3.7 Link Entrance—

The proposed entrance reconstructs the existing link wall, allowing us to move the entrance doorway to the west side of the link. In front of the entrance, a small stone bench finishes the paved area and provides a visual queue for the entrance when people enter the Fellows' Garden.

The facade is composed of panels of bath stone ashlar that subtly step back in layers and step down in scale to the entrance door. Stone blocks of a similar height to the main facade are laid in a random stretcher bond, and panels are edged with more finely honed and chamfered stones.

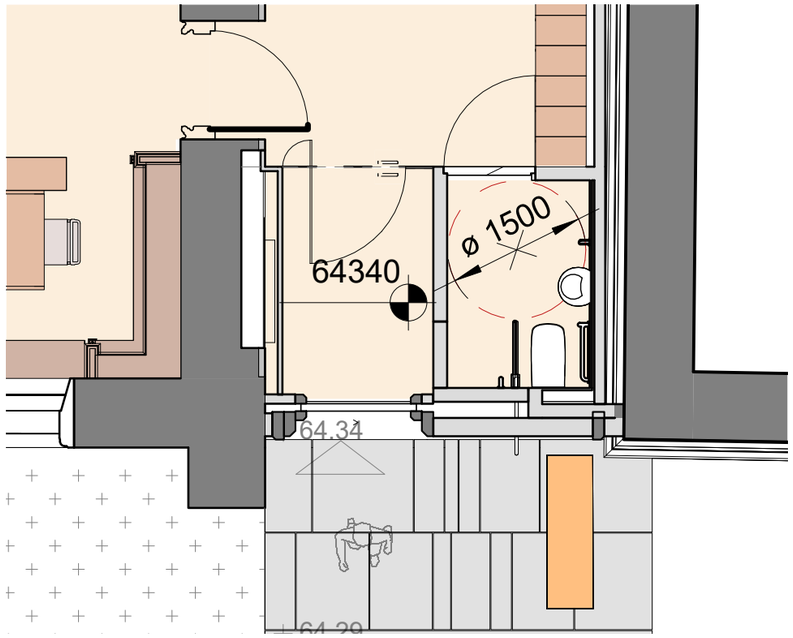
The doorway width and height complements the main entrance door. Reflecting the treatment around the main entrance, the new doorway surround has a more finely honed finish.

The rounded and chamfered reveal surrounding the door offers a contemporary interpretation of the shouldered arch found in some of the other doors in the building. In this case a bronzed metal light fitting sits above the door to illuminate it. A boarded oak door with a rose window will automatically slide into a discrete pocket behind the stone.

Proposed Link Entrance from Fellows Garden

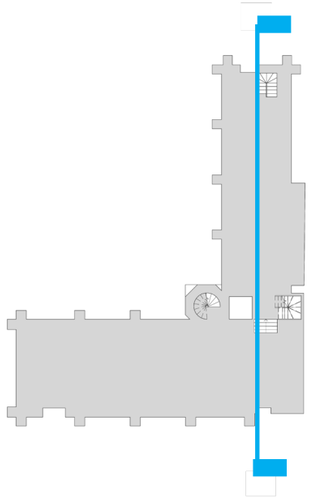
Ashlar Reveal Detail

Exterior Stonework - Museo di Castelveccio - Carlo Scarpa

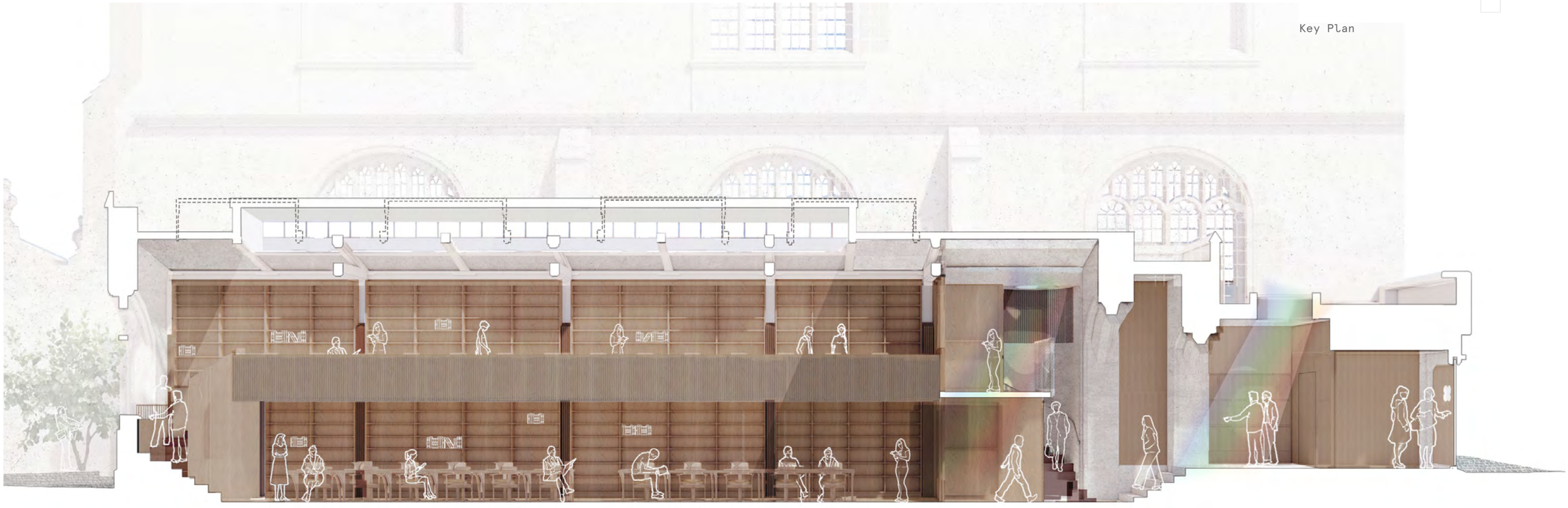


Key Plan

3.7 Link Entrance—



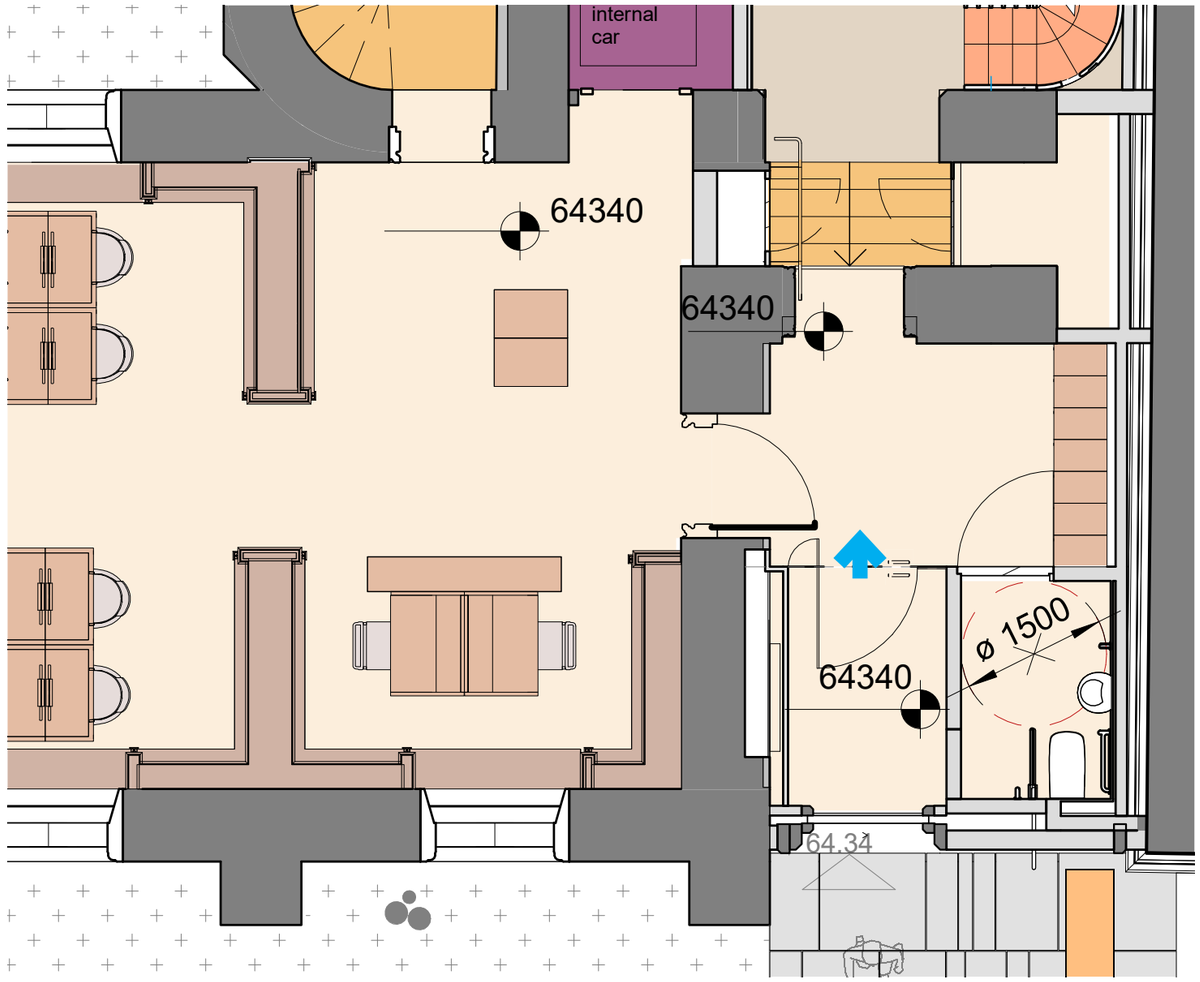
Key Plan

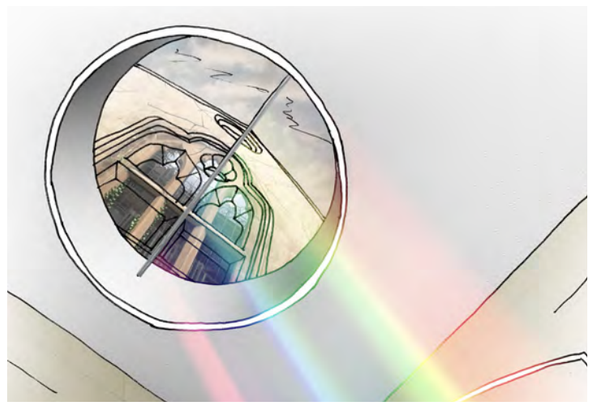


Section through Annexe and New Entrance

3.7 Link Entrance—

New Entrance Vestibule Interior





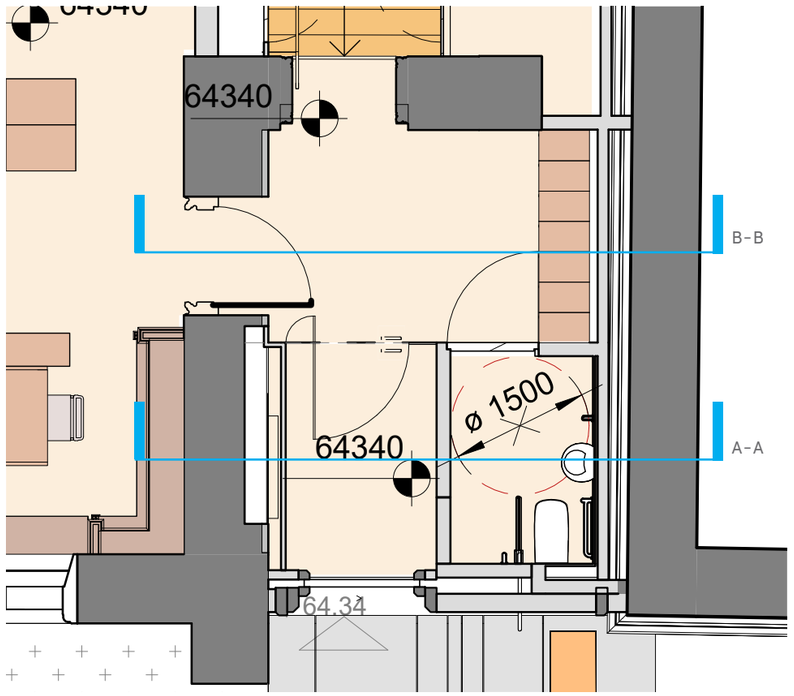
View of upper library range through roof-light

3.7 Link Entrance—

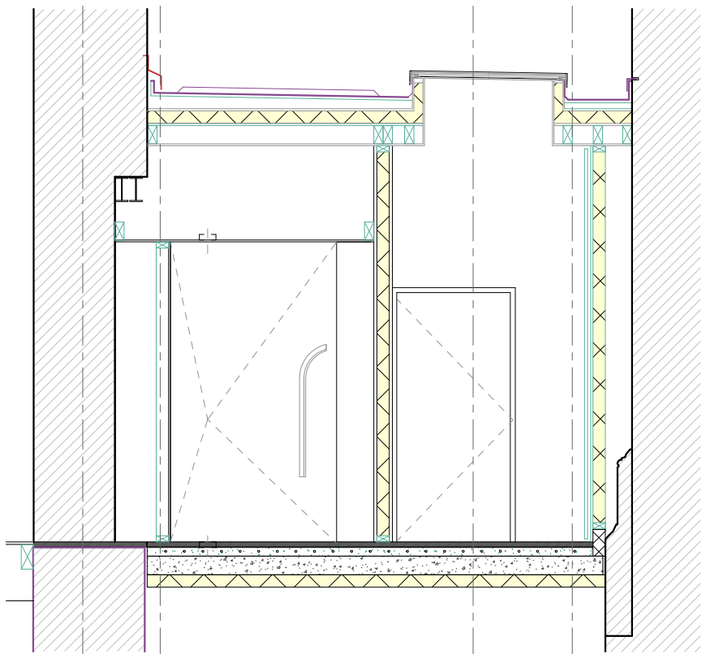
Link Entrance Boundary
Some walls and the roof of the existing Link block will be demolished and replaced with a new entrance block that abuts the Bodleian wall. The boundary wall will step back around the window to Convocation House to ensure that daylight is not restricted.

The proposed floor, wall and roof structure in this location will be free-standing and self-supporting. Lead flashing will be tucked into a mortar joint on the Bodleian wall underneath the window sill of Convocation House.

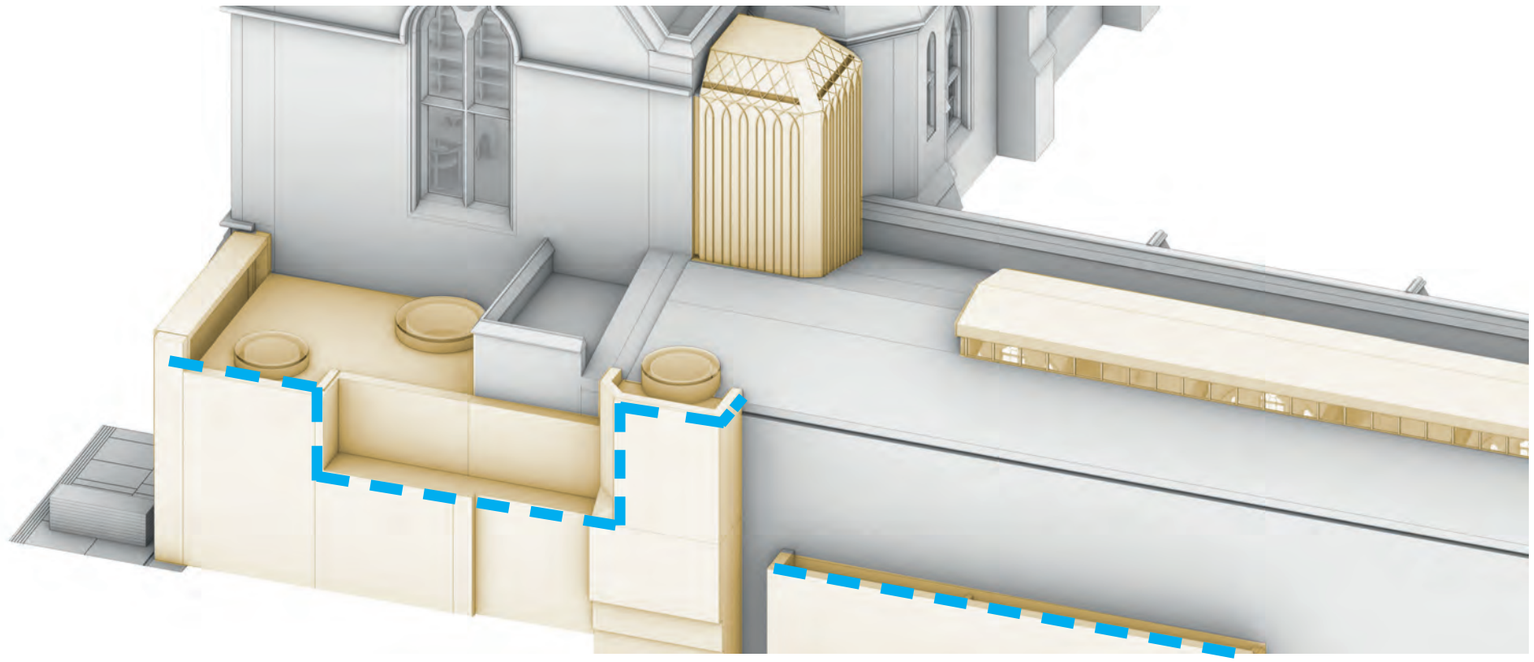
The reduced headroom space underneath the Bodleian window sill will house reader lockers. The wall area above is solid wall construction to minimise light spill into Convocation House at night. We propose to place a coloured glass art piece in this location to welcome visitors into the library.



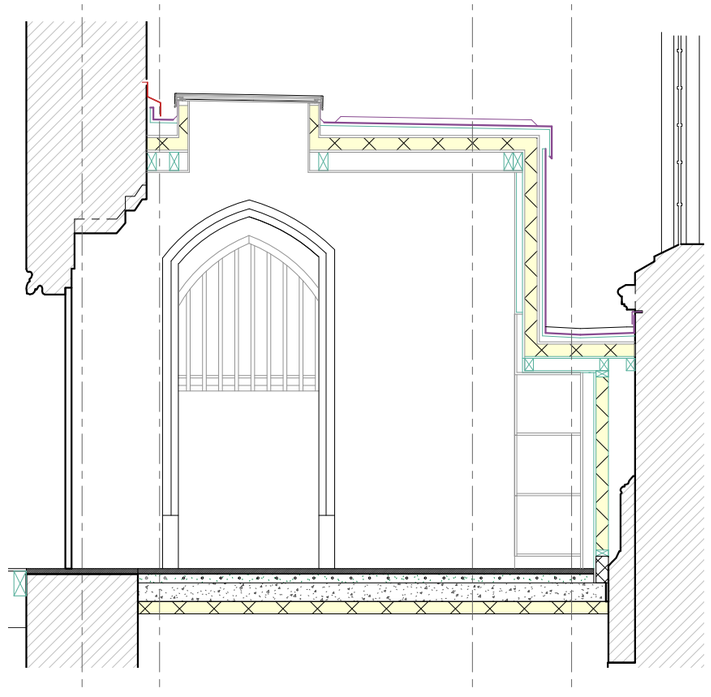
Key Plan



Section A-A



View of East boundary (Bodleian Omitted) highlighting new elements of construction. Blue line denotes extent of lead flashing into Bodleian wall.



Section B-B

3.7 Link Entrance—

Bodleian Interface
The current junction with the Bodleian is dressed unevenly into the wall and appears to have required the destruction of much of the original window cill.

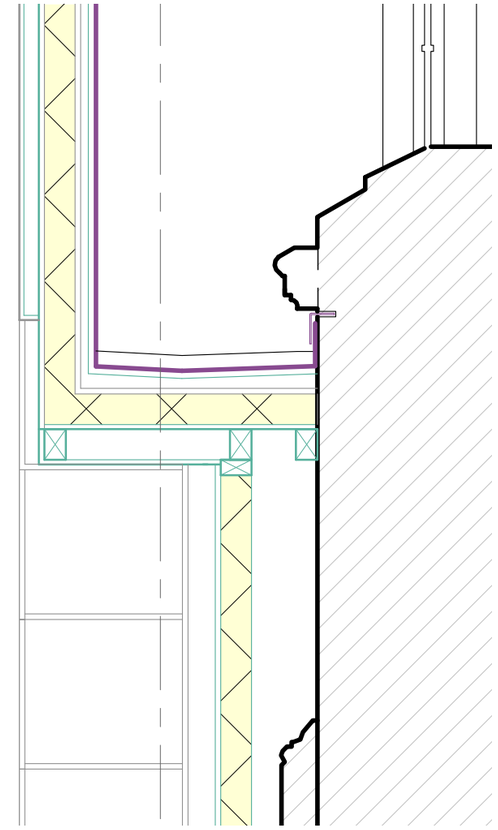
Our proposal seeks to improve on the existing interface by lowering the junction with the Bodleian to beneath the cill. The work offers the opportunity to repair the damaged cill or at least protect the window surround from further deterioration.

The current arrangement includes a single drainage route along the line of the window cill. The proposed roof will include an additional backup rainwater outlet to mitigate the risk of blockage and water damage to the fabric of the Bodleian. An overflow flood sensor and permanent maintenance access will be provided to this roof to allow for regular inspection.

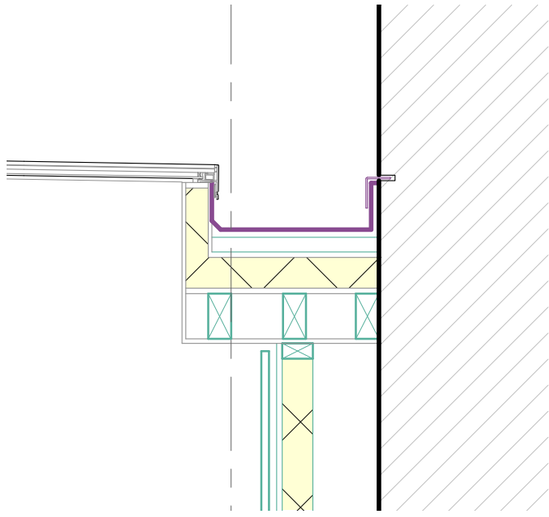
Beyond the window, leadwork will be flashed into mortar joints within the Bodleian wall. Further site surveys to determine the remaining extent of the Bodleian cill profile and mortar joint positions will allow working details to be developed during Stage 4.

Existing condition showing leadwork abutting bodleian cill

Example Lead / Stone Interface Detail



Section to show lowered interface at Bodleian cill

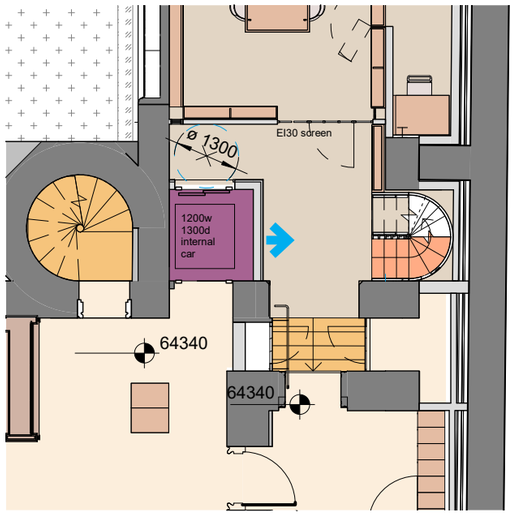


Interface section south of Bodleian window

3.7 Link Entrance—

South Stairs
A new stairs will be inserted to access the annexe mezzanine next to the lift. Offering easy access from the new entrance, the stairs will be made from oak joinery and be top-lit via a circular roof-light.

Placing a stairs in this location is made possible by infilling the gap alongside the Bodleian. The proposed floor, wall and roof structure will be free-standing and self-supporting. Lead flashing will be tucked into a mortar joint on the Bodleian wall with an accepted heritage detail.



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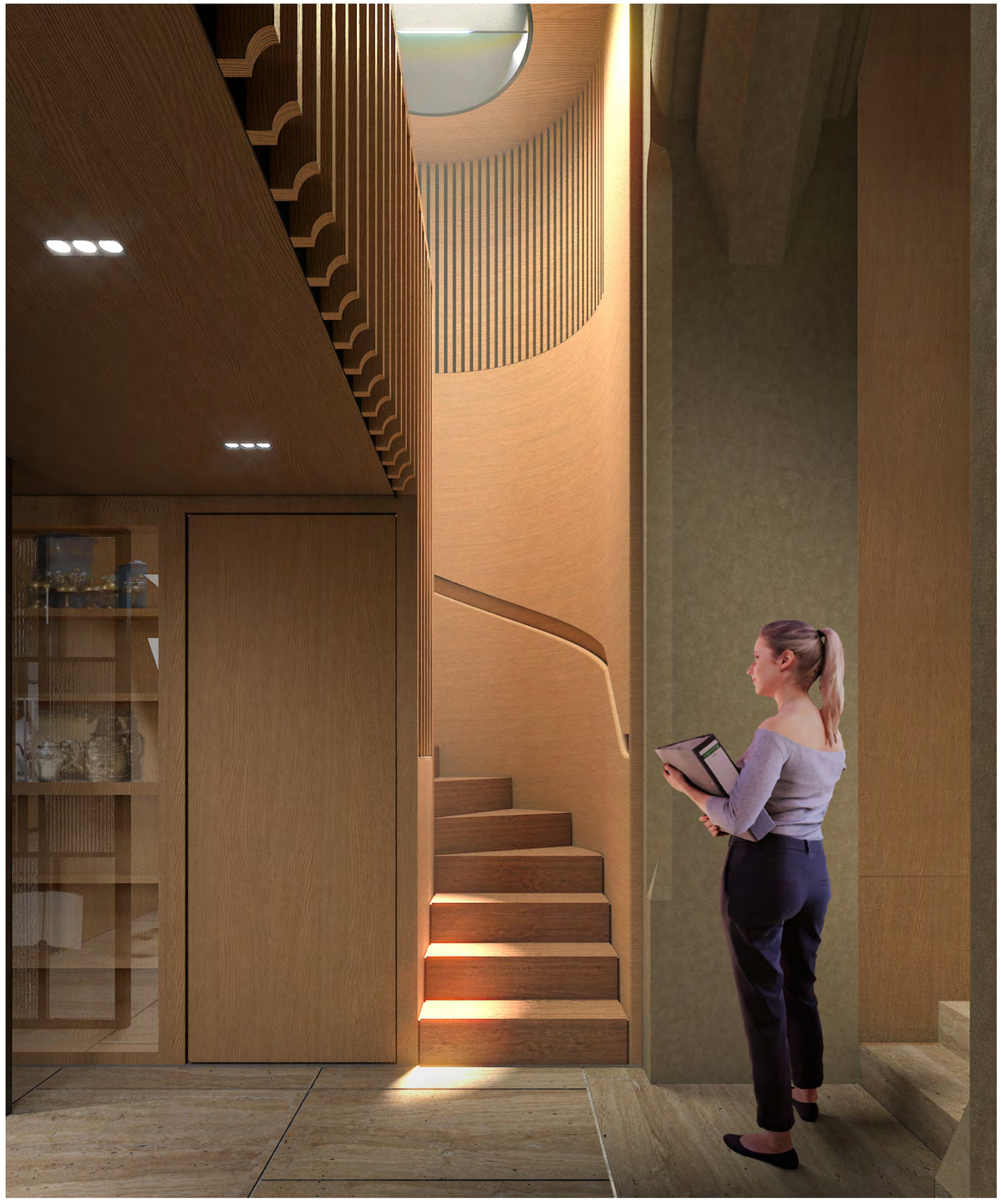
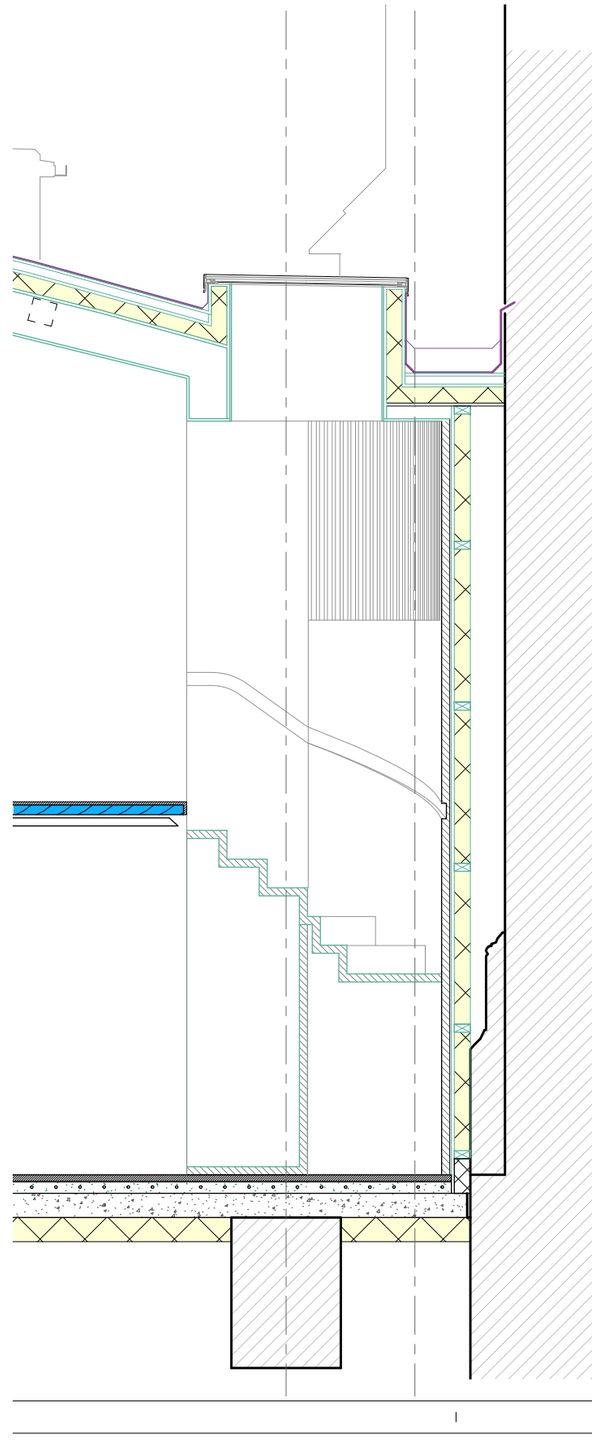


View of Proposed South Staircase from Lower Ground Level



Section showing stair interface with the Bodleian

3.8 Annexe Mezzanine—

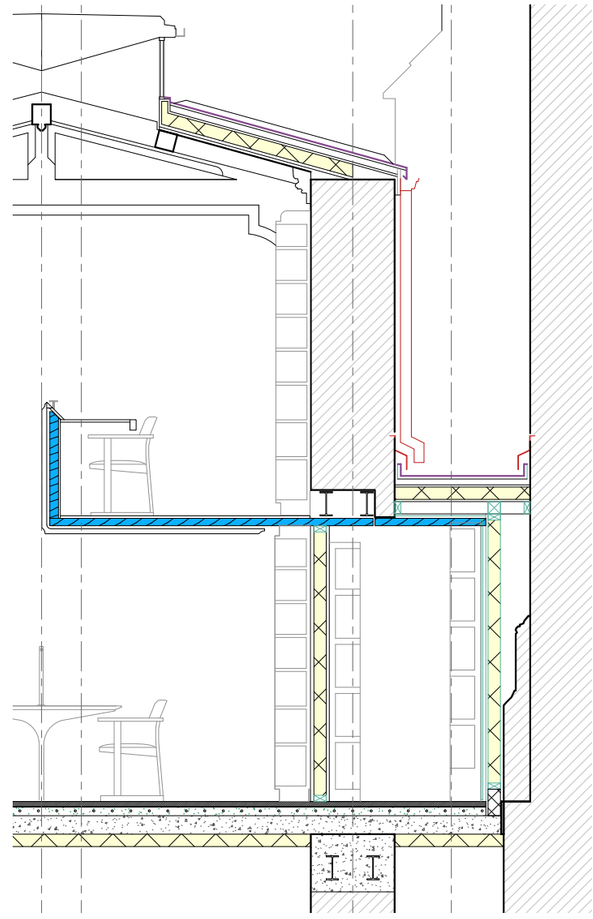
Annexe Reading Room
The new reading room will be an intimate space lined with finely crafted oak bookshelves. A new mezzanine extends half-way across the width of the room to fully reveal the tall windows in the west wall.

The mezzanine balcony is column free, being cantilevered off the new bookcases on the rear wall. This frees the lower floor of obstructions offering flexibility to rearrange furniture.

The bookcase on the east wall conceals two hidden doors into a small book store and staff workspace, which infills the gap to the Bodleian. This structure is free-standing and self supporting. Lead flashing will be tucked into a mortar joint on the Bodleian wall.

The mezzanine balcony is made from laminated beech hardwood and over-clad in fine oak battens that act as an acoustic baffle. The floor is laid in random stretcher bond Clipsham limestone with a honed finish.

Visualisation of Annexe Interior Looking North



Section through Annexe reading room

Existing Annexe West Windows, Obscured by Mezzanine

3.8 Annexe Mezzanine—

View of Annexe looking south showing clerestory glazing in the roof

3.9 Annexe Rooflights—

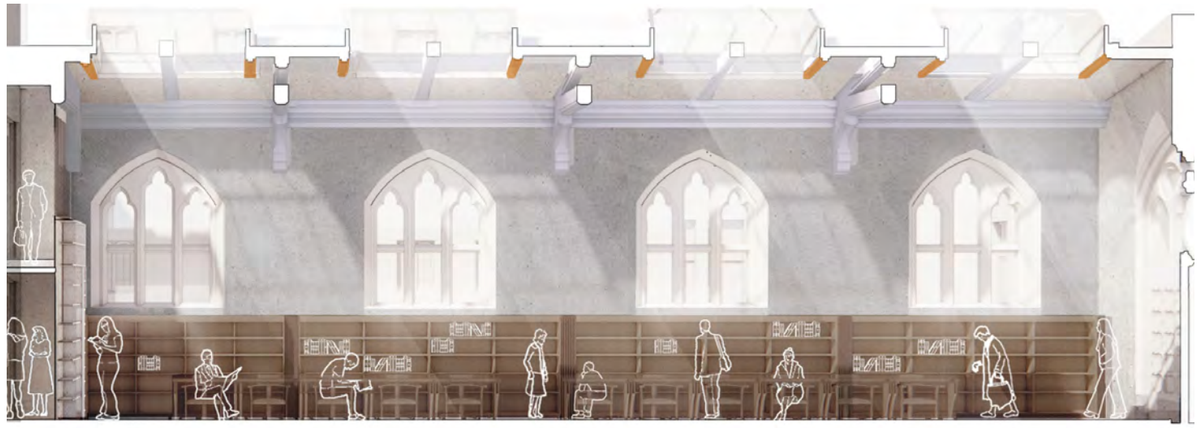
Link Block Envelope and Roof
The Historic Building Report revealed that the roof-lights to the annexe were not of Scott's design, but added in the 1957 refurbishment. Most likely, the roof-lights were introduced to bring more light into the upper reading room as a result of the new mezzanine floor splitting the windows in the west wall.

A sketch from 1957 shows the design intent, and suggests extra louvres were to be fixed on the inside to limit solar glare. As far as we can find, these louvres were not put in place and glare continues to be a problem in the space.

The original roof structure, with refined carving on the beams, was altered to accommodate the roof-lights. Sixteen beams were added to support four roof-lights, which are unevenly spaced along the length of the annexe. These extra beams detract from the simplicity and legibility of Scott's original roof structure.

The present condition of the roof-lights is poor. Upstands are not insulated and the wired single glazing contributes to heat loss and condensation. Frames around the glass panes have leaked in places and some are in an advanced state of decay.

As the brief requires the full refurbishment of the roof, the question arises of how to address the retention and design of these roof-lights.



Section view showing the additional 1957 roof timbers highlighted in yellow.

Perspective sketch of roof-lights, 1957.

Aerial view of existing roof-lights installed in 1957

Interior photographs showing the roof-lights.

3.9 Annexe Roof-lights—

Clerestory windows in first floor of the library

Clerestory windows at St Pancras ticket hall by George Gilbert Scott

Clerestory windows in first floor of the library

Scott's Use of Clerestory Windows

Our research on Scott's work has been unable to find precedents for the use of roof-lights in his buildings. We have found that his design approach favoured a more controlled introduction of light into his interiors, often via high-level clerestory windows.

This may be due to Scott's extensive work on medieval churches and cathedrals, and the more common use of steel-framed roof-lights in industrial buildings of the period, where he often worked in collaboration with other engineers.

Examples of Scott's more typical approach to roof lighting can be seen in his ecclesiastical work, the roof of his ticket hall for St. Pancras station, and of course in the first floor of Exeter College Library. In these instances, he employs clerestory rose windows or ribbon lights to admit light into the interior.

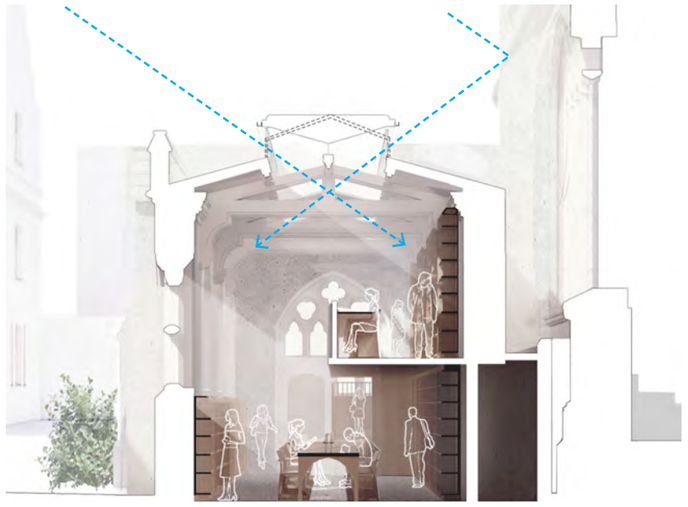
3.9 Annexe Roof-lights—

Clerestory Roofights
The restoration of the library fabric includes the replacement of the annexe lead roof and roof-lights to improve their thermal efficiency and further extend the design life of the building.

The extent of this work provides the opportunity to consider the design of the roof-lights and develop proposals that are more sympathetic to the character of the original building, Scott's design sensibility more broadly, and to the future use of the building.

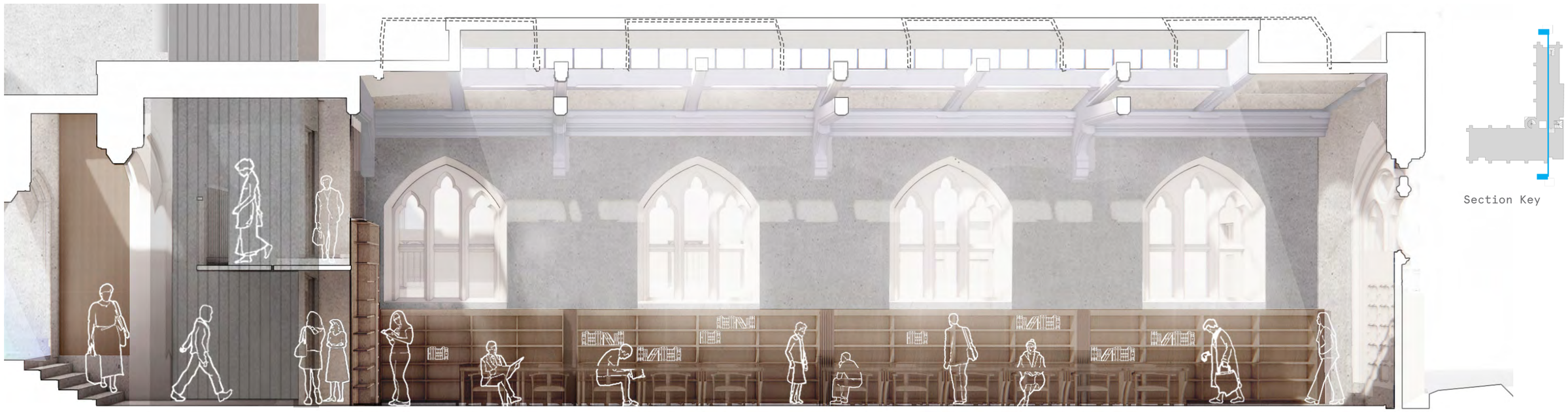
Our proposals for the annexe roof-lights replace the 1957 alterations with two parallel ribbons of clerestory windows that extend the length of the mezzanine balcony. These will be covered by a lead lantern cap that should extend no higher than the ridge of the existing roof-lights.

Clerestory windows will reduce the solar gain in the library in summer, introduce a more even spread of daylight across the reader spaces, and reduce the visible impact of the roof-lights from the upper floor of the Bodleian. Our technical studies suggest that the new roof configuration will not reduce the daylight levels in Convocation House.



Section showing continuous clerestory windows

Clerestory glazing reference



Section Key

Long Section - Continuous Rooflight

3.9 Annexe Roof-lights—

View from Annexe mezzanine showing clerestory ribbon windows

3.10 Materials & Finishes—

Materials and Finishes
Our approach to finishes has been to select materials that are high-quality and durable, that patina well, and are cost effective. Our material choices have taken cues from Victorian and Neo-Gothic architecture, and Scott's repertoire in particular. Where possible, we have made sustainable material choices that have a lower environmental impact.

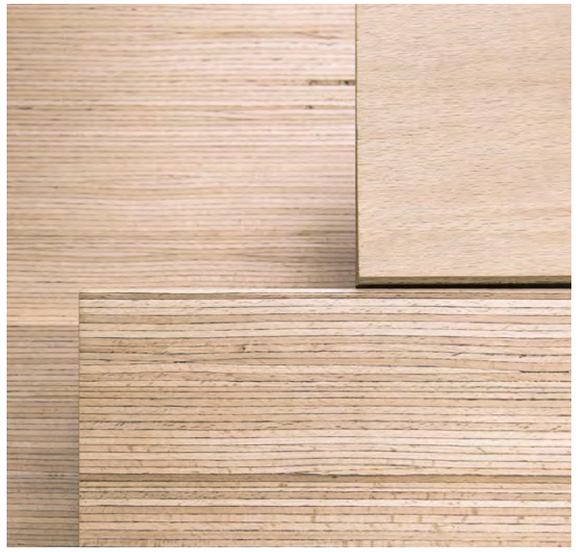
Wood
Our design proposals use wood as both a primary structural material and as a finish to fitted furniture elements.

For the annexe and lift structure, we propose 'Baubuche' laminated beech wood panels. Baubuche offers the excellent strength, stiffness and durability of a laminated hardwood, and can be prefabricated off-site in large sections. This will reduce the build programme and minimise the disruption of heavy construction work.

The Baubuche panels will be over-clad with a high quality finish layer of English Oak battens. A secondary layer allows us to accommodate service wiring and fittings; offer acoustic absorption; and create a floor wearing layer for the mezzanine.

Metal
Inspired by historic library design and neo-gothic detail, we propose to make the lift-shaft cladding from cast iron metalwork. This will be lightly patterned with a herringbone tracery inspired by Scott's leadwork on the campanile of the College Chapel. Further detail on material quality and surface finish will be obtained during Stage 4 technical design.

New roofs will be finished in rolled lead and new gutters and downpipes to the rear of the annexe will be made from cast iron.



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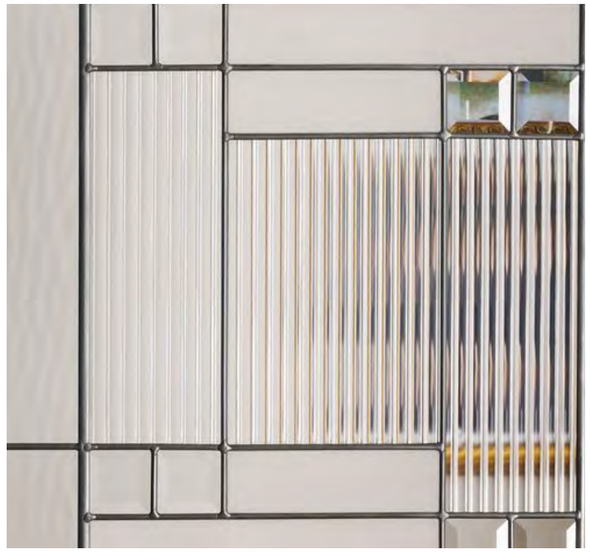


04.

Stone
Where the existing walls or floors are altered, new additions will be formed in Bath stone ashlar with joints struck to match existing masonry.

Detailed elevations and a schedule of external stonework repairs are provided with this application. Honed Clipsham limestone will be used in the new annexe floor.

05.

Glass
Thin section steel window and door frames will be used in the new glazed screen in the annexe, in-filled with low-iron clear and fluted glass.

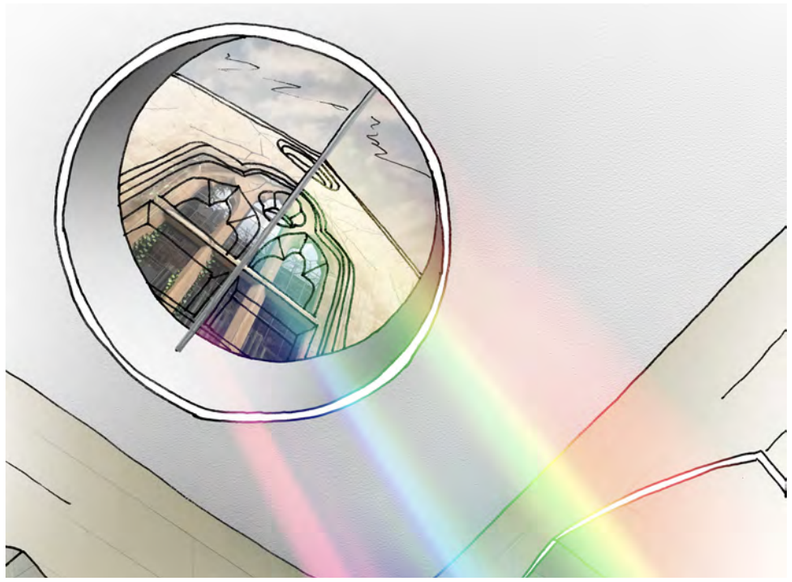
Glass in the roof-lights and the ground floor partition will be low-iron, which is a closer match to the lead glass used in the original windows.

06.

01. Detail of 'Baubuche' Beech panels
02. Zurich Law Library balcony cladding
03. Ashlar Bathstone
04. Clear and Reeded glass
05. Cast Iron Cladding Panel, Georgian House, Dublin
06. Clipsham Limestone Floor

3.10 Materials & Finishes—

Stained Glass Roundels by Alumni Morris and Burne-Jones



New Roof-light in Annexe Link

Potential locations for stained glass addition in Stair Turret

Reference of Stained Glass by Brian Clarke

Reference of Stained Glass by Brian Clarke

Dichroic Glass installation by Chris Wood.

Coloured Glass

The existing library contains a number of fine stained glass roundels made by the College alumni Morris and Burne-Jones, who also completed the stained glass for the College Chapel.

We propose to continue this use of coloured glass and colour-saturated light by introducing colour into the building in appropriate locations. The effect will resonate with the character of Scott's building and his history of commissioning stained glass in his other work.

We propose new stained glass elements in selected locations within the library circulation spaces in the annexe link space and the original stair turret. It is envisaged that the College will commission an artist for this glass work in consultation with the College community and project benefactors.

4.1 External Repairs: Findings & Recommendations

Masonry
The masonry to both the library and its extension has suffered greatly from the effects of atmospheric pollution.

This has resulted in surface blistering and subsequent erosion of blocks and also the erosion of drip-mouldings to cornices and hood mouldings, causing drenching of stone below with resultant losses due to erosion and the effects of freezing.

The current proposals allow for a series of essential repairs, as well as those which would bring the exterior of the library back into a good state of decorative repair, to include:

Cleaning of areas of stone where deleterious crusts have formed, both to reduce further damage and to properly identify what repairs are required.
A combination of mortar repairs and stone-indents, the latter where a more robust repair is desirable, to restore the façades and delay further erosion.
Replacement of defective coping and other weathering stones, along with limited replacement of carved ornament to protect other masonry.

Introduce lead cover flashings to cornices, string courses and hood-moulds, in order to restore the effect of a drip-mould and help move water away from the face of the masonry.

Cleaning the existing decorative stonework and undertaking a series of mortar repairs and replacements to bring back lost details, including carved heads, carvings of leaves and flowers and lion heads to rainwater pipes.

Replace the lost pinnacles to all dormer gables, the east and west end gables to the main library and the tower. Removing vine eyes and installation of a new support system as set out in Landscape Architects report.

An assumption for cleaning and repairs has been included within the following schedule, however, this will require re-assessment once full access is available and vegetation has been removed.

Roofs

Main Roof
The roof to the main Library building has been re-laid in the past, most probably to allow replacement of lead valley and other flashings.

The slates to the south slope are of a different nature to those at the rear, except to those areas beneath the dormers.

The mix of blue and grey slates to the south slopes is visually unappealing, while those to the north slope are far more consistent, apart from one small area behind the tower.

While the condition of the slating appears to be reasonable, the condition of the valley and other flashings cannot be readily assessed without scaffolding or other means of access, while drone images suggest that cover flashings to the dormer cheeks have not been replaced.

We propose that the roofs are stripped and recovered, re-using original slates but better mixed at the north slope and dormers with new slates of a similar type to those originally used, not as currently exist, at the south slope and dormers. We estimate that this would equate to approximately 50% new British natural slate. All flashings and outlets will also be re-leaded.

At the same time, a multi-foil insulant will be incorporated to improve the thermal efficiency of the structure, while all leadwork is renewed. In conjunction with the ecological mitigation strategy, bat access slates will be incorporated where recommended in the north slope, located where possible to limit visibility from the ground.

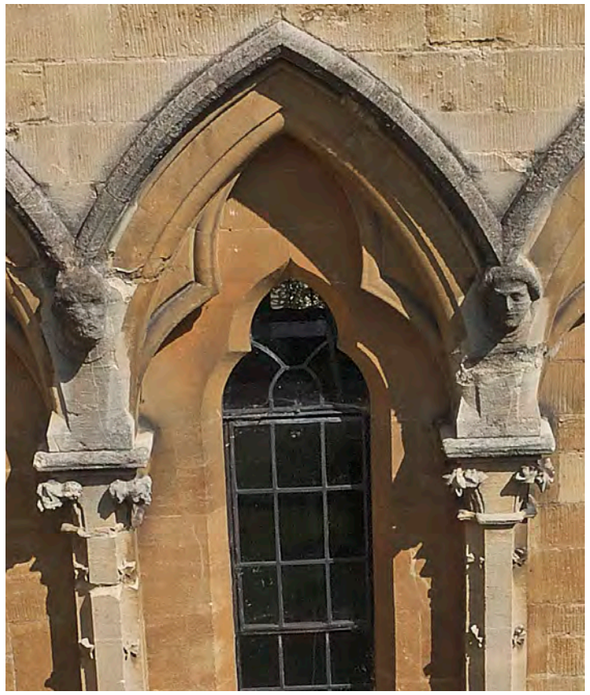
The Annexe
At the Annexe extension, the roof is a lead-covered flat roof incorporating a series of four rooflights, with a parapet gutter to the west and a 4" half-round gutter to the east.

The lead is suffering from severe surface oxidisation, due to atmospheric pollutants, while the method in which it was laid, with hollow intermediate rolls, has resulted in a number of stress fractures at the end drips.

In addition, the rooflights are not of the quality expected in such a prestigious building, utilising polycarbonate glazing and rudimentary frames, while the state of the under-boarding to the lead is questionable, due to the noticeable unevenness in places, while lifting one small area of lead revealed that the felt underlay had deteriorated completely.

Due to the need to re-lead the Annexe roof, this also provides us with the opportunity to replace the rooflights with a lantern of a quality appropriate to the building. Recovering the roof also allows us to incorporate a ventilated substrate allowing insulation to be incorporated within the roof structure, which currently has none. This will has the effect of pushing the existing ridge line upwards, due to both the incorporation of insulation and the new lantern design. As per Nex Architects drawings, the lead roof to the lantern will still lie below the existing north gable end of the Annexe, and due to the parapet to the west, the impact from the Rector's garden will be limited. Views have been included within the application drawings to illustrate this impact.

We would also increase the capacity of the guttering and downpipes to the east slope and checking the capacity of the downpipes serving the parapet gutter to the west slope, in order that they are able to cope with the more frequent high intensity downpours which we experience today. This will be in 6” half round cast iron guttering to west.


01.


02.

01. North Elevation
02. South Elevation

4.1 External Repairs: Findings & Recommendations

The Link Building

The link block is currently formed from a small flat lead roof with stone parapets to the south and east and a pitched slate roof to the south which covers the safe room and gardener's store below. Rainwater from the lead roof drains through a hole within the parapet to the south and down the slate roof to a lead parapet gutter which drains to the open alleyway to the north.

With the internal reorganisation of the library, the slate roof is now not fit for purpose, offering limited head room beneath. It is therefore proposed that this roof be replaced, salvaging any slates for the main roof where possible, with a series of lead bays with rooflights to provide daylight to the rooms below.

The existing slate roof is sloped in order to accommodate a westerly window to the Bodleian with a lead flashing overlaying the existing cill. In order to maintain this relationship and ensure that there is an adequate flashing to the Bodleian, a lead lined 'gutter' at a reduced height is to be incorporated to the east with all roofs within the link block draining into here and through a new internal rainwater pipe.

A new lead flashing would be created to the Bodleian, ensuring a minimum of 150mm below the existing cill. The vertical face of the drop in height between this gutter and the higher roofs to the west will be lead lined. The existing lead roof will be relaid to new falls to the east to also drain into this gutter, with a new hole created through the parapet to allow for this, and the existing hole repaired.

A series of extract and income pipes will be also be required, with the main plant room located beneath the easterly gutter and the existing lead flat roof.

Other Items

Rainwater Goods

The majority of hoppers and downpipes have been replaced. The originals are of square section and we have therefore proposed that all are replaced with new cast-iron to the original pattern in order to restore the original intent of the designer. This equates to 8no 4.2m long painted cast iron rainwater pipes to the south elevation to match existing and 1no 8m long rwp of same specification to the north elevation.

Man-Safe System

A man-safe system is proposed to ensure that the Annexe and link block roofs can be adequately maintained, which is not currently possible. This will incorporate:

- Two permanent fixings within the east face of the Annexe wall within the gap between the Library and the Bodleian to allow a ladder to be safely fixed by members of the College maintenance team.
- A hook and wire system running along the east slope of the Annexe roof to allow maintenance staff to access the whole of the Annexe roof safely. This would be located on the lower section of the east slope to avoid visibility from key viewpoints
- A number of independent hooks to the link block roofs to allow maintenance staff to travel between these roofs safely.

Lightning Protection

A lightning protection system will be installed on the building. Full details of this system will be defined following opening up works on the roofs of the Main Library Range and Annexe.

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02.

03.

04.

01. Flat lead roof to link block
02. Sloping slate roof above safe room and gardener's store
03. Original square section rainwater pipe to the south elevation
04. Bodleian window with existing flashing detail

4.1 External Repairs: Findings & Recommendations

	Component	Repairs Required	Quantity Required	Comments
	ESTIMATED DECORATIVE STONEWORK REPAIRS			
1	**Main Library - South Elevation**			
	Engaged Colums			
	Leaves to column shaft	Leaf points missing. New sections to be pinned back into place	50	
		Missing. New complete leaves required	7	
	Column Heads			
	String course	Allow for new stone to replace missing sections	3	
	Entablature	Missing leaves	7	
	Column head to east	Missing flower with leaves	1	
		Vine with 4no leaves	1	
	Carved Stone Heads			
	Decorative heads to column heads	Surface has been worn away and stone has lost all definition. Allow for new heads to replace existing stone	10	
	Entrance Door			
	Decorative arch bases	Missing leaves	1	
		Leaf points missing. New sections to be pinned back into place	2	
		Missing flower	1	
	Gables			
	Pinnacles	Missing. Allow for new pinnacles to match historic images	4	
	Provisional Items			
	Lion heads to rainwater pipes	*New carved stone heads to replace existing if damage or detail has been lost beyond repair*	*1*	*Not visible due to planting*
	Leaves to column shaft	*Leaf points missing. New sections to be pinned back into place*	*20*	*Bases of columns not visible due to planti ng*
2	**Main Library - North Elevation**			
	Engaged Columns			
	Leaves to column shaft	Leaf points missing. New sections to be pinned back into place	17	
		Missing. New complete leaves required	2	

Draft Repairs - Estimate of Masonry Repairs

	Column Heads			
	Entablature	Missing leaves	3	
	Carved Stone Heads			
	Carved stone to column heads	Surface has been worn away and stone has lost all definition. Allow for new heads to replace existing stone	3	
		Missing leaves	6	
		Missing flowers	2	
	Gables			
	Pinnacles	Missing. Allow for new pinnacles to match historic images	4	
	Rainwater Goods			
	Carved heads to rainwater pipes	New carved stone heads to replace existing where detail has been lost	2	Not visible due to wisteria
3	**Tower**			
	Leaves	Missing. Allow for new to match remaining examples	6	
		Leaf points missing. New sections to be pinned back into place	6	
	Carved stone ribs	Missing or broken stone ribs. New sections required	6	
	Pinnacle	Missing. Allow for new pinnacle to match historic images	1	
4	**Annexe - West Elevation**			
	Provisional Items			
	Carved heads	*New carved stone heads to replace existing where missing or detail has been lost*	*4*	*Not visible due to planting*
	Pinnacles to buttress	*New pinnacles to match remaining example where missing or detail has been lost*	*2*	*Not visible due to planting*
5	**Additional Items**			
	Cleaning	Allow for careful cleaning of all decorative stonework before repairs are undertaken		

Draft Repairs - Estimate of Masonry Repairs

4.1 External Repairs: Findings & Recommendations

	ESTIMATE OF EXTERNAL MASONRY REPAIRS		
	Provisional Items		
		Stone cleaning - plain ashlar	60m²
	Cornices	Stone cleaning - carved cornices with embellishments	15m
	All walls	Stone indents - rectilinear (average 150x50x50mm)	10No
	All walls	Stone indents - rectilinear (average 300x200x50mm)	40No
	All walls	Stone indents - moulded (average 150x100x100mm)	10No
	All walls	Stone indents - moulded (average 300x100x100mm)	5No
	All walls	Stone indents - moulded (average 450x150x150mm)	6No
	Skew stone	Replacement skew stone (450x300x75mm)	12No
	Stone finial	Replacement carved stone finial (300x300x450mm o'all)	1No
	Carved capital	Replacement carved capital (400x400x300mm o'all) – Aesthetic choice only	4No
	Sill	Replacement quarter-sill (900x450x300mm o'all)	2No
	All walls	Mortar repair (average 150x50x50mm)	30No
	All walls	Mortar repair (average 300x200x50mm)	16No
	All walls	Remove sand-cement and effect mortar repair (average 150x50x50mm)	6No
	All walls	Remove sand-cement and effect mortar repair (average 300x200x50mm)	15No
	All walls	Rake out and repoint	30m²
	All walls	Cut out sand-cement and repoint in lime	5m
	Cornice	Code 5 lead cover-flashing to cornice – Subject to heritage consent	40m
	Hood moulds	Code 5 lead cover-flashing to hood moulds – Subject to heritage consent	80m

Draft Repairs - Estimate of Masonry Repairs

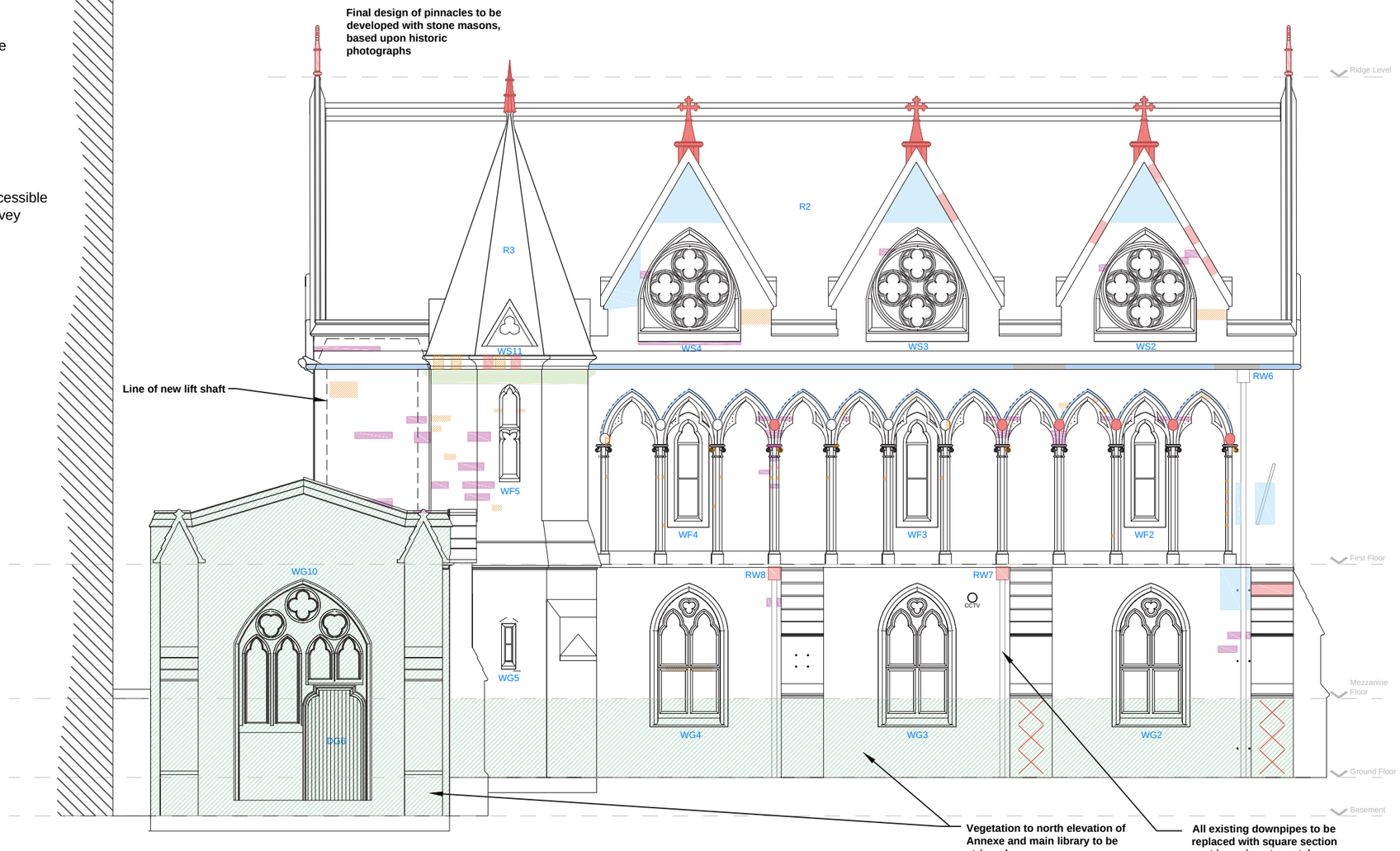
4.1 External Repairs: Findings & Recommendations

KEY:

- Remove trellis
- Lead flashing
- Clean stone
- Repointing
- Replace stone
- Stone indent
- Mortar repair
- Areas not accessible at time of survey

NOTES

Refer to schedule for approximate quantities
Decorative stonework to be cleaned before final quantities can be assessed
Final repair schedule to be agreed on site once full access is available and vegetation removed where indicated



01 / 2201 Proposed repairs - North elevation of Main Library and Annexe

1:100

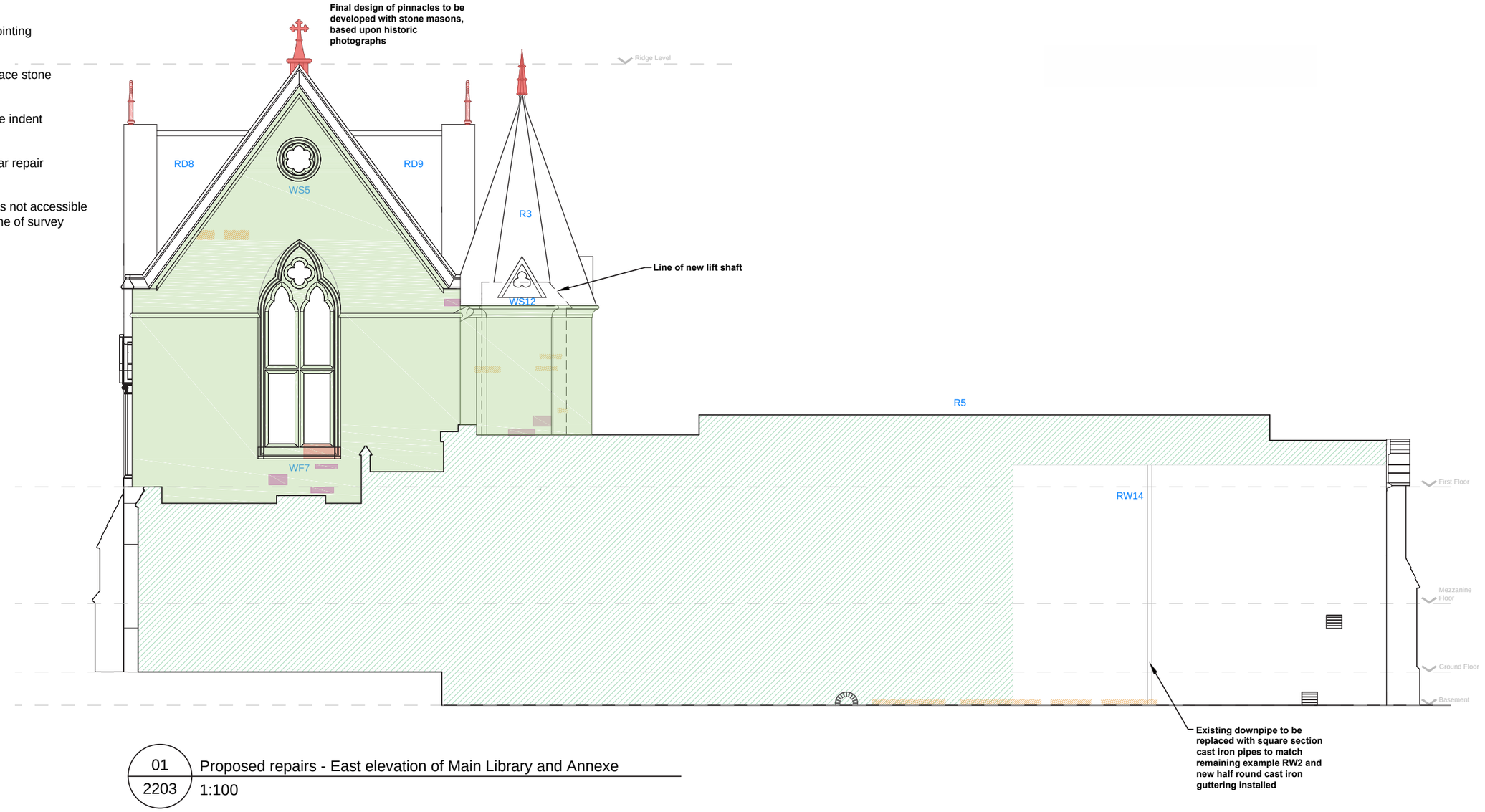
0 1 5

Scale 1:100 m

4.1 External Repairs: Findings & Recommendations

KEY:

- Remove trellis
- Lead flashing
- Clean stone
- Repointing
- Replace stone
- Stone indent
- Mortar repair
- Areas not accessible at time of survey



01
2203

Proposed repairs - East elevation of Main Library and Annexe

1:100

NOTES

Refer to schedule for approximate quantities
Decorative stonework to be cleaned before final quantities can be assessed
Final repair schedule to be agreed on site once full access is available and vegetation removed where indicated

Repairs to East Elevation

0 1 5

Scale 1:100 m

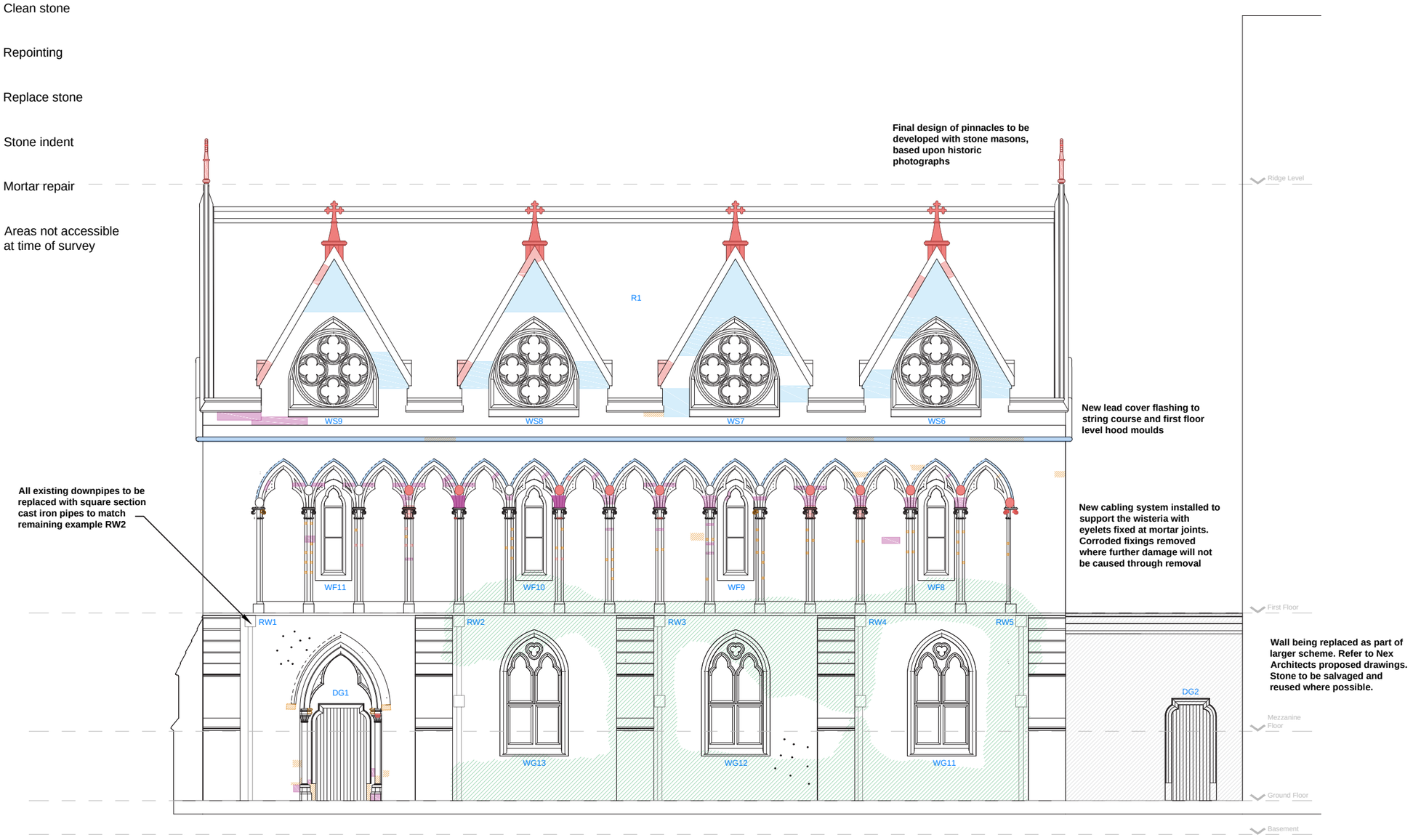
4.1 External Repairs: Findings & Recommendations

KEY:

- Remove trellis
- Lead flashing
- Clean stone
- Repointing
- Replace stone
- Stone indent
- Mortar repair
- Areas not accessible at time of survey

NOTES

Refer to schedule for approximate quantities
Decorative stonework to be cleaned before final quantities can be assessed
Final repair schedule to be agreed on site once full access is available and vegetation removed where indicated



01 / 2200 Proposed repairs - South elevation of Main Library
1:100

0 1 5
Scale 1:100 m

Repairs to South Elevation

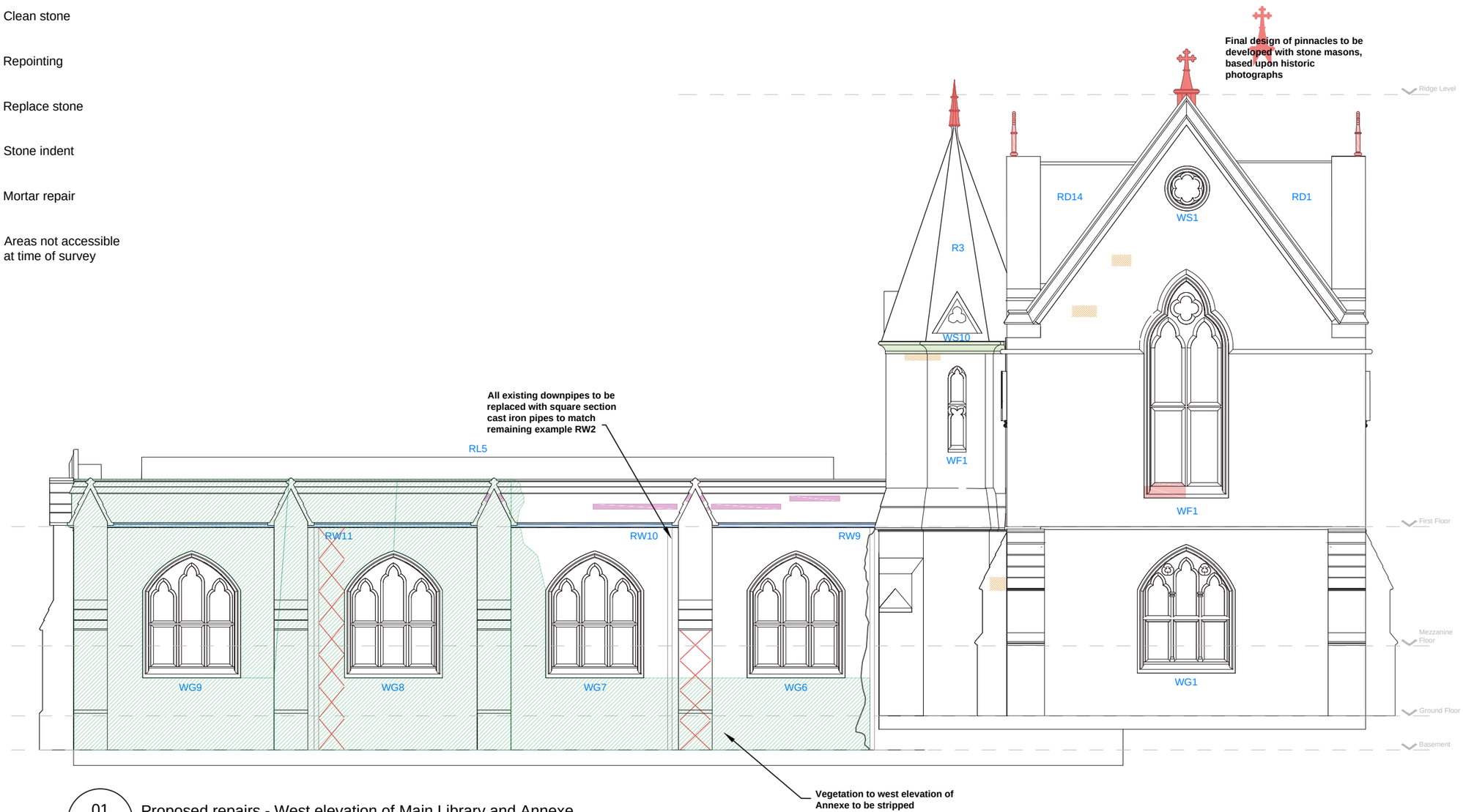
4.1 External Repairs: Findings & Recommendations

KEY:

- Remove trellis
- Lead flashing
- Clean stone
- Repointing
- Replace stone
- Stone indent
- Mortar repair
- Areas not accessible at time of survey

NOTES

Refer to schedule for approximate quantities
Decorative stonework to be cleaned before final quantities can be assessed
Final repair schedule to be agreed on site once full access is available and vegetation removed where indicated

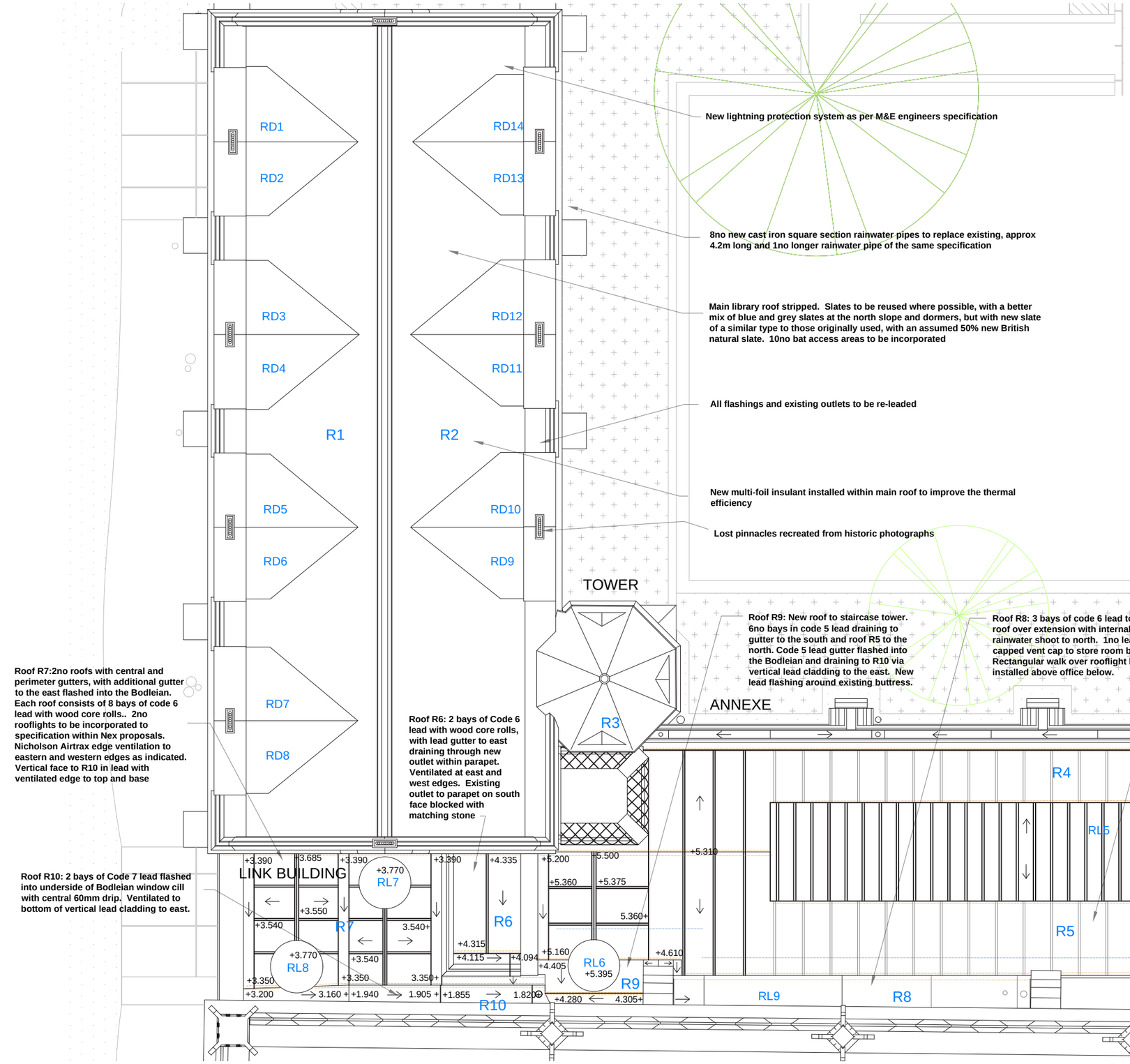


01 / 2202 Proposed repairs - West elevation of Main Library and Annexe
1:100

0 1 5
Scale 1:100 m

Repairs to West Elevation

4.1 External Repairs: Findings & Recommendations



New lightning protection system as per M&E engineers specification

8no new cast iron square section rainwater pipes to replace existing, approx 4.2m long and 1no longer rainwater pipe of the same specification

Main library roof stripped. Slates to be reused where possible, with a better mix of blue and grey slates at the north slope and dormers, but with new slate of a similar type to those originally used, with an assumed 50% new British natural slate. 10no bat access areas to be incorporated

All flashings and existing outlets to be re-leaded

New multi-foil insulant installed within main roof to improve the thermal efficiency

Lost pinnacles recreated from historic photographs

Roof R7:2no roofs with central and perimeter gutters, with additional gutter to the east flashed into the Bodleian. Each roof consists of 8 bays of code 6 lead with wood core rolls.. 2no rooflights to be incorporated to specification within Nex proposals. Nicholson Airtrax edge ventilation to eastern and western edges as indicated. Vertical face to R10 in lead with ventilated edge to top and base

Roof R6: 2 bays of Code 6 lead with wood core rolls, with lead gutter to east draining through new outlet within parapet. Ventilated at east and west edges. Existing outlet to parapet on south face blocked with matching stone

Roof R9: New roof to staircase tower. 6no bays in code 5 lead draining to gutter to the south and roof R5 to the north. Code 5 lead gutter flashed into the Bodleian and draining to R10 via vertical lead cladding to the east. New lead flashing around existing buttress.

Roof R8: 3 bays of code 6 lead to new roof over extension with internal rainwater shoot to north. 1no lead capped vent cap to store room below. Rectangular walk over rooflight RL9 installed above office below.

Roof R5 stripped and relaid in code 6 lead with wood core rolls, ventilated at eastern parpaet, rooflight and ridge. New cast iron half round gutter toeast roof edge with cast iron square section rwp to replace existing

Roof R4 stripped and relaid in code 6 lead with wood core rolls, ventilated at western gutter line, ridge and rooflignt. Existing lead gutter stripped and relaid to existing rainwater pipes.

Roof R10: 2 bays of Code 7 lead flashed into underside of Bodleian window cill with central 60mm drip. Ventilated to bottom of vertical lead cladding to east.

Mansafe System: Fixings for access ladder installed to eastern face of Annex to the gap between the Bodleian and Library. Hook and wire system installed to eastern edge of R5, with hooks to roofs R6 and R7 for access for cleaning and maintenance

01
2002

Proposed repairs - Roof Plan

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0 1 5

Scale 1:100 m

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NOTES

Final quantities to be agreed on site once full access is available and roofs have been stripped. Mansafe system, lightning protection system and rooflights to specifications by others. Full details to be agreed.

All levels are assumed and will need to be confirmed prior to/during the works

4.1 External Repairs: Findings & Recommendations

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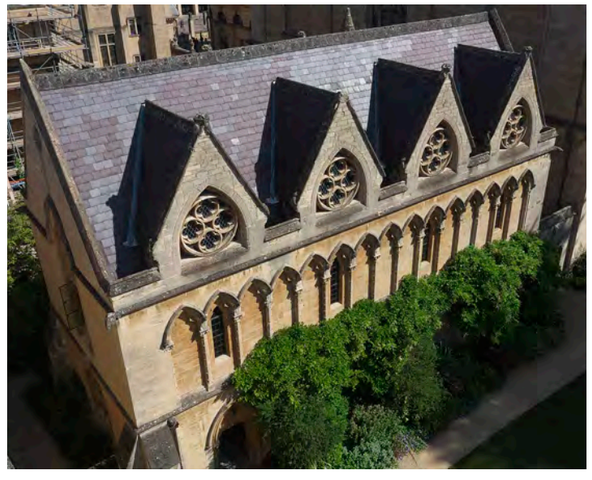

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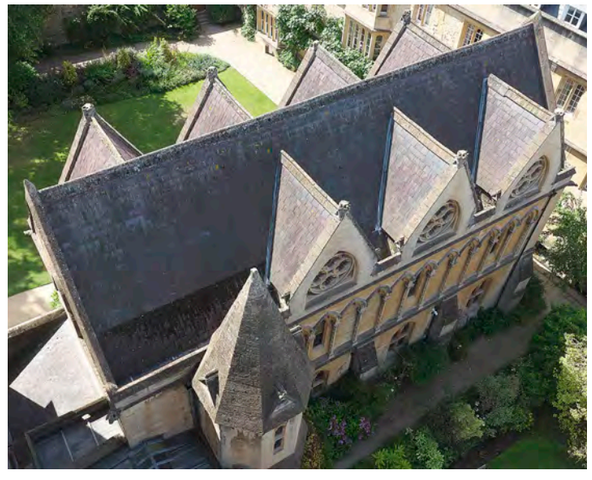


08.

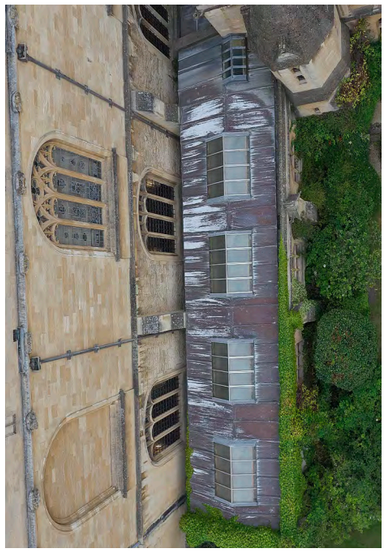
Photo References: Elevations

01. North elevation
02. East elevation, main library
03. East elevation, annexe
04. South elevation, annexe

05. South elevation: main library and tower
06. West elevation: main library and tower
07. Top view of North elevation: main library
08. Top view of South elevation: tower, annexe and link building

4.1 External Repairs: Findings & Recommendations

01.



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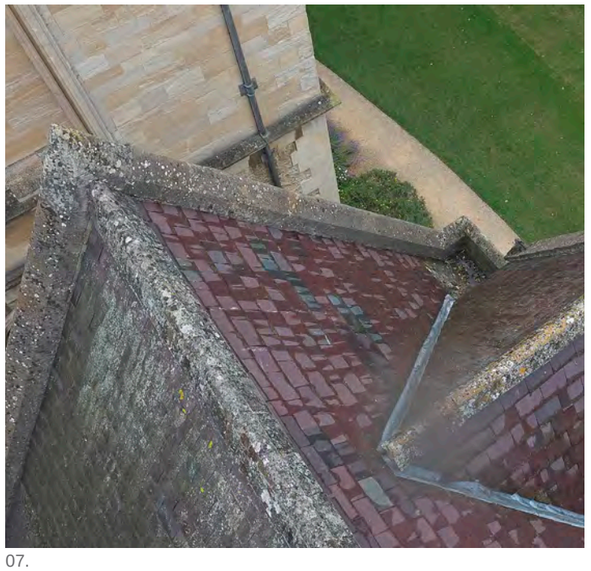

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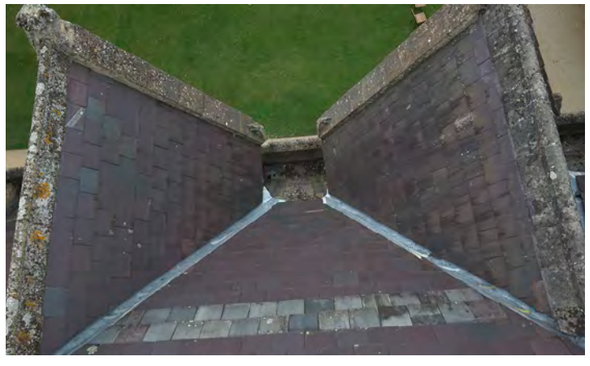

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Photo References: Roof

01. Bird's eye view of southern side of main library
02. Annexe
03. Junction at Main Library, Tower, Annexe and Link buildings
04. Main Library
05. Link
06. Annexe rooflights
07. Main Library - difference in slates
08. Main Library - lead valleys

4.1 External Repairs: Findings & Recommendations

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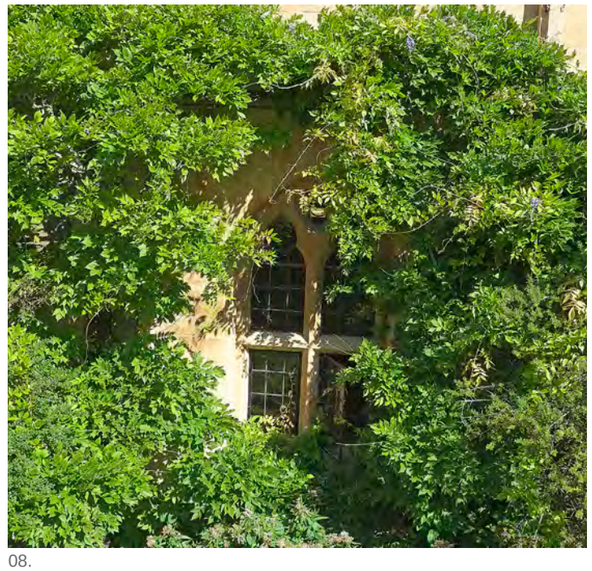

08.

Photo References: Elevation Repairs

01. Remove trellis
02. Suggested location for lead flashings
03. Clean stone
04. Area requiring repointing
05. Replacement stone at window WF7
06. Stone indent at west elevation of annexe
07. Mortar repair at main library entrance
08. Areas not accessible at time of survey due to overgrown vegetation