

Second Floor Refurbishment



Hartley Hall

REFURBISHMENT INFORMATION DOCUMENT

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Revision: V1

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Second Floor Refurbishment

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Second Floor Refurbishment

A Preliminaries / General Matters

Building Description–Hartley Hall School: Second Floor, North Wing and Central Wind Refurbishment

This report proposal will be adding additional information regarding comments and advice to achieve the standard listed building regulation.

The proposals envisage a refurbishment of the building, with several key structural interventions, including:

1. Overall Building Analysis (Delivered to Current Scheme)
2. The replacing of existing windows with original sash window
3. The replacing clear glass windows with original Screen (Stained Glass Window)
4. Ventilation Ducted to Ceiling
5. Reuse all existing door panels with new matching existing door frames
6. Installation cable tray for electric cables and lighting
7. Skirting
8. Wall mounting will be use in corridor

Design Drawings

This document is to be read in conjunction with the following drawings:-

- KDG-038-PL01 R1
- KDG-038-PL02 R1
- KDG-038-PL04 R1
- KDG-038-PL06 R1
- KDG-038-PL07 R1
- KDG-038-PL08 R1
- KDG-038-PL09 R1

Second Floor Refurbishment

B Overall Building Analysis – Strategic Analysis

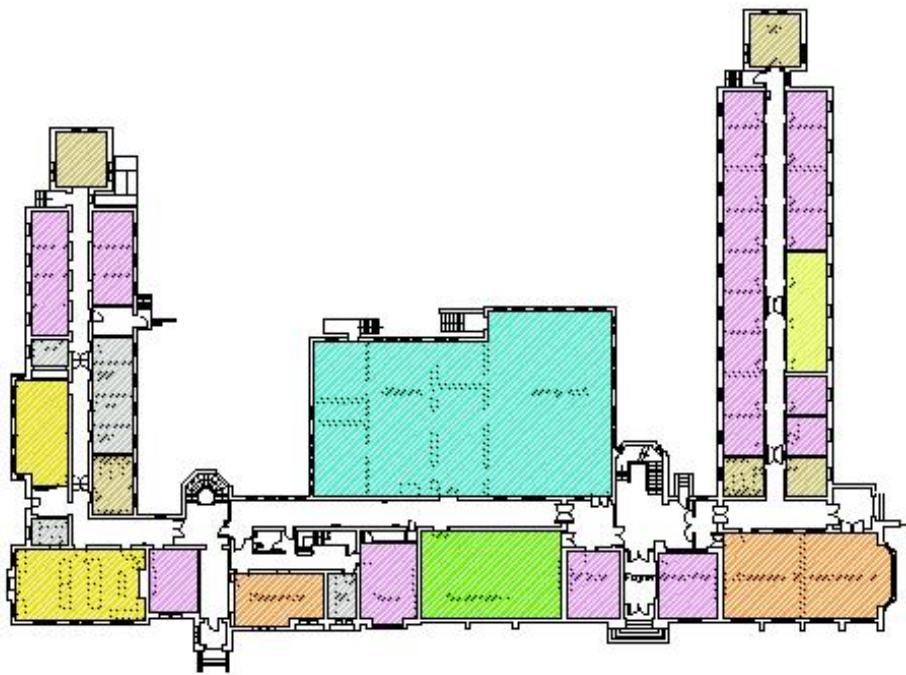
Please find a set of drawing showing the functionality and layout of the space throughout the school building.

The design concept has gone through 5 different stages. Every option (stage) has a stated conclusion giving reasons for its unsuitiandy. Option 5 is the chosen design solution.

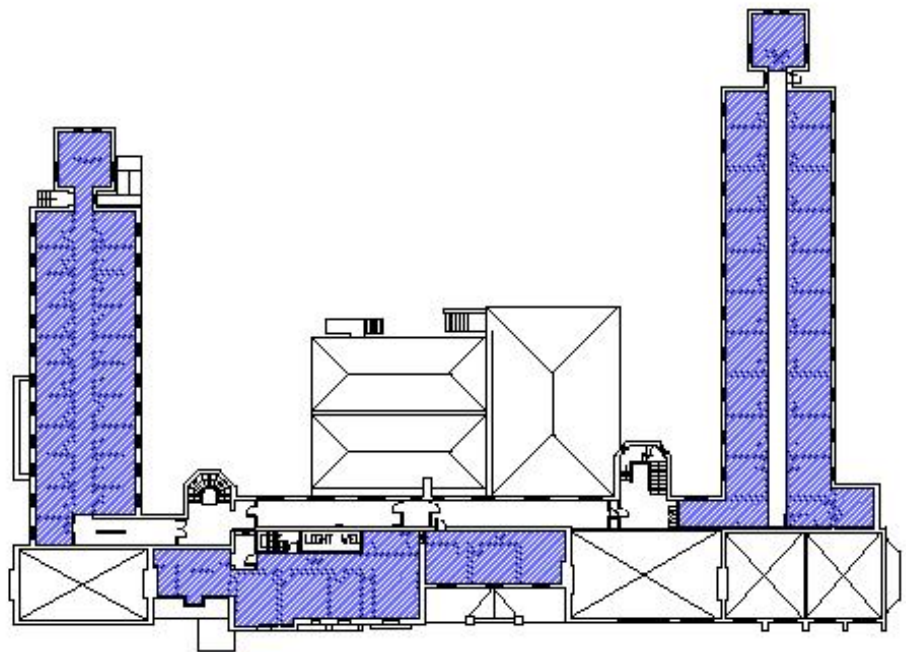
The final option 5 meets our criteria for all 3 laboratories requirement such as minimum 60 sqm for 20 pupils per lab easy access to having 3 laboratories on same floor and perfect rectangular space, 72 sqm to accommodate 20 pupils, small classroom to accommodate 20 pupils and a set of toilet. Moreover reusing existing redundant space to create a new teaching lab space joined with lab stores and lab assistant room the large area on second floor.

To conclude, due to the space being on the second floor this means it requires less steel input for overall support making it a cost effective solution.

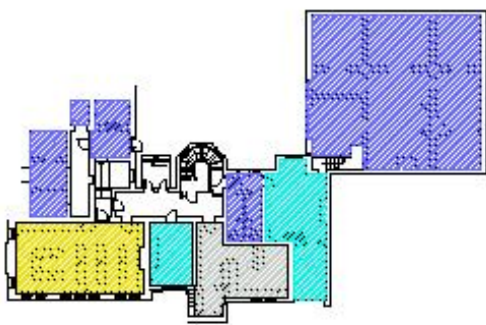
Second Floor Refurbishment



Existing
Ground Floor Plan

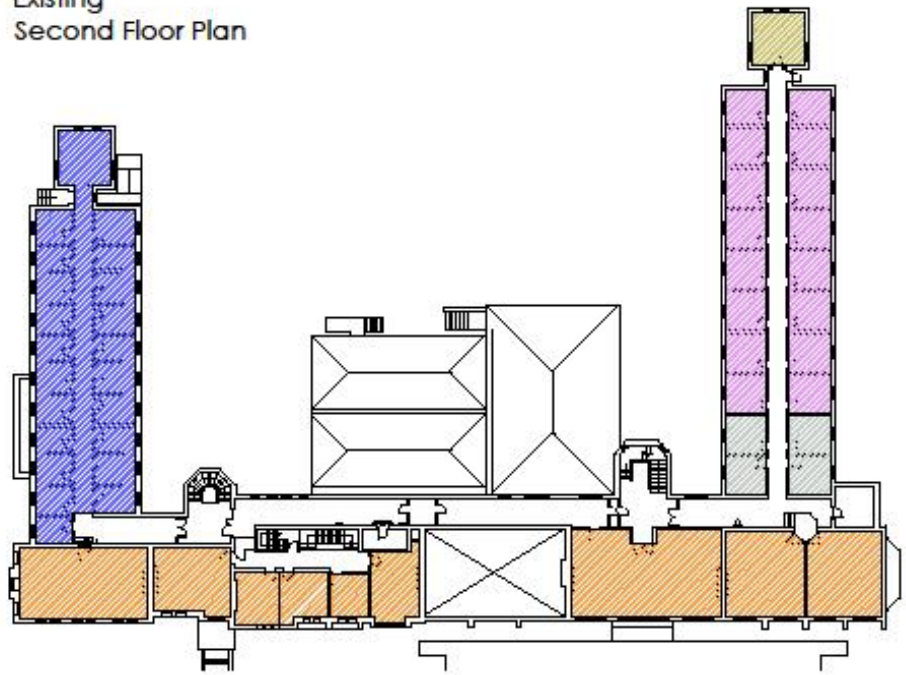


Existing
Second Floor Plan



Existing
Lower Ground Floor

KEY	
	Non Usable Space
	Plantroom
	Store
	Laboratory
	Classroom/Teaching Space
	Library
	Office
	Toilet
	Kitchen / Dining Hall
	Staffroom



Existing
First Floor Plan

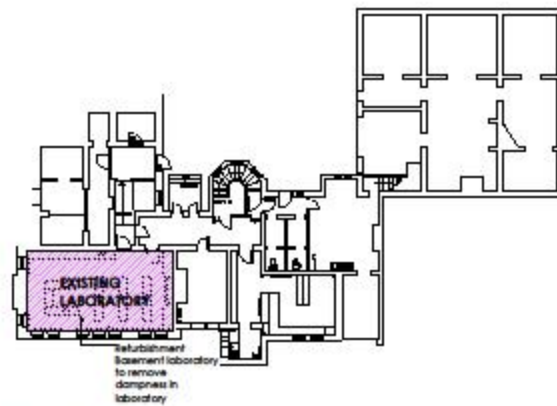
HARTLEY HALL
EXISTING SCHOOL LAYOUT

Second Floor Refurbishment

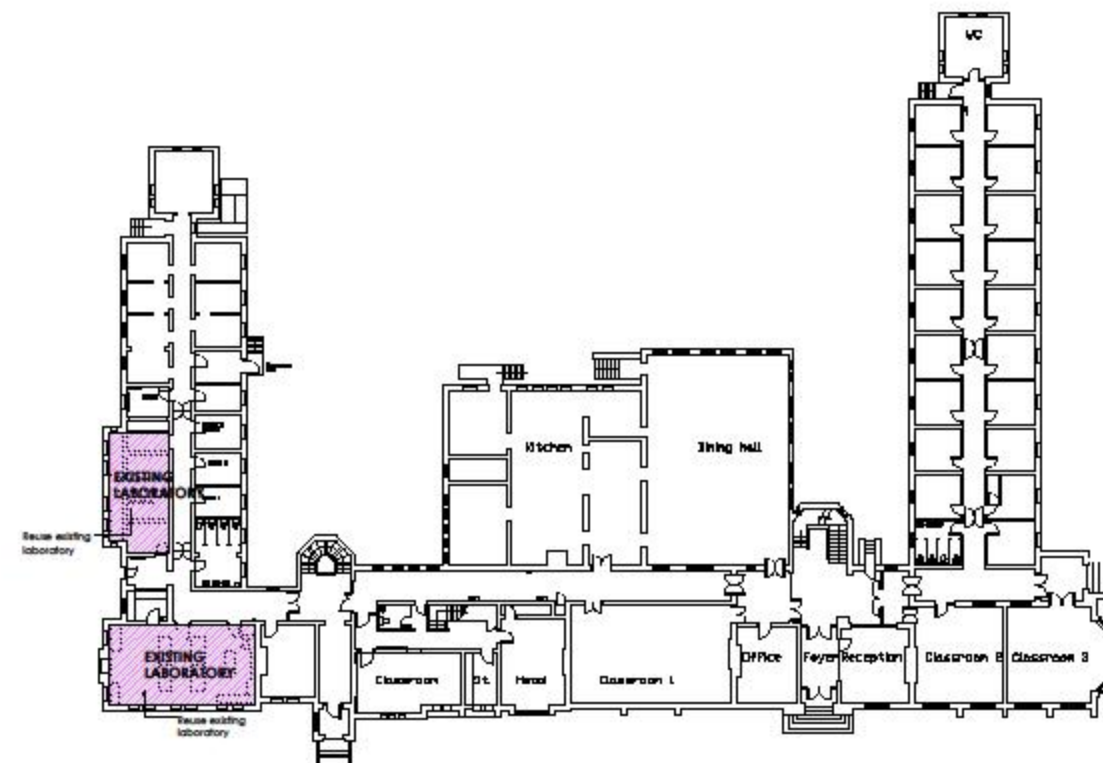
Conclusion:

Option 1

1. By refurbishment Basement, the school unable to achieve minimum size of 60 Square Meters for 20 pupils
2. 3 laboratories operated in different floors.



Option 1
Refurbishment Lower Ground Floor



Option 1
Refurbishment Ground Floor

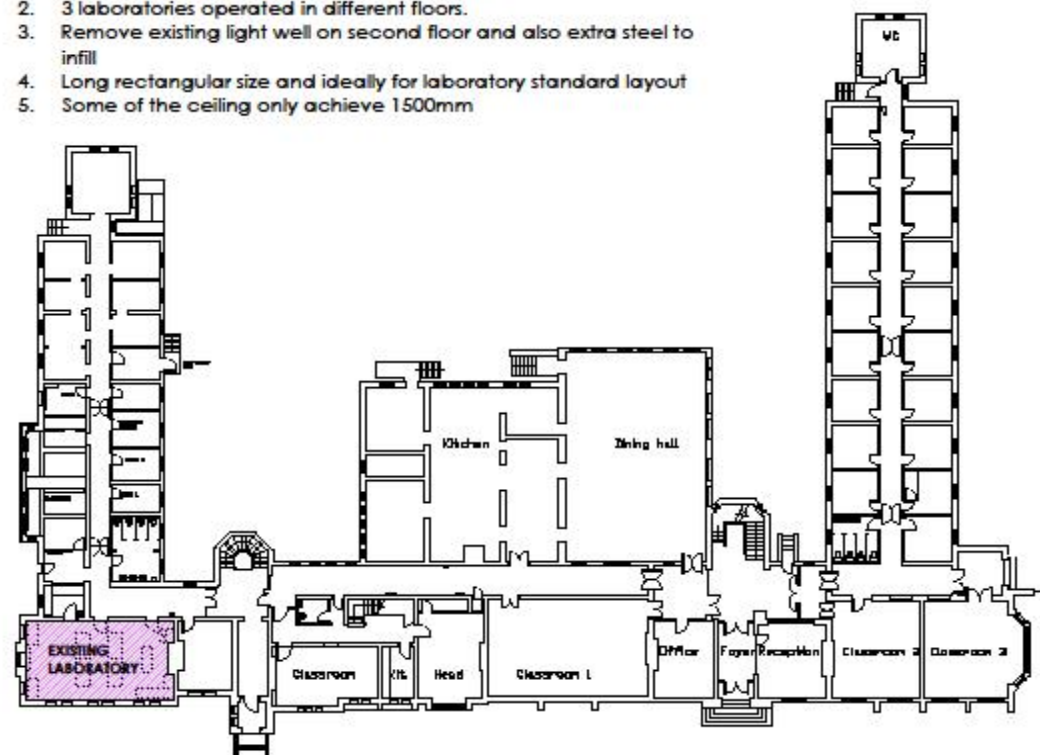
OPTION 1

Second Floor Refurbishment

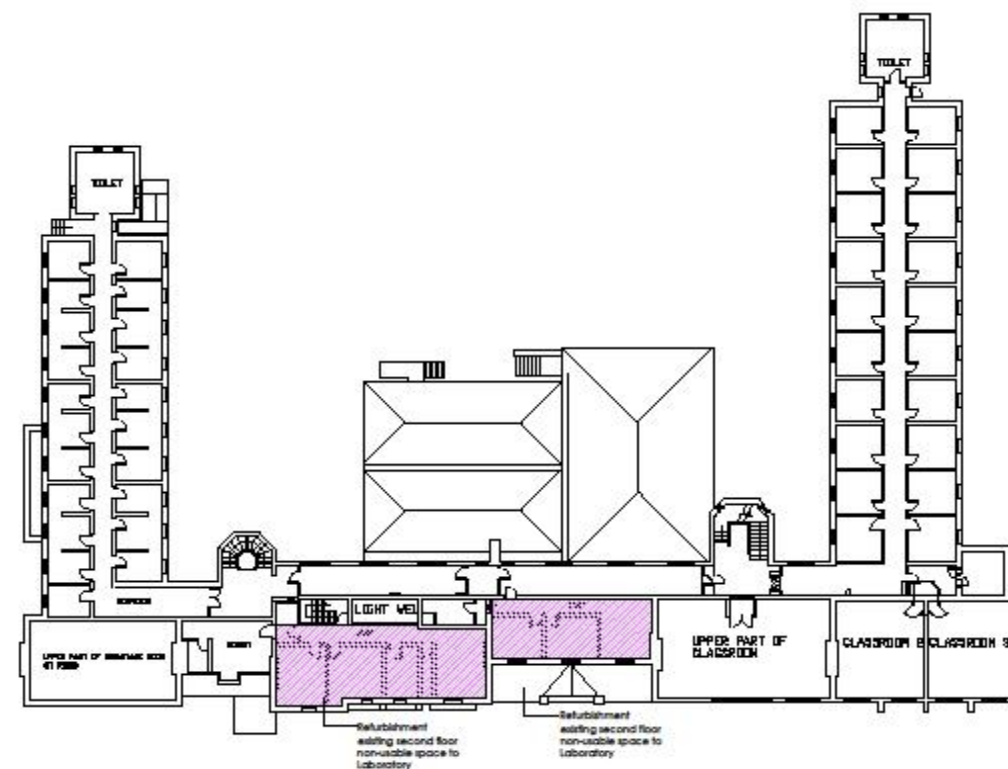
Conclusion:

Option 2

1. By refurbishment Basement, the school unable to achieve minimum size of 60 Square Meters for 20 pupils
2. 3 laboratories operated in different floors.
3. Remove existing light well on second floor and also extra steel to infill
4. Long rectangular size and ideally for laboratory standard layout
5. Some of the ceiling only achieve 1500mm



Option 2
Refurbishment Ground Floor



Option 2
Refurbishment Second Floor

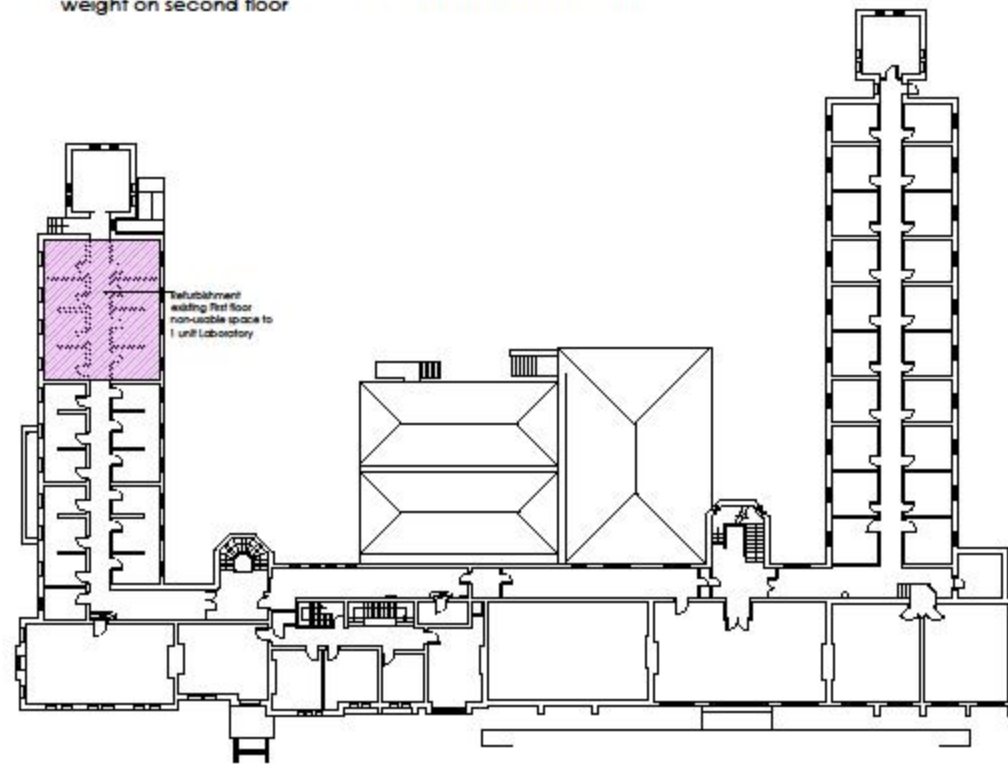
OPTION 2

Second Floor Refurbishment

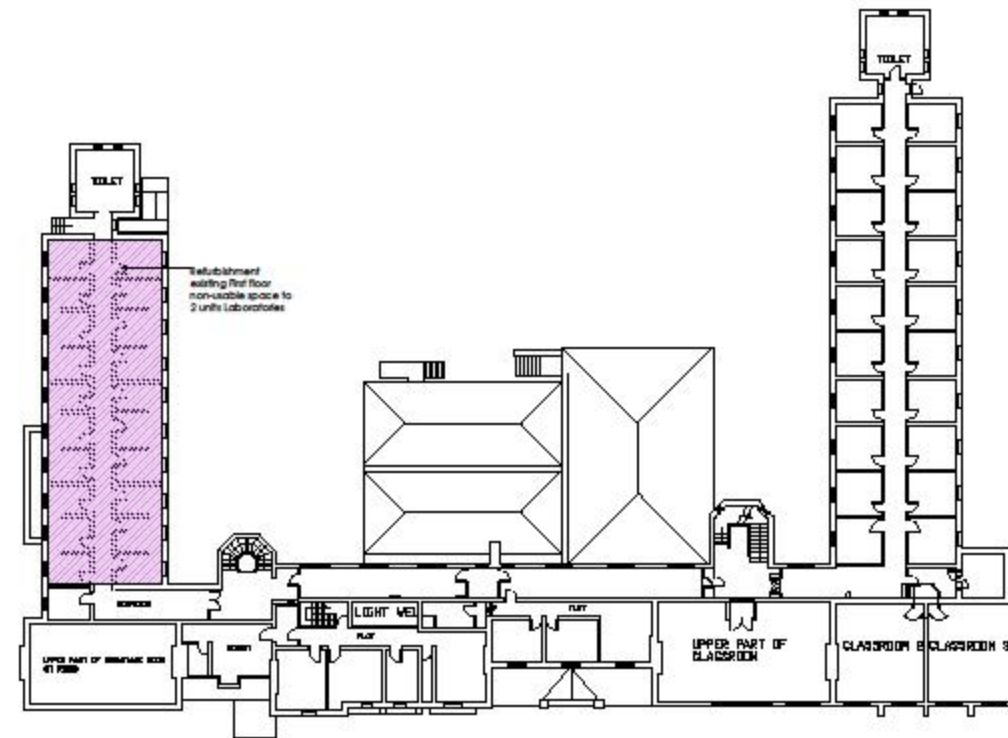
Conclusion:

Option 3

1. 3 laboratories operated in different floors
2. Refurbishment first floor required a lot larger steel to support weight on second floor



Option 3
Refurbishment First Floor



Option 3
Refurbishment Second Floor

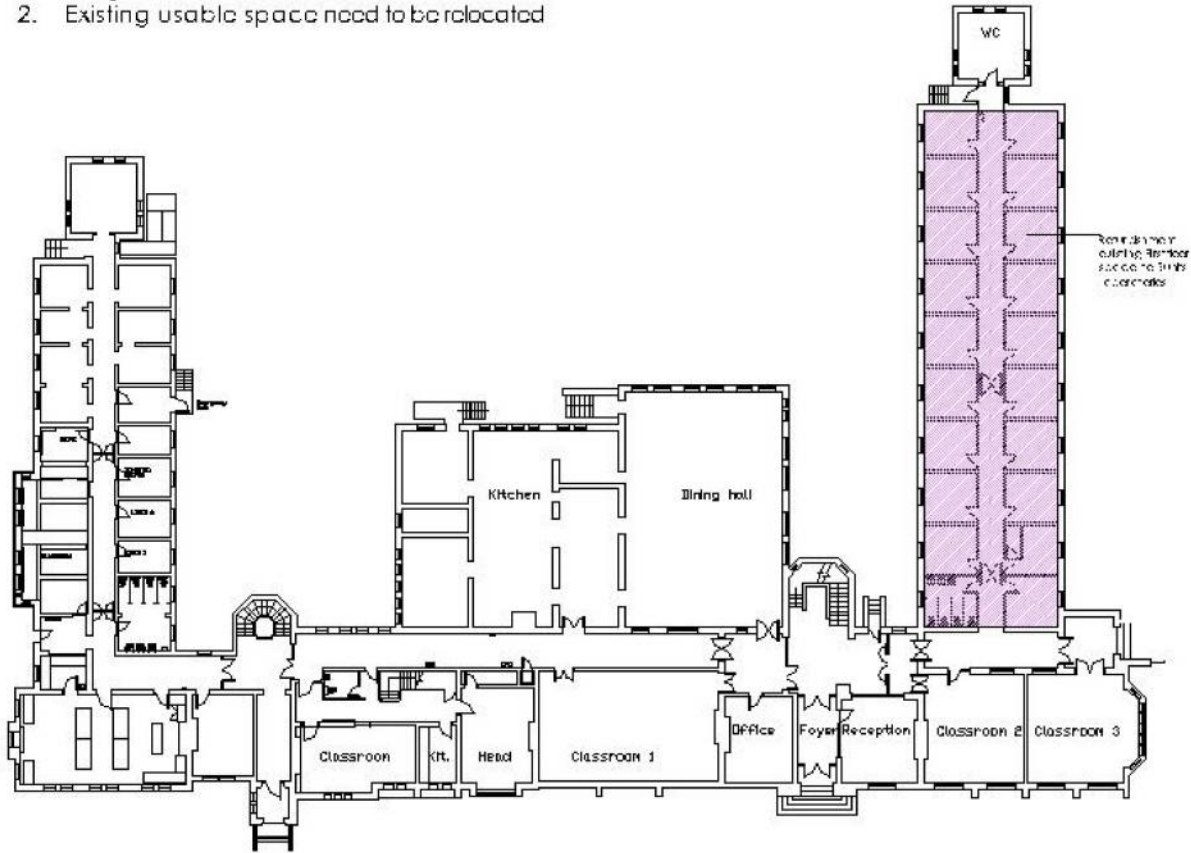
OPTION 3

Second Floor Refurbishment

Conclusion:

Option 4

- 1. Refurbishment ground floor required a lot larger steel to support weight on first and second floor
- 2. Existing usable space need to be relocated



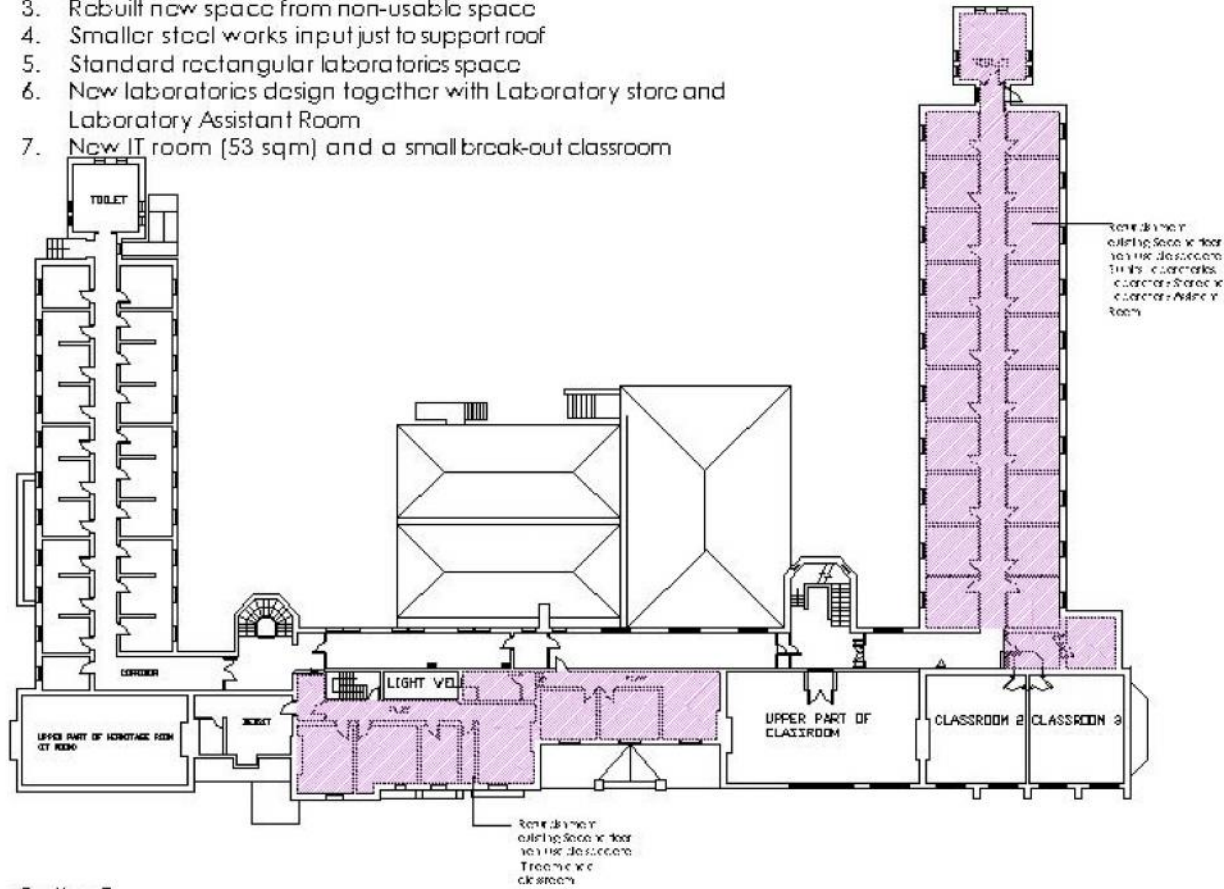
Option 4
Refurbishment Ground Floor

OPTION 4

Conclusion:

Option 5

- 1. 3 Laboratories meet the requirement size (minimum 60 square meters for 20 pupils per lab)
- 2. Easy to operate for 3 Laboratories in same floors
- 3. Rebuilt new space from non-usable space
- 4. Smaller steel works input just to support roof
- 5. Standard rectangular laboratories space
- 6. New laboratories design together with Laboratory store and Laboratory Assistant Room
- 7. New IT room (53 sqm) and a small break-out classroom



Option 5
Refurbishment Second Floor Floor

OPTION 5

Second Floor Refurbishment

C Demolitions

Demolish internal walls to suit new layout providing new steel supporting the structure as advised by SE.

Windows panel and windows frame to new proposed laboratory to be carefully removed awaiting for new installation of original timber sash windows

D Steelwork – refer to Structural Engineer

All new steelwork to be provided to site with zinc rich primer or red oxide coating to prevent corrosion. All new steelwork to be sized by SE and installed in accordance with their details.

E Floors

Make good floors where existing internal partitions have been removed. Provide 2 layers 18mm WBP plywood on top of joists each layer with staggered joints to support final floor finish.

F External walls

Generally no changes are proposed to the existing external walls. Though, minor repairs and making good may be required after inspection of the conditions of walls near to the fire escape route replace new glazed on external door panel.

Second Floor Refurbishment

G Windows – repair/renew

As agreed all external aluminium window to be replaced with timber sash window set. To bring back original timber sash window design.

All toughened / laminated glass will be to BS 6206 Class A and toughened glass will be heat soaked in accordance with DIN 18516 Part 4.

H External Doors

Generally no changes are proposed to the existing external doors, though minor repairs and making good may be required after inspection of the conditions to the fire escape door adjacent to the Boys toilet.

I Internal walls & partitions – repair/renew & new

As part of the works to create three contemporary lab spaces a number of the original internal walls will require adapting. Rather than fully remove the original walls it is proposed that large openings are created within the walls leaving large visible portions of the historic fabric of the building intact.

Generally, new internal partitions will be lightweight partition Acoustic & Fire rated stud partitioning- Main circulation spaces and laboratories separation walls specification as shown below:

130mm thick (nom) galvanised stud partition (Gypwall Robust system) with 70mm Acoustuds at 600c/c.50mm thick Isover APR 1200 insulation.Two layera of 15mm Duraline plasterboard and 3mm skim finish to each side.

All junctions and abutments to be fire-sealed by accredited installer for warranty and certification.

Second Floor Refurbishment

J Internal doors

Generally, reuse all internal doors and frame solid painted doors. All fire doors to be FD30S complying with BS 476 and self-closing with intumescent smoke seals.

All doors at the second floor level (refurbishment area) may be retained and in this case allowance should be made for complete removal of the door from site and re-finishing to a high standard, before replacement.

Generally, new ironmongery will be specified to all internal doors as stainless steel to suit existing design.

K Roof coverings

Generally all roof in good condition. All roof leaks have been repaired 2 years ago.

L Stairs

(Stair access to new proposed laboratories) Inspect existing stairs for any damage and repair as required before redecoration.

M Finishes

Wall Finishes:

Existing walls—After thorough cleaning of walls, apply 2no.coats of vinyl matt emulsion paint onto existing substrate.

New walls - One mist coat and 2no full coats of vinyl matt emulsion on taped and jointed plasterboard.

Toilets/Changing Rooms

Walls will be finished in a combination of three coats (one mist coat and 2no full coats) vinyl matt emulsion paint, applied directly to taped and jointed moisture resistant plasterboard, mirrors and back-painted glass, with 100 mm MDF painted skirting.

Joinery items

Existing timber joinery (skirtings/wall moulding/architraves/stairs etc.) shall be refurbished (sand down and fill) and redecorated - one undercoat and 2no. fullcoats eggshell.

New timber joinery – one undercoat and 2no.full eggshell

Second Floor Refurbishment

Floor Finishes:

Corridor Second Floor

Vinyl Sheetting: Marmoleum or Homogeneous / Heterogeneous PVC by `Forbo`. Installed over 2-3mm self-levelling screed to prepared sub-strate. 2mm gauge sheetting to be fully hot seam welded in colour match rod. Coved up walls to specified height.

Toilet & Laboratories Second Floor

Vinyl Sheetting: Marmoleum or Homogeneous / Heterogeneous PVC (NON-SLIP) by `Forbo`. Installed over 2-3mm self-levelling screed to prepared sub-strate. 2mm gauge sheetting to be fully hot seam welded in colour match rod. Coved up walls to specified height.

Ceiling finishes:

Existing ceilings

After thorough cleaning of ceilings, apply 2no.coatsvinyl matt emulsion paint onto existing substrate.

N M&E Installation

Mechanical

Replace new ceiling extract fan in Assistant Laboratory Room and ducting up to the roof. Ventilation duct will be lower than the roof ridge.

Ventilation –Whole refurbishment area will be using natural ventilation supplying and removing air from an indoor space without using mechanical systems.

Power

All laboratories and corridor will have a dedicated cable tray delivering power for services equipment.

Lighting

Each space will be provided with suitable lighting for the tasks that will likely be conducted in those areas installation below the cable tray.

Compliant with CIBSE recommended lux levels. Lighting control will be automatic.

Fire Alarm

The space will be provided with an L1 fire detection scheme. This will be provided with a system via smoke alarms in line with the fire regulation strategy for the building.

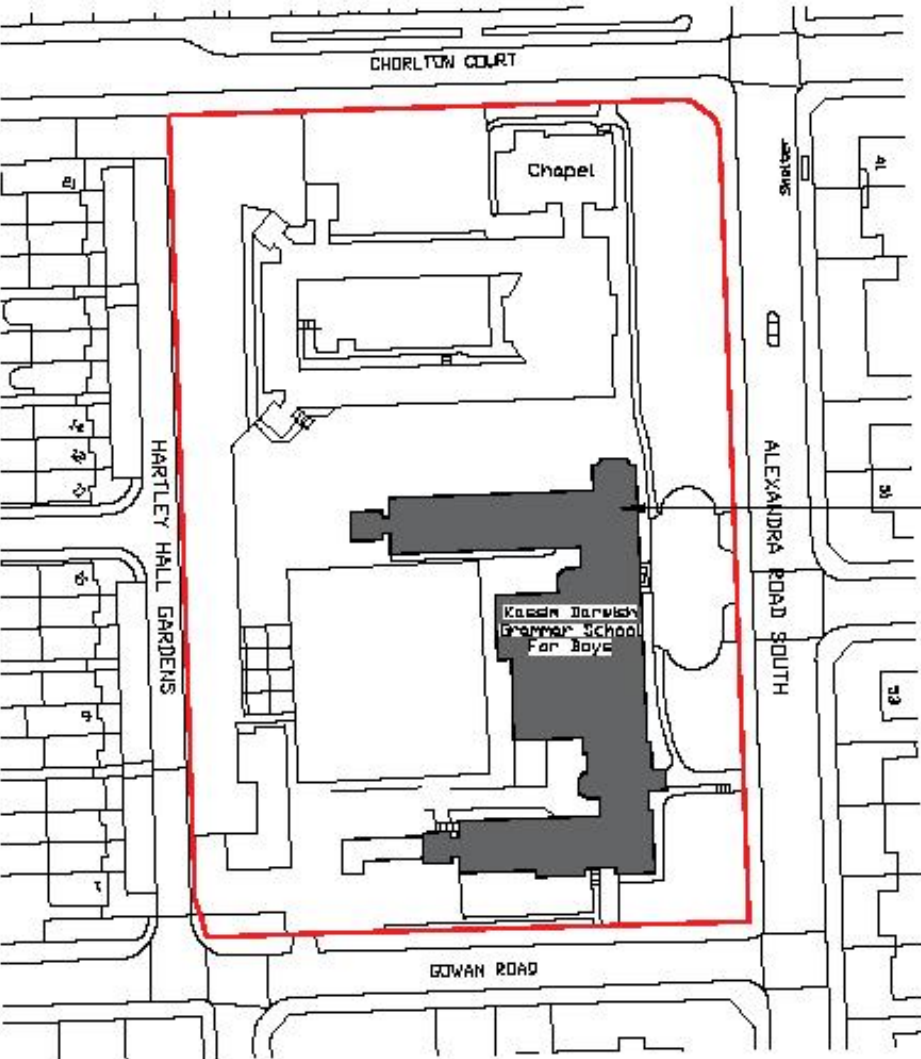
Second Floor Refurbishment

P Public Health

Hot & Cold Water Services

The existing water supply shall be provided to all laboratories sink. A booster set will be installed to provide outlets within the building with a satisfactory water pressure.

Second Floor Refurbishment



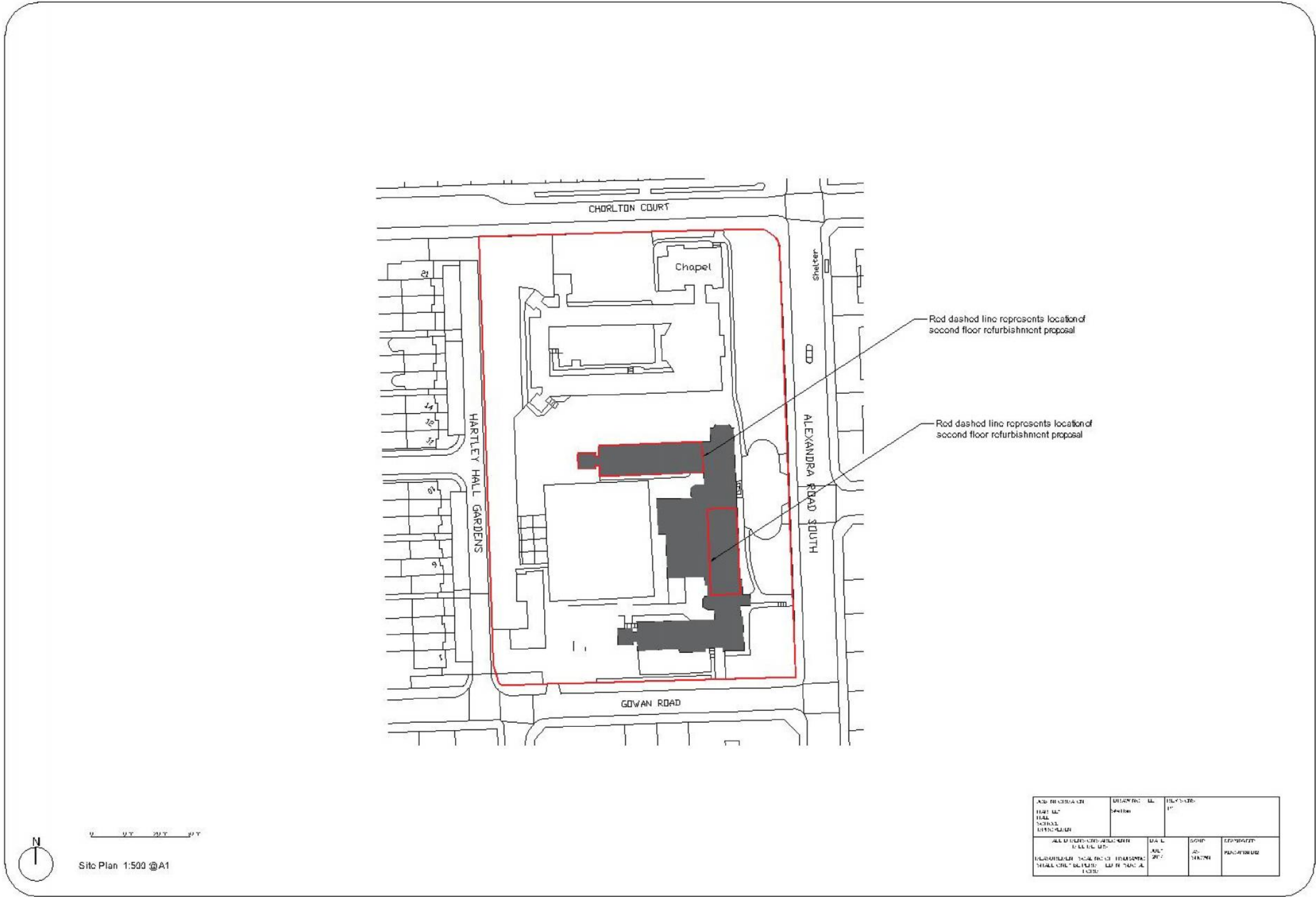
Site Address:
Hartley Hall
Alexandra Road South
Manchester
M16 8NH



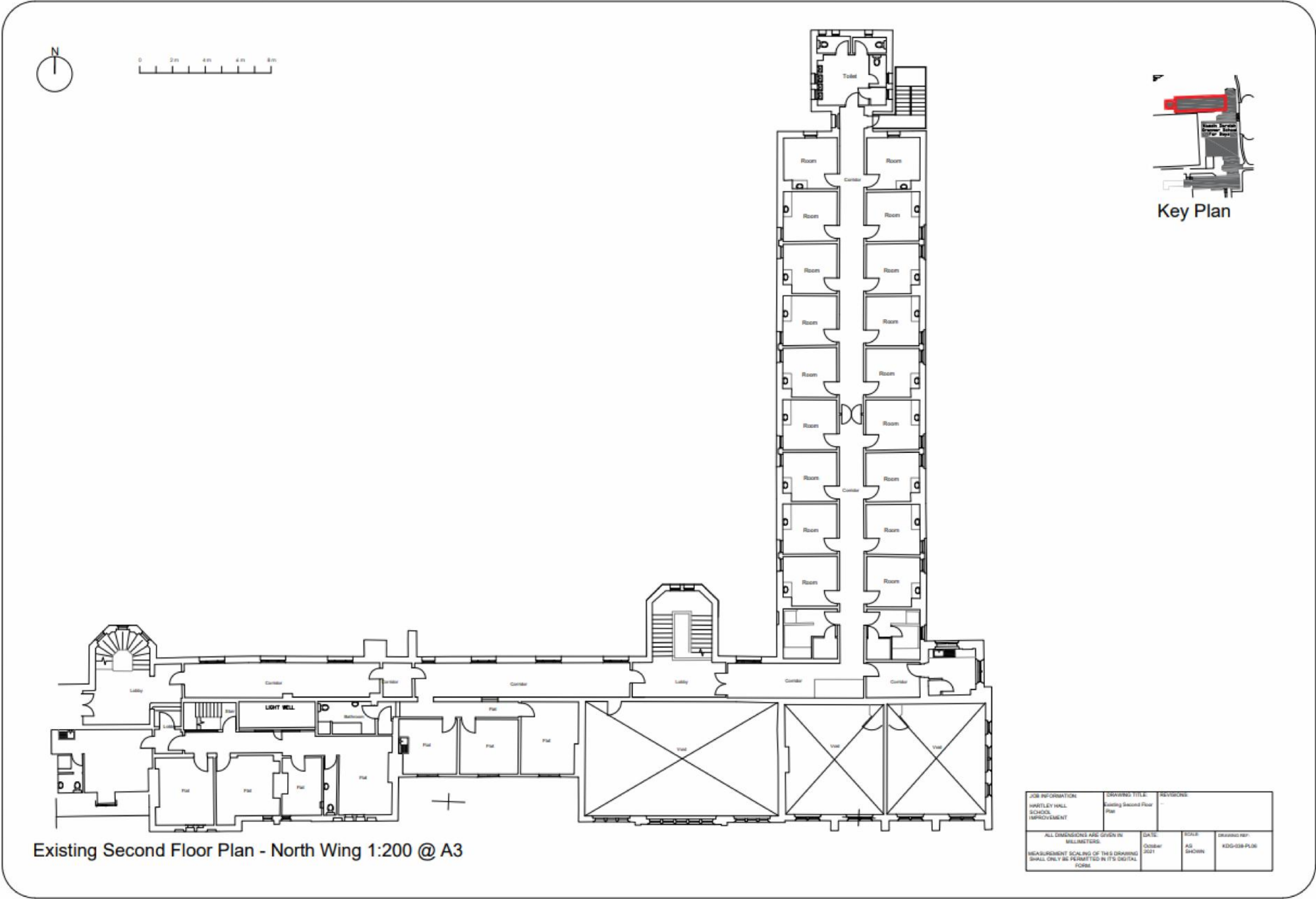
Location Plan 1:1000 @ A3

JOB INFORMATION: HARTLEY HALL SCHOOL IMPROVEMENT	DRAWING TITLE: Location Plan	REVISIONS: P1
ALL DIMENSIONS ARE GIVEN IN MILLIMETERS. MEASUREMENT SCALING OF THIS DRAWING SHALL ONLY BE PERMITTED IN ITS DIGITAL FORM.	DATE: JULY 2017	SCALE: AS SHOWN
		DRAWING REF: KDG-038-PL01

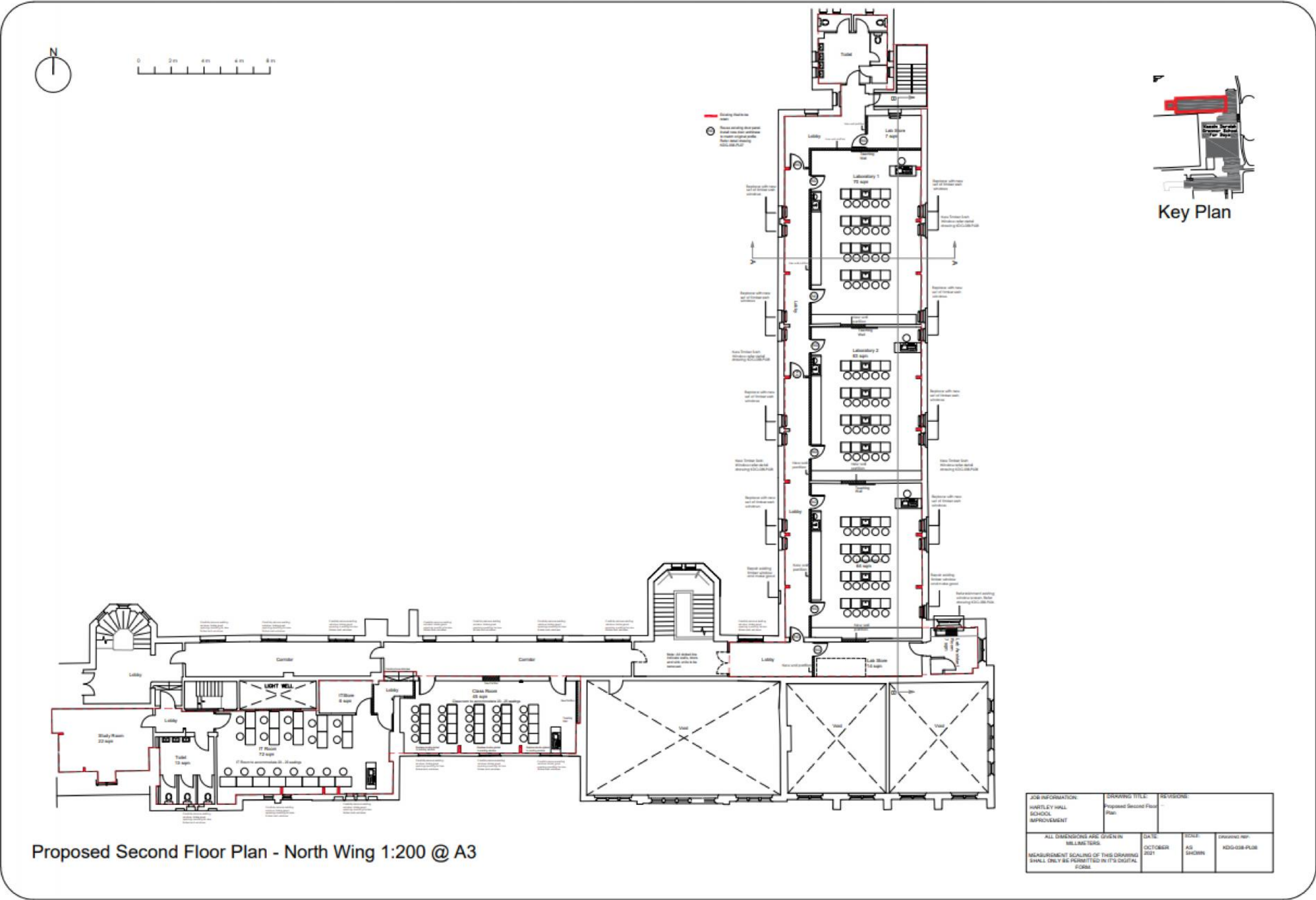
Second Floor Refurbishment



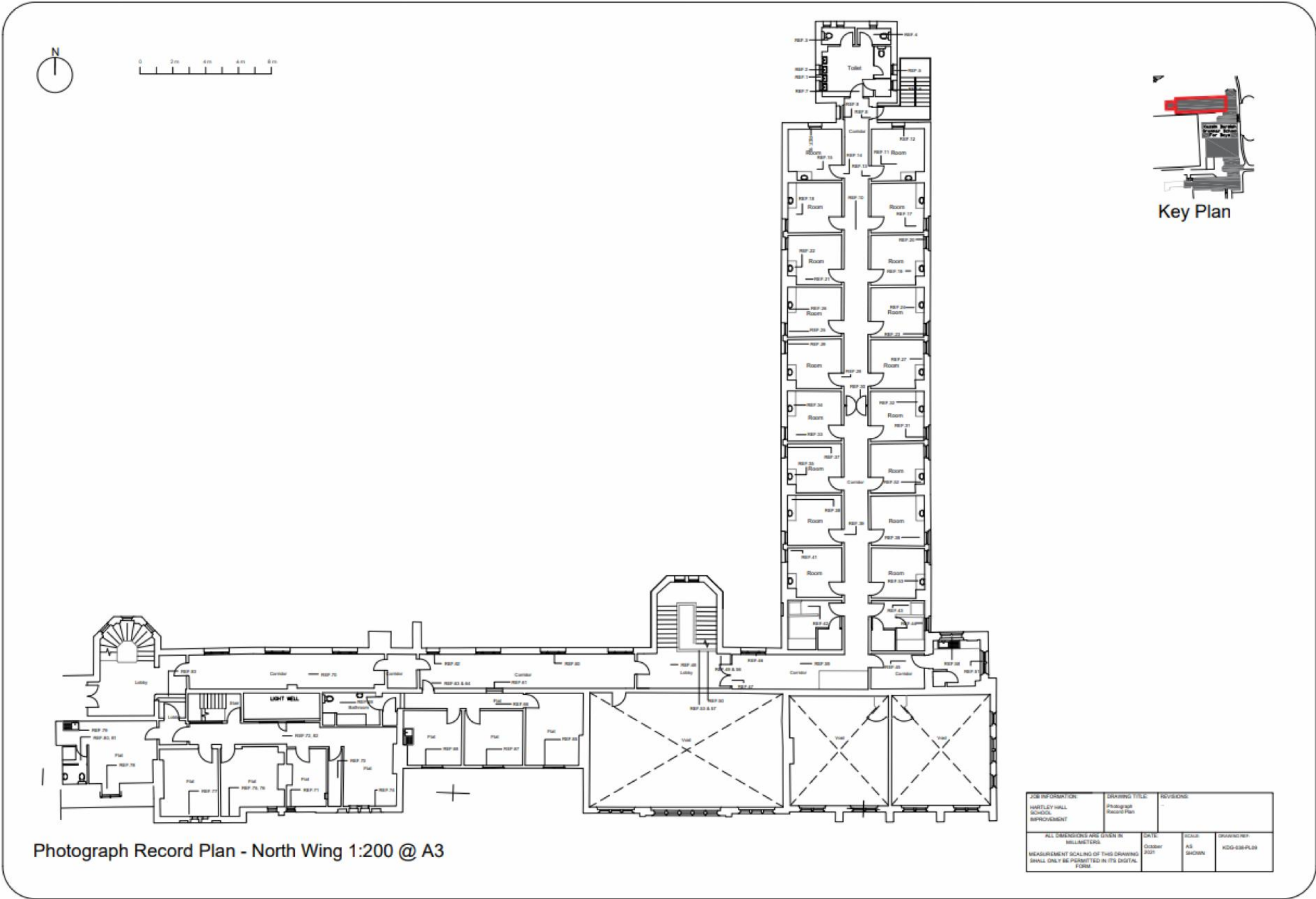
Second Floor Refurbishment



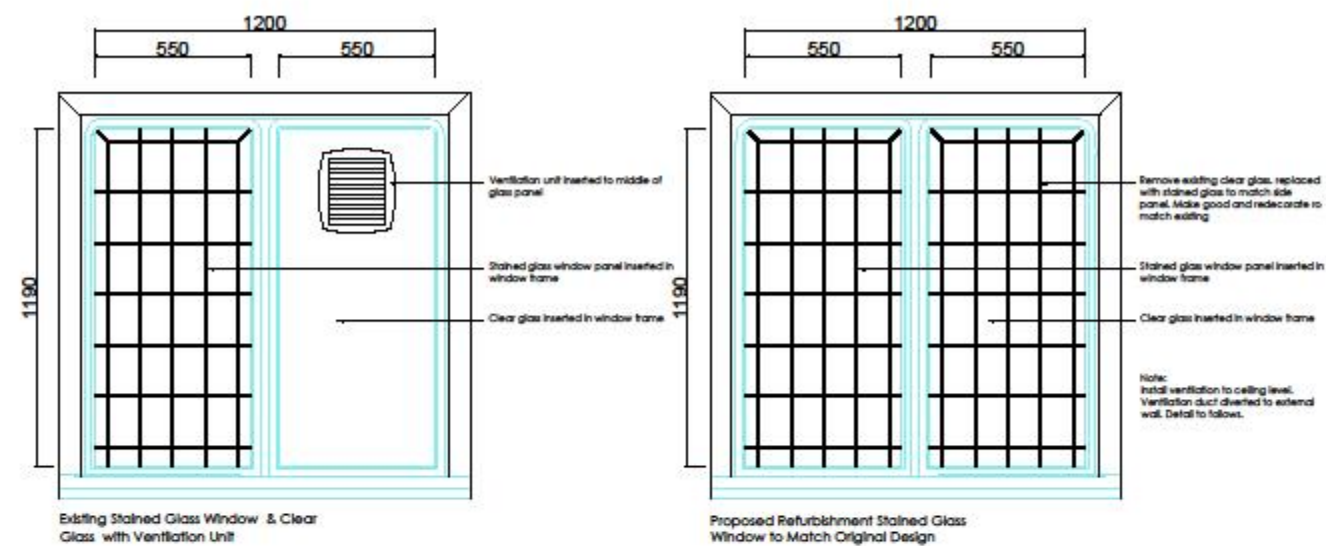
Second Floor Refurbishment



Second Floor Refurbishment

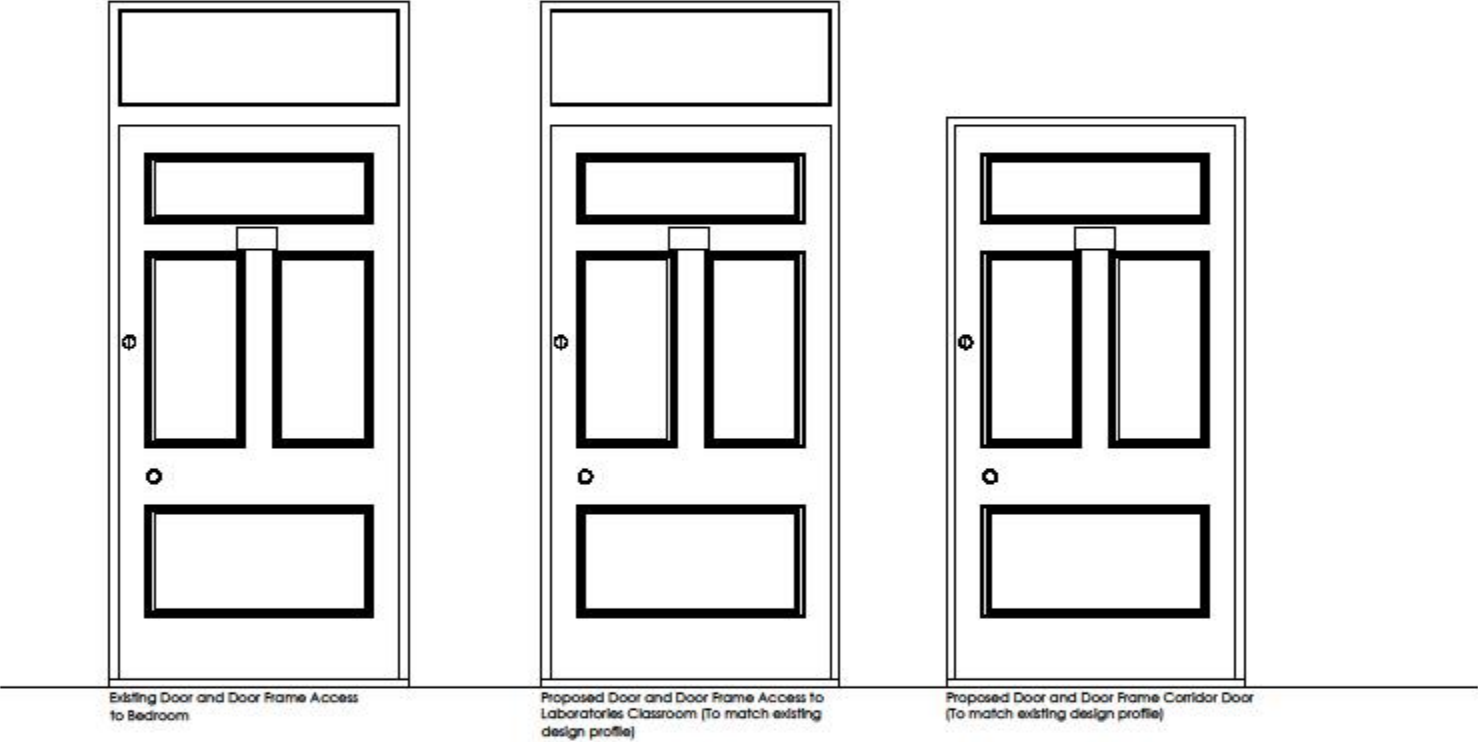


Second Floor Refurbishment



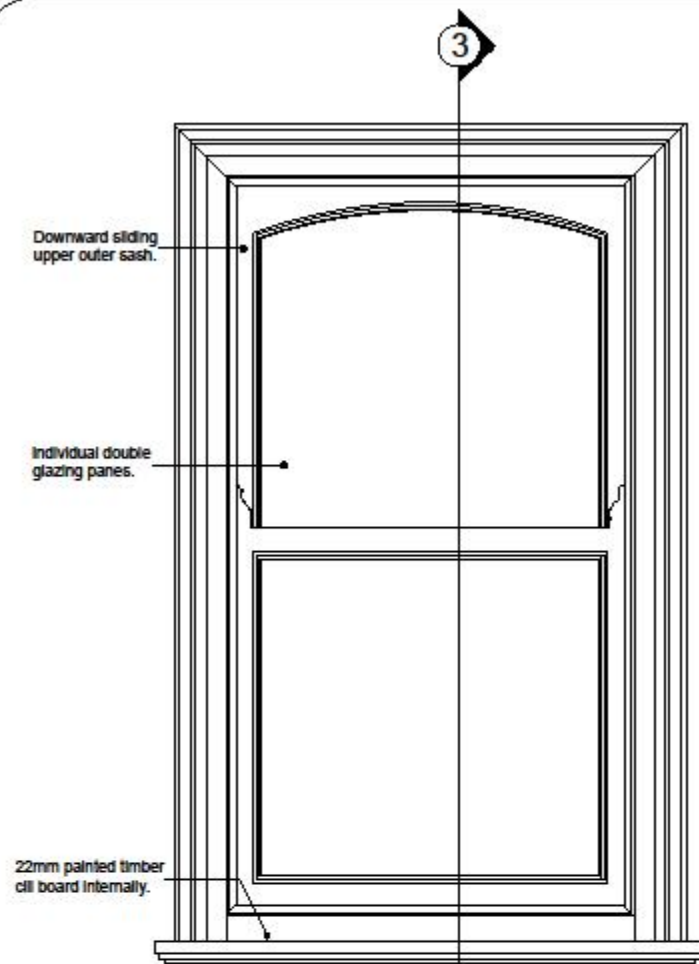
JOB INFORMATION: HARTLEY HALL SCHOOL IMPROVEMENT	DRAWING TITLE: Existing & Proposed Window Screen in Laboratory Assistant Room	REVISIONS: P1		
		ALL DIMENSIONS ARE GIVEN IN MILLIMETERS. MEASUREMENT SCALING OF THIS DRAWING SHALL ONLY BE PERMITTED IN ITS DIGITAL FORM.	DATE: JULY 2017	DRAWING REF: KDG-038-PL06

Second Floor Refurbishment

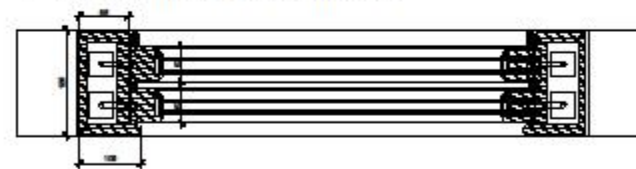


JOB INFORMATION: HARTLEY HALL SCHOOL IMPROVEMENT	DRAWING TITLE: Existing & Proposed Internal Door Set	REVISIONS: P1		
		ALL DIMENSIONS ARE GIVEN IN MILLIMETERS. MEASUREMENT SCALING OF THIS DRAWING SHALL ONLY BE PERMITTED IN ITS DIGITAL FORM.	DATE: JULY 2017	DRAWING REF: KDG-038-PL07

Second Floor Refurbishment



1 - WINDOW INTERNAL ELEVATION 1:10



2 - WINDOW PLAN 1:10

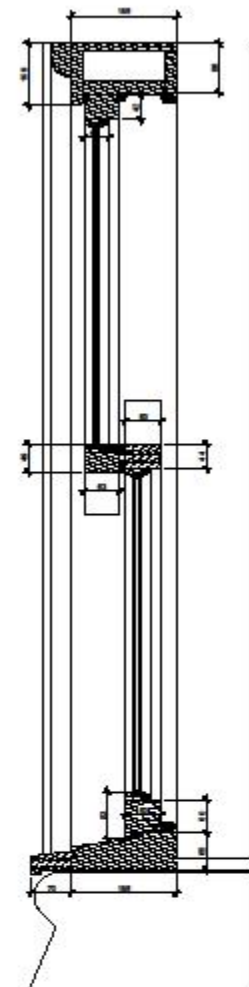
System fittings are to comprise of cord clutch, cord plug sash fastener and slotted hinges factory fitted to the windows and satisfactorily tested prior to delivery.

NOTES

Typical Replacement Window Details:
Traditional style timber sash window with paint finish all to match existing windows which are being removed.
All frames, boxes, rails and beads to be constructed from engineered solid timber using either Sapele Mahogany or Accoya.

Typical Double Glazing Specification:
Outer pane of 4mm thick SGG Planiclear
Securit, 4mm thick 90% krypton warm
edge and 4mm thick SGG Securit
Planiclear Panithem ONE T.

All joinery dimensions indicated are subject to site survey of existing joinery profiles and timber availability.



3 - WINDOW SECTION 1:10



4 - SKIRTING & WALL PANEL MOULDING
1:10

JOB INFORMATION: HARTLEY HALL SCHOOL IMPROVEMENT	DRAWING TITLE: Replace New External Window & Proposed Skirting to Match Existing	REVISIONS: P1		
ALL DIMENSIONS ARE GIVEN IN MILLIMETERS.		DATE: JULY 2017	SCALE: 1:10(A3)	DRAWING REF: KDG-036-PL08
MEASUREMENT SCALING OF THIS DRAWING SHALL ONLY BE PERMITTED IN ITS DIGITAL FORM.				