repair work. The provisional allowance will need to be reviewed once a full condition survey has been undertaken.
- 3.21 The budget costs exclude other site abnormalities not identified on the feasibility drawings.
- 3.22 The budget figures do not include the costs associated with achieving BREEAM excellent or Low/Zero carbon targets. The costs would need to be reviewed as the design develops and the requirements have been confirmed.
- 3.23 The budget costs reflect achieving building control approval under the current Building Regulations. Should the Building Regulations change, the costs would need to be reviewed to take account of any new requirements.
- 3.24 A provisional allowance has been included for a catering kitchen in the student welfare/union area, based on a simple canteen service.
- 3.25 In terms of preliminaries an allowance of 18% of the estimated construction cost excluding the contingency sum has been allowed.
- 3.26 A 10% contingency has been allowed, together with a 10% design risk allowance.
- 3.27 Costs are based on the 4th quarter 2019 and would be subject to inflationary costs beyond this period. No allowance has been made for inflation. This would need to be added, as dictated by the proposed programme of works.

PROPOSED BLACK MOUNTAIN COLLEGE: HIGH-LEVEL FEASIBILITY COST PLAN PILOT SCHEME

- 3.28 These budget costs are provided as an initial high-level cost plan/feasibility budget estimate but will vary, dependent on the level of specification, design and engineering solutions.
- 3.29 No allowance has been made within the budget estimate for surveys (e.g. site investigation, drainage, services, topographical, measured building, ecology, acoustics etc.).
- 3.30 No allowance has been made for any ecological works that may be necessary and it is assumed that an ecology and bat survey will be required. Any costs associated with these will need to be added to the budget estimate once known.
- 3.31 An allowance of 12% of the construction cost has been included for design fees.
- 3.32 No allowance has been made within the budget estimate for costs associated with any archaeology that maybe present on the site.
- 3.33 No allowance has been made in the high-level cost plan for any FFE (ICT, loose furniture, fixtures and equipment).
- 3.34 For the hospital site, an allowance has been made for the heras fencing that would be required to segregate the existing hospital buildings on the site from the new accommodation and also to segregate the site from the public right of way that needs to remain in use at all times. This is based on approximate length provided by Graham Frecknall Architecture of 1550m. This would be considered an abnormal cost and will need to be reviewed, once the full extent of the requirements are understood.

4.0 Farm Site Pilot Scheme

- 4.1 The Farm Site pilot scheme option allows for the construction of a new single storey four class teaching block and five single/two storey accommodation blocks; together with remodelling of existing farm buildings to provide Administration, Student Union accommodation, a multi-purpose hall, a single story workshop (Space 5) and some single storey accommodation (Block F).
- 4.2 The high-level cost plan estimates the construction cost of the farm site pilot scheme to be in the order of £13,349,300 (exclusive of VAT and design fees).
- 4.3 As noted above the figure is an indication of cost and is subject to the development of the proposals and design. In addition, as noted above, this includes a number of provisional allowances that are subject to review.
- 4.4 The exclusions and clarifications noted above in Section 3 need to be reviewed and appropriate allowances made over and above the estimate construction cost.

5.0 Hospital Site Pilot Scheme

- 5.1 The Hospital Site pilot scheme allows for the construction of a new single storey four class teaching block with administration accommodation, kitchen/refectory and multi-purpose hall; together with the construction of a three storey accommodation block.
- 5.2 The high-level cost plan estimates the construction cost of hospital site pilot scheme to be in the order of £15,634,200 (exclusive of VAT and design fees).

PROPOSED BLACK MOUNTAIN COLLEGE: HIGH-LEVEL FEASIBILITY COST PLAN
PILOT SCHEME

5.3 As noted above the figure is an indication of cost and is subject to the development of the proposals and design. In addition, as noted above, this includes a number of provisional allowances that are subject to review.

5.4 The exclusions and clarifications noted above in Section 3 need to be reviewed and appropriate allowances made over and above the estimate construction cost.

6.0 Conclusion

6.1 The high-level cost plan/feasibility budget estimate reflects the level of information available and will need to be reviewed once the design has been developed.

6.2 Analyses of the cost per square metre are included in Appendix E. The figures for external works, drainage, preliminaries, provisional sums, contingencies and fees have been apportioned across the blocks.

Michael R. Lee, MRICS
On behalf of Lee Associates

27th January, 2020

APPENDIX A

FEASIBILITY BUDGET ESTIMATE
HIGH-LEVEL COST PLAN : SUMMARY PAGES (FARM SITE SCHEME)



BUDGET ESTIMATE OF CONSTRUCTION COST: HIGH LEVEL COST PLAN

Based on GFA Drawing Nos: 1611.19/AL.1000, AL.01A, 02A, 03A, 04A, 05A, 06A and 07
 Together with Schedule of Accommodation indicated on drawing AL.07

SUMMARY:

Total £

Pilot Scheme: Farm Option

Administration/Offices (Block I)	554,000
Student Facility/Student Union/Welfare (Block H)	208,800
Multi-Purpose Hall/Dance Hall Block (Block H)	426,300
General Classroom Block (Block G)	977,100
General Classroom Block (Space 5)	91,600
Residential Blocks (Refurb); 1Nr Block (Block F)	91,500
Residential Blocks (New Build) 2 Nr Blocks (Block A and B)	1,646,700
Residential Blocks (New Build) 1 Nr Block (Block C)	725,800
Residential Blocks (New Build) 1 Nr Block (Block D)	914,800
Residential Blocks (New Build) 1 Nr Block (Block E)	817,100

PV installation to roofs (SE/SW slopes: Blks A, B, C, D, E and G)	846,600
EO Allowance for GSHP; assume separate system for each block	357,000
Boreholes for GSHP	204,000
EO for sprinkler system	146,900
BWIC with above services	46,600

External Works and Drainage 1,077,300

Demolition	Wye Valley	46,000
Shoring/Temporary Works	Wye Valley	N/A
Asbestos Removal/Treatment	Wye Valley	2,500

Sub-total 9,180,600

Preliminaries 18% 1,652,500

Sub-total 10,833,100

Provisional Sums:

Services (gas, electricity, water)	125,000
Services (new build properties)	210,000
Upgrade Sub-station	75,000
Additional Asbestos Removal	20,000
Highways Improvements (planning)	150,000
Additional Works to Existing Structures	100,000

Design Risk	10.0%	918,100
Contingencies	10.0%	918,100

Total Estimated Construction Cost (excl VAT) 13,349,300

Design fees (excluding surveys) 12.00% 1,601,900

Total Estimated Construction Cost (excl VAT) 14,951,200

Exclusions/Clarifications:

- Value Added Tax, inflation, surveys, planning fees, building control etc. are excluded
- Furniture, Fixtures and Equipment are excluded
- Provisional allowances for demolition/asbestos clearance subject to full building survey
- Provisional allowances for drainage and statutory services
- Provisional allowances for mechanical and electrical works, external works; subject to detailed design

APPENDIX B

FEASIBILITY BUDGET ESTIMATE
HIGH-LEVEL COST PLAN : SUMMARY PAGES (HOSPITAL SITE SCHEME)



BUDGET ESTIMATE OF CONSTRUCTION COST: HIGH LEVEL COST PLAN

Based on GFA Drawing Nos: 1611.19/AL.0.10.B
 Together with Schedule of Accommodation indicated on drawing AL.0.10.B

SUMMARY:

Total £

Pilot Scheme: Hospital Option

Administration/Offices/Caretaker/Ancillary Space	393,100
Student Welfare/Refectory/Kitchen	544,400
Multi-Purpose Hall	563,600
Classrooms	903,400
Residential Blocks (New Build); 1Nr Block (Block 19)	4,965,000

PV installation to roofs (assume 33% of area)	1,065,900
EO Allowance for GSHP; assume separate system for each block	178,500
Boreholes for GSHP	102,000
EO for sprinkler system	188,000
BWIC with above services	46,000

External Works and Drainage (Option A) 1,835,100

Demolition	Wye Valley	97,800
Shoring/Temporary Works	Wye Valley	N/A
Asbestos Removal/Treatment	Wye Valley	82,200

Sub-total 10,965,000

Preliminaries 18% 1,973,700

Sub-total 12,938,700

Provisional Sums:

Services (gas, electricity, water)	62,500
Services (new build properties)	175,000
Upgrade Sub-station	75,000
Additional Asbestos Removal	40,000
Highways Improvements (planning)	150,000
Additional Works to Existing Structures Assume no work to Ancillary Space	N/A

Design Risk	10.0%	1,096,500
Contingencies	10.0%	1,096,500

Total Estimated Construction Cost (excl VAT) 15,634,200

Design fees (excluding surveys) 12.00% 1,876,100

Total Estimated Construction Cost (excl VAT) 17,510,300

Exclusions/Clarifications:

Value Added Tax, inflation, surveys, planning fees, building control etc. are excluded
 Furniture, Fixtures and Equipment are excluded
 Provisional allowances for demolition/asbestos clearance subject to full building survey
 Provisional allowances for drainage and statutory services
 Provisional allowances for mechanical and electrical works, external works; subject to detailed design

APPENDIX C

FEASIBILITY BUDGET ESTIMATE
HIGH-LEVEL COST PLAN : BLOCKS: FARM SITE



BUDGET ESTIMATE OF CONSTRUCTION COST: HIGH LEVEL COST PLAN

Administration/Offices (Block I)

Based on GFA Drawing Nos: 1611.19/AL.1000, AL.01A, 02A, 03A, 04A, 05A, 06A and 07

Together with Schedule of Accommodation indicated on drawing AL.07

Construction Value

(Estimate based on approximate floor areas for estimating purposes)

Total £

Demolition/Site Clearance

See Main Summary

Remedial Work to Exstg:

New Roof Structure	17,900
New Roof Coverings	78,200
Insulated Drylining to External Walls	34,700
Renew Ground Floor Structure	16,400
Renew First Floor Structure	15,700
Allowance for Masonry Repairs	30,000
Allowance for Timber Repairs	30,000
Allowance for Replacement of Existing Windows	14,700
Allowance for Replacement of Existing External Doors	10,000

Remodelled Accommodation:

Admin areas (Offices/Meeting Rooms)	108,600
Extra over for WC area	5,400

Mechanical and Electrical	132,400
Lift	60,000

Total Estimated Construction Cost (excl prelims, contingencies, VAT etc.)

554,000

Carried forward to Main Summary



BUDGET ESTIMATE OF CONSTRUCTION COST: HIGH LEVEL COST PLAN

Multi-Purpose Hall/Dance Hall Block (Block H)

Based on GFA Drawing Nos: 1611.19/AL.1000, AL.01A, 02A, 03A, 04A, 05A, 06A and 07

Together with Schedule of Accommodation indicated on drawing AL.07

Construction Value

(Estimate based on approximate floor areas for estimating purposes)

Total £

Demolition/Site Clearance:

See Main Summary

Remedial Work to Exstg:

New Roof Structure	7,700
New Roof Coverings	33,900
Insulated Drylining to External Walls	28,900
Renew Ground Floor Structure	15,500
Renew First/Second Floor Structure	3,400
Allowance for Masonry Repairs	40,000
Allowance for Timber Repairs	40,000
Allowance for Replacement of Existing Windows	2,900
Allowance for Replacement of Existing Windows Stick Curtain walling	9,000
EO Allowance for External Door	4,000
Allowance for Replacement of Existing External Doors	2,000

Remodelled Accommodation:

Performance Space/Hall	92,200
Utility/Store	22,100
Extra over for WC area	10,800
Replacement Staircase to Utility/Store allow	4,500

Mechanical and Electrical 109,400

Total Estimated Construction Cost (excl prelims, contingencies, VAT etc.)

426,300

Carried forward to Main Summary



BUDGET ESTIMATE OF CONSTRUCTION COST: HIGH LEVEL COST PLAN

General Classroom Block (Block G)

Based on GFA Drawing Nos: 1611.19/AL.1000, AL.01A, 02A, 03A, 04A, 05A, 06A and 07

Together with Schedule of Accommodation indicated on drawing AL.07

Construction Value

(Estimate based on approximate floor areas for estimating purposes)

Total £

Demolition/Site Clearance:

See Main Summary

Remedial Work to Exstg Block G:

Small Scale Concrete Repairs (subject to survey)	10,000
Allowance for Works to Existing Roof Structure	23,100
Strip Existing Cladding	9,100
New Roof Coverings (profiled metal sheet)	78,000
Allowance for additional work to existing building	50,000
EO for timber cladding to concrete frame	13,300
EO for curtain walling	66,000

New Build Accommodation (built inside existing concrete frame)

Classrooms Block G	New Build	532,400
--------------------	-----------	---------

Mechanical and Electrical	195,200
---------------------------	---------

Total Estimated Construction Cost (excl prelims, contingencies, VAT etc.)

977,100

Carried forward to Main Summary



BUDGET ESTIMATE OF CONSTRUCTION COST: HIGH LEVEL COST PLAN

Residential Blocks (Refurb); 1Nr Block (Block F)

Based on GFA Drawing Nos: 1611.19/AL.1000, AL.01A, 02A, 03A, 04A, 05A, 06A and 07

Together with Schedule of Accommodation indicated on drawing AL.07

Construction Value

(Estimate based on approximate floor areas for estimating purposes)

Total £

Demolition/Site Clearance:

See Main Summary

Remedial Work to Exstg:

New Roof Structure	2,600
New Roof Coverings	11,300
Insulated Drylining to External Walls	5,300
Renew Ground Floor Structure	3,400
Renew First/Second Floor Structure	N/A
Allowance for Masonry Repairs	15,000
Allowance for Timber Repairs	15,000
Allowance for Replacement of Existing Windows	2,900
Allowance for Replacement of Existing External Doors	4,000

Remodelled Accommodation:

Residential Accommodation - Block F	14,600
Mechanical and Electrical	17,400

Total Estimated Construction Cost (excl prelims, contingencies, VAT etc.)

91,500

Carried forward to Main Summary



BUDGET ESTIMATE OF CONSTRUCTION COST: HIGH LEVEL COST PLAN

Residential Blocks (New Build) 2 Nr Blocks (Block A and B)

Based on GFA Drawing Nos: 1611.19/AL.1000, AL.01A, 02A, 03A, 04A, 05A, 06A and 07

Together with Schedule of Accommodation indicated on drawing AL.07

Date: 27/01/2020

Rev:

Construction Value

(Estimate based on approximate floor areas for estimating purposes)

Total £

Demolition/Site Clearance:

See Main Summary

New Build Accommodation:

Block A 493,200

Block B 493,200

Mechanical and Electrical 500,300

Lift 160,000

Total Estimated Construction Cost (excl prelims, contingencies, VAT etc.)

1,646,700

Carried forward to Main Summary



BUDGET ESTIMATE OF CONSTRUCTION COST: HIGH LEVEL COST PLAN

Residential Blocks (New Build) 1 Nr Block (Block C)

Based on GFA Drawing Nos: 1611.19/AL.1000, AL.01A, 02A, 03A, 04A, 05A, 06A and 07

Together with Schedule of Accommodation indicated on drawing AL.07

Date: 27/01/2020

Rev:

Construction Value

(Estimate based on approximate floor areas for estimating purposes)

Total £

Demolition/Site Clearance:

See Main Summary

New Build Accommodation:

Block C

428,500

Mechanical and Electrical

217,300

Lift

80,000

Total Estimated Construction Cost (excl prelims, contingencies, VAT etc.)

725,800

Carried forward to Main Summary



BUDGET ESTIMATE OF CONSTRUCTION COST: HIGH LEVEL COST PLAN

Residential Blocks (New Build) 1 Nr Block (Block D)

Based on GFA Drawing Nos: 1611.19/AL.1000, AL.01A, 02A, 03A, 04A, 05A, 06A and 07

Together with Schedule of Accommodation indicated on drawing AL.07

Date: 27/01/2020

Rev:

Construction Value

(Estimate based on approximate floor areas for estimating purposes)

Total £

Demolition/Site Clearance:

See Main Summary

New Build Accommodation:

Block D

553,900

Mechanical and Electrical

280,900

Lift

80,000

Total Estimated Construction Cost (excl prelims, contingencies, VAT etc.)

914,800

Carried forward to Main Summary



BUDGET ESTIMATE OF CONSTRUCTION COST: HIGH LEVEL COST PLAN

Residential Blocks (New Build) 1 Nr Block (Block E)

Based on GFA Drawing Nos: 1611.19/AL.1000, AL.01A, 02A, 03A, 04A, 05A, 06A and 07

Together with Schedule of Accommodation indicated on drawing AL.07

Date: 27/01/2020

Rev:

Construction Value

(Estimate based on approximate floor areas for estimating purposes)

Total £

Demolition/Site Clearance:

See Main Summary

New Build Accommodation:

Block E

489,100

Mechanical and Electrical

248,000

Lift

80,000

Total Estimated Construction Cost (excl prelims, contingencies, VAT etc.)

817,100

Carried forward to Main Summary



BUDGET ESTIMATE OF CONSTRUCTION COST: HIGH LEVEL COST PLAN

External Works and Drainage

Based on GFA Drawing Nos: 1611.19/AL.1000, AL.01A, 02A, 03A, 04A, 05A, 06A and 07

Together with Schedule of Areas produced by GFA

Date: 27/01/2020

Rev:

Construction Value

(Estimate based on approximate quantities for estimating purposes)

Total £

Courtyards:		
	Paving	203,800
Access Roads/Site Roads:		
	Tarmac Roadway (incl lighting/kerbs)	61,200
	Tarmac Car Parking (incl lighting/kerbs)	85,200
	Break up existing surfacing	27,600
	Site clearance	20,000
Soft Landscaping Generally:		
	Grass	9,700
	Agricultural	45,500
	Planting	3,700
Retaining Walls Generally - excluded - no information available		To be designed
	Retaining walls between D/E (as GFA schedule)	14,700
	Retaining walls between D/G (as GFA schedule)	20,500
Furniture:		
	Benches	15,800
	Waste bins/Cigarette bins	7,000
	Bike Shelters/storage	91,800
	Bus Shelters/Stops	4,100
	Bollards	5,800
	Fencing	None
	Gates	6,100
External Services: Lighting:		incl
Car Park/Street Lighting		incl
Courtyard Lighting		32,500
Drainage - paving		69,000
Drainage - building		83,000
BWIC with external Services		204,000
Signage		15,300
Covered Ways		51,000
Total Estimated Construction Cost (excl prelims, contingencies, VAT etc.)		1,077,300
Carried forward to Main Summary		

APPENDIX D

FEASIBILITY BUDGET ESTIMATE
HIGH-LEVEL COST PLAN : BLOCKS: HOSPITAL SITE

BLACK MOUNTAIN COLLEGE - Hospital Site (Pilot Scheme)



LEE ASSOCIATES

BUDGET ESTIMATE OF CONSTRUCTION COST: HIGH LEVEL COST PLAN

Administration/Offices/Caretaker/Ancillary Space

Based on GFA Drawing Nos: 1611.19/AL.0.10.B

Together with Schedule of Accommodation indicated on drawing AL.0.10.B

Date: 27/01/2020

Rev:

Construction Value

(Estimate based on approximate floor areas for estimating purposes)

Total £

Demolition/Site Clearance

See Main Summary

New Build Accommodation

Admin areas (Offices/Meeting Rooms/Caretaker/Ancillary)

287,600

Mechanical and Electrical

105,500

Total Estimated Construction Cost (excl prelims, contingencies, VAT etc.)

393,100

Carried forward to Main Summary

Lee Associates

CHARTERED QUANTITY SURVEYORS ~ CONSTRUCTION COST CONSULTANTS ~ CDM ADVISERS ~ PROJECT MANAGERS

BLACK MOUNTAIN COLLEGE - Hospital Site (Pilot Scheme)



LEE ASSOCIATES

BUDGET ESTIMATE OF CONSTRUCTION COST: HIGH LEVEL COST PLAN

Student Welfare/Refectory/Kitchen

Date: 27/01/2020

Based on GFA Drawing Nos: 1611.19/AL.0.10.B

Rev:

Together with Schedule of Accommodation indicated on drawing AL.0.10.B

Construction Value

(Estimate based on approximate floor areas for estimating purposes)

Total £

Demolition/Site Clearance

See Main Summary

New Build Accommodation

Refectory/Kitchen

376,400

EO for Small Catering Kitchen/Equipment

30,000

Mechanical and Electrical

138,000

Total Estimated Construction Cost (excl prelims, contingencies, VAT etc.)

544,400

Carried forward to Main Summary

Lee Associates

CHARTERED QUANTITY SURVEYORS ~ CONSTRUCTION COST CONSULTANTS ~ CDM ADVISERS ~ PROJECT MANAGERS

BLACK MOUNTAIN COLLEGE - Hospital Site (Pilot Scheme)



LEE ASSOCIATES

BUDGET ESTIMATE OF CONSTRUCTION COST: HIGH LEVEL COST PLAN

Multi-Purpose Hall

Date: 27/01/2020

Based on GFA Drawing Nos: 1611.19/AL.0.10.B

Rev:

Together with Schedule of Accommodation indicated on drawing AL.0.10.B

Construction Value

(Estimate based on approximate floor areas for estimating purposes)

Total £

Demolition/Site Clearance:

See Main Summary

New Build Accommodation:

Multi Purpose Hall

394,500

Mechanical and Electrical

169,100

Total Estimated Construction Cost (excl prelims, contingencies, VAT etc.)

563,600

Carried forward to Main Summary

Lee Associates

CHARTERED QUANTITY SURVEYORS ~ CONSTRUCTION COST CONSULTANTS ~ CDM ADVISERS ~ PROJECT MANAGERS

BLACK MOUNTAIN COLLEGE - Hospital Site (Pilot Scheme)



LEE ASSOCIATES

BUDGET ESTIMATE OF CONSTRUCTION COST: HIGH LEVEL COST PLAN

Classrooms

Date: 27/01/2020

Based on GFA Drawing Nos: 1611.19/AL.0.10.B

Rev:

Together with Schedule of Accommodation indicated on drawing AL.0.10.B

Construction Value

(Estimate based on approximate floor areas for estimating purposes)

Total £

Demolition/Site Clearance:

See Main Summary

New Build Accommodation:

Classrooms 4Nr

New Build

661,000

Mechanical and Electrical

242,400

Total Estimated Construction Cost (excl prelims, contingencies, VAT etc.)

903,400

Carried forward to Main Summary

Lee Associates

CHARTERED QUANTITY SURVEYORS ~ CONSTRUCTION COST CONSULTANTS ~ CDM ADVISERS ~ PROJECT MANAGERS



BUDGET ESTIMATE OF CONSTRUCTION COST: HIGH LEVEL COST PLAN

Residential Blocks (New Build); 1Nr Block (Block 19)

Based on GFA Drawing Nos: 1611.19/AL.0.10.B

Together with Schedule of Accommodation indicated on drawing AL.0.10.B

Date: 27/01/2020

Rev:

Construction Value

(Estimate based on approximate floor areas for estimating purposes)

Total £

Demolition/Site Clearance:

See Main Summary

New Build Accommodation:

Block 19

3,135,000

Mechanical and Electrical

1,590,000

Lift

240,000

Total Estimated Construction Cost (excl prelims, contingencies, VAT etc.)

4,965,000

Carried forward to Main Summary



BUDGET ESTIMATE OF CONSTRUCTION COST: HIGH LEVEL COST PLAN

External Works and Drainage (Option A)
Based on GFA Drawing Nos: 1611.19/AL.0.10.B

Date: 27/01/2020
Rev:

Construction Value

(Estimate based on approximate quantities for estimating purposes)

Total £

Courtyards:		
	Paving	203,800
Access Roads/Site Roads:		
	Tarmac Roadway (incl lighting/kerbs)	164,500
	Tarmac Car Parking (incl lighting/kerbs)	459,800
	Break up existing surfacing	58,400
	Site Clearance	20,400
Soft Landscaping Generally:		
	Grass	70,000
	Planting	27,000
Retaining Walls Generally - excluded - no information available		To be designed
Heras Fencing (to hospital site)		119,400
Furniture:		
	Benches	15,800
	Waste bins/Cigarette bins	7,000
	Bike Shelters/storage	91,800
	Bus Shelters/Stops	4,100
	Bollards	5,800
	Fencing	None
	Gates	3,100
External Services: Lighting:		incl
Car Park/Street Lighting		incl
Courtyard Lighting		32,500
Drainage - paving		175,100
Drainage - building		106,300
BWIC with external Services		204,000
Signage		15,300
Covered Ways		51,000
Total Estimated Construction Cost (excl prelims, contingencies, VAT etc.)		1,835,100
Carried forward to Main Summary		

APPENDIX E

FEASIBILITY COST PER SQUARE METRE ANALYSES

Black Mountain College
 Cost per square metre analysis: Brownfield Site

Farm Pilot Scheme		GIFA	Admin/Offices	Student Welfare	Multi Purpose Hall	Gen Classrm Blk G	Gen Classrm Space 5	Residential Blk F	Residential Blks A&B	Residential Blk C	Residential Blk D	Residential Blk E	
	m2												
Admin/Offices	236	554,000	554,000										
Student Welfare	58	208,800		208,800									
Multi Purpose Hall	143	426,300			426,300								
Gen Classrm Blk G	348	977,100				977,100							
Gen Classrm Space 5	26	91,600					91,600						
Residential Blk F	31	91,500						91,500					
Residential Blks A&B	944	1,646,700							1,646,700				
Residential Blk C	410	725,800								725,800			
Residential Blk D	530	914,800									914,800		
Residential Blk E	468	817,100										817,100	
			554,000	208,800	426,300	977,100	91,600	91,500	1,646,700	725,800	914,800	817,100	
			£/m2	2,347	3,600	2,981	2,808	3,523	2,952	1,744	1,770	1,726	1,746
Apportioned Costs:													
PV		846,600	72,700	27,400	55,900	128,200	12,000	12,000	216,000	95,200	120,000	107,200	
GSHP		357,000	30,600	11,600	23,600	54,100	5,100	5,100	91,100	40,100	50,600	45,200	
Boreholes		204,000	17,500	6,600	13,500	30,900	2,900	2,900	52,100	22,900	28,900	25,800	
Sprinkler		146,900	12,600	4,800	9,700	22,200	2,100	2,100	37,500	16,500	20,800	18,600	
BWIC		46,600	4,000	1,500	3,100	7,100	700	700	11,900	5,200	6,600	5,900	
Ext Wks and Drainage		1,077,300	92,500	34,900	71,200	163,100	15,300	15,300	274,900	121,200	152,700	136,400	
			£/m2	3,322	5,097	4,219	3,973	4,988	4,181	2,468	2,505	2,442	2,471
Demolition													
Shoring	N/A	46,000	3,900	1,500	3,000	7,000	700	700	11,700	5,200	6,500	5,800	
Asbestos		-	-	-	-	-	-	-	-	-	-	-	
			£/m2	2,500	200	100	200	400	-	600	300	400	300
			£/m2	3,339	5,124	4,241	3,995	5,015	4,203	2,481	2,518	2,455	2,484
Preliminaries		1,652,500	141,900	53,500	109,200	250,200	23,500	23,400	421,600	185,800	234,200	209,200	
Prov Sums		680,000	58,400	22,000	44,900	103,000	9,700	9,600	173,500	76,500	96,400	86,100	
Design Risk		918,100	78,800	29,700	60,600	139,000	13,000	13,000	234,300	103,300	130,100	116,200	
Contingencies		918,100	78,800	29,700	60,600	139,000	13,000	13,000	234,300	103,300	130,100	116,200	
			£/m2	4,856	7,450	6,166	5,808	7,292	6,106	3,608	3,662	3,570	3,611
Design Fees		1,601,900	137,500	51,800	105,800	242,500	22,700	22,700	408,700	180,200	227,100	202,800	
			14,951,200	1,283,400	483,900	987,600	2,263,800	212,300	212,000	3,814,900	1,681,500	2,119,200	1,892,800
			£/m2	5,438	8,343	6,906	6,505	8,165	6,839	4,041	4,101	3,998	4,044

Black Mountain College
 Cost per square metre analysis: Brownfield Site

Hospital Pilot Scheme

		Admin/Offices	Student Welfare	Multi Purpose Hall	Classrooms	Residential Blk	
	m2						
Admin/Offices	178	393,100					
Student Welfare	234	544,400	544,400				
Multi Purpose Hall	210	563,600		563,600			
Classrooms	410	903,400			903,400		
Residential Blk	3000	4,965,000				4,965,000	
		<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	
		393,100	544,400	563,600	903,400	4,965,000	
	£/m2	2,208	2,326	2,684	2,203	1,655	
Apportioned Costs:							
PV	1,065,900	56,900	78,700	81,500	130,700	718,100	
GSHP	178,500	9,500	13,200	13,700	21,900	120,300	
Boreholes	102,000	5,400	7,500	7,800	12,500	68,700	
Sprinkler	188,000	10,000	13,900	14,400	23,000	126,700	
BWIC	46,000	2,500	3,400	3,500	5,600	31,000	
Ext Wks and Drainage	1,835,100	97,900	135,600	140,300	225,000	1,236,300	
	£/m2	3,232	3,405	3,928	3,225	2,422	
Demolition	97,800	5,200	7,200	7,500	12,000	65,900	
Shoring	N/A	-	-	-	-	-	
Asbestos	82,200	4,400	6,100	6,300	10,100	55,400	
	£/m2	3,286	3,462	3,993	3,279	2,462	
Preliminaries	1,973,700	105,300	145,800	150,900	241,900	1,329,700	
Prov Sums	502,500	26,800	37,100	38,400	61,600	338,500	
Design Risk	1,096,500	58,500	81,000	83,900	134,400	738,700	
Contingencies	1,096,500	58,500	81,000	83,900	134,400	738,700	
	£/m2	4,685	4,935	5,694	4,674	3,511	
Design Fees	1,876,100	100,100	138,600	143,500	230,000	1,264,000	
		<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	
		17,510,300	934,100	1,293,500	1,339,200	2,146,500	11,797,000
	£/m2	5,248	5,528	6,377	5,235	3,932	