Killin and Ardeonaig Parish Church

Feasibility Study

December 2020

LDN Architects

Project Directory

Client:
Killin and Ardeonaig Parish Church
Main St
Killin
FK21 8TN

Architect:
LDN Architects
57-59 Bread Street
Edinburgh
EH3 9AH

Structural Engineer:
David Narro Associates
5 Viewfield Place
Stirling
FK8 1NQ

Services Engineer:
Irons Foulner
48 Melville Street
Edinburgh
EH3 7HF

Quanitity Surveyors:
Morham + Brotchie
126 Calton Rd
Edinburgh
EH8 8JQ

Revision	Date	Description
Draft Issue	18th December 2020	Draft Issue to Client
Rev A	22nd December 2020	Extension visuals added & section 5.6 updated
Rev B	21st January 2021	Updated following client feedback

Contents

Appendices

1.0 Introduction

Killin and Ardeonaig Parish Church, located within the picturesque village of Killin at the Falls of Dochart, is a fine Category B listed building constructed in 1744. The Church is now in need of repair and upgrading and its active congregation have prepared an exciting vision for its future.

This Feasibility Study was carried out in collaboration with the Church in response to the Forward in Faith 2020 paper (Appendix A), described as *an attempt to prompt thinking, decision making and action to consolidate the growth of the Killin and Ardeonaig Parish Church.*

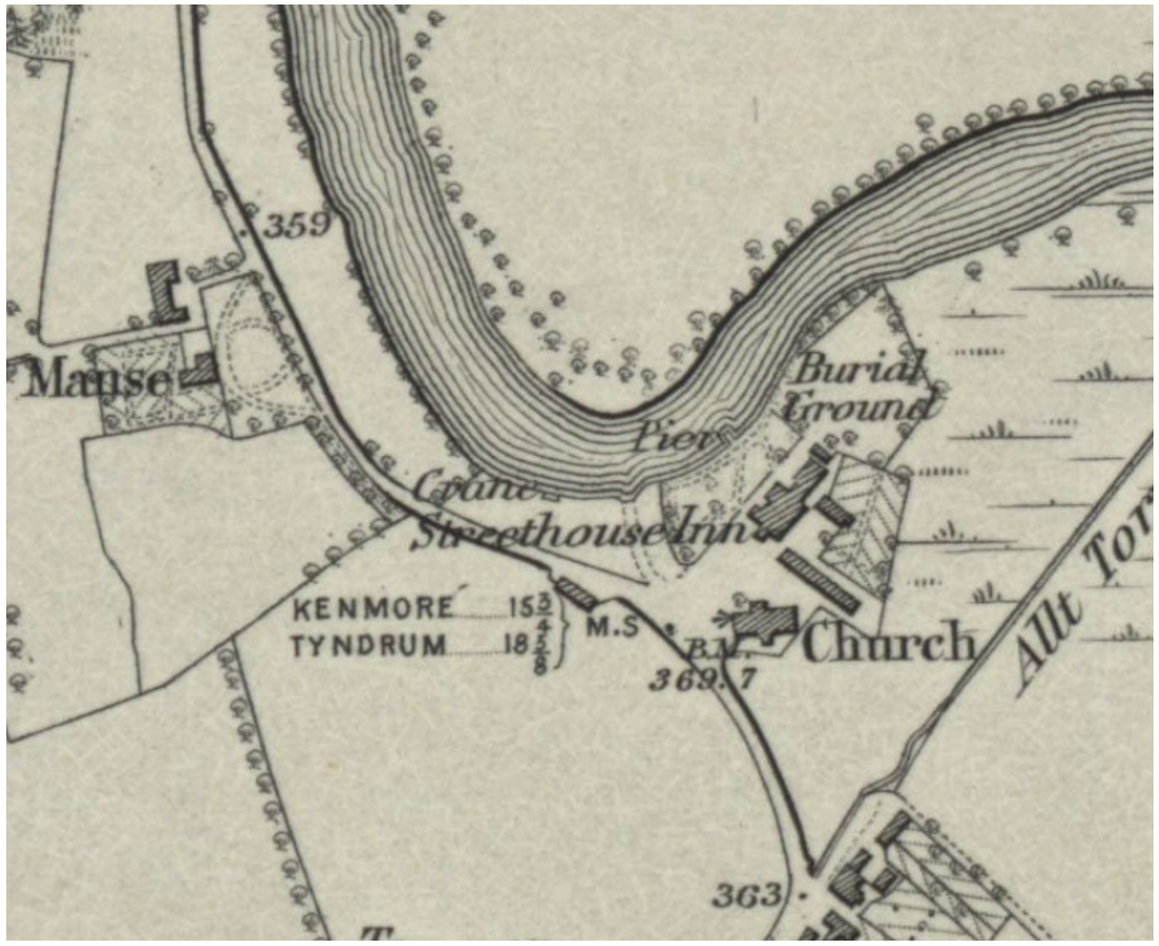
The report was prepared by LDN Architects during December 2020. Structural Engineering input was provided by David Narro Associates, M&E Engineering by Irons Foulner and Quantity Surveying input by Morham + Brotchie.

2.0 Brief

The following requirements have been developed with the Church through briefing workshops:

- Create a more welcoming entrance
- Revert to original orientation of worship (south)
- Improve accessibility
- Create flexibility to allow multi-functional use and future proofing
- Improve kitchen and toilet provision
- Install Tiffany stained glass window salvaged from Morenish Chapel (Appendix B)
- Renew services including installation of renewables, underfloor heating, upgrades of lighting and AV
- Carry out comprehensive fabric repairs
- Display artefacts

1779 Engraving



1843-1882 Historic Map

3.0 History & Significance

3.1 Timeline

Pre-Battle of Bannockburn (1314)
A Church is built on the site north-east of the current Church. This site later becomes the location of the Parish Church graveyard.

Post-Battle of Bannockburn (1314)
Robert the Bruce grants the patronage of the old Church, with its revenues to the Abbot and Convent of Inchaffray.

1429
King James I grants the land of Killin to his new Carthusian Monastery at Perth.

1488
The Prior grants a croft of land in Killin to Donald McCause. Produce from the land is bought and sold. Three pounds of wax is paid to the Parish Church in honour of the Blessed Virgin and St.Fillan.

1510
The vicar at this time was Sir Robert McNair. On 19th May 1557 the Bishop of Dunkeld issued an order to the curate of Killin to summon the parishioners to pay their dues to the parish clerk William Ruthven.

16th Century
John McCorcadill becomes the first Minister of the Reformed Church.

1627
By this time there are around 460 communicants in Killian and Strathfillan, organised by Minister William Menzies.

1680 – 1729
During the incumbency of the Episcopalian minister Reverend Robert Stewart the old Church falls into disrepair.

1728
Adam Fergusson is ordained at Killin. He maintains regular services in all three churches of the Parish and promotes schools in the outlying districts.

1737
The Reverend James Stewart comes to Killin with 'energy and zeal' to re-build the church. Stewart becomes the minister of Killin Parish Church from 1737-89.

1744
The New Killin Church is built in the form of a Celtic Cross by Thomas Clark, mason of Dunkeld, at a cost of 3,120 Scots and is designed by John Douglas of Edinburgh. *(Further investigation required confirming original choice of pure octagonal plan or if the octagonal plan also included smaller west and east transepts.)* The bell, dated 1632 by Robert Hog (Potterow, Edinburgh), is gifted to the Church by Sir Colin Campbell of Glenorchy and installed in the bellcote above the north entrance door on the 'central projecting gable of the North elevation. The bell, which came from the previous Church, has been 'summoning the people to worship for over three hundred years.' *(Date of installation of bell assumed to be during this period.)*

1779
A copper-plate engraving of a drawing by renowned map-maker and landscape painter Paul Sandby entitled 'The Earl of Breadalbane's Seat in Killing' is published in the book 'The virtuosi's museum: containing select views, in England, Scotland and Ireland'. It shows the Church situated in prime position within the valley at the western head of Loch Tay. The building itself is a view of the south-west of the Church showing the octagonal plan with west and east transepts, as well as a south Porch (now no longer existing) and external timber stair that may have been used to access the internal gallery spaces. The windows on this elevation are also shown differently, with a large window to the ground floor and smaller, top-light style, window at gallery level rather than a single tall window as exists today. *(Were these windows enlarged as part of the 1831-32 alteration scheme or perhaps later when the gallery was removed in 1843?)*

1831-32
The Church is significantly altered and enlarged during the ministry of Reverent Hugh Mackenzie MD. A spiritual awakening during this time had increased the Church's congregation. The Church is altered and enlarged to seat over 900 people. The west and east elevations (the arms of the Celtic Cross plan) are widened to the north ('removing the previous symmetry on that axis') and a gallery is installed right round the Church *(including the Laird's Loft which still remains on the north side of the Church?).* Two fluted cast-iron columns are added to support the roof.

1843
In the year of Disruption, the Church is split. The Rev. Alexander Stewart and many of the congregants leave to form the Free Church of Killin. Several years after this time, the gallery inside the church is removed *(with the exception of the Laird's Loft?)* as the additional space is no longer needed.

1890s
At the beginning of Reverend George Mackay's ministry the church is reoriented. A chancel is formed in the eastern arm of the Cross with the pulpit (a fine carved oak hexagonal pulpit originally the pulpit of Dunblane Cathedral) at the left-hand side, the old Celtic baptismal seven-side font (dating from the 9th or 10th Century) at the right and a handsome oak communion table in the centre. The pews are rearranged accordingly.

1931
After the union of the Church of Scotland and the United Free Church in 1929, the congregation once again come together to worship at Killin Parish Church. Ominously, the 1632 bell cracked during this period but was subsequently welded and re-hung.

1933
The Vestry is added to the Church to commemorate the reunion of the two congregations. *(Is this the single storey addition to the east, rebuilt in 2004?)*

1971
Killin and Ardeonaig Parish Church (Church of Scotland) is added to the Listed Building register as Category B.

1973
Killin is designated as a Conservation Area in recognition of its special architectural and historic interest. Originally centred on the Falls of Dochart, the boundary is then amended in 1978 and 2001 to extend to the north along Main Street.

2004
The single storey addition to the East end is rebuilt with corrugated iron roof.


IN MEMORY OF ELIZABETH WIFE OF H.W.HENDERSON
AND DAUGHTER OF ALINE TODD
BORN 23 RD SEPTMDCCCLXX
DIED DEC 18 TH MCMI
THY WILL BE DONE

Killin And Ardeonaig Parish Church
Window Timeline

1831-32
During this time of significant alteration works, the Church receives most of its current glazing. Plain windows are installed including those by Hartley Woods which were 'rolled amber cathedral to spring level…with either staining sheet or sheet red in the lanced heads and blue sheet in the traceries. All these glass types are now very rare and should be retained given that so few of these late regency/early gothic schemes have survived in Scotland typifying the desire to create a form of illumination without imagery.'
At this time (1830) John Hartley began to manufacture sheet glass and by 1832 was experimenting with new German plate glass manufacturing methods.

1901
The Stephen Adam Resurrection window is installed in the east.

1948
The War Memorial window (south) by R Douglas McLundie of Abbey Studios of Edinburgh is installed. This replaces a 'painted window in the apex of the Cross represents Raphael's "St Cecelia" the patron saint of Music, came from Taymouth Castle. Originally in Kenmore Church, it was then put into the Taymouth Castle then to Killin Church where it symbolises the place of music in the service of the sanctuary.'

UNKNOWN
'A single light in the liturgical west upper gallery showing Lillies.'
Installation date unknown.

1994
The War Memorial window (south) is restored.

Morenish Chapel
The Todd Memorial 10 Commandments 'Tiffany' Window Timeline

1902
The Morenish Chapel is built by Aline Elizabeth Todd, wife of Sir Joseph White Todd in memory of her daughter Elvira Todd Henderson, who died in childbirth. Aline's awareness of American trends in art and architecture at the turn of the 20th century, will have influenced her choice to commission the Arts and Crafts style of Morenish Chapel, including the use of coloured stained glass East window by Tiffany Studios of New York.
The other windows in the Chapel are square leaded pane timber-framed with plain, textured glass.

June 2015
The Todd Memorial 10 Commandments 'Tiffany' window is removed from Morenish Chapel due to building subsidence issues and is taken to Christian Shaw studio for safekeeping.

Post-2015
The Chapel is sold, rendering the Tiffany window homeless.

2016
It is proposed that the Tiffany window be installed in Killin and Ardeonaig Parish Church. The window currently resides in the studio of Christian Shaw (now Finnigan and Shaw Ltd).

3.2 Significance Drawings

LDN Architects
57 - 59 Bread Street, Edinburgh EH3 9AH
T: 0131 222 2900
E: architects@ldn.co.uk

Job Title:
2018
Killin and Ardeonaig Parish Church

Drawing Title:
Ground Floor Plan - Significance Diagram

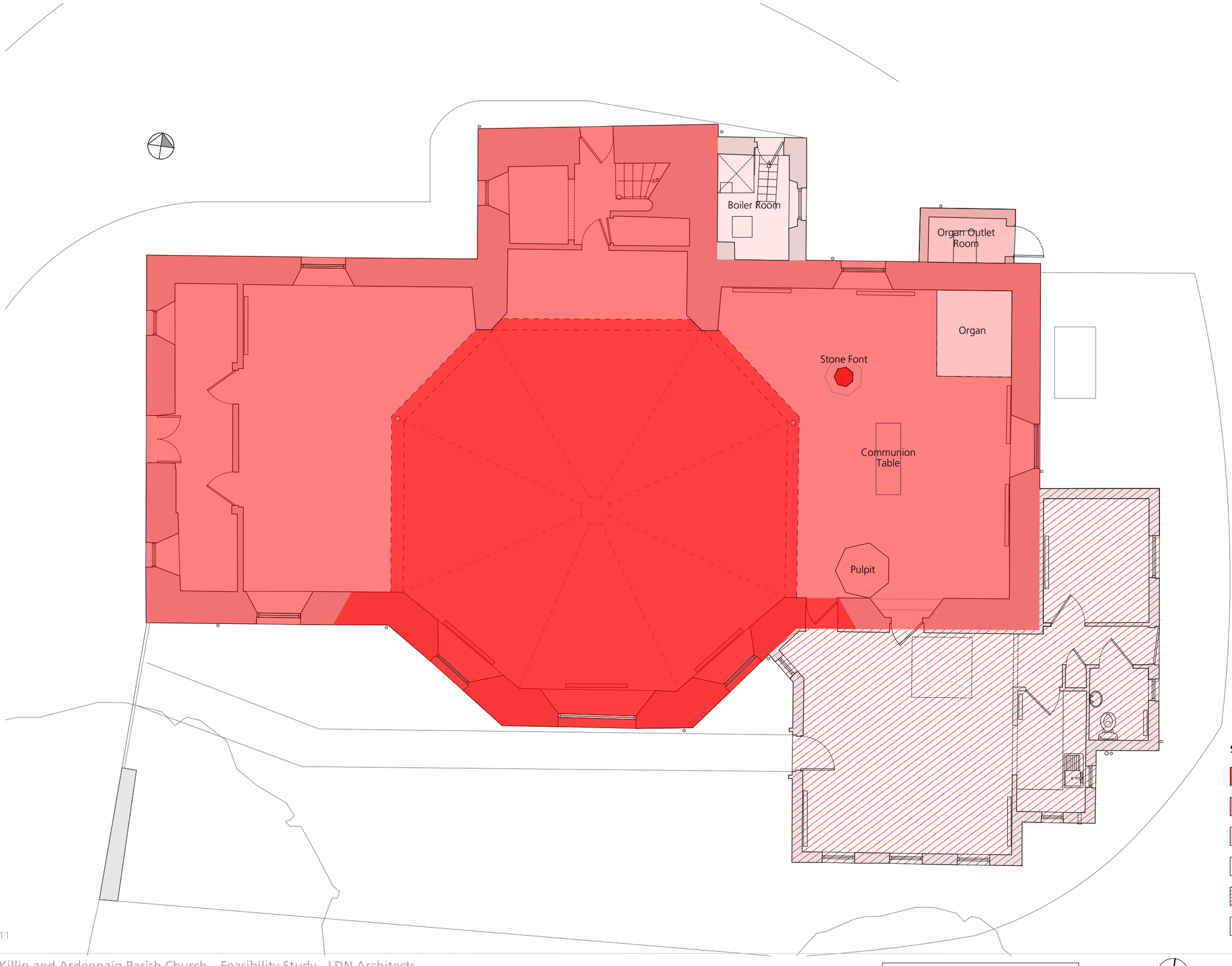
Drawing Status:
Existing

Drawing Number:
L(--)051

Scale:	Date:	Drawn:	Reviewed:
1:50 @ A1	Nov 2020	AR	EB

Revisions:

*	06.11.2020	AR	EB



SIGNIFICANCE KEY
- EXCEPTIONAL
- CONSIDERABLE
- SOME
- LITTLE
- INTRUSIVE
- NEUTRAL

Note: These drawings are based on measured survey information provided by others which we cannot guarantee the accuracy of

1:50 1m 2m 3m 4m 5m

LDN Architects
57 - 59 Bread Street, Edinburgh EH3 9AH
T: 0131 222 2900
E: architects@ldn.co.uk

Job Title:
2018
Killin and Ardeonaig Parish Church

Drawing Title:
Balcony Floor Plan - Significance Diagram

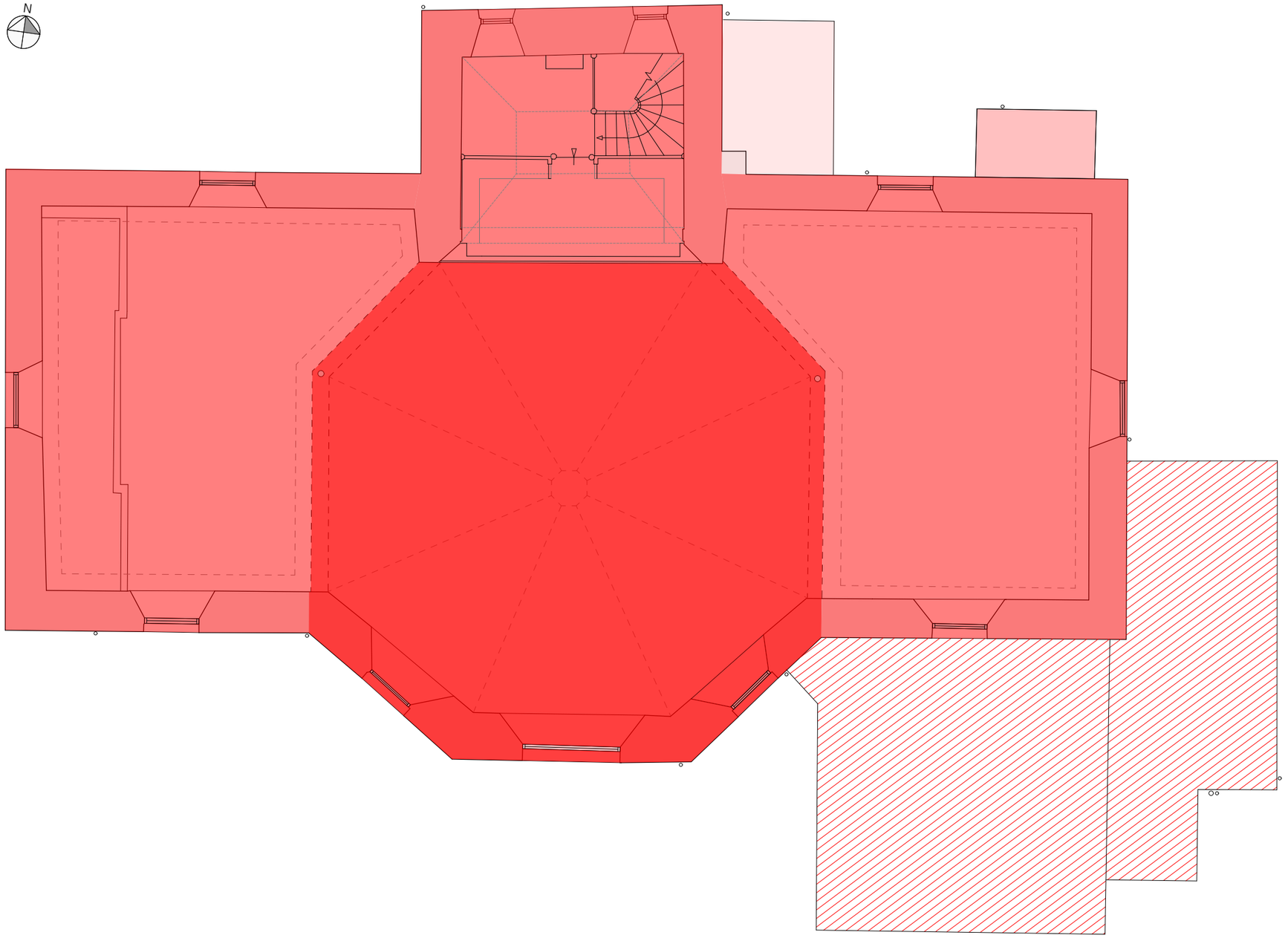
Drawing Status:
Existing

Drawing Number:
L(--)052

Scale:	Date:	Drawn:	Reviewed:
1:50 @ A1	Nov 2020	AR	EB

Revisions:

*	06.11.2020	AR	EB



SIGNIFICANCE KEY

- EXCEPTIONAL
- CONSIDERABLE
- SOME
- LITTLE
- INTRUSIVE
- NEUTRAL

Note: These drawings are based on measured survey information provided by others which we cannot guarantee the accuracy of

1:50 1m 2m 3m 4m 5m

LDN Architects
57 - 59 Bread Street, Edinburgh EH3 9AH
T: 0131 222 2900
E: architects@ldn.co.uk

Job Title:
2018
Killin and Ardeonaig Parish Church

Drawing Title:
Roof Plan - Significance Diagram

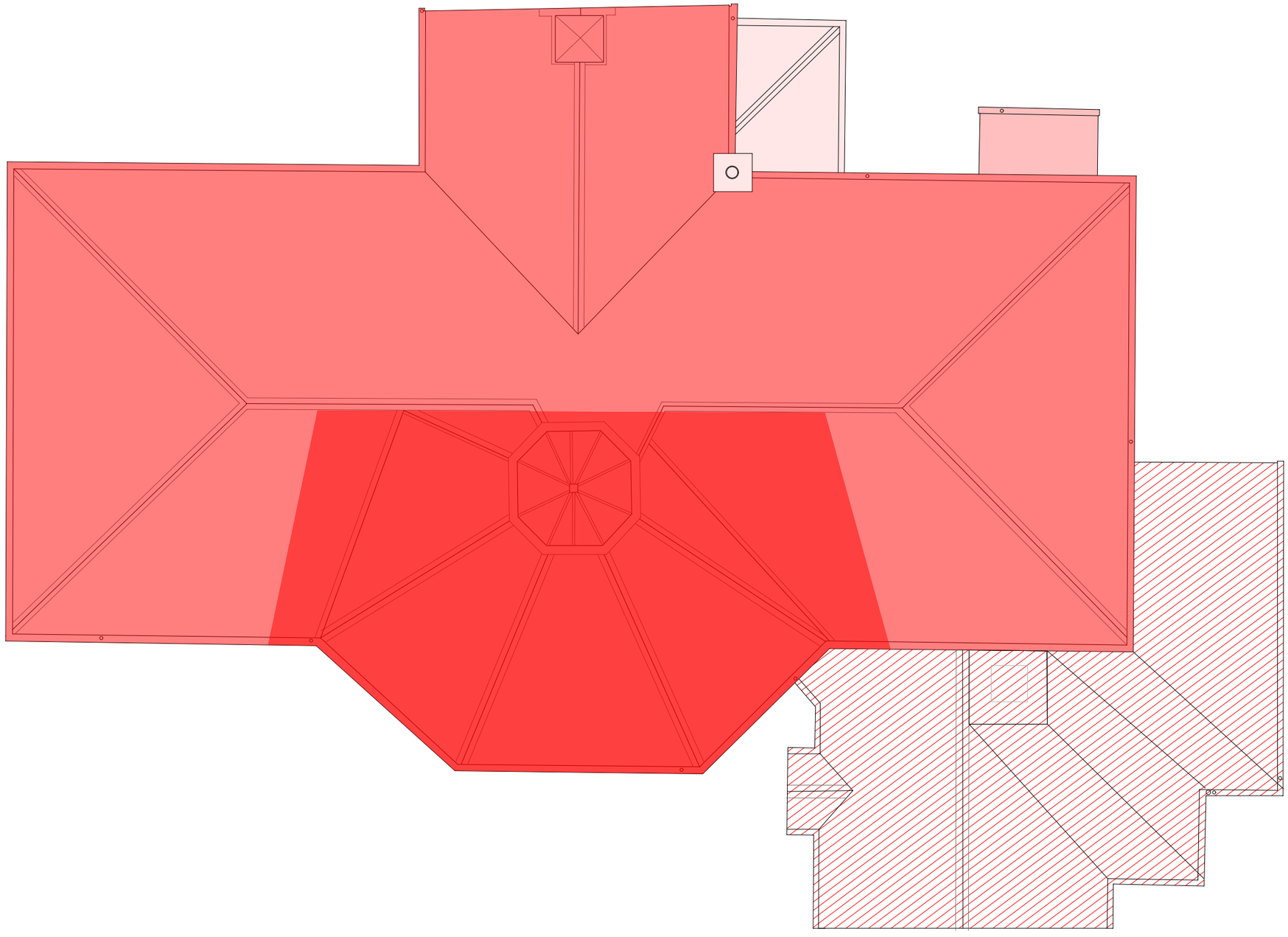
Drawing Status:
Existing

Drawing Number:
L(--)053

Scale:	Date:	Drawn:	Reviewed:
1:50 @ A1	Nov 2020	AR	EB

Revisions:

*	06.11.2020	AR	EB



SIGNIFICANCE KEY

- EXCEPTIONAL
- CONSIDERABLE
- SOME
- LITTLE
- INTRUSIVE
- NEUTRAL

Note: These drawings are based on measured survey information provided by others which we cannot guarantee the accuracy of

1:50 1m 2m 3m 4m 5m

LDN Architects
57 - 59 Bread Street, Edinburgh EH3 9AH
T: 0131 222 2900
E: architects@ldn.co.uk

Job Title:
2018
Killin and Ardeonaig Parish Church

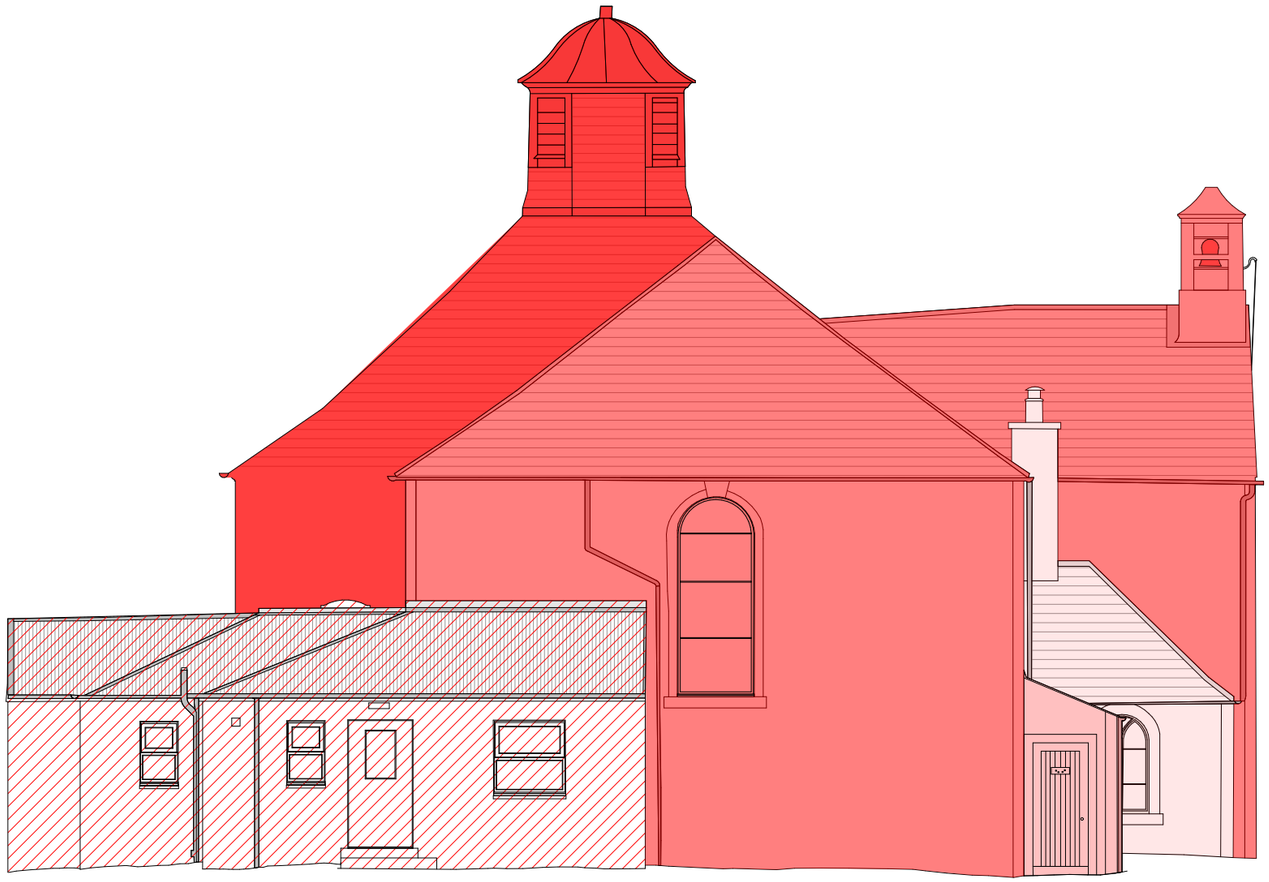
Drawing Title:
East Elevation - Significance Diagram

Drawing Status:
Existing

Drawing Number:
L(--)054

Scale:	Date:	Drawn:	Reviewed:
1:50 @ A1	Nov 2020	AR	EB

Revisions:			
*	06.11.2020	AR	EB



EAST ELEVATION

SIGNIFICANCE KEY

- EXCEPTIONAL
- CONSIDERABLE
- SOME
- LITTLE
- INTRUSIVE
- NEUTRAL

Note: These drawings are based on measured survey information provided by others which we cannot guarantee the accuracy of

1:50 1m 2m 3m 4m 5m

LDN Architects
57 - 59 Bread Street, Edinburgh EH3 9AH
T: 0131 222 2900
E: architects@ldn.co.uk

Job Title:
2018
Killin and Ardeonaig Parish Church

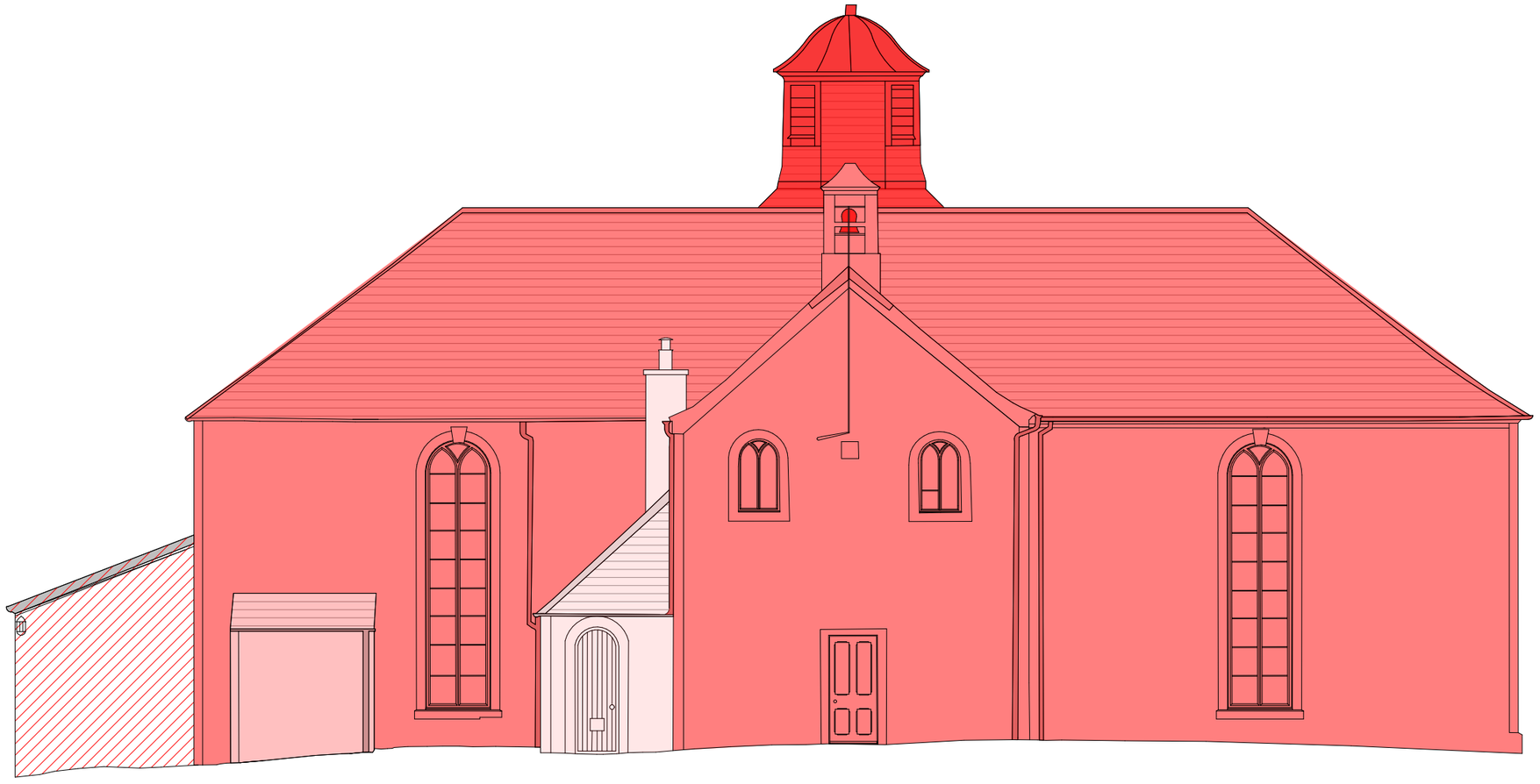
Drawing Title:
North Elevation - Significance Diagram

Drawing Status:
Existing

Drawing Number:
L(--)055

Scale:	Date:	Drawn:	Reviewed:
1:50 @ A1	Nov 2020	AR	EB

Revisions:			
*	06.11.2020	AR	EB



NORTH ELEVATION

SIGNIFICANCE KEY

- EXCEPTIONAL
- CONSIDERABLE
- SOME
- LITTLE
- INTRUSIVE
- NEUTRAL

Note: These drawings are based on measured survey information provided by others which we cannot guarantee the accuracy of

1:50 1m 2m 3m 4m 5m

LDN Architects
57 - 59 Bread Street, Edinburgh EH3 9AH
T: 0131 222 2900
E: architects@ldn.co.uk

Job Title:
2018
Killin and Ardeonaig Parish Church

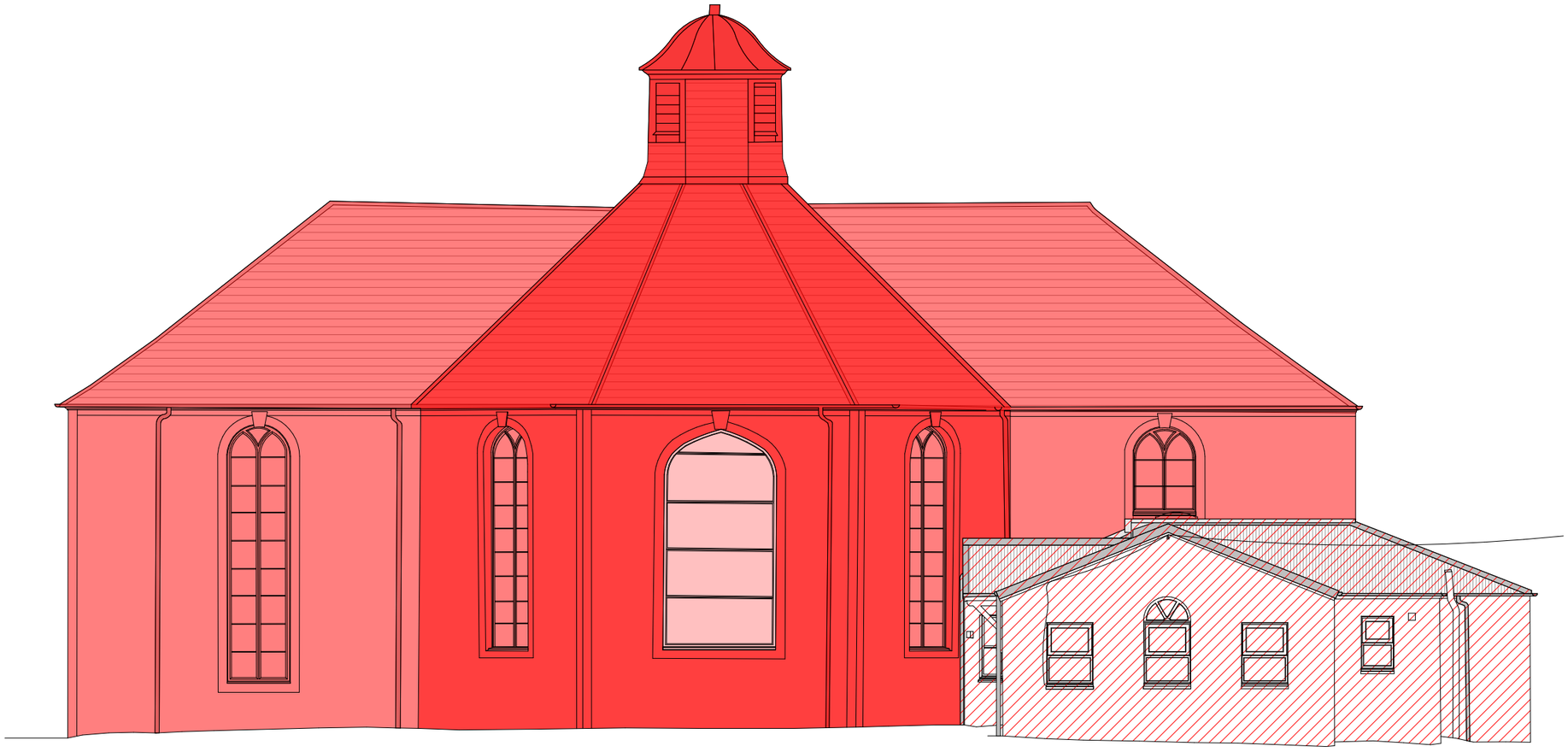
Drawing Title:
South Elevation - Significance Diagram

Drawing Status:
Existing

Drawing Number:
L(--)056

Scale:	Date:	Drawn:	Reviewed:
1:50 @ A1	Nov 2020	AR	EB

Revisions:			
*	06.11.2020	AR	EB



SOUTH ELEVATION

SIGNIFICANCE KEY

- EXCEPTIONAL
- CONSIDERABLE
- SOME
- LITTLE
- INTRUSIVE
- NEUTRAL

Note: These drawings are based on measured survey information provided by others which we cannot guarantee the accuracy of

1:50 1m 2m 3m 4m 5m

LDN Architects
57 - 59 Bread Street, Edinburgh EH3 9AH
T: 0131 222 2900
E: architects@ldn.co.uk

Job Title:
2018
Killin and Ardeonaig Parish Church

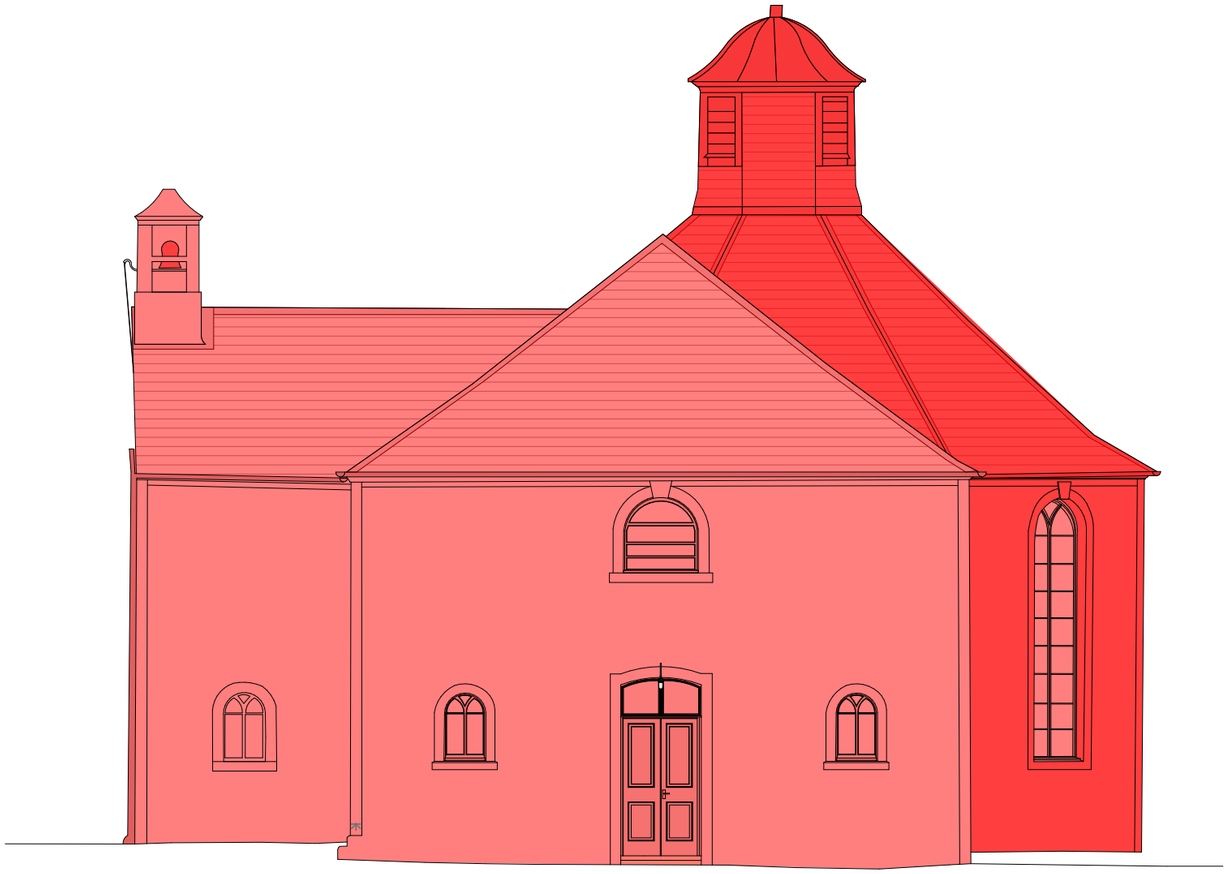
Drawing Title:
West Elevation - Significance Diagram

Drawing Status:
Existing

Drawing Number:
L(--)057

Scale:	Date:	Drawn:	Reviewed:
1:50 @ A1	Nov 2020	AR	EB

Revisions:			
*	06.11.2020	AR	EB



WEST ELEVATION

WEST ELEVATION

SIGNIFICANCE KEY

- EXCEPTIONAL
- CONSIDERABLE
- SOME
- LITTLE
- INTRUSIVE
- NEUTRAL

Note: These drawings are based on measured survey information provided by others which we cannot guarantee the accuracy of

1:50 1m 2m 3m 4m 5m

4.0 Building Condition

A costed quinquennial survey was carried out by Adams Napier Partnership during October 2018 (Appendix C). Following this, a structural survey of the bell tower and cupola was carried out by David Narro Associates in January 2020 (Appendix D).

Since both of these reports were prepared, the Church has independently arranged for the bell tower to be repaired during September 2020. The Church also arranged for a specialist timber survey to be carried out during November 2020 (Appendix E) with the intention of carrying out repairs during 2021.

An Asbestos report dated 2005 is available (Appendix F), though a Refurbishment & Demolition Asbestos Survey will be required in advance of any construction work.

5.0 Proposals

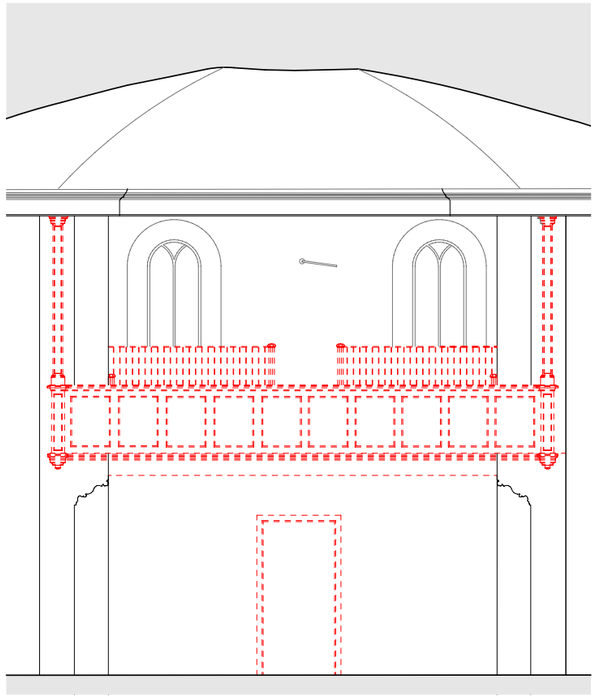
5.1 Options Appraisal

Measured survey drawings of the existing building are included under Appendix G and seating layouts were prepared in relation to removal of the pews (Appendix H).

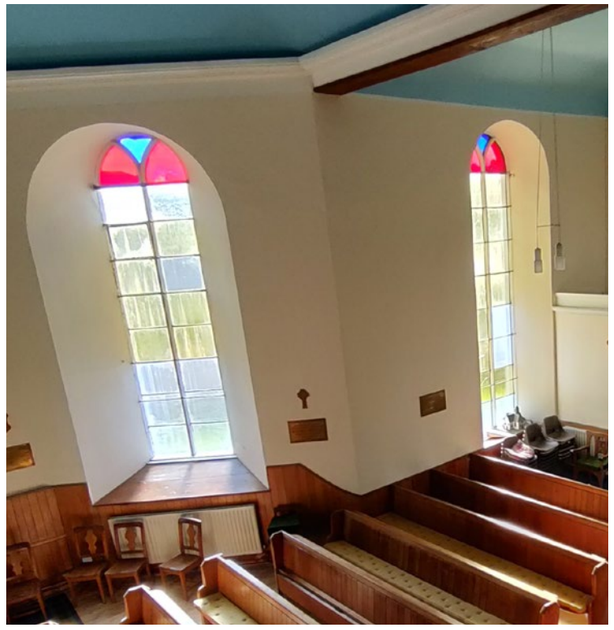
Various options were developed during the Feasibility Study and shared with the Church. The outcome of which has resulted in the following proposals:

- Creation of a large entrance within a new extension
- Reverting to the original orientation of worship (south) with the option to install smart glass in front of the War Memorial stained glass window
- Creation of new flexible spaces to east and west with movable partitions
- Levelling the floor to improve accessibility
- Removal of the organ
- Increased and enhanced toilet provision
- Increased kitchen and servery provision
- Installation of the Tiffany stained glass window salvaged from Morenish Chapel at the Laird's Loft
- Renew services including installation of renewables, underfloor heating, upgrades of lighting and AV
- Installation of insulation within the floor and roof
- Creation of new storage space for stackable chairs
- Comprehensive fabric repairs
- Display of artefacts within new extension

Downtakings and proposal drawings are included in the following pages.



The client is keen to explore the removal of the Laird's loft in order to create a more light and spacious entrance to the sanctuary from the new extension. This would require consideration and costing during the next stage, plus consultation with the Church of Scotland given its significance.



Upgrading of several windows including possible replacement with clear glazing and installation of secondary glazing is to be considered during the next stage.

LDN Architects
57 - 59 Bread Street, Edinburgh EH3 9AH
T: 0131 222 2900
E: architects@ldn.co.uk

Job Title:
Killin and Ardeonaig Parish Church

Drawing Title:
Ground Floor Plan

Drawing Status:
EXISTING

Drawing Number:
L(--)101A

Scale:	Date:	Drawn:	Reviewed:
1.50 @A1/1:100 @A3	Nov 2020	FM	

Revisions:

A	20.01.2021	FM

Revised following client comments. Issued to client.

Ground re-graded and landscaped to suit new extension entrance
Relocate radiators
Window sill lowered and width increased to create new door opening.
Slapping to external wall
STORE
STORE
Internal walls removed.
Slapping to new WC
Remove organ and equipment
Relocate font, table and pulpit
ORGAN OUTLET
Relocate radiators
ORGAN
Remove single story partitions and ceiling
VESTIBULE
Existing stepped floor removed and new level floor laid
Relocate radiators
Slapping to external wall
Internal walls removed for re-ordering of kitchen and WC.
UNISEX WC
MULTI-USE COMMUNITY ROOM
KITCHEN
Relocate radiators

1:50 1m 2m 3m 4m 5m

LDN Architects
57 - 59 Bread Street, Edinburgh EH3 9AH
T: 0131 222 2900
E: architects@ldn.co.uk

Job Title:
Killin and Ardeonaig Parish Church

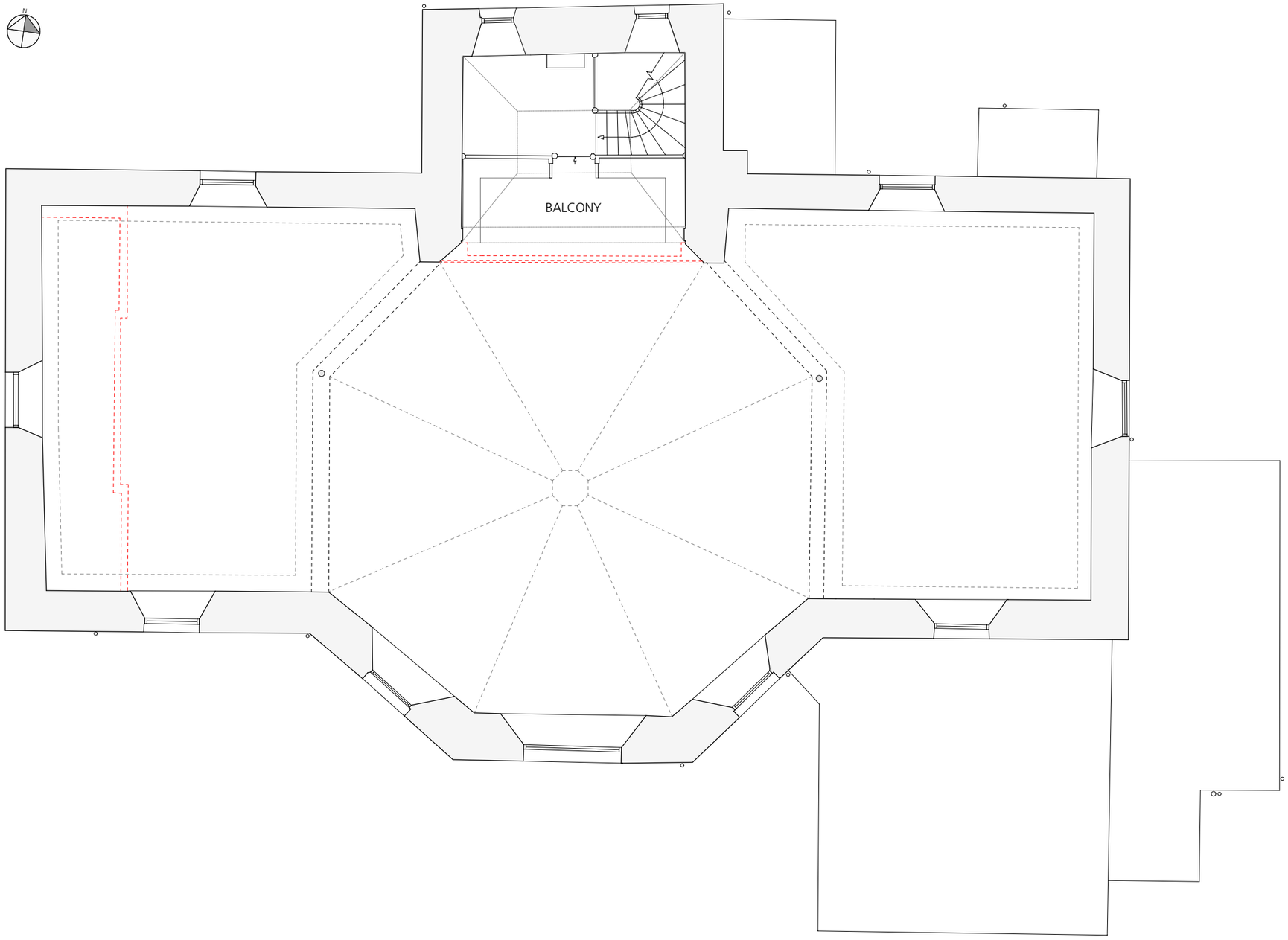
Drawing Title:
Balcony Floor Plan

Drawing Status:
EXISTING

Drawing Number:
L(--)102

Scale:	Date:	Drawn:	Reviewed:
1:50 @A1/1:100 @A3	Nov 2020	FM	

Revisions:



1:50 1m 2m 3m 4m 5m

LDN Architects
57 - 59 Bread Street, Edinburgh EH3 9AH
T: 0131 222 2900
E: architects@ldn.co.uk

Job Title:
Killin and Ardeonaig Parish Church

Drawing Title:
Ground Floor Plan

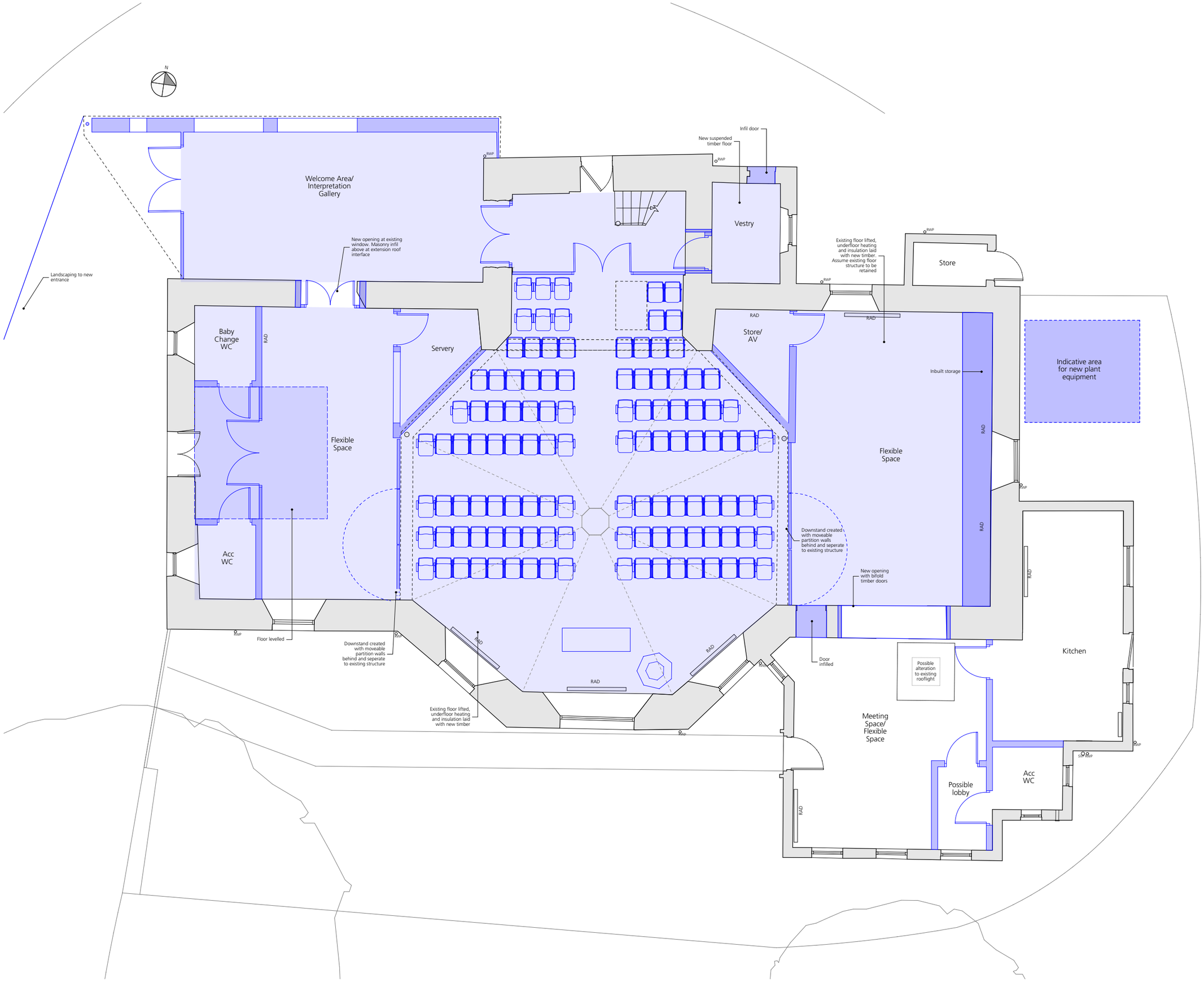
Drawing Status:
PROPOSED

Drawing Number:
L(--)111B

Scale:	Date:	Drawn:	Reviewed:
1:50 @A1/1:100 @A3	Nov 2020	FM	

Revisions:

A	27.11.2020	FM
Revised following DTM.		
B	20.01.2021	FM
Revised following client comments. Issued to client.		



LDN Architects
57 - 59 Bread Street, Edinburgh EH3 9AH
T: 0131 222 2900
E: architects@ldn.co.uk

Job Title:
Killin and Ardeonaig Parish Church

Drawing Title:
Balcony Floor Plan

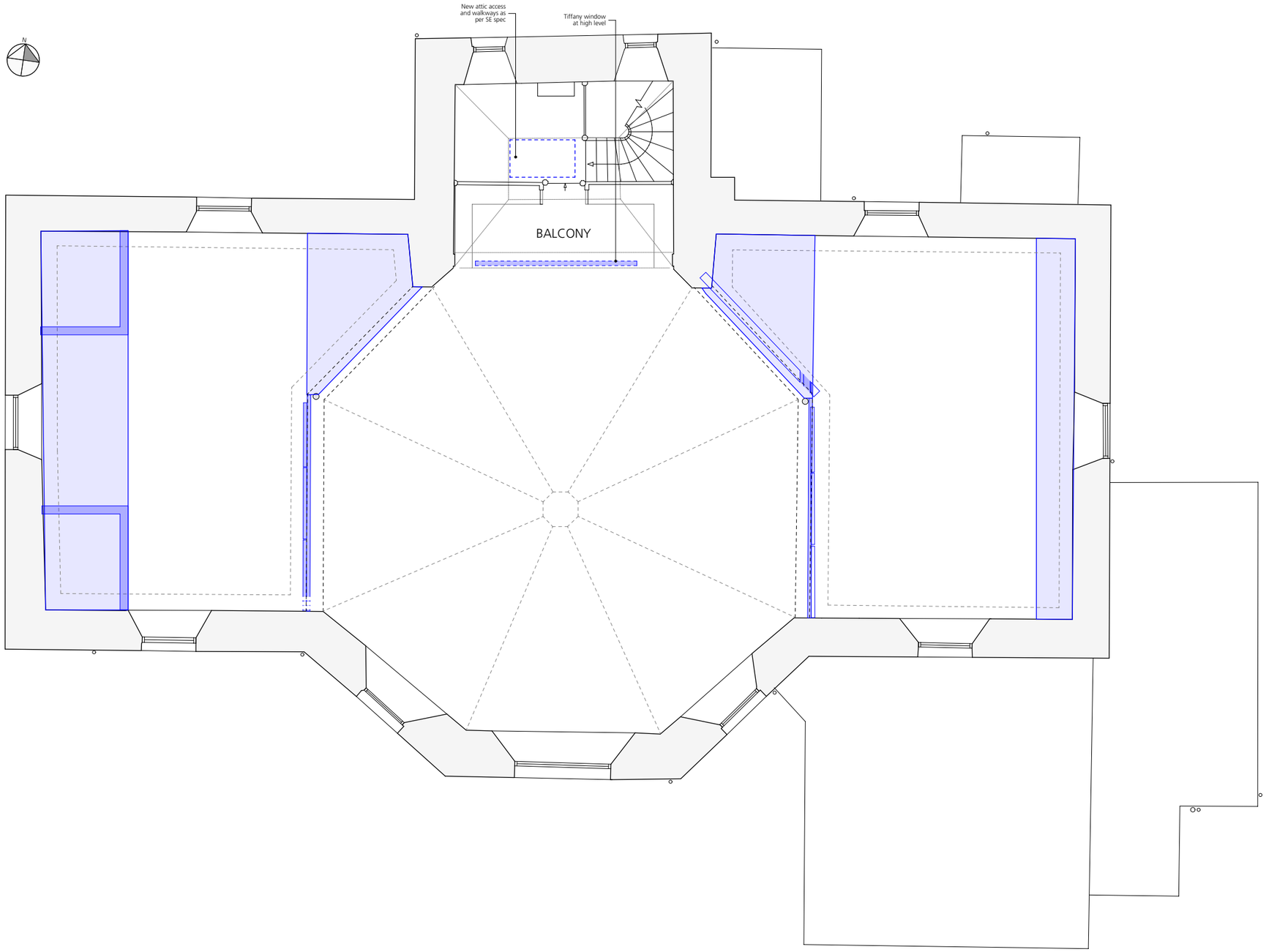
Drawing Status:
PROPOSED

Drawing Number:
L(--)112B

Scale:	Date:	Drawn:	Reviewed:
1.50	Nov 2020	FM	
@A1/1:100			
@A3			

Revisions:

A	27.11.2020	FM
Revised following DTM.		
B	20.01.2021	FM
Revised following client comments. Issued to client.		



1:50 1m 2m 3m 4m 5m

5.2 Outline Scope

1.0 Structures:

1.1 Refer to structural statement.

2.0 Services:

2.1 Refer to services statement.

3.0 Alterations:

3.1 Protection of historic windows and finishes.

3.2 Downtakings and strip-out as drawings including specialist removal of organ.

3.3 Floor levelled, insulated, underfloor heating installed and new engineered timber board finish installed. Existing skirting boards salvaged and supplemented to match. Acoustics to be considered in detail, particularly in relation to use of sanctuary / Sunday School.

3.4 New insulated suspended floor within former boiler room being converted to accessible toilet. New skirting boards to match.

3.5 Install solum ventilation with cast iron vents.

3.6 Roof insulated and adequate ventilation installed.

3.7 Improved roof space access provided including walkways.

3.8 Make good roof and walls at flue removal to former boiler room.

3.9 New acoustically rated fixed and sliding / bi-fold partitions as drawings.

3.10 3no new accessible toilet spaces and fittings.

3.11 1no new kitchen fit-out with integrated appliances (enhanced domestic level).

3.12 1no new servery fit-out with integrated appliances.

3.13 Slip resistant vinyl floor finishes in toilets and kitchen / servery.

3.14 Tiled splashbacks in toilets and servery. Whiterock splashbacks to kitchen.

3.15 Wall panelling repaired to match where pews removed.

3.16 New European oak-built storage along east wall.

3.17 Existing stair and balustrade to Laird's Loft refurbished and new carpet runner installed. Note that this would be omitted if the Laird's Loft was removed.

3.18 Joinery at Laird's Loft refurbished and new carpet installed. Note that this would be omitted if the Laird's Loft was removed.

3.19 Tiffany window re-located to front of Laird's Loft and toughened glazed balustrade installed to inside. Note that the window position would move north if the Laird's loft was removed.

3.20 Option to install secondary glazed smart glass to south elevation War Memorial window.

3.21 Font, communion table and pulpit carefully relocated to south.

3.22 Cracks and water damage repaired in existing plaster work.

3.23 Re-decorate throughout using Dulux Heritage range.

4.0 Extension:

4.1 Glazed and Siberian larch timber extension to west with zinc flat roof.

4.2 Re-grading ground works and landscaping to suit new entrance.

4.3 Install artefact display cases.

5.0 New Services Enclosure:

5.1 Siberian larch timber clad structure to east with single ply membrane flat roof.

6.0 Repairs:

6.1 Repairs in accordance with Adams Napier Partnership & David Narro Associates reports.

6.2 Omit requirement to re-build bell tower which has been carried out by client.

7.0 Surveys:

7.1 Refurbishment & Demolition Asbestos survey.

7.2 Rot & Infestation survey.

7.3 Trial pits at new structures.

7.4 Drainage CCTV.

7.5 Selective opening up.

7.6 Acoustics survey.

7.7 Bat & bird survey.

7.8 Stone analysis.

7.9 Lime analysis.

5.3 Extension


KILLIN HOTEL

5.4 Structural Statement

Existing Structure, Proposed Alterations and Extension

The existing church roof is understood to have been constructed in phases, with signs of past alteration. The roof is predominantly constructed in timber, but has some ironwork elements present. There are clear signs of timber decay or infestation which are currently being fully assessed ahead of repair works. It is understood that these repairs will have been completed ahead of the proposed alterations and extension.

We recommend that improved access to the roof space is included as part of the proposed works.

The central section of roof is in part carried by very slender cast iron columns. As such the columns form part of the building's primary structure. The columns appear to be jointed at their mid-height. Cast iron is a strong but brittle material and therefore should be considered vulnerable. Protective measures against impact or accidental loading should be considered during the design phase, construction phase and ongoing use of the building.

It will not be possible to justify any additional load (vertical or horizontal) being applied to the columns as part of the proposals. As such, proposed partitions in this section of the church will have to be supported independently to the existing roof and columns. New steel beams spanning the width of the church might be installed to provide lateral restraint to partitions, or allow partitions to be hung.

It is proposed to install a stained glass window to the edge of the existing balcony. It is expected that structural framing will be required to the perimeter of the relocated window, to replicate the original stonework surrounds. A separate protective barrier will have to be provided if the balcony section is accessible.

A number of new openings through walls are proposed. The most significant of these is to the south of the existing worship area located to the eastern side of the church. The opening will connect through to the community space, which is located in an existing more modern extension. This large opening may require a structural steel 'picture frame' to carry the masonry wall and roof loads from above and spread load back into the existing foundations. The frame would include steel lintel members, posts and ground beams.

Smaller door width openings elsewhere will require lintels. All openings will require temporary propping works with needling and propping to support masonry above during the construction.

The removal of pews to be replaced with stackable chairs may be regarded as a change of use in terms of how imposed (live) loading is calculated. A back-analysis of the existing floor joists may therefore be undertaken during the design phase to confirm that the proposed activities and any increase in loading from floor finishes or insulation is acceptable.

The proposed extension to the north west is flat roofed and might be constructed in a number of different materials. No significant structural challenges are anticipated in the design of the extension. Trial pits should be undertaken to determine the existing ground conditions and inform the design of new foundations and their interaction with the existing adjacent church building.

Drainage

We understand the church is served by mains public drainage. We recommend a CCTV Drainage Survey is undertaken to establish layout and condition of the existing system to help inform future alterations. The proposed alterations are likely to increase both Surface Water and Foul Water demand. Surface water management should be considered, with sustainable opportunities such as green roofs, rainwater collection, or local soakaways all being preferred to mains disposal by Scottish Water where practical.

5.5 Services Statement

Incoming Services/Supplies

Mains Water

The water supply to the building is adequate for the proposed development and as far as it is possible to tell will be unaffected by these works. The exact route of the mains water pipe(s) external to the building is not known but it is unlikely that a pipe passes under the proposed extension to the north.

Mains Electricity

The existing electricity supply and meter are located in a cupboard off the west door vestibule. It is a single phase 100A supply and is adequate for the proposed development unless a heat pump is proposed or the kitchen is of a larger standard than can be accommodated by this capacity. In that case an upgrade to a three phase supply would be required. The supply in any event cannot remain in this position and will require to be relocated. The most likely position for the new supply would be the new plant structure at the rear (east) of the building. The power cable currently enters the building from an overhead line. The pole for this is located on the opposite side of the road. The new supply would either be undergrounded from the opposite side of the road or alternatively a second pole would be erected near the church and the new cable undergrounded from that point around the south elevation to the new external plant room at the east gable.

Telecoms

It is expected that the existing provision will be adequate in terms of capacity. The existing main incoming cable enters the building in the south east corner of the existing hall extension and may require to be relocated depending upon the more detailed proposals for that space.

Installations Within the Building

Space Heating

The existing heating system is served by an oil fired boiler. The boiler is located in the basement boiler room and the oil tank is positioned at the east gable of the church. The proposals require that the area at ground level occupied by the boiler room becomes a vestry . This will require the central heating plant to be relocated whatever the heating solution will be. Space heating in the re-ordered building will be by a combination of underfloor heating and radiators. Depending upon the heating solution the underfloor system may be served by a heat pump supplemented by an oil fired boiler serving the radiators. Alternatively the whole system might be served by a wood pellet boiler. The options for the central plant are discussed in the separate section below.

The heating system will be zoned into five areas: The north extension entrance; the west, central and east sections of the sanctuary; and the reordered existing east hall extension.

Heating System Controls

The heating installation will be under the control of a flexible but simple control system that will permit access through the internet for remote monitoring and control. The nature of the control will be agreed with the client.

Domestic Hot and Cold Water

Cold water will be provided directly from the mains as it is now. Domestic hot water will be generated by local point of use water heaters. Separate heaters will be located near the three WCs, the baby change and the kitchen.

Ventilation

The nave is currently unventilated except by infiltration through the building fabric and a degree of natural ventilation associated with a roof vent arrangement. It is not proposed to alter this provision. It is possible however that the creation of the sub-dividable spaces in the east and west wings of the sanctuary could trigger the requirement for mechanical ventilation in these spaces from building control. If that was necessary then it is likely that the most pragmatic solution would be to install extract fans in the roof space above and duct these to dormer louvres formed in the roof. The toilets, baby change, servery and kitchen will all require mechanical extract. The scale of the extract in the kitchen will depend upon the specification of this. At present it is assumed that this will be a large scale domestic kitchen but not a full scale commercial arrangement.

Control of the ventilation in the toilets will be by presence detectors linked to the lighting circuits. Control of the ventilation fans in the kitchen, the servery and (if required) in the sub-dividable wings of the sanctuary will be by local speed controllers in each space.

Electrical Supply and Distribution Equipment

The existing distribution board next to the incoming supply and meter point will be removed and the building with the exception of the kitchen will be re-wired from a new distribution board located in the AV/store room. A separate distribution board will be located in the kitchen for the kitchen appliances. These boards will be supplied by new mains cables from the electrical supply point in the new external plant room.

Small Power

The wiring for the power installation will be by multi-core lsf cables installed below floors, within stud walls in conduit or clipped to tray. Circuit protection will be by RCCBOs (ie incorporating earth leakage protection) on all general power ring circuits.

13A twin switched socket outlets will be provided in meeting rooms and for general power. Power for AV equipment will also be provided. The extent of this will require to be determined during design development.

Lighting and Emergency Lighting

The general lighting and emergency lighting will be by high efficiency LED luminaires.

In the sanctuary a new scheme comprised of six larger contemporary chandeliers supplemented by perimeter LED cove lighting and spotlights will be developed. The Tiffany window will be back lit by LED tape. The new north extension entrance lobby will be provided with a decorative scheme.

Downlights will be utilised in the other areas.

Emergency lighting will be by mains charged self-contained emergency luminaires and emergency directional signage designed to meet building control requirements.

External lighting will be provided at the new main entrance and at fire escapes. The lighting at the new entrance will be integrated into the façade to make a statement about the re-ordered building and announce the new entrance location.

Fire Detection & Alarms

The building currently has no automatic fire detection system. The requirement for a system depends upon the future use but it is likely that a system will be required. It would be prudent to assume that a new L3 automatic installation would be part of the scheme. This would comprise of smoke detector/sounders in most areas except toilets and call points at exit doors. In the three sections of the sanctuary area beam detectors would be utilised to avoid the need to install detectors at high level.

The system will be connected to the intruder alarm system and from there to a remote, permanently manned monitoring station via a telephone link.

Security Systems and Facilities for the Disabled

A new intruder detection system will be installed. The system will comprise door contacts and passive infra-red movement sensors in areas directly accessible from outside. The system will be connected to a remote, permanently manned monitoring station via a telephone link.

Accessible toilet alarm systems will be provided in each of the accessible WCs.

A loop hearing system will be installed in each of the three main sanctuary areas.

Telecoms and Data Wiring

Wiring will be provided for telecoms and data in the newly created spaces, cabled to a new wiring rack in the AV/store room. Wiring for wi-fi access points will be provided in each main area. It is assumed that wiring for active equipment will be installed by the Client following completion of the building works. The cabling will be Cat 6 structured wiring system. The extent to which this system will interface with the specialist AV installation will require to be determined once the scope of that installation is known.

Existing telecoms and data connections located in the existing hall extension will be retained but wired to the new central rack position in the AV/store room.

Options for New Heating System

As part of the re-ordering works a new heating system will be required. The creation of the new vestry in the area off the north vestibule renders the existing boiler room unusable. The options for heating the church are:

New oil-fired heating installation

Hybrid air source heat pump coupled with oil fired boiler installation

Wood pellet boiler heating installation with oil fired back-up

A description of these coupled with the pros and cons is given below.

New oil fired heating

A new oil fired boiler will be located in a new external plant room on the east gable of the church. The existing oil tank would be retained and relocated. In this option the plant room required would be approximately 3m x 3m in plan x 3m high. A flue would project from the roof to a height of about 1.5m above the roof line.

The advantages of this option is that it is the lowest in capital cost terms but the highest in carbon emissions. It uses a fuel which does not have a long term future as government will move to discourage the use of hydrocarbons over the next 20 years. In the meantime however the cost of oil is still comparatively low and the upward pressure on price will diminish. If it does become more expensive it is likely that this will be due to taxes imposed by government rather than market forces.

Hybrid air source heat pump coupled with oil fired boiler

To utilize an air source heat pump to heat the building in its entirety is not a practical option for the church as the improvements that can be made to the insulation and air infiltration of the fabric is limited. A heat pump linked to an under-floor heating system would be capable of heating the building for approximately two thirds of the year but for the colder winter months it would be necessary to increase the heat input using another heat source which, in this instance, would most practically be an oil fired boiler. Air source heat pumps make noise, and the proximity of the hotel to the north east of the church means that it will be necessary to take precautions to limit the noise break-out from the pump to the surrounding environment. This can be achieved by locating the heat pump unit in an acoustic enclosure. The plant room in this option, incorporating both the heat pump equipment and acoustic protection and the oil fired top-up boiler would be in the region of 8m x 4m x 3.5m high. A flue would project from the roof to a height of about 1.5m above the roof line. Again the existing oil tank would be retained and relocated near the plant room.

The advantage of this option is that the base load for the heating system is taken up by a form of heating that is regarded as renewable. The disadvantages are that it requires an oil fired boiler system to top up the heating capacity in colder weather and an upgrade of the electricity supply to three phase will be required to operate the heat pump.

Wood pellet boiler installation with oil back-up

A pellet boiler would operate the heating system in the church in the same way as an oil fired boiler. In the event of a break-down of the pellet boiler or an interruption in the source of pellet fuel it is normal practice to also install and oil fired back up boiler. The plant room for the pellet boiler and the oil fired back up boiler would in this option be approximately 6m x 3m x 3.5m high. In addition to this there would be a pellet storage silo of approximately 3.5m high x 2m in diameter which would be located next to the plant room. There is concern over the products of combustion from biomass boilers. It is important that the flue emissions disperse adequately and do not cause a nuisance to neighbours. The flue from the boiler would be required to terminate at a height greater than that for an oil fired equivalent. In this case it should be assumed that the flue would need to rise at least 6m from ground level up the east gable of the church. The flue for the oil fired back up boiler would project from the roof to a height of about 1.5m above the roof line. Again the existing oil tank would be retained and relocated near the plant room.

The advantage of this option is that the heating is by a source which is renewable and has the lowest carbon emissions of the three options. The disadvantage of the option is that it is more expensive in capital cost terms and wood pellets are actually more expensive than oil at current prices. Incentive schemes such as the RHI can alter the economics but at this point the future intentions of government on matters like incentivising the use of low carbon fuels or dis-incentivising the use of hydrocarbons (eg by taxing them) is unclear.

5.6 Statutory Consents

The interior alteration work will be subject to ecclesiastical exemption and will therefore not require Planning or Listed Building Consent. The Church have previously made enquiries with CARTA regarding alteration work which resulted in approval to remove the pews (carried out during November 2020).

The exterior alterations, extension and new services enclosure will require Planning and Listed Building consent and we would recommend pre-application discussions regarding the extension given that it alters the front elevation. If a biomass boiler is proposed, the Planning application will require an assessment of emissions from the flue simulating different wind conditions. Alternatively, if an air source heat pump is proposed, the Planning application will require an acoustic assessment, particularly in relation to the nearby sleeping accommodation at the hotel.

Both the interior and exterior work will require Building Warrant Consent.

5.7 Phasing Options

The work could be carried out under one contract or potentially phased as follows:

1. External fabric repairs
2. Internal alterations
3. New extension

The following indicative costs assume that the work is carried out in one phase which would prove more economic.

6.0 Indicative Costs

As the project is currently at feasibility stage, the indicative cost produced is intended to give an approximate cost projection for budget planning purposes. Should the project develop then both the design and the cost can become more detailed, as at this stage Morham + Brotchie have made various cost allowances and assumptions based on the information available.

There are currently three separate heating installation options for the project and the cost has been prepared in a way that highlights the cost difference between these options. Morham + Brotchie has also incorporated and updated costs based on the Adams Napier Partnership report and these costs in addition to both the extension and the alteration costs have been isolated within the report. This helps to identify specific items within the cost and also is useful as a way of targeting savings if it is required.

Morham + Brotchie have worked on similar church projects and therefore have recent cost information that has been used to compare this project against. This is a useful tool to audit the costs and having carried out this benchmarking exercise, Morham + Brotchie believe that this supports the level of costs for the proposed works at this stage.

Morham + Brotchie PARTNERSHIP

Killin and Ardeonaig Parish Church

Indicative Cost

Proposed Extension & Alterations

18 December 2020

Contents

KILLIN AND ARDEONAIG PARISH CHURCH
KILLIN

Indicative Cost 1 : 18 December 2020

1.0 Introduction

This document has been prepared to report on the anticipated capital costs associated with the proposed Extension and Alterations at Killin and Ardeonaig Parish Church.

The following indicative cost has been prepared on the basis of the drawings and information prepared by LDN Architects, David Narro Associates and Irons Foulner. The cost also incorporates comments and budget costs identified in the quinquennial report prepared by Adams Napier Partnership.

The cost summary below splits the costs in to three options for different heating installation systems. These options all include for a new external building to house the plant equipment.

2.0 Indicative Cost Summary

		Indicative Cost		
		Heating Option 1	***Heating Option 2***	***Heating Option 3***
A	PREPARATORY WORKS	£ 8,000	£ 8,000	£ 8,000
B	BUILDING CONTRACT WORKS			
1	Adams Napier Report - (External Fabric Repairs/ Roof / Window & External Door Repairs)	£ 71,000	£ 71,000	£ 71,000
2	Alterations	£ 680,000	£ 680,000	£ 680,000
3	Extension	£ 170,000	£ 170,000	£ 170,000
C	HEATING OPTIONS (including area for plant)			
1	Heating Option 1 - New Oil Fired Heating Installation	£ 60,000		
2	Heating Option 2 - Hybrid Air Source Heat Pump System		£ 180,000	
3	Heating Option 3 - Wood Pellet Boiler Heating Installation			£ 170,000
		£ 989,000	£ 1,109,000	£ 1,099,000
	SAY	**£ 990,000**	**£ 1,110,000**	**£ 1,100,000**

3.0 Notes on the Cost

a Prices are based on the project being competitively tendered.

b Cost allowances for external fabric repairs/ roof repairs are based on the allowances made in the Adam Napiers Partnership report.

c An allowance for Design Development has been included as proposals are still at a relatively early stage.

d The impact of the current Covid-19 pandemic is still to be ascertained and the uncertainty of this situation comes with inherent risk which may impact upon construction costs.

e The impact of Brexit is still to be ascertained, these is an inherent risk which may impact upon construction costs.

4.0 Exclusions

1 Inflation
2 VAT
3 Insurances
4 Professional fees
5 Building Warrant and Planning Fees
6 Maintenance Costs
7 Furniture, fittings and equipment other than those specifically noted within the cost
8 Roof repairs as identified in Eradakil report are excluded as it is assumed that these works shall be carried out separately by the client.
9 Repairs to the bell tower and main cupola roof as identified in the Adams Napier Partnership survey are excluded as are to be carried out seperately.

Prepared by:

Morham + Brotchie Partnership
Chartered Quantity Surveyors
126 Calton Road
Edinburgh
EH8 8JQ

Tel: 0131 556 2556
Fax: 0131 556 2501
email: david.piechniczek@mb-qs.com

Appendix Cost Back Up

Killin and Ardeonaig Parish Church	QTY	UNIT	RATE	EXTENSION	TOTAL
Provisional allowances for the following preparatory works					
- Refurbishment & demolition and asbestos survey	1	sum	£ 1,000.00	£ 1,000.00	
- Rot & infestation survey	1	sum	£ 1,000.00	£ 1,000.00	
- Trial pits at new structures	1	sum	£ 500.00	£ 500.00	
- Drainage surveys / CCTV	1	sum	£ 750.00	£ 750.00	
- Selective opening up	1	sum	£ 500.00	£ 500.00	
- Acoustic survey	1	sum	£ 500.00	£ 500.00	
- Bat & bird survey	1	sum	£ 1,000.00	£ 1,000.00	
- Stone analysis	1	sum	£ 1,000.00	£ 1,000.00	
- Lime analysis	1	sum	£ 1,000.00	£ 1,000.00	
					£ 7,250.00
Contingency 10%					£ 725.00
					£ 7,975.00
				SAY	**£ 8,000.00**

Killin and Ardeonaig Parish Church	QTY	UNIT	RATE	EXTENSION	TOTAL
Notes:					
1 *The following costs have been identified within Adams Napier Partnership's quinquennial report.*					
2 *The costs exclude any works to the bell tower and to the main cupola as they are to be carried out separately..*					
3 *Items relating to general maintenance have also been excluded.*					
4 *Items relating to internal works (decoration etc)/ mechanical and electrical works and external works are deemed to be included within the main alterations cost*					
Roofs					
Main Roof					
Replace cracked and missing pointing in a suitably specified lime mortar allowance	1	sum	£ 150.00	£ 150.00	
Repair slating adjacent to valley and replace corroding brackets allowance	1	sum	£ 350.00	£ 350.00	
Boiler House Roof					
Cut out and replace cracked cement fillet and replace corroding zinc holding down straps allowance	1	sum	£ 250.00	£ 250.00	
Remove staining and redecorate harling at chimney and allowance for replacing lead flashing allowance	1	sum	£ 300.00	£ 300.00	
Rainwater goods					
Take down gutters and overhaul allowance	1	sum	£ 3,000.00	£ 3,000.00	
Redecorate cast iron gutters and downpipes allowance	1	sum	£ 1,920.00	£ 1,920.00	
Replace missing downpipe bracket allowance	1	sum	£ 50.00	£ 50.00	
Fit more appropriate connections at base of downpipes where identified allowance	1	sum	£ 1,000.00	£ 1,000.00	
Replace upvc sections of downpipes where appropriate allowance	1	sum	£ 600.00	£ 600.00	
Fit balloon gratings to gutter outlets allowance	1	sum	£ 300.00	£ 300.00	
Replace 2nr broken brackets allowance	1	sum	£ 100.00	£ 100.00	
					8,020.00
External Fabric Repairs					
Redecorate timber fascia at gable (north elevation) allowance	1	sum	£ 120.00	£ 120.00	
Redecorate timber fascia at gable allowance	1	sum	£ 480.00	£ 480.00	

Cut out and fill cracks with a suitable lime mortar/ remove bossed areas re-harl					
allowance	1	sum	£ 2,000.00	£ 2,000.00	
Prepare walls and redecorate with suitable limewash/ masonry paint					
allowance	1	sum	£11,000.00	£ 11,000.00	
Cut out and fill cracks with suitable lime mortar (north elevation - various locations)					
allowance	1	sum	£ 100.00	£ 100.00	
Point up gap with lime mortar/ realign stone cornice if required					
allowance	1	sum	£ 750.00	£ 750.00	
Cut out and fill cracks with suitable lime mortar (south elevation)					
allowance	1	sum	£ 50.00	£ 50.00	
Cut out and fill cracks with suitable lime mortar (east elevation)					
allowance	1	sum	£ 50.00	£ 50.00	
Clear blocked vents					
allowance	1	sum	£ 150.00	£ 150.00	
Fill crack in harling (north elevation)					
allowance	1	sum	£ 50.00	£ 50.00	
Repair damaged render					
allowance	1	sum	£ 50.00	£ 50.00	
Fill crack in harling (south elevation)					
allowance	1	sum	£ 50.00	£ 50.00	
Redecorate harling					
allowance	1	sum	£ 3,500.00	£ 3,500.00	
					18,350.00

Windows

Large windows (generally) - overhaul, replace rotten window cills and carry out splice repairs					
allowance	1	sum	£10,000.00	£ 10,000.00	
Prepare and redecorate					
allowance	1	sum	£ 1,400.00	£ 1,400.00	
Small windows (generally) - overhaul, replace rotten window cills and carry out splice repairs					
allowance	1	sum	£ 2,000.00	£ 2,000.00	
Prepare and redecorate					
allowance	1	sum	£ 700.00	£ 700.00	
Windows (generally) - replace cracked/ broken glazing					
allowance	1	sum	£ 1,000.00	£ 1,000.00	
Assessment of original glazing for future glass replacement					
allowance	1	sum	£ 750.00	£ 750.00	
Remove replacement glass not matching original scheme					
allowance	1	sum	£ 3,500.00	£ 3,500.00	
Replace wire mesh grilles					
allowance	1	sum	£ 800.00	£ 800.00	
Ventilation holes to decorative stained glass windows (east and south elevations)					
allowance	1	sum	£ 150.00	£ 150.00	
Specialist assessment of leaded windows (south elevation)					
allowance	1	sum	£ 750.00	£ 750.00	
					21,050.00

External Doors

Cut out decayed base of timber facings and splice repair (north elev - various locations)					
allowance	1	sum	£ 2,000.00	£ 2,000.00	
Replace plastic ventilation grille					
allowance	1	sum	£ 500.00	£ 500.00	
Replace rotten timber covering and cut out/replace decayed timber frame					
allowance	1	sum	£ 250.00	£ 250.00	
Replace corroded ironmongery fixings					
allowance	1	sum	£ 1,500.00	£ 1,500.00	
Redecorate external doors generally					
allowance	1	sum	£ 500.00	£ 500.00	
					4,750.00

		£ 52,170.00
PRELIMINARIES	12%	£ 6,260.40
		£ 58,430.40
DESIGN DEVELOPMENT	5%	£ 2,921.52
		£ 61,351.92
CONTINGENCY	15%	£ 9,202.79
		£ 70,554.71
	SAY	**£ 71,000.00**

Indicative Cost

Alterations

	QTY	UNIT	RATE	SUBTOTAL	TOTALS
1 *DOWNTAKINGS & SUBSTRUCTURE*					
a.1 Downtakings					
Carefully take down, remove and relocate					
Fixtures and fittings					
font, communion table and pulpit	1	sum	£ 1,000.00	£ 1,000.00	
Take down and remove					
Internal partitions					
150 thick	105	m^2	£ 30.00	£ 3,150.00	
making good / repairs, allowance	1	sum	£ 250.00	£ 250.00	
Balcony					
allowance for removing timber frontage for future window/frame installation	1	sum	£ 250.00	£ 250.00	
External doors					
single	1	nr	£ 40.00	£ 40.00	
Internal doors					
single - ground floor	10	nr	£ 30.00	£ 300.00	
Ceiling					
at vestibule	16	m^2	£ 30.00	£ 480.00	
Timber flooring					
main area (including stepped area)	238	m^2	£ 10.00	£ 2,380.00	
Floor finish					
balcony (carpet)	21	m^2	£ 10.00	£ 210.00	
back of house - kitchen/wc/community area	65	m^2	£ 10.00	£ 650.00	
Skirtings					
salvage existing where possible; allowance	50	m	£ 10.00	£ 500.00	
Wall finishes					
provisional allowance	25	m2	£ 15.00	£ 375.00	
Kitchen fittings					
sink, cooker, oven, worktops, units, cupboards etc - allowance, including capping off water supplies and drainage.	1	item	£ 500.00	£ 500.00	
Sanitaryware					
wc	1	nr	£ 40.00	£ 40.00	
whb	1	nr	£ 40.00	£ 40.00	
redundant pipework	1	item	£ 75.00	£ 75.00	
miscellaneous loose fittings	1	item	£ 50.00	£ 50.00	
Organ removal (& equipment)					
allowance for specialist removal	1	sum	£ 2,000.00	£ 2,000.00	
Electrical Installation					
allowance - including retaining radiators where poss	336	m^2	£ 10.00	£ 3,360.00	
Mechanical Installation					
allowance (inc garage/storage)	336	m^2	£ 10.00	£ 3,360.00	
Boiler room					
remove fixtures and fittings	1	sum	£ 250.00	£ 250.00	
Miscellaneous					
allowance	1	sum	£ 500.00	£ 500.00	
Protection works					
Historic windows/ finishes					
allowance			included within preliminaries		
a.2 Substructure					
Foundations					
to new internal masonry walls					
provisional allowance	1	sum	£ 3,500.00	£ 3,500.00	
					£ 23,260.00
					£ 23,260.00
2 SUPERSTRUCTURE					
2A *BUILDER/STRUCTURAL WORK*					
Forming downstands					
either side of octagon; include allowance for steelwork to width of church					
form pockets In masonry	4	nr	£ 150.00	£ 600.00	
padstones	6	nr	£ 75.00	£ 450.00	
2 nr steel beams; 9000 long; allow	18	m	£ 200.00	£ 3,600.00	
allowance for steel fittings	1	sum	£ 350.00	£ 350.00	
additional builderswork allowance	1	sum	£ 250.00	£ 250.00	
allowance for making good	1	sum	£ 200.00	£ 200.00	
framing to form downstands (2nr)	19	m^2	£ 27.00	£ 513.00	
insulation	19	m^2	£ 22.00	£ 418.00	
plasterboard	28	m^2	£ 13.00	£ 364.00	
skim coat	28	m^2	£ 12.00	£ 336.00	
Internal masonry walls					
to main church areas only					
allow 100 thick	81	m^2	£ 40.00	£ 3,240.00	
framing/ plasterboard etc			included elsewhere		
Slapping; at existing store					
allow 850 x 2100; 750 thick wall					
carefully remove masonry & dispose, temp propping, forming pockets/jambs etc and make good	1	sum	£ 4,000.00	£ 4,000.00	
Slapping; at existing organ outlet					
allow 1000 x 2100; 750 thick wall					
carefully remove masonry & dispose, temp propping, forming pockets/jambs etc and make good	1	sum	£ 4,500.00	£ 4,500.00	
Slapping; at existing community room					
allow 2800 x 2400; 1000 thick wall					
carefully remove masonry & dispose, temp propping, forming pockets/jambs, steel lintels & posts etc and make good	1	sum	£ 7,500.00	£ 7,500.00	
Infill openings					
allow 850 x 2100; 500 thick wall					
allow masonry infill, tie in to existing etc, plasterboard and skim etc	1	sum	£ 1,250.00	£ 1,250.00	
allow 900 x 2100; 950 thick wall					
allow masonry infill, tie in to existing etc, plasterboard and skim both sides etc	1	sum	£ 1,750.00	£ 1,750.00	
Joinerwork					
refurbish joinerwork (timber lining boards/ seating) at balcony - provisional allowance	1	sum	£ 2,000.00	£ 2,000.00	
New timber flooring build up					
to central area of church					
lift and remove existing flooring			included elsewhere		
allowance for repairs to substructure - joists/sleeper walls etc - provisional	1	sum	£ 5,000.00	£ 5,000.00	
allowance for levelling floor	15	m^2	£ 15.00	£ 225.00	
allow 100 thick insulation board	226	m^2	£ 30.00	£ 6,780.00	
allow 12 thick plywood with polythene separating layer	226	m^2	£ 18.00	£ 4,068.00	
allowance for battens	226	m^2	£ 12.00	£ 2,712.00	
dry screed mix	226	m^2	£ 20.00	£ 4,520.00	
under floor heating			included elsewhere		

engineered timber floor			included elsewhere			
allowance for solum ventilation	1	sum	£ 1,000.00	£ 1,000.00		
Suspended timber floor						
to accessible wc						
joists	19	m	£ 15.00	£ 285.00		
allowance for works to masonry	1	sum	£ 200.00	£ 200.00		
runners bolted to masonry or timber	10	m	£ 20.00	£ 200.00		
joist hangers/shoes	6	nr	£ 14.00	£ 84.00		
insulation	6	m^2	£ 30.00	£ 180.00		
ply deck	5	m^2	£ 20.00	£ 100.00		
finish			included elsewhere			
					£	56,675.00
2B *UPPER FLOORS*						
					£	-
2C *ROOFS*						
Existing roof						
allowance for making good where flue removed	1	sum	£ 1,500.00	£ 1,500.00		
new attic access/ hatch	1	nr	£ 500.00	£ 500.00		
provisional allowance for repairs to structural timber - condition unknown	1	sum	£ 3,500.00	£ 3,500.00		
provisional allowance for improved walkways within attic	58	m	£ 30.00	£ 1,740.00		
improve roof insulation - provisional allowance	226	m^2	£ 35.00	£ 7,910.00		
eaves ventilation - allowance	115	m	£ 20.00	£ 2,300.00		
Rainwater goods						
provisional allowance for alterations to existing/ connections etc	1	sum	£ 250.00	£ 250.00		
					£	17,700.00
2D *STAIRS*						
Existing stair						
refurbish timber stairs and balustrading - allowance	1	sum	£ 2,000.00	£ 2,000.00		
					£	2,000.00
2E *ELEVATIONS*						
					£	-
2F *WINDOWS & EXTERNAL DOORS*						
Windows						
install Tiffany window at balcony; include for bespoke framing	1	nr	£ 5,000.00	£ 5,000.00		
glazed balustrading at balcony	5	m	£ 750.00	£ 3,750.00		
Secondary glazing						
to south elevation window - allow 2200 x 4500	1	nr	£ 7,500.00	£ 7,500.00		
Rooflights						
existing rooflight (meeting space) - provisional allowance for possible alterations (TBC)	1	sum	£ 2,500.00	£ 2,500.00		
					£	18,750.00
2G *INTERNAL PARTITIONS*						
Internal partitions						
kitchen/lobby etc (back of house); allow timber stud						
timber framing	30	m^2	£ 27.00	£ 810.00		
insulation	30	m^2	£ 22.00	£ 660.00		
plasterboard	60	m^2	£ 13.00	£ 780.00		
skim coat	60	m^2	£ 12.00	£ 720.00		
Timber skirtings - allow 125m						
new skirtings; allowance	95	m	£ 14.00	£ 1,330.00		
re-use existing; allowance	30	m	£ 10.00	£ 300.00		
					£	4,600.00

2H *INTERNAL DOORS*						
Doors						
new timber framed door						
single	8	nr	£ 550.00	£ 4,400.00		
double	2	nr	£ 800.00	£ 1,600.00		
frame	54	m	£ 16.00	£ 864.00		
stops	54	m	£ 14.00	£ 756.00		
architraves	108	m	£ 15.00	£ 1,620.00		
ironmongery	10	nr	£ 250.00	£ 2,500.00		
bifold timber doors						
allow 3000 long	1	nr	£ 5,000.00	£ 5,000.00		
sliding door to octagon						
bifold door/partition; allow 4000 x 4500	2	nr	£10,000.00	£ 20,000.00		
					£	36,740.00
					£	136,465.00
3 INTERNAL FINISHES						
3A *INTERNAL WALL FINISHES*						
Framing/ plasterboard to existing rooms						
new accessible wc (north)						
framing	21	m^2	£ 27.00	£ 567.00		
insulation , allow	21	m^2	£ 22.00	£ 462.00		
plasterboard	21	m^2	£ 13.00	£ 273.00		
skim coat	21	m^2	£ 12.00	£ 252.00		
store 1 (north)						
framing	9	m^2	£ 27.00	£ 243.00		
insulation , allow	9	m^2	£ 22.00	£ 198.00		
plasterboard	9	m^2	£ 13.00	£ 117.00		
skim coat	9	m^2	£ 12.00	£ 108.00		
store 2 (north)						
framing	8	m^2	£ 27.00	£ 216.00		
insulation , allow	8	m^2	£ 22.00	£ 176.00		
plasterboard	8	m^2	£ 13.00	£ 104.00		
skim coat	8	m^2	£ 12.00	£ 96.00		
Framing/plasterboard to newly formed rooms (masonry walls)						
accessible wc (1)						
framing	46	m^2	£ 27.00	£ 1,242.00		
insulation , allow	46	m^2	£ 22.00	£ 1,012.00		
plasterboard	46	m^2	£ 13.00	£ 598.00		
skim coat	46	m^2	£ 12.00	£ 552.00		
baby change						
framing	46	m^2	£ 27.00	£ 1,242.00		
insulation , allow	46	m^2	£ 22.00	£ 1,012.00		
plasterboard	46	m^2	£ 13.00	£ 598.00		
skim coat	46	m^2	£ 12.00	£ 552.00		
servery						
framing	58	m^2	£ 27.00	£ 1,566.00		
insulation , allow	58	m^2	£ 22.00	£ 1,276.00		
plasterboard	58	m^2	£ 13.00	£ 754.00		
skim coat	58	m^2	£ 12.00	£ 696.00		
store/AV						
framing	58	m^2	£ 27.00	£ 1,566.00		
insulation , allow	58	m^2	£ 22.00	£ 1,276.00		
plasterboard	58	m^2	£ 13.00	£ 754.00		
skim coat	58	m^2	£ 12.00	£ 696.00		
Plaster repairs						
provisional allowance						
not exceeding 1.00 m2	25	nr	£ 22.00	£ 550.00		
exceeding 1.00 m2	30	m^2	£ 30.00	£ 900.00		
Timber panelling						
repairs to existing						
provisional allowance	30	m^2	£ 50.00	£ 1,500.00		

Splashbacks								
toilets/ servery - allow tiled	5	nr	£	200.00	£	1,000.00		
kitchen - allow whiterock	1	nr	£	650.00	£	650.00		
							£	22,804.00
3B *FLOOR FINISHES*								
Finishes								
vinyl finish; allow								
kitchen	23	m²	£	50.00	£	1,150.00		
acc wc (1)	5	m²	£	50.00	£	250.00		
acc wc (2)	6	m²	£	50.00	£	300.00		
acc wc (3)	4	m²	£	50.00	£	200.00		
baby change	4	m²	£	50.00	£	200.00		
servery	5	m²	£	50.00	£	250.00		
carpet; allow								
balcony	21	m²	£	55.00	£	1,155.00		
carpet runner to stair	1	sum	£	350.00	£	350.00		
engineered timber flooring								
main church area	223	m²	£	120.00	£	26,760.00		
meeting space/ flexible space	35	m²	£	120.00	£	4,200.00		
possible lobby	4	m²	£	120.00	£	480.00		
resin finish; allow								
store (1)	4	m²	£	40.00	£	160.00		
store (2)	3	m²	£	40.00	£	120.00		
							£	35,575.00
3C *CEILING FINISHES*								
Existing ceilings								
allow for plaster repairs etc - provisional								
not exceeding 1.00m2	25	nr	£	22.00	£	550.00		
exceeding 1.00m2	40	m²	£	30.00	£	1,200.00		
Framing/ plasterboard to existing rooms								
new accessible wc (north)								
framing	6	m²	£	27.00	£	162.00		
insulation , allow	6	m²	£	22.00	£	132.00		
plasterboard	6	m²	£	13.00	£	78.00		
skim coat	6	m²	£	12.00	£	72.00		
store 1 (north)								
framing	5	m²	£	27.00	£	135.00		
insulation , allow	5	m²	£	22.00	£	110.00		
plasterboard	5	m²	£	13.00	£	65.00		
skim coat	5	m²	£	12.00	£	60.00		
store 2 (north)								
framing	2	m²	£	27.00	£	54.00		
insulation , allow	2	m²	£	22.00	£	44.00		
plasterboard	2	m²	£	13.00	£	26.00		
skim coat	2	m²	£	12.00	£	24.00		
Framing/plasterboard to newly formed rooms								
accessible wc (1)								
framing	4	m²	£	27.00	£	108.00		
insulation , allow	4	m²	£	22.00	£	88.00		
plasterboard	4	m²	£	13.00	£	52.00		
skim coat	4	m²	£	12.00	£	48.00		
baby change								
framing	4	m²	£	27.00	£	108.00		
insulation , allow	4	m²	£	22.00	£	88.00		
plasterboard	4	m²	£	13.00	£	52.00		
skim coat	4	m²	£	12.00	£	48.00		
servery								
framing	5	m²	£	27.00	£	135.00		
insulation , allow	5	m²	£	22.00	£	110.00		
plasterboard	5	m²	£	13.00	£	65.00		
skim coat	5	m²	£	12.00	£	60.00		
store/AV								
framing	5	m²	£	27.00	£	135.00		
insulation , allow	5	m²	£	22.00	£	110.00		
plasterboard	5	m²	£	13.00	£	65.00		
skim coat	5	m²	£	12.00	£	60.00		
							£	4,044.00
3D *DECORATION*								
Internal decoration; GIFA								
ground floor; throughout	315	m²	£	75.00	£	23,625.00		
balcony	21	m²	£	75.00	£	1,575.00		
							£	25,200.00
							£	87,623.00
4 FITTINGS & FIXTURES								
Kitchen								
provisional sum allowance	1	sum	£	20,000.00	£	20,000.00		
Servery								
provisional sum allowance	1	sum	£	10,000.00	£	10,000.00		
Inbuilt oak storage wall								
provisional allowance	1	sum	£	25,000.00	£	25,000.00		
							£	55,000.00
							£	55,000.00
5 SERVICES								
5A SANITARY WARE								
Accessible WCs								
doc m pack	3	nr	£	2,500.00	£	7,500.00		
Baby changing/ WC								
allowance	1	sum	£	2,000.00	£	2,000.00		
							£	9,500.00
5B PLUMBING								
Plumbing								
plumbing - soil, waste & domestic water, allowance per fittings	10	nr	£	750.00	£	7,500.00		
							£	7,500.00
5C HEATING & VENTILATION								
Heating installation								
allowance for relocating existing central heating plant (required for all heating options)	1	sum	£	5,000.00	£	5,000.00		
allowance for new radiators/ re-using existing where possible	1	sum	£	7,500.00	£	7,500.00		
allowance for heating control system	1	sum	£	5,000.00	£	5,000.00		
underfloor heating (assume not required for back of house/ kitchen areas)	223	m²	£	75.00	£	16,725.00		
allowance for domestic water heaters	1	sum	£	1,500.00	£	1,500.00		
sundry items/ testing etc	1	sum	£	500.00	£	500.00		
Ventilation								
extract fan ventilation to kitchen/servery/toilets	1	sum	£	5,000.00	£	5,000.00		
							£	41,225.00
5D ELECTRICAL								
Electrical installation								
new power, distribution, general electrical circuits	336	m²	£	120.00	£	40,320.00		
wiring for telecoms and date - allowance to newly formed areas	1	sum	£	5,000.00	£	5,000.00		
budget allowance for AV (scope TBC)	1	sum	£	40,000.00	£	40,000.00		
allowance for data rack	1	sum	£	3,000.00	£	3,000.00		
budget allowance for lighting/emergency lighting	1	sum	£	25,000.00	£	25,000.00		
intruder alarm system	336	m²	£	25.00	£	8,400.00		
fire detection & alarm system	336	m²	£	25.00	£	8,400.00		
loop hearing system to sanctuary	1	sum	£	2,500.00	£	2,500.00		
accessible wc alarms (3nr)	1	sum	£	3,000.00	£	3,000.00		
sundry items/ testing etc	1	sum	£	1,000.00	£	1,000.00		

					£ 136,620.00		
5E	BWIC						
	allowance	5%		£ 9,742.25			
					£ 9,742.25		
						£	204,587.25
6	DRAINAGE & EXTERNAL SERVICES						
6A	SITE WORK						
	External works						
	allowance for work as identified with Adams Napier Partnership report - replace rotten fence posts, paint gates, remove minor vegetation etc	1	sum	£ 2,500.00	£ 2,500.00		
					£ 2,500.00		
6B	DRAINAGE						
	Foul and Surface						
	provisional allowance for any alterations	1	sum	£ 2,500.00	£ 2,500.00		
					£ 2,500.00		
6C	SERVICES						
	Incoming services						
	water						
	allowance	existing provision deemed adequate					
	telecoms						
	allowance	existing provision deemed adequate					
	electricity						
	provisional allowance for relocating existing electrical supply	1	sum	£10,000.00	£ 10,000.00		
	NOTE: cost for upgrading electrical supply if heat pump installed included in Heating Option						
					£ 10,000.00		
						£	15,000.00
							£ 521,935.25
7	PRELIMINARIES	12%					£ 62,632.23
							£ 584,567.48
8	DESIGN DEVELOPMENT	5%					£ 29,228.37
							£ 613,795.85
8	CONTINGENCY	10%					£ 61,379.59
							£ 675,175.44
				SAY			**£ 680,000.00**

Indicative Cost

Extension

		QTY	UNIT	RATE	SUBTOTAL	TOTALS
1	*DOWNTAKINGS & SUBSTRUCTURE*					
	a.1 Downtakings					
	Windows					
	allow 4000 high	2	nr	£ 100.00	£ 200.00	
	a.2 Substructure					
	Site preparation					
	prepare ground for new slab					
	remove existing turf; allow	45	m²	£ 10.00	£ 450.00	
	remove hard landscaping, allow	1	sum	£ 250.00	£ 250.00	
	allowance for re-grading/ levelling etc	50	m²	£ 10.00	£ 500.00	
	Solid ground floor slab					
	excavate	16	m³	£ 40.00	£ 640.00	
	dispose off site	16	m³	£ 25.00	£ 400.00	
	level	41	m²	£ 3.00	£ 123.00	
	compact excavations	41	m²	£ 3.00	£ 123.00	
	hardcore - 150 thick	6	m³	£ 50.00	£ 300.00	
	compacting hardcore	41	m²	£ 3.00	£ 123.00	
	blind	41	m²	£ 3.00	£ 123.00	
	dpm	41	m²	£ 5.00	£ 205.00	
	150 thick slab; concrete	6	m³	£ 180.00	£ 1,080.00	
	mesh reinforcement	41	m²	£ 18.00	£ 738.00	
	allow insulation	41	m²	£ 30.00	£ 1,230.00	
	allow 12 thick plywood with polythene separating layer	41	m²	£ 18.00	£ 738.00	
	allowance for battens	41	m²	£ 12.00	£ 492.00	
	dry screed mix	41	m²	£ 20.00	£ 820.00	
	under floor heating			included elsewhere		
	engineered timber floor			included elsewhere		
					£ 8,535.00	
						£ 8,535.00
2	SUPERSTRUCTURE					
2A	*BUILDER/STRUCTURAL WORK*					
	Slapping; at existing store					
	allow 2000 x 2100; 800 thick wall					
	carefully remove masonry & dispose, temp propping, forming pockets/jambs etc and make good	1	sum	£ 5,000.00	£ 5,000.00	
	Slapping; at vestibule					
	allow 2000 x 2100; 800 thick wall					
	carefully remove masonry & dispose, temp propping, forming pockets/jambs etc and make good	1	sum	£ 5,000.00	£ 5,000.00	
	Infill openings ; above new opening in to extension					
	allow 2000 x 1500; 800 thick wall					
	allow masonry infill, tie in to existing etc, plasterboard and skim etc	1	sum	£ 1,500.00	£ 1,500.00	
					£ 11,500.00	
2B	*UPPER FLOORS*					
					£ -	
2C	*ROOFS*					
	Zinc flat roof, allow					
	zinc	41	m²	£ 130.00	£ 5,330.00	
	zinc edge detailing	23	m	£ 70.00	£ 1,610.00	
	battens	41	m²	£ 12.00	£ 492.00	
	sarking boards	41	m²	£ 22.00	£ 902.00	
	membrane	41	m²	£ 6.00	£ 246.00	

insulation	41	m²	£	35.00	£	1,435.00		
plywood boarding	41	m²	£	20.00	£	820.00		
sundry timbers	1	sum	£	250.00	£	250.00		
joists	114	m	£	24.00	£	2,736.00		
allow dwangs	63	m	£	10.00	£	630.00		
wall plate	18	m	£	15.00	£	270.00		
allowance for tying to existing masonry	1	sum	£	500.00	£	500.00		
Rainwater goods								
allow cast iron								
gutters	15	m	£	75.00	£	1,125.00		
downpipes	9	m	£	75.00	£	675.00		
connections, angles etc	1	sum	£	250.00	£	250.00		
							£	17,271.00
2D *STAIRS*								
							£	-
2E *ELEVATIONS*								
Extension								
External wall make up - allow 4.5m high								
Siberian larch cladding	60	m²	£	125.00	£	7,500.00		
horizontal timber battens	60	m²	£	14.00	£	840.00		
vertical timber battens	60	m²	£	14.00	£	840.00		
breather membrane	60	m²	£	5.00	£	300.00		
allow layer 140 thick block	60	m²	£	65.00	£	3,900.00		
timber framing	60	m²	£	35.00	£	2,100.00		
insulation	60	m²	£	40.00	£	2,400.00		
plasterboard, allow 2 layers	60	m²	£	26.00	£	1,560.00		
skim coat plaster	60	m²	£	12.00	£	720.00		
West elevation - allow 4.5m high								
assume glazed elevation/ entrance	15	m²	£	1,000.00	£	15,000.00		
							£	35,160.00
2F *WINDOWS & EXTERNAL DOORS*								
Windows								
window heights tbc								
2000 x 1300	1	nr	£	3,000.00	£	3,000.00		
2350 x 1300	1	nr	£	3,500.00	£	3,500.00		
External doors								
double door at entrance, allow glazed	1	nr	£	5,000.00	£	5,000.00		
							£	11,500.00
2G *INTERNAL PARTITIONS*								
New timber skirtings								
allow	25	m	£	14.00	£	350.00		
							£	350.00
2H *INTERNAL DOORS*								
Doors								
new timber framed door								
double	2	nr	£	800.00	£	1,600.00		
frame	12	m	£	16.00	£	192.00		
stops	12	m	£	14.00	£	168.00		
architraves	24	m	£	15.00	£	360.00		
ironmongery	2	nr	£	250.00	£	500.00		
							£	2,820.00
							£	78,601.00
3 INTERNAL FINISHES								
3A *INTERNAL WALL FINISHES*								
Framing/ plasterboard								
existing external walls								
framing	56	m²	£	27.00	£	1,512.00		
insulation , allow	56	m²	£	22.00	£	1,232.00		
plasterboard	56	m²	£	13.00	£	728.00		
skim coat	56	m²	£	12.00	£	672.00		
							£	4,144.00
3B *FLOOR FINISHES*								
Finishes								
extension								
allow engineered timber	39	m²	£	120.00	£	4,680.00		
							£	4,680.00
3C *CEILING FINISHES*								
Ceilings								
framing	39	m²	£	27.00	£	1,053.00		
insulation, allow	39	m²	£	22.00	£	858.00		
plasterboard	39	m²	£	13.00	£	507.00		
skim coat	39	m²	£	12.00	£	468.00		
							£	2,886.00
3D *DECORATION*								
Internal decoration; GIFA								
extension	39	m²	£	75.00	£	2,925.00		
							£	2,925.00
							£	14,635.00
4 FITTINGS & FIXTURES								
Extension								
artefact display cases, allowance	1	sum	£	2,500.00	£	2,500.00		
							£	2,500.00
							£	2,500.00
5 SERVICES								
5A SANITARY WARE								
							£	-
5B PLUMBING								
							£	-
5C HEATING & VENTILATION								
Heating installation								
underfloor heating	39	m²	£	75.00	£	2,925.00		
allowance for new radiators/ re-using existing								
where possible	1	sum	£	1,000.00	£	1,000.00		
valves, pipework, connections etc	1	sum	£	250.00	£	250.00		
sundry items/ testing etc	1	sum	£	300.00	£	300.00		
							£	4,475.00
5D ELECTRICAL								
Electrical installation								
new power, distribution, general electrical circuits	39	m²	£	120.00	£	4,680.00		
budget allowance for lighting/ emergency lighting	1	sum	£	2,000.00	£	2,000.00		
external lighting - allowance	1	sum	£	5,000.00	£	5,000.00		
intruder alarm system	39	m²	£	25.00	£	975.00		
fire detection & alarm system	39	m²	£	25.00	£	975.00		
sundry items/ testing etc	1	sum	£	250.00	£	250.00		
							£	13,880.00
5E BWIC								
allowance	5%				£	917.75		
							£	917.75
							£	19,272.75
6 DRAINAGE & EXTERNAL SERVICES								
6A SITE WORK								
Landscaping to entrance								
scope TBC; budget allowance meantime	1	sum	£	5,000.00	£	5,000.00		
							£	5,000.00

6B	DRAINAGE		£	-
6C	SERVICES		£	-
			£	5,000.00
			£	128,543.75
7	PRELIMINARIES	12%	£	15,425.25
			£	143,969.00
8	DESIGN DEVELOPMENT	5%	£	7,198.45
			£	151,167.45
8	CONTINGENCY	10%	£	15,116.75
			£	166,284.20
		SAY	**£**	**170,000.00**

Indicative Cost

Area for New Plant / Heating Option 1

		QTY	UNIT		RATE		SUBTOTAL		TOTALS
1	*DOWNTAKINGS & SUBSTRUCTURE*								
	a.2 Substructure								
	Site preparation								
	prepare ground for new slab								
	remove existing turf; allow	15	m^2	£	10.00	£	150.00		
	remove hard landscaping, allow	1	sum	£	150.00	£	150.00		
	allowance for re-grading/ levelling etc	1	sum	£	150.00	£	150.00		
	Solid ground floor slab - allow 3400 x 3000								
	excavate	4	m^3	£	40.00	£	160.00		
	dispose off site	4	m^3	£	25.00	£	100.00		
	level	10	m^2	£	3.00	£	30.00		
	compact excavations	10	m^2	£	3.00	£	30.00		
	hardcore - 150 thick	2	m^3	£	50.00	£	100.00		
	compacting hardcore	10	m^2	£	3.00	£	30.00		
	blind	10	m^2	£	3.00	£	30.00		
	dpm	10	m^2	£	5.00	£	50.00		
	150 thick slab; concrete	2	m^3	£	180.00	£	360.00		
	mesh reinforcement	10	m^2	£	18.00	£	180.00		
	allow insulation	10	m^2	£	30.00	£	300.00		
	underfloor heating				assume not required				
	formwork for edge of bed	13	m	£	12.00	£	156.00		
	levelling screed	10	m^2	£	25.00	£	250.00		
								£	2,226.00
								£	2,226.00
2	SUPERSTRUCTURE								
2A	*BUILDER/STRUCTURAL WORK*							£	-
2B	*UPPER FLOORS*							£	-
2C	*ROOFS*								
	Flat roof extension								
	single ply roof membrane; including 155 thick								
	insulation and vapour membrane	10	m^2	£	140.00	£	1,400.00		
	allow 18mm plywood	10	m^2	£	20.00	£	200.00		
	timber joists	26	m	£	28.00	£	728.00		
	allowance for sundry timbers	1	sum	£	150.00	£	150.00		
	allow 50 x 50 battens	10	m^2	£	12.00	£	120.00		
	wall plate	12	m	£	15.00	£	180.00		
	Flue								
	allowance	5	m	£	90.00	£	450.00		
	Rainwater goods								
	allow cast iron								
	gutters	7	m	£	75.00	£	525.00		
	downpipes	6	m	£	75.00	£	450.00		
	connections, angles etc	1	sum	£	100.00	£	100.00		
								£	4,303.00
2D	*STAIRS*							£	-
2E	*ELEVATIONS*								
	Extension								
	External wall make up - allow 3m high								
	Siberian larch cladding	38	m^2	£	125.00	£	4,750.00		
	horizontal timber battens	38	m^2	£	14.00	£	532.00		
	vertical timber battens	38	m^2	£	14.00	£	532.00		

breather membrane	38	m²	£	5.00	£	190.00		
allow 140 thick block	38	m²	£	65.00	£	2,470.00		
timber framing	38	m²	£	35.00	£	1,330.00		
insulation	38	m²	£	40.00	£	1,520.00		
plasterboard	38	m²	£	13.00	£	494.00		
skim coat plaster	38	m²	£	12.00	£	456.00		
							£	12,274.00

2F *WINDOWS & EXTERNAL DOORS*

External doors								
allow single door	1	nr	£	1,000.00	£	1,000.00		
							£	1,000.00

2G *INTERNAL PARTITIONS*

							£	-

2H *INTERNAL DOORS*

							£	-
							£	17,577.00

3 INTERNAL FINISHES

3A *INTERNAL WALL FINISHES*

							£	-

3B *FLOOR FINISHES*

Finishes								
plant area								
allowance for resin flooring finish	10	m²	£	40.00	£	400.00		
							£	400.00

3C *CEILING FINISHES*

Ceilings								
framing	10	m²	£	27.00	£	270.00		
insulation , allow	10	m²	£	22.00	£	220.00		
plasterboard	10	m²	£	13.00	£	130.00		
skim coat	10	m²	£	12.00	£	120.00		
							£	740.00

3D *DECORATION*

Internal decoration; GIFA								
may not be required - provisional allowance	10	m²	£	75.00	£	750.00		
							£	750.00
							£	1,890.00

4 FITTINGS & FIXTURES

							£	-
							£	-

5 SERVICES

5A SANITARY WARE

							£	-

5B PLUMBING

							£	-

5C HEATING & VENTILATION

Heating Option 1								
new oil fired heating system	1	sum	£	25,000.00	£	25,000.00		
							£	25,000.00

5D ELECTRICAL

Electrical installation								
allowance for electrical supply, wiring etc	1	sum	£	2,000.00	£	2,000.00		
							£	2,000.00

5E BWIC

allowance	1	sum	£	250.00	£	250.00		
							£	250.00
							£	27,250.00

6 DRAINAGE & EXTERNAL SERVICES

6A SITE WORK

							£	-

6B DRAINAGE

							£	-

6C SERVICES

							£	-
							£	-

		£	48,943.00
7 PRELIMINARIES	12%	£	5,873.16
		£	54,816.16
8 DESIGN DEVELOPMENT	5%	£	2,740.81
		£	57,556.97
8 CONTINGENCY	10%	£	5,755.70
		£	63,312.66
	SAY	**£**	**60,000.00**

Indicative Cost

Area for New Plant / Heating Option 2

	QTY	UNIT	RATE	SUBTOTAL	TOTALS	
1 *DOWNTAKINGS & SUBSTRUCTURE*						
a.2 Substructure						
Site preparation						
prepare ground for new slab						
remove existing turf; allow	35	m²	£ 10.00	£ 350.00		
remove hard landscaping, allow	1	sum	£ 150.00	£ 150.00		
allowance for re-grading/ levelling etc	1	sum	£ 250.00	£ 250.00		
Solid ground floor slab - allow 8000 x 4000						
excavate	13	m³	£ 40.00	£ 520.00		
dispose off site	13	m³	£ 25.00	£ 325.00		
level	32	m²	£ 3.00	£ 96.00		
compact excavations	32	m²	£ 3.00	£ 96.00		
hardcore - 150 thick	5	m³	£ 50.00	£ 250.00		
compacting hardcore	32	m²	£ 3.00	£ 96.00		
blind	32	m²	£ 3.00	£ 96.00		
dpm	32	m²	£ 5.00	£ 160.00		
150 thick slab; concrete	5	m³	£ 180.00	£ 900.00		
mesh reinforcement	32	m²	£ 18.00	£ 576.00		
allow insulation	32	m²	£ 30.00	£ 960.00		
underfloor heating			assume not required			
formwork for edge of bed	24	m	£ 12.00	£ 288.00		
levelling screed	32	m²	£ 25.00	£ 800.00		
					£ 5,913.00	
						£ 5,913.00
2 SUPERSTRUCTURE						
2A *BUILDER/STRUCTURAL WORK*						
					£ -	
2B *UPPER FLOORS*						
					£ -	
2C *ROOFS*						
Flat roof extension						
single ply roof membrane; including 155 thick insulation and vapour membrane	32	m²	£ 140.00	£ 4,480.00		
allow 18mm plywood	32	m²	£ 20.00	£ 640.00		
timber joists	54	m	£ 28.00	£ 1,512.00		
allowance for sundry timbers	1	sum	£ 250.00	£ 250.00		
allow 50 x 50 battens	32	m²	£ 12.00	£ 384.00		
wall plate	32	m	£ 15.00	£ 480.00		
Flue						
allowance	5	m	£ 90.00	£ 450.00		
Rainwater goods						
allow cast iron						
gutters	8	m	£ 75.00	£ 600.00		
downpipes	7	m	£ 75.00	£ 525.00		
connections, angles etc	1	sum	£ 150.00	£ 150.00		
					£ 9,471.00	
2D *STAIRS*						
					£ -	
2E *ELEVATIONS*						
Extension						
External wall make up - allow 3.5m high						
Siberian larch cladding	84	m²	£ 125.00	£ 10,500.00		
horizontal timber battens	84	m²	£ 14.00	£ 1,176.00		
vertical timber battens	84	m²	£ 14.00	£ 1,176.00		
breather membrane	84	m²	£ 5.00	£ 420.00		
allow 140 thick block	84	m²	£ 65.00	£ 5,460.00		
timber framing	84	m²	£ 35.00	£ 2,940.00		
insulation	84	m²	£ 40.00	£ 3,360.00		
allow acoustic timber panels (required due to ASHP)	84	m²	£ 100.00	£ 8,400.00		
					£ 33,432.00	
2F *WINDOWS & EXTERNAL DOORS*						
External doors						
allow single door	1	nr	£ 1,000.00	£ 1,000.00		
					£ 1,000.00	
2G *INTERNAL PARTITIONS*						
					£ -	
2H *INTERNAL DOORS*						
					£ -	
						£ 43,903.00
3 INTERNAL FINISHES						
3A *INTERNAL WALL FINISHES*						
					£ -	
3B *FLOOR FINISHES*						
Finishes						
plant area						
allowance for resin flooring finish	32	m²	£ 40.00	£ 1,280.00		
					£ 1,280.00	
3C *CEILING FINISHES*						
Ceilings						
framing	32	m²	£ 27.00	£ 864.00		
insulation , allow	32	m²	£ 28.00	£ 896.00		
allow acoustic timber panels (required due to ASHP)	32	m²	£ 100.00	£ 3,200.00		
					£ 4,960.00	
3D *DECORATION*						
Internal decoration; GIFA						
may not be required - provisional allowance	32	m²	£ 75.00	£ 2,400.00		
					£ 2,400.00	
						£ 8,640.00
4 FITTINGS & FIXTURES						
					£ -	
						£ -
5 SERVICES						
5A SANITARY WARE						
					£ -	
5B PLUMBING						
					£ -	
5C HEATING & VENTILATION						
Heating Option 2						
hybrid ASHP system	1	sum	£65,000.00	£ 65,000.00		
further upgrade to electrics (3 phase supply) required to cope with ASHP	1	sum	£10,000.00	£ 10,000.00		
					£ 75,000.00	
5D ELECTRICAL						

	Electrical installation									
	allowance for electrical supply, wiring etc	1	sum	£	2,000.00	£	2,000.00	£	2,000.00	
	5E BWIC									
	allowance	1	sum	£	500.00	£	500.00	£	500.00	
										£ 77,500.00
6	DRAINAGE & EXTERNAL SERVICES									
	6A SITE WORK									
								£	-	
	6B DRAINAGE									
								£	-	
	6C SERVICES									
								£	-	£ -
										£ 135,956.00
7	PRELIMINARIES					12%				£ 16,314.72
										£ 152,270.72
8	DESIGN DEVELOPMENT					5%				£ 7,613.54
										£ 159,884.26
8	CONTINGENCY					10%				£ 15,988.43
										£ 175,872.68
								SAY		**£ 180,000.00**

Appendix A

Forward in Faith 2020

Killin & Ardeonaig Parish Church of Scotland

Forward in Faith 2020…
…the Church in the Community, the Community in the Church

Introduction

This paper is an attempt to prompt thinking, decision making *and action* to consolidate the growth of the Killin and Ardeonaig Parish Church and to attempt to carry forward the vision of our church and the Church of Scotland against tide of challenge and seeming decline. Not only is it an imperative of our faith and the nature of a church to be thriving, discipling and inclusive body of people, part of the body of Christ, but at a much more fundamental level the support for the church in Killin and Ardeonaig from Presbytery is likely to be dependent on the health of the congregation as we seek to fulfil our vision.

Summary

1. Killin and Ardeonaig Parish Church has an exciting vision of the future with the purpose of being the Church in the Community and the Community being in the Church.
2. There are clear aims and objectives to help realise the vision.
3. Growth in the life of the congregation would bring more opportunities for mission in the community.
4. Growth in the life of the congregation would provide more resources to continue the church's work in meeting its aims, objectives and fulfilling its vision.
5. The church building does not engender growth in the life of the congregation.
6. The church building does not meet modern standards for health and safety, inclusive access and use, environmental standards. It could be said not to be fit for purpose.
7. The church building survey reveals many areas needing repair and maintenance.

Immediate action

1. Confirm agreement with this paper.
2. Communicate the intentions of this paper to the congregation.
3. Communicate the intentions of this paper to Presbytery.
4. Proceed to replace the pews with chairs as soon as possible.
5. Work with the minister to introduce new ways of worship and engender Christian growth.
6. Implement a time scaled action plan for the urgent repairs and maintenance.
7. Appoint an architect to help develop proposals for development.

Vision of Killin and Ardeonaig

For a number of years we have said:

We aim to be a Christ centred family

- Bible based in our discipleship
- Together in our worship
- Caring in our community
- Serving with our God given gifts.

None of this need change, it certainly lays out an aspiration for the future. In the context of our current situation it might be helpful to develop an action plan to help realise the vision and to put some detail on what it means when considering our current circumstances.

- Bible based in our discipleship
  We have a minister who holds the Bible in high regard and teaches from it.
- Together in our worship
  Currently we are small enough church numerically and managing to hold in balance the various needs and some of the aspirations of many but probably not all of those attending. But any flexibility or opportunity to 'do church' in a different way from time to time is limited by the layout of the church. We started looking at this on the 'church tour' some of us went on in 2011.
- Caring in our community
  We may be caring in our community. In order to welcome people into the church and help people to feel as though it is a welcoming place where they can go without encountering a rigid way of doing things, sitting and relating to others are obvious changes to be made. Proving more toilets in a more available way for example, or storage for the groups who already use the church/community rooms.
- Serving with our God given gifts.
  There are various ways we can do this but basically we either make it easy for people to come in for us to serve or we go out to serve where they are. The church having a higher profile in the community and creating facilities and services for all in the parish may be a difficult thing to see but we have a fine unusual building that is more or less used for an hour a week and we have the glebe.

Themes from Presbytery are helpful to frame progress towards our vision over the next five years and beyond:

- Life of the congregation - worship, evangelism, service, discipleship, fellowship.
- Wider church – partnerships with other congregations, community groups or agencies, or mission partners. Involvement with Presbytery.
- Resources – people, buildings, money.
- Communication, with the congregation, keeping in touch with one another, others living in the parish, advertising what the church is doing.
- Leadership development and staff training.

Aim

To be a Christian community pointing to Jesus, growing in discipleship, drawing others in and placing itself at the centre of village life.

Objectives

1. For the congregation
   to provide ways of *worship, fellowship* and *being together* that encourage *discipleship* and a sense of moving together towards the fulfilment of our vision. Flowing from congregational growth in these areas will be a readiness to *talk about our faith*.
   i. To identify ways, perhaps other meeting groups, for members of the congregation to share stories about their own Christian life and learn more about the day to day business of being a Christian.
   ii. To create opportunities for informal fellowship such as a men's breakfast, after church service discussions, fellowship meals to encourage a 'gossiping of the gospel'.
   iii. To use these and other means to form a community of discipleship from where the church can grow in service and evangelism.

2. For the parish
   to increase the visibility and ways in which the church *serves* the community. To *inspire the community* to see new ways the church can effectively serve and meet needs.
   i. To make the church accessible both physically and socially /emotionally / spiritually so that the community will continue to think of the church as 'theirs' but also for what goes on in the church to be 'theirs'.
   ii. To use informal contacts and occasional events within the church building as an opportunity for evangelism, drawing on the discipleship developed in Objective 1.

3. For the congregation and the parish
   to tell the *heritage story* of the church in Killin and how it came to be at the heart of the village. To add meaning to the buildings and to locate the existing and future congregation and church in time and society. To provide for increasing numbers of visitors coming to the church on holiday or *pilgrimage* that they will be refreshed in their faith and take blessing back to their own communities. In this sense to be a sending church.

Underlying principles

- Pray constantly
- Keep everything in the public eye of the congregation
- To change what we do to meet the changing experiences of the congregation and local community. To grow in informality, to experiment with different ways of worship, changing the structure of worship to bring other things and people in thereby growing discipleship in the congregation.
- Stage the developments in two ways:
  - Those things that encourage the congregation – something that can be seen to be happening.
  - Those things of fabric that provide the space but are not exciting, the exciting things are those that happen within the space.
- Establish fundraising milestones with the end in sight.
- Demonstrate success along the way in order to release the next wave of funds.
- 'Next we are fundraising for…..'
- Adopt the notion of Future proofing.

Future proofing based on:

- mission
- where we would like to be in five years' time, or 10 years
- future flexibility
- long term forward plan circa 45 years (the accepted life of a building in the form it is in).

What will the church / society's need be in 2065? What changes can be anticipated?
Therefore, we need buildings that are adaptable.

An **informal survey** at a gathering of 100 church members from a number of parishes in October 2019 showed their priorities in a building to be:

Warm halls / sanctuary
Toilets
Places to meet.

Other priorities included:
Welcoming space; hospitality; gathering size; intimacy; economy and efficiency.
It was noted that "if we get it wrong no one will want to undo the work that has been done with the best of intentions".

Problems and solutions

	Problem	Solution	Objective	Action
1	There are individuals within the congregation who barely know each other.	Create more fellowship opportunities. .	1	Prepare and maintain an annual calendar of events of sufficient variety to attract different people
2	It can be difficult to translate the teaching of the Sunday morning service into practical and/or personal things for daily life.	Establish ways appropriate to groups of individuals at different stages of their Christian lives to have follow up from Sunday mornings, nurturing and discipling them in their faith.	1	Consult with the congregation about how best to do this, whether it is a mid week meeting, an after church meeting or something else.
3	The present Community Rooms are too crowded for some after the Sunday service for them to stay for informal fellowship.	Find a way for the tea/coffee/fellowship to take place in the main sanctuary.	1	Engage an architect to design a new layout for the interior of the church using these 'problems and solutions' as part of the brief.
4	Understandings of evangelism are underdeveloped, there is a lack of confidence in the congregation when talking about their faith.	On the basis that evangelism flows from discipleship create a culture where each member of the congregation knows their personal Christian life is something to nurture.	1 2	Embed the theme in the Sunday morning teaching. Ensure the actions in points 1-3 are achieved.
5	The Abernethy team are a unique part of the congregation for whom we may not be encouraging a sense that this is their church	Meet at least annually with the leadership team at the Centre to gain insight into how the church can respond to their being there.		Include as a minimum a welcome event when the gap years start.
6	The church is designed to be used only as a church or in the way a church was when it was furnished in the 1830s.	Remove the pews and replace with chairs	1	Raise funds to buy chairs Remove the pews
7	The internal arrangement of the church imposes a particular form of behaviour on the congregation	Remove the pews and replace with chairs	1	Raise funds to buy chairs Remove the pews

	Problem	Solution	Objective	Action
8	Alternative forms of service such as café church, have been well received but have had to be held in another public building. The alternative can be made to work occasionally but is not ideal.	Remove the pews and replace with chairs. Re-configure the inside of the church to create a variety of spaces for different uses.	1 2	Raise funds to buy chairs Remove the pews. Engage an architect to design a new layout for the interior of the church using these 'problems and solutions' as part of the brief.
9	The facilities of the church are not versatile and do not lend themselves to a variety of uses or by more groups of people.	Other users who have expressed interest in using the church and have different needs of the building are the community choir, the music festival, the flower and quilt festival and others. Re-configure the inside of the church to create a variety of spaces for different uses. Install more toilets including a fully accessible toilet that is big enough for those who need help to use the toilet. Ref www.changingplaces.org	2	Engage an architect to design a new layout for the interior of the church using these 'problems and solutions' as part of the brief.
10	The church building is neither inclusive nor accessible for all.	Remove access problems such as steps, gravel, narrow doorways, install a door that can be opened by those in wheelchairs.	1 2	Engage an architect to design a new layout for the interior of the church using these 'problems and solutions' as part of the brief.
11	There are a number of health and safety shortcomings that can only be resolved through significant works.	Install a fire alarm system, fire doors, smoke detectors etc	1 2	Engage an architect to design a new layout for the interior of the church.
12	The fabric of the church needs renovation and repair.	See survey report which includes essential work to the roof and windows	1 2 3	Engage a building supervisor or similar, refer to the General Trustees for professional support and ideas for funding.
13	Life of the church within the building is obscured from the community – windows are frosted, doors are solid, nothing is visible from outside.	Replace frosted glass in some of the windows with clear glass. Create a glazed vestibule welcome area.	2 3	Engage an architect to design a new layout for the interior of the church using these 'problems and solutions' as part of the brief.

	Problem	Solution	Objective	Action
14	The building has poor environmental standards, it uses fossil fuel for heating, takes a long time to warm up and is not insulated.	Repair and insulate the roof and windows. Install a green energy heat source. Install underfloor heating, zoned to meet the future needs of the church.	1 2 3	Engage an architect to design a new layout for the interior of the church using these 'problems and solutions' as part of the brief.
15	The church building is unique but the 'story' of its uniqueness, its heritage, and change through time is hidden from the community and visitors. The Tiffany window is of national interest and is waiting to be installed in the church.	Provide interpretation boards. Install glass security cabinets in which the church's artefacts and story can be displayed.	2 3	Consult with the General Trustees, Historic Environment Scotland and the engaged architect to find a solution.
16	The building may tell the story of where the church has come from but does not make hope for the future explicit.	Present the heritage of the building, the life of the congregation and the vision of the congregation in a display and in the actual welcome and facilities of the church.	1 2 3	The Minister and Kirk Session to plan a way forward
17	Use the church's other assets for the general benefit of the community	The glebe could be developed. An access route should be created through the manse garden to the upper glebe. The riverside glebe merits consideration as a resource other than the small amount of funds derived from the present letting arrangement.	2 3	Consult with the General Trustees. Seek to alter the title deed of the manse. Plan a new driveway into the upper glebe.

Key funding ideas

1. Listed places of worship scheme which allows VAT to be reclaimed. The scheme will run to 2021. (A bridging loan is available from the General Trustees to cover the period while the VAT repayment is awaited.
2. Is Killin & Ardeonaig a 'priority area'?
3. Listed buildings are listed for the benefit of the public – can we demonstrate the public benefits of our listing?
4. Heritage Lottery Fund (HLF). We may choose to apply for this on the basis that it is for 'public benefit' rather than for the realisation of our vision. What can we point to in our church that demonstrates a significant part in the country's history?
5. Historic Environment Scotland has in the past match funded grants from HLF. HES will give grants for urgent repairs and support the cost of conservation standard repairs.

6. It is easier to get money for repairs than for a new project, therefore in the masterplan we should separate repairs and development.
7. This plan will give the congregation "a chance to thrive".
8. Look for outcomes that will bring in the non-religious funders e.g. the Robertson Trust.
9. The Go For It Fund of the Church of Scotland has become the Special Capital Fund or Growth Fund and can be applied to for grants.
10. Links with the local Council can be beneficial.
11. Scottish Government allocates a Town Centre Capital fund to local authorities which may be available to draw on in rural areas.
12. City Deal funds are likely to be available for some rural causes.
13. Community development is likely to attract funds and may prompt thinking to recreate the church as a community hub
14. Central Fabric Fund (CFF) of the Church of Scotland gives loans and grants. Applications are to be made through Presbytery. The CFF is part of the General Trustees. They are clear that our own funds must be used first. We are expected to keep 50% of our annual running costs after spending whatever else there is in the church's reserve. This is the rainy day for which we might have been keeping funds
15. A grant will be more likely to be made once local funds are expended and an urgent capital cost arises.
16. (The General Trustees do not need to know about any works undertaken below a value of £50,000. E.g. £6k on rainwater goods GT and Presbytery don't need to know. Alterations and larger projects need to go through Presbytery to the General Trustees.)

Forward in Faith 2020…
…the Church in the Community, the Community in the Church

Appendix 1

Background

- For a number of years there have been a various of 'pressures for change' growing in the church at large and in Killin and Ardeonaig in particular.
- As early as 2011 a small group from the Kirk Session and Congregational Board visited several other church buildings in order to see how they were adapting their buildings for use in the 21st century.
- In early 2012 a presentation was made to the congregation in which it was highlighted Killin & Ardeonaig would be likely to have a deficit budget for the year. A deficit budget could follow in each subsequent year until our reserves were used up. Perhaps it would take five or six years to have nothing left.
- Some progress has been made to rationalise our commitments and reduce our liabilities by selling the church hall and Morenish Chapel.
- Investment was made in the manse to bring it up to modern standards and to treat any incoming minister fairly.
- John Lincoln retired as minister and after a vacancy of two years we were able to call Russel Moffat to be our minister. Russel is scheduled to retire in 2021.
- Presbytery planning continues to look at how parish churches can be sustained without ministers and, often, without any funds.
- Proposals for 'hub ministries are being evaluated.
- The General Assembly of 2019 approved a Radical Action Plan to stem an apparent decline in the church and to stimulate growth. As part of the Radical Action Plan the General Trustees have noted 'the church is not a building preservation organisation…buildings should be managed…so they are not a distraction to the call to "Follow me".'

The Radical Action Plan endorses the initiative of the General Trustees to have **Well Equipped Spaces in the Right Places.** The Radical Action plan places an emphasis on engaging with people under 40.

In an effort to coalesce thinking the Minister, Session Clerk and Property Convenor met over two years ago to discuss needs and hopes for the church directly affected by the physical building of the Kirk. They agreed nine areas need to be addressed in any plans for development, and for any plans to be judged against.

1) Retirement/ New Minister – Russel due to be retiring before long, currently ministers in short supply, effort should be made to show to C of S and prospective ministers that Killin and Ardeonaig are forward thinking, making it an attractive and flexible place to work.
2) Dynamic Building – A building that is able to be flexible in its use may mean fellowship can take different forms, making it appealing to a wider spectrum of believers, and incidentally to other organisations.
3) Safety – Much work is needed to bring the church up to a standard that keep users safe and to ensure legal requirements are met.
4) Environment – New Technology would enable the church to be more environmentally friendly, and potentially to save money on energy use,
5) Accessibility – Ensure the church and toilet facilities are accessible to all, regardless of any mobility or health issues.
6) Transparency – Enable those outside of the church find the fellowship to be attractive, transparent, and easily accessed, not secretive, mysterious or hidden away.
7) Costs – Reduce on-going maintenance and general running costs.
8) Storage - Various ministries and user groups require significant space to store equipment, space should be made available to store securely and safely.
9) History – Need to look after the church history through maintenance, storage and display of items of interest, and the church building in general.

Many of these things have not gone away and are included them in the Problems and Solutions table above.

Appendix B

Tiffany Window Drawing

LDN Architects
#Contact Full Address
T: #Contact Phone Number
E: #Contact E-mail

Job Title:
2018
Killin and Ardeonaig Parish Church

Drawing Title:
10 Commandments 'Tiffany' Window
Elevation - Panels with Framing

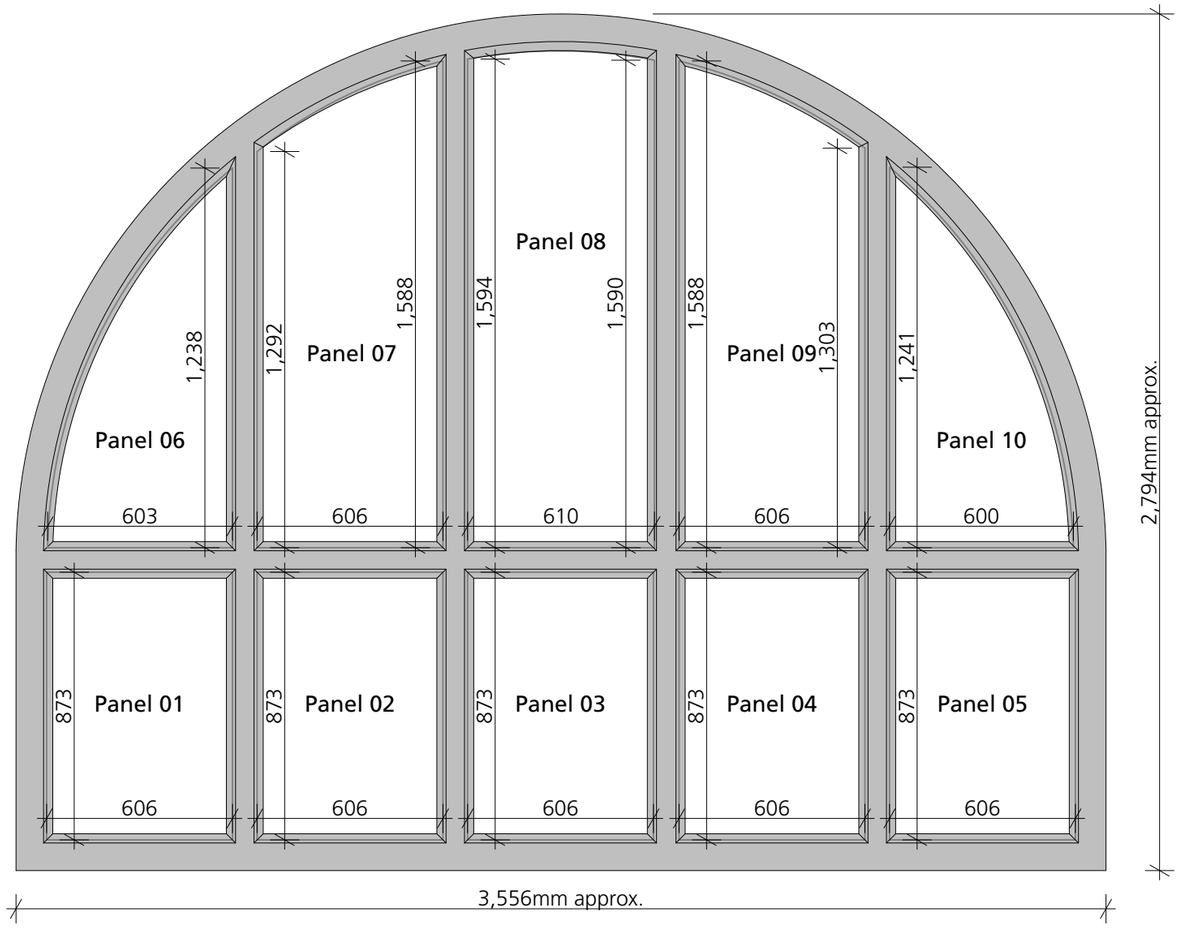
Drawing Status:
Sketch

Drawing Number:
L(SK)050
DRAFT

Scale:	Date:	Drawn:	Reviewed:
1:20 @ A3	Nov 2020	AR	EB

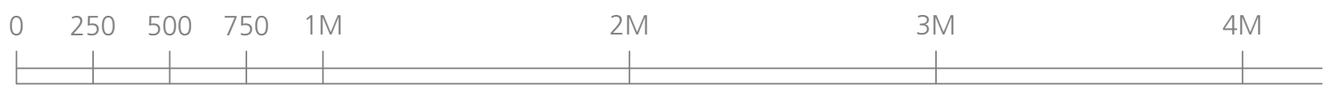
Revisions:

*	05.11.2020	AR	EB



10 Commandments 'Tiffany' Window - Panels with Framing
Based on panel dimensions provided by Finnigan and Shaw Ltd and
approximation of original timber framing as installed in Morenish Chapel

1:20



Appendix C

Adams Napier Partnership Report

ADAMS NAPIER PARTNERSHIP
Chartered Building Surveyors and Heritage Consultants
2 Copperbeech Court, Cavalry Park, Peebles EH45 9BU
admin@adamsnapier.co.uk www.adamsnapier.co.uk 01721588110

Quinquennial Survey Report

on

Killin & Ardeonaig Parish Church

for

Killin & Ardeonaig Parish Church

Killin & Ardeonaig Parish Church

October 2018

P180154

ADAMS NAPIER PARTNERSHIP
Chartered Building Surveyors and Heritage Consultants
2 Copperbeech Court, Cavalry Park, Peebles EH45 9BU
admin@adamsnapier.co.uk www.adamsnapier.co.uk 01721588110

Contents

1.0 INSTRUCTIONS

Scope of Instructions

1.1 Adams Napier Partnership was instructed on 12 September 2018 to undertake a condition survey of Killin and Ardeonaig Parish Church. The purpose of the survey is to provide detailed information on the condition of the property and recommendations which will allow for the planning of future repairs and maintenance.

1.2 The consultancy commission is to carry out a survey of both the interior and exterior of the property to assess its present condition and identify the works (and estimated costs) necessary to maintain it in good order and providing recommendations for on-going yearly, cyclical maintenance and project works.

1.3 The previous Quinquennial Survey Report for the Church and Hall was provided in advance of the survey.

Property Address

1.4 Killin and Ardeonaig Parish Church
Main Street
Killin
FK21 8UW
Contact: Nathaniel Felgate

Client's Name & Address

1.5 Killin & Ardeonaig Parish Church
Address & contact details as Item 1.4 above.

2.0 EXECUTIVE SUMMARY

Description & Construction
Church

2.1 The original church was built by the mason Thomas Clark to a design probably by John Douglas. A datestone is incorporated in the projecting gable wall of the north elevation reading 'THO CLARK THE BUILDE OF THIS CHURCH 1744'. The Church is composed of white harl with grey margins and the windows are predominantly round-headed with simple Y-tracery. The original octagonal plan has been masked by later additions and alterations, notably the scheme of 1831-2 which enlarged the East and West elevations. The louvred cupola from the original design remains. A focal point for Killin, the Parish Church remains a good example of an 18th century church despite its later additions. The original choice of an octagonal plan is rare and sets this building apart from many of its contemporaries.

2.2 The West elevation now provides the main entrance and was widened to the North as part of the 1831-2 scheme. The centrally-placed 2-leaf door has a keystoned clerestory window above and is flanked by a pair of smaller windows. The bellcote which contains the 1632 bell by Robert Hog is located on the central projecting gable of the North elevation. Below this, at clerestory level, is Thomas Clark's datestone. It is the South elevation which most visibly retains the octagonal plan despite a later projecting single storey addition to the East end (rebuilt in 2004 with corrugated metal roof). It has a central tripartite bay window with long keystoned round-headed windows.

2.3 The pulpit has been relocated from the South and is now at the East end of the church. Entrance to the church is through a flat-roofed vestibule. There are painted walls and ceiling and the ceiling is supported by 2 fluted cast-iron columns added as part of the 1831-2 work. There is a laird's loft to the North which has a panelled balcony with engaged pilasters. To the East is an oak communion table and pulpit. The windows mostly have simple coloured glass panels, however, there are 3 stained glass

ADAMS NAPIER PARTNERSHIP
Chartered Building Surveyors and Heritage Consultants
2 Copperbeech Court, Cavalry Park, Peebles EH45 9BU
admin@adamsnapier.co.uk www.adamsnapier.co.uk 01721588110

windows. There is a small stained glass panel to the West, a window to the East of 1901 and a South window by R Douglas McLundie of 1948. There are timber pews.

Church Hall

2.4 The single storey church hall adjoins the church to the north east and is understood to have been built circa 2004. It has a pitched metal corrugated roof, harled masonry walls, double glazed timber windows, timber panelled front door and a timber half glazed fire exit door to the rear. Internally the hall comprises a community room, kitchen, toilet facilities and office.

Areas of Concern
Church
EXTERNAL
Roofs

2.5 The church has a pitched slated roof and the main pitches are in a fair condition with several slipped and missing slates and these should be replaced during routine annual maintenance. Sections of the valley flashings have been replaced in zinc in the past, however one to the south east was subject to water ingress and more recently replaced in lead. The slates around the valleys are vulnerable to wind uplift and several were noted to be displaced. Metal flashings to hips and ridges have also lifted in places with corrosion also noted to strappings and fixings. These elements should be removed and replaced where corroded and refixed securely into position. A cement fillet at the junction between the boiler house roof and wall of the main building has hairline cracks and should be cut out and replaced in a suitably specified lime mortar.

2.6 The central cupola is slated and incorporates timber louvres and cornice, covered by ogee shaped slated roof with lead ridges. Internally, there are signs of water ingress through staining of roof timbers and decay of elements of the timber structure. There has also been movement in the roof structure above the octagonal shaped roof to the south, however this may be historic and addressed in previous repairs where metal bracing has been inserted to rafter feet. A structural engineer should inspect the structure and advise on any necessary repairs. The cupola would benefit from being stripped and reslated, including replacement of rotten timbers, lead flashings and external decoration. Scaffold access would be needed to undertake the works and could also be used to access repairs to the structure below aided by the temporary removal of a timber louvre.

2.7 The condition of the bell tower to the north elevation is a cause for concern with some of the stonework appearing to be out of plumb and corrosion to metal fixings and cracks in surrounding stonework apparent. The base of the bell tower has also been finished with a render which has cracked and spalled off in places. Beneath the bell tower internally there are signs of water ingress and cracking to plasterwork. The bell tower should be inspected in closer detail and appropriate repairs undertaken including improvements to detailing to prevent further deterioration of this structure which houses a bell of some historical significance dating from 1632.

2.8 Temporary 'Flashband' repairs have been carried out to leadwork around the base of the chimney on the north elevation and the lead should be replaced during future repairs works.

Rainwater Goods

2.9 Rainwater goods to the church are predominantly cast iron gutters and downpipes and require to be overhauled and repaired including replacing missing brackets, re-caulking joints, improving downpipe connections to the underground drainage system and decoration. Defects to guttering on the north elevation have caused staining to wall surfaces below and the gutters should be repaired and detailed correctly to prevent a re-occurrence.

Walls

2.10 The walls of the church are constructed of stone and have been harled and painted with a white masonry paint. The harling appears to be a later hard cementitious material and was noted to be cracked and 'boss' in places having become detached from its background, particularly below and around windows. The hard cement coating and impermeable masonry paint will prevent the moisture from evaporating out from the underlying traditional constructed masonry walls as originally intended and could lead to deterioration of the underlying stone and dampness internally. Cracking was noted to some of the plaster wall finishes internally.

2.11 There is a keystone above the south east facing church window on the south elevation which has slipped leaving a gap in the masonry above and the stone cornice to the wallhead is also out of alignment. There is also some evidence of movement in a timber rafter on this side of the church in the roofspace above. In the short term the gap should be pointed up with a lime mortar and the stonework monitored for future signs of movement. The stone should be jacked back up into its correct position and pinned and pointed with a lime mortar in a future external fabric repairs programme.

2.12 Window and doors margins have been painted with a masonry paint which has cracked and is flaking off in places. Modern masonry paints are impermeable and can trap moisture within the wall structure and have a detrimental impact on the fabric of the building. The masonry paint should be removed carefully where it can be done without damaging the underlying stone and the masonry left bare or decorated with a limewash or 'breathable' paint in future schemes of decoration.

Windows and Doors

2.13 The main entrance doors to the church are timber panelled double doors situated on the west elevation with glazed fanlight over. The doors have been subject to recent decoration and are in good condition and should continue to be subject to redecoration as part of a planned maintenance programme.

2.14 The doors to the boiler house and single storey lean-to to the north are timber t&g panelled framed and ledged doors and are in a fair condition, however wet rot was noted to the base of some of the door frames and facings. Rotten sections of timber should be cut out, splice repaired with a suitable durable timber species and all timber decorated.

2.15 The windows to the church are generally in a poor condition with timber cills and lower sections of the window frames rotten. Splice repairs to the base of the timber frames and mullions have been carried out in the past but the condition of the windows continues to deteriorate. There are several panes of glass which are cracked / broken and some localised distortion to lead cames. A lot of what appears to be the original glazing remains, however the aesthetic appearance of the windows has been compromised in later glazing replacements which do not match the type or colour of the original glazing scheme. An assessment of the significance of the original glazing and colour scheme is recommended to inform the specification of future glass replacements. The restoration of the original decoration scheme is desirable.

2.16 The decorative leaded windows are protected externally with metal grilles and secondary panes of polycarbonate pointed up with a putty / mortar. The metal grilles are fixed into the surrounding stonework which has caused some cracking to individual stones as the metal fixings corrode and expand. The gap between the secondary glazing and the original leaded windows is not ventilated and the presence of the secondary glazing may contribute to thermal expansion and distortion of the leaded windows. There is some evidence of this to the base of the central window to the south. It would be beneficial for a stained glass window specialist to undertake a condition assessment of the leaded windows and advise on any necessary repairs.

ADAMS NAPIER PARTNERSHIP
Chartered Building Surveyors and Heritage Consultants
2 Copperbeech Court, Cavalry Park, Peebles EH45 9BU
admin@adamsnapier.co.uk www.adamsnapier.co.uk 01721588110

2.17 The metal grilles covering the decorative leaded windows are generally in a poor condition with their shape distorted and surface corrosion causing staining to surrounding wall surfaces. The metal grilles should be removed and replaced with a suitable alternative if protection is still required, using non-ferrous fixings to prevent damage to the surrounding stone.

2.18 A planned maintenance programme for the decoration of all external joinerwork should be introduced to prevent deterioration of timber elements and the need for future repairs.

INTERNAL

Walls & Ceilings

2.19 The interiors of the church are in a fair condition however there are signs of water ingress and areas where paint is flaking together with cracks in the plaster wall and ceiling finishes. There is an area of damage at the wall /ceiling junction to the north wall of the gallery and the finishes should be repaired following completion of repairs to the external bell tower above. A lot of the damage to the plasterwork is found around the window openings and the cracks should be cut out and filled as part of a future scheme of internal decoration and monitored thereafter.

2.20 There are also areas of plaster cracking to the walls and ceiling around the opening to the south wall of the gallery. The cracking may be historical and related to movement at the time the gallery was constructed and the cracks should be filled and monitored for signs of any further movement.

2.21 The interiors of the church would benefit from redecoration and replacement of floor coverings which are aged and worn. The interiors of the church hall are in a good condition with the halls having been constructed c. 2004 and decorated recently.

2.22 There were signs of condensation and mould growth on the west wall of the north extension beneath the gallery. Wallpaper finishes were also becoming detached in this area. Additional ventilation and heating is recommended to improve environmental conditions and remove the condensation risk in this area.

Roofspace

2.23 Signs of water ingress through the staining of sarking and rafters is apparent in the cupola and below the north and south roof pitches. There is also evidence of insect attack to timbers. A horizontal timber tie at the base of the cupola has deteriorated to the extent it is now in two sections. The top section of a main timber rafter from the base of the cupola which extends down the main roof pitch to the south is rotten. Whilst additional timbers have been inserted to strengthen the roof during later alterations advice should be sought from a structural engineer to determine if any repairs are required.

BOUNDARIES AND GATES

2.24 The property is surrounded by a small section of stone boundary wall to the south west, a modern timber 'hit and miss' panelled fence to the south and a timber post and rail fence to the east. The stone boundary wall has been heavily pointed with cement. The wall is in a fair condition with only minor cracking to pointing noted. Any future repointing should be undertaken in a suitably specified lime mortar to prevent damage to the surrounding stone. Some of the posts to the timber post and rail fence are rotten and require to be replaced.

GENERALLY

Services

2.25 At the time of the survey the church was undergoing electrical works to replace aged electrical wiring and fittings. Once completed a planned programme of testing the fixed electrical wiring installations should commence. A label on the electrical consumer unit in the church hall indicated it had not been tested since 2005 and this should be programmed as a matter of priority.

2.26 The property is heated by an oil fired boiler situated in an adjoining boiler house accessed externally on the north elevation. The boiler is connected to a wet central heating system with panel radiators situated throughout the church and adjacent halls. The boiler is aged and corrosion was evident to several radiators. Some of the radiator valves and pipework also appear to be leaking causing staining to surrounding timber skirtings and floorboards. Elevated moisture content readings were recorded in stained floorboards on the north side of the church putting timbers at risk of decay. The heating system should be checked and repaired as necessary. Consideration should also be given to replacing the central heating system as part of an energy efficiency upgrade which could also include installation of LED lighting and further insulation in the roofspace to reduce running costs further.

2.27 There is no smoke detection installed in the church or heat detection in the church hall kitchen and no emergency lighting fitted in the church. The provision of these services should be reviewed in the property fire risk assessment.

Asbestos

2.28 An Asbestos Survey has not been carried out on the property and this should be undertaken in accordance with current legislation and any recommendations carried out. Thereafter, an Asbestos Register should be maintained at the property and made available to anyone working at the property with potential to disturb an asbestos containing material.

Fire Risk Assessment

2.29 The Fire Risk Assessment for the Church and Hall is currently being prepared in-house by the Property Convener. The Risk Assessment should include an assessment of need for additional smoke / heat detection and provision of emergency lighting.

3.0 FUTURE REPAIR AND MAINTENANCE APPROACH

Phasing

3.1 Regular roof inspections and gutter clearances should commence along with the other routine compliance maintenance. The Church and Hall are overlooked by trees and there was a considerable amount of leaves and other debris in gutters, particularly on the south side of the building and these would benefit from clearance in late Autumn once all the leaves have fallen. The existing records of all compliance works should be maintained and made available for all parties working on or inspecting the buildings.

3.2 The church requires a package of works to the external fabric to address defects including repairs to slating, roof flashings, rainwater goods, central cupola, bell tower, windows and external decoration. This would also require provision of an access scaffold to allow high level repairs to be carried out, including replacement of defective elements of the timber roof structure. Once the external fabric has been repaired works to the interior are recommended to include plaster repairs and internal decoration. This could be done in conjunction with the external fabric repairs or as a separate later phase of works. A suggested phasing of the works is noted below:

Phase 1	External Fabric Repairs	£55,000
Phase 2	Church - Internal Repairs & Decoration	£21,000
Phase 3	Central Heating System Replacement	£12,000

Excluding: Preliminaries, Professional Fees and VAT.

ADAMS NAPIER PARTNERSHIP
Chartered Building Surveyors and Heritage Consultants
2 Copperbeech Court, Cavalry Park, Peebles EH45 9BU
admin@adamsnapier.co.uk www.adamsnapier.co.uk 01721588110

Construction (Design and Management) Regulations (2015)

3.3 Building owners, users or managing agents having maintenance, small-scale building work or other minor works carried out in connection with a business must comply with the CDM Regulations. A copy of the Health & Safety Executive's Publication "Need building work done?" is included in Appendix D.

Estimated Costs

3.4 The breakdown of estimated costs is contained within the condition report, however they can be summarised as follows: -

Cost Summary

		I	U	N	D	Totals
i.	General	0	950	1,150	0	**£2,150**
ii.	Church External	0	20,410	29,325	5,465	**£55,200**
iii.	Church Internal	0	300	4,750	28,200	**£33,250**
iv.	Boundaries & Gates	0	0	975	1,200	**£2,175**
vi.	Hall External	0	50	4,445	0	**£4,495**
vii.	Hall Internal	0	150	25	250	**£425**
		£0	**£21,860**	**£40,670**	**£35,115**	**£97,695**

Excluding: Preliminaries, Professional Fees and VAT.

Preliminaries vary in value from 10-30% of the cost of the work depending on the level of site set up or access equipment required to undertake the work.

Estimated costs for internal decoration are only included where the existing standard of decoration is considered poor or where decoration is associated with an item of repair.

Categories of Urgency for Works Identified as being Required.

3.5 The requirement for repair, maintenance or conservation works to any inspected elements has been prioritised into categories of urgency, in accordance with BS7913: 2013 the 'Guide to the Principles of the Conservation of Historic Buildings', and an indication of when these should be attended to is included in the report.

Immediate – Work which should be put in hand without delay for public safety or health and safety reasons, to prevent imminent damage or to arrest rapid deterioration. This can include immediate further investigative survey work.

Urgent – Work which should be put in hand within weeks, months, or within a year at the most. Failure to do so would be likely to result in significant further damage or deterioration and increased costs.

Necessary – Work which should be carried out before the next five-yearly inspection, for which there is time to plan, and which can be integrated with other work. This is work, which is due to keep the building in a state of good repair. Most repair work should come into this category.

Desirable – Work which is desirable, if not strictly necessary, but which may improve the functioning or performance of the building or enhance its architectural or aesthetic qualities. Alternatively, work which is not due, but likely to become due, before the next five-yearly inspection or which can sensibly be incorporated with other work.

4.0 SURVEY PARTICULARS

Date of Survey

4.1 The survey was carried out on Friday 5th October 2018. Ladder access was provided to allow inspection of the main roof pitches from eaves level. The roofspace above the central cupola and east side of the church was accessed from scaffolding provided by the contractor undertaking the rewiring of the electrical installation.

Weather

4.2 Dry and sunny.

Surveyor

4.3 The survey was conducted by Chris Prentice MRICS of the Adams Napier Partnership, RICS Historic Building Professional.

Orientation

4.4 For the purposes of the survey, the principal entrance to the Church is deemed to face west.

Areas of Restricted Access

4.5 The roofspace over the north gable extension could not be accessed and access was limited to the roofspace over the west side of the church.

Information Relied Upon in this Report

4.6 Listed Building Reports

Killin and Ardeonaig Parish Church (Church of Scotland), including Boundary Walls	http://portal.historicenvironment.scot/designation/LB8248

Tenure

4.7 Not known.

5.0 LEGAL CONSIDERATIONS

Statutory Consents

5.1 Killin and Ardeonaig Parish Church including boundary walls is Category B listed and located within the Killin Conservation Area. Before undertaking any alterations or interventions affecting the building fabric contact should be made with the Local Authority to confirm whether any statutory consents are required.

Deleterious Materials

5.2 There is no Asbestos survey report or register for the property.

Bats & Ecological / Wildlife and Countryside Act

5.3 No evidence was found for the presence of bats during the survey. All bats and their roosts are fully protected by law and it is a criminal offence to disturb, damage, block access to/from or destroy a bat roost. It is also a criminal offence to kill or injure a bat. We would recommend that prior to undertaking any extensive roof repairs a suitably qualified and licenced person be appointed to undertake a bat survey at the property.

5.4 All birds, their nests (when being built or in use) and their eggs are fully protected by law and, in summary, it is a criminal offence to intentionally or recklessly:

- kill, injure or take any wild bird;
- take, damage, destroy or interfere with a nest of any wild bird whilst it is in use or being built (or at any time for a nest habitually used by any bird listed in Schedule A1
- obstruct or prevent any wild bird from using its nest;
- take or destroy an egg of any wild bird.

Many species of bird, such as Swifts, Swallows, House martins and Barn Owls typically roost in Historic Buildings. We would therefore recommend that advice is taken from a suitably qualified and licenced person be appointed to undertake a survey at the property prior to works commencing.

Fire Precautions and Means of Escape

5.5 The Church Property Convener is currently undertaking a fire risk assessment.

Health & Safety

5.6 Building works should comply with the Construction (Design and Management) Regulations 2015 and guidance is provided in Appendix D.

Guarantees & Warranties

5.7 We were not provided with any warranties or guarantees at the time of our inspection.

Signature	Representing	Date
	Robert Adams MRICS **Adams Napier Partnership**	15 October 2018
	Chris Prentice MRICS **Adams Napier Partnership**	15 October 2018

ADAMS NAPIER PARTNERSHIP
Chartered Building Surveyors and Heritage Consultants
2 Copperbeech Court, Cavalry Park, Peebles EH45 9BU
admin@adamsnapier.co.uk www.adamsnapier.co.uk 01721588110

Appendix A

Condition Survey and Budget Costs

i. General
ii. Church External
iii. Church Internal
iv. Boundaries & Gates
v. Hall External
vi. Hall Internal
vii. Project Summary Costs
viii. Exclusions

Item	Photo Reference	Building	Location	Element 1	Description	Condition	Recommendations	Category	Year	Cycle	Cost
			GENERALLY								
1		Killin & Ardeonaig Church	Roofs		Annual roof maintenance	-	Implement annual roof maintenance and gutter clearance to ensure roof is maintained in order to avoid larger repair or replacement of original materials. Take opportunity to undertake minor repairs and overhauling when access is made available for other maintenance.	N	1	1	£500
2		Killin & Ardeonaig Church	Asbestos Survey		Asbestos Survey	No Asbestos Survey and Register.	Arrange Asbestos Survey and act upon recommendations, including maintaining asbestos register at property and make available as per Health & Safety Executive guidance.	U	1	1	£500
3		Killin & Ardeonaig Church	Services		Electrical installation.	No test certificates provided at the time of inspection. Church undergoing electrical re-wiring at time of inspection.	Carry out periodic inspection and act upon recommendations as required.	N	5	5	£500
4	96	Killin & Ardeonaig Church Hall				The date of the last electrical inspection in the Church Hall was recorded on the consumer unit to be 02/05 and is therefore well overdue.	Carry out periodic inspection and act upon recommendations as required.	U	1	5	£250
5		Killin & Ardeonaig Church	Services		Emergency Lighting	No test certificates provided at the time of inspection.	Annual maintenance and testing of installation.	N	1	1	£50
6		Killin & Ardeonaig Church	Services		Portable Electrical Appliances	No test certificates provided at the time of inspection.	Annual inspection and testing of portable electrical appliances.	U	1	1	£100
7		Killin & Ardeonaig Church	Services		Heating Installation	Oil fired boiler. No test certificates provided at time of inspection.	Annual maintenance and testing of heating systems.	N	1	1	£100
8		Killin & Ardeonaig Church	Fire Risk Assessment		Fire Risk Assessment	Fire Risk Assessment is currently being undertaken in-house.	Follow FRA recommendations and review on a regular basis in accordance with statutory legislation.	U	1	1	-
9		Killin & Ardeonaig Church	Services		Fire Extinguishers	Annual maintenance undertaken, latest visit 31/12/17. Testing of fire extinguisher in gallery overdue.	Annual maintenance and testing of equipment. Ensure all equipment tested and FE in gallery found to be out of date.	U	1	1	£100
10		Killin & Ardeonaig Church	Services		Oil Storage Tank	No test certificates provided at time of inspection.	Inspect annually by OFTEC Registered Technician at same time as boiler servicing.	N	1	1	£50

Item	Photo / Dwg Reference	Building	Location	Element	Description	Condition	Recommendations	Category	Year	Cycle	Cost
11	15, 20, 21	Killin & Ardeonaig Church	Roofs	Main Roof Coverings	Pitched Welsh slated hipped roof coverings to church main roof.	The slate roof coverings are in a fair condition with only a small number of cracked, slipped or missing slates.	Continue with annual roof maintenance to include gutter cleaning and replacing cracked, missing or slipped slates (costed elsewhere).	U	1	1	Incl.
12	22	Killin & Ardeonaig Church	Roofs	Main Roof Coverings		Cracked and missing pointing to the slated verges of the north extension.	Replace cracked and missing pointing in a suitably specified lime mortar.	N	1	-	£150
13	27	Killin & Ardeonaig Church	Roofs	Boiler House Roof Covering	Pitched slated hipped roof to single storey boiler house to north elevation with zinc hip flashing. Cement mortar fillets at junction with walls of church.	Fair condition. Some moss growth to slating. Cement fillet at junction with church north elevation appears to be more recent replacement. Hairline cracks noted in cement mortar fillet at junction with north extension wall. Some of the zinc flashing holding down straps are corroding.	Remove moss from slating during annual roof maintenance (cost included elsewhere). Cut out and replace cracked cement fillet using appropriately specified lime mortar. Replace corroding zinc holding down straps.	N	1	-	£250
14	28	Killin & Ardeonaig Church	Roofs	Lean-to Roof Covering	Pitched slated roof to single storey lean-to extension to north elevation. Cement flashing at head of slate roof at junction with external wall.	Fair condition. Previous rooflight has been removed and slated over since previous QS report.	Continue with annual roof maintenance to include gutter cleaning and replacing cracked, missing or slipped slates (costed elsewhere).	N	1	-	Incl.
15	16, 17, 18, 19	Killin & Ardeonaig Church	Roofs	Cupola Roof Coverings	Ogee shaped slated roof with lead ridges and vertical slating to walls with lead apron flashings around base and under louvre cills.	Signs of water ingress on timber sarking and roof structure internally. Missing slate noted and flashband repairs have been carried out to leadwork. Open joints at angle between adjacent areas of vertical slating	Strip roof and reslate reusing existing slates, replacing missing and defective slates where required on new underlay. Replace leadwork in accordance with Lead Sheet Association guidelines by LSA approved contractor taking opportunity to improve detailing at junctions to prevent future water ingress.	N	1	-	£8,000
16	16, 17, 18, 19	Killin & Ardeonaig Church	Roofs	Cupola	Timber louvres	Deterioration to timbers apparent, notably to facings and decoration poor. Mastic cracked and missing in places at joint between louvers and adjacent slating.	Replace rotten sections of timber with suitably specified durable timber species. Prepare timbers and decorate.	N	1	-	£1,500
17	20	Killin & Ardeonaig Church	Roofs	Main Roof Flashings	Zinc ridge and hip flashings. Combination of zinc and lead valley flashings.	Fair condition. Some of the slating has slipped adjacent to valleys. Previous water ingress at zinc valleys (advised one of these to south pitch has been replaced recently) causing staining to underside of sarking in roofspace. Zinc ridge and hip flashings lifting in places and some of the holding down brackets are corroding.	Repair slating adjacent to valley. Refix zinc ridge and hip flashings where lifting and replace corroding brackets.	N	1	-	£350

Item	Photo / Dwg Reference	Building	Location	Element	Description	Condition	Recommendations	Category	Year	Cycle	Cost
18	23, 24, 25, 26	Killin & Ardeonaig Church	Roofs	Bell Tower	Stone bell tower with pyramidal roof and cement rendered base. Upper stonework decorated with a masonry paint. Contains historically significant bell dating from 1632 supported on ironwork secured into stonework.	Poor condition. Structure appears out of plumb and subject to movement although it can't be determined if this is historic. Some cracking apparent to stonework where corroding metal fixings for bell situated. Upper part of structure has been painted with a masonry paint and are covered in moss and algae. Cement rendered base is cracked and parts have spalled off notably on the west facing elevation.	Allow for detailed close inspection of structure when suitable access allows to inform repair proposals. In the meantime allowance should be made for the removal of the defective cement rendered basecourse, removal of masonry paint which could be trapping water and contributing to decay, repoint cracked and open joints in suitable specified lime mortar. Check bell and replace corroding fixings with non ferrous alternatives to prevent future damage to surrounding stonework.	U	1	-	£10,000
19	23, 24, 25	Killin & Ardeonaig Church	Roofs	Bell tower			Replace lead around the base of the tower making improvements to detailing in accordance with Lead Sheet Association Guidelines using an LSA approved contractor.	U	1	-	£600
20	29, 30, 31, 32, 33, 34, 35	Killin & Ardeonaig Church	Roofs	Rainwater Goods	Cast iron half round gutters. Cast iron downpipes.	Fair condition. Debris and leaves noted in gutters. Some staining to underside of gutters at joints. Staining of wall surfaces below gutters on north elevation. No caulking of joints to downpipes. Surface corrosion and flaking of paintwork.	Take down gutters and overhaul ensuring these are aligned to correct falls, recaulk joints in gutters and downpipes.	N	1	-	£2,400
21		Killin & Ardeonaig Church	Roofs	Rainwater Goods			Redecorate cast iron gutters and downpipes as part of a planned maintenance programme.	N	1	5	£1,920
22		Killin & Ardeonaig Church	Roofs	Rainwater Goods			Continue to clean out gutters and rod through to ensure these are running clearly during annual roof maintenance works (cost included elsewhere)	N	1	1	Incl.
23	33	Killin & Ardeonaig Church	Roofs	Rainwater Goods		Downpipe bracket missing and downpipe loose on south elevation.	Replace missing downpipe bracket and ensure downpipes are secure.	N	1	-	£50
24	34	Killin & Ardeonaig Church	Roofs	Rainwater Goods		Several downpipes do not have appropriate connections to the underground drainage system.	Fit more appropriate connections at base of downpipes, including provision for rodding access.	N	2	-	£450
25		Killin & Ardeonaig Church	Roofs	Rainwater Goods		Lower sections of downpipe next to the extension to the east are upvc replacements.	Replace upvc sections of downpipe to main church in cast iron which is more appropriate for a traditional historic listed building.	D	2	-	£600
26	49, 50	Killin & Ardeonaig Church	Roofs	Copes		Displaced stone eaves course above south east facing window on south elevation.	Movement appears to be historic but should be monitored for signs of further movement.	N	1	5	-

Item	Photo / Dwg Reference	Building	Location	Element	Description	Condition	Recommendations	Category	Year	Cycle	Cost
27	29	Killin & Ardeonaig Church	Roofs	Chimneys	Chimney stack from boiler house in re-entrant angle between north elevation of church and adjacent north extension. Stack is constructed of brick and finished with a cement harl. Concrete cope, clay chimney can bedded in cement haunching and terminated with proprietary aluminium cowl. Lead flashing at base of chimney covered with temporary 'Flashband' repair.	Fair condition. Lead apron flashing at base of chimney covered with temporary 'Flashband' repair. Harling stained and algae growth below defective gutter.	Remove staining and redecorate harling with suitable 'breathable' paint as part of external walls planned programme of decoration (costed elsewhere). Replace lead flashing with new detailed in accordance with recommended Lead Sheet Association Guidelines and installed by LSA approved contractor.	N	1	-	£300
28		Killin & Ardeonaig Church	Walls	North elevation	Timber fascia to gable.	Fair condition. Some discolouration from water run off over lead at apex.	Prepare and redecorate as part of a planned maintenance programme.	N	2	5	£120
29	36, 38, 39, 40	Killin & Ardeonaig Church	Walls	Walls generally	Masonry walls with harled finish decorated with a masonry paint. The harling is believed to be a later cementitious coating.	Fair condition. Cracking and harling 'boss' in several areas notably around windows. Moss and algae growth generally, paint cracking and peeling in areas.	Cut out and fill cracks with a suitable lime mortar. Remove boss areas and re-harl with a suitably specified lime harling. Monitor areas thereafter.	U	1	-	£2,000
30		Killin & Ardeonaig Church	Walls	Walls generally			Prepare walls and redecorate with a suitably specified limewash or breathable masonry paint. Monitor internal finishes and internal environment for signs of dampness.	N	2	-	£10,220
31		Killin & Ardeonaig Church	Walls	West Elevation	Masonry walls with harled finish decorated with a masonry paint. The harling is believed to be a later cementitious coating.	Good condition. Decorated earlier this year.	No work required.	-	-	-	-
32	29, 32, 38	Killin & Ardeonaig Church	Walls	North elevation		Walls below gutter adjacent to chimney and below boiler house gutter on north elevation heavily stained from water from defective guttering above.	Repair gutters (costed elsewhere), remove staining and decorate walls with a suitable breathable paint as part of planned maintenance programme (costed elsewhere).	N	1	-	Incl.
33	37	Killin & Ardeonaig Church	Walls	North Elevation		Hairline cracking to cill and harling below of west most window. Masonry paint flaking off cill.	Cut out and fill cracks with a suitable lime mortar and monitor.	N	1	-	£25
34	38	Killin & Ardeonaig Church	Walls	North Elevation		Hairline cracking to stone rybat continuing through harling above west side of door to boiler house extension.	Cut out and fill cracks with a suitable lime mortar and monitor.	N	1	-	£25
35		Killin & Ardeonaig Church	Walls	North Elevation		Hairline cracking to window surrounds of ground floor window to west facing elevation of north extension.	Cut out and fill cracks with a suitable lime mortar and monitor.	N	1	3	£25
36	38	Killin & Ardeonaig Church	Walls	North Elevation		Hairline cracking to arched stone at head of boiler house east facing window.	Cut out and fill cracks with a suitable lime mortar and monitor.	N	1	-	£25
37	49, 50	Killin & Ardeonaig Church	Walls	South Elevation		Keystone above the south east facing window on octagonal projection to the south elevation has slipped leaving a gap above. The stone cornice above is also misaligned showing signs of structural movement.	Point up gap with lime mortar in short term and monitor area for future signs of movement. When suitable access allows jack up keystone into correct position and pin and point, taking opportunity to realign stone cornice if required.	N	1	-	£750

Item	Photo / Dwg Reference	Building	Location	Element	Description	Condition	Recommendations	Category	Year	Cycle	Cost
38	51, 53	Killin & Ardeonaig Church	Walls	South Elevation		Hairline cracking in harling below large central lancet window and to cill and harling below most westerly window.	Cut out and fill cracks with a suitable lime mortar and monitor.	N	1	-	£50
39	39	Killin & Ardeonaig Church	Walls	East Elevation		Hairline cracking to harling below the north side of the main east elevation window extending down to ground level. Some of the render is 'boss' having become detached from its background.	Cut out and fill cracks with a suitable lime mortar. Remove boss areas and re-harl with a suitably specified lime harling (cost included elsewhere). Monitor areas thereafter.	N	1	-	£25
40	42, 43, 45, 46, 47	Killin & Ardeonaig Church	Windows	Windows Generally - Large Windows	Predominatly round headed with Y-tracery and coloured glazing scheme. 2nr decorative leaded windows.	Poor condition. Timber cills and lower parts of the window frames rotten. Splice repairs to lower sections of timber have been carried out in the past but the condition of the windows continues to deteriorate. There are several panes of glass which are cracked / broken and some localised distortion and deterioration to lead cames. A lot of what appears to be the original glazing remains however the aesthetic appearance of the windows has been lost in the replacement of glazing which does not match the type or colour of the original glazing scheme. Sand mastic pointing around windows cracked.	Overhaul windows to include replacement of rotten window cills and carry out splice repairs to decayed rotten sections of timber in a suitably specified durable timber species. Include for cutting out and replacing mastic with linseed oil sand mastic pointing.	U	1	-	£4,200
41		Killin & Ardeonaig Church	Windows				Prepare and redecorate as part of a planned maintenance programme.	U	1	5	£1,400
42	44	Killin & Ardeonaig Church	Windows	Windows Generally - Small Windows	Predominatly round headed with Y-tracery.	Poor condition. Timber cills and lower parts of the window frames rotten. Splice repairs to lower sections of timber have been carried out in the past but the condition of the windows continues to deteriorate. There are several panes of glass which are cracked / broken. A lot of what appears to be the original glazing remains however the aesthetic appearance of the windows has been lost in the replacement of glazing which does not match the type or colour of the original glazing scheme. Sand mastic pointing around windows cracked.	Overhaul windows to include replacement of rotten window cills and carry out splice repairs to decayed rotten sections of timber in a suitably specified durable timber species. Include for cutting out and replacing window mastic with linseed oil sand mastic pointing.	U	1		£1,500
43		Killin & Ardeonaig Church	Windows	Windows Generally			Replace cracked / broken glazing with glass to match existing type and colour of originals	N	1	-	£840
44		Killin & Ardeonaig Church	Windows	Windows Generally - Small Windows			Prepare and redecorate as part of a planned maintenance programme.	U	1	5	£560
45	42	Killin & Ardeonaig Church	Windows	Windows Generally			An assessment of the significance of the original glazing and colour scheme is recommended to inform a future glass replacement.	D	3	-	£750

Item	Photo / Dwg Reference	Building	Location	Element	Description	Condition	Recommendations	Category	Year	Cycle	Cost
46	42	Killin & Ardeonaig Church	Windows	Windows Generally			Remove replacement glass which does not match original glazing scheme and replace with suitable glass to match type and colour of originals.	D	3	-	£3,240
47	51, 52,	Killin & Ardeonaig Church	Windows	Windows Generally	Leaded windows are protected by wire mesh grilles fixed into the surrounding masonry walls.	The mesh grilles have distorted in places and are corroding. Fixings into surrounding masonry are also corroding and the expansion has caused some cracking to the surrounding masonry.	Replace wire mesh grilles with non ferrous alternative including fixings which should be secured into masonry joints to prevent future cracking.	N	1	-	£800
48	72	Killin & Ardeonaig Church	Windows	Windows - Decorative Stained Glass Windows to East and South Elevation	Decorative leaded stained glass windows covered with clear protective polycarbonate sheeting.	The polycarbonate sheeting does not allow any ventilation in the space between the leaded window and can lead to high temperatures distorting the lead cames and glazing. Some distortion is apparent to the central window on the south elevation.	If the clear polycarbonate covering is still required to protect the windows ventilation holes should be introduced at the top and bottom to encourage air flow and reduce temperatures	N	1	-	£150
49	72	Killin & Ardeonaig Church	Windows	South Elevation		There is some distortion at the base of the decorative stained glass window to the centre of the projecting octagonal walls on the south elevation	Assessment of the condition of leaded windows by a specialist.	D	1	-	£750
50		Killin & Ardeonaig Church	Doors	North Elevation	Timber traditional panelled door to centre of north extension.	Fair condition. Door handle loose but operational. Screw fixings corroding to aluminium threshold strip. Some wet rot noted to base of timber door facings.	Cut out decayed base of timber facings, splice repair with suitable durable timber species and decorate. Tighten door knob. Replace corroding screw fixings to threshold strip with non-ferrous alternative.	N	2	-	£100
51	40, 48	Killin & Ardeonaig Church	Doors	North Elevation	Timber tongue and grooved vertical boarded, braced door to boiler house with ventilation holes at high level and plastic grille in lower part of door.	Fair condition. Some wet rot to base of door frame. Flaking paint. Surface corrosion to door ironmongery.	Cut out decayed base of timber facings, splice repair with suitable durable timber species and decorate. Prepare and decorate door ironmongery.	N	2	-	£100
52	40	Killin & Ardeonaig Church	Doors			Plastic grille to lower part of door. Corroding screw fixings.	Replace plastic ventilation grille with less visually intrusive external grille. Secure with non ferrous screws.	D	3	-	£100
53		Killin & Ardeonaig Church	Doors		Timber tongue and grooved vertical boarded, braced door to lean-to extension with ventilation holes at high level and timber angled covering.	Fair condition. Some wet rot to door frame. Timber angled covering over ventilation holes rotten.	Replace rotten timber covering over ventilation holes and cut out decayed section of timber door frame and replace with suitable durable timber species and decorate.	N	2	-	£200
54		Killin & Ardeonaig Church	Doors	West Elevation	Traditional timber panelled double leaf main entrance doors with glazed fanlight above.	Good condition. Decorated earlier this year. Some corrosion to lever handle and fixings.	Replace corroding ironmongery fixings with non ferrous alternatives. Prepare and redecorate ironmongery.	D	2	-	£25
55			Doors	Doors Generally			Prepare and redecorate as part of a planned maintenance programme.	N	2	-	£500
56	55	Killin & Ardeonaig Church	Services	West Elevation	External light fitting over main entrance door.	Cover missing exposing light bulb.	Replace with suitable IP rated fitting appropriate to the building.	U	1	-	£150

Item	Photo / Dwg Reference	Building	Location	Element 1	Description	Condition	Recommendations	Category	Year	Cycle	Cost
57		Killin & Ardeonaig Church	Lobby	Ceiling	Plastered, painted.	Fair condition. Finish uneven in places. Some hairline cracking and flaking paint.	Remove flaking paint, fill cracks and decorate out (cost included elsewhere).	D	-	-	Incl.
58		Killin & Ardeonaig Church	Lobby	Walls	Plastered, painted.	Fair condition. Some hairline cracking and flaking paint, particularly around windows. Cracks apparent to right of door to north.	Remove flaking paint, fill cracks and decorate out.	D	-	-	Incl.
59		Killin & Ardeonaig Church	Lobby	Floors	Concrete floor screed.	Good condition. Minor wear around main entrance.	No work required.	-	-	-	-
60		Killin & Ardeonaig Church	Lobby	Windows	2 single glazed small lancet windows.	Rot to cills noted and some moss growth. Flaking paint.	Cut out defective timber and insert new splice repair using suitable timber species. Redecorate (cost included elsewhere).	N	1	-	Incl.
61		Killin & Ardeonaig Church	Lobby	Doors	Timber panelled double leaf entrance door with glazed fanlight above.	Good condition. Some flaking paint to fanlight timber astragals.	Prepare and redecorate (cost included elsewhere).	D	2	-	-
62		Killin & Ardeonaig Church	Lobby	Doors	2 traditional timber panelled doors to church sanctuary.	Fair condition. Marked in places commensurate with age.	Prepare and redecorate (cost included elsewhere).	D	2	-	£100
63		Killin & Ardeonaig Church	Lobby	Services	Electric bar heater above entrance doors, incoming electrical supply, lantern type pendant lighting.	Not assessed.	-	-	-	-	-
64	62, 63, 64	Killin & Ardeonaig Church	Nave	Ceiling	Plastered, painted. Note in a bottle left in attic by tradesmen indicates the church ceiling was replaced in 1983.	Fair condition. Some hairline cracking and flaking paint, particularly at intersections of octagonal shaped ceiling, near junctions with walls and above windows.	Remove flaking paint, fill cracks in plasterwork and decorate all ceilings.	D	2	-	£5,000
65	62, 63, 64, 68, 69	Killin & Ardeonaig Church	Nave	Walls	Plastered, painted.	Hairline cracking and flaking paint evident in many locations throughout the Nave, particularly above and around windows. On east wall horizontal cracking both sides of window approximately 1 metre down from the ceiling and around perimeter of window. Extensive hairline cracking to west wall above vestibule. Staining of wall surface adjacent to first window on left (east) as you enter the hall. Filling of cracks in plasterwork at high level above windows evident on south wall.	Cut out and fill hairline cracks and undertake patch repairs to plaster. Redecorate all walls on completion of remedial works.	D	2	-	£10,000
66		Killin & Ardeonaig Church	Nave	Walls		Cracking to plasterwork on lobby partition between doors.	Cut out and fills cracks in plaster. Redecorate on completion of the remedial works (cost included elsewhere).	D	2	-	Incl.
67		Killin & Ardeonaig Church	Nave	Walls	Vertical tongue and grooved boards to dado height lining walls.	Marked commensurate with age. Varnish finish worn.	Prepare and redecorate (cost included elsewhere).	D	2	-	Incl.

Item	Photo / Dwg Reference	Building	Location	Element 1	Description	Condition	Recommendations	Category	Year	Cycle	Cost
68	74, 75	Killin & Ardeonaig Church	Nave	Floors	Suspended timber tongue and grooved flooring on timber joists.	Fair condition. Some staining to floorboards and skirtings around room perimeter which appears to be associated with leaks from central heating pipework. Moisture content readings taken in timber floorboards below radiators and pipework on north wall elevated indicating timber 'At Risk' from decay. Readings were also taken in some exposed floor joists where boards taken up for ongoing electrical re-wire and were normal. Evidence of minor insect damage to floorboards.	Repair leaking central heating pipework and radiators valves (cost included elsewhere).	U	1	-	Incl.
69		Killin & Ardeonaig Church	Nave	Floors	Carpet finish.	Isolated staining to carpet floor finishes.	Clean carpets where staining evident.	D	1	-	£450
70		Killin & Ardeonaig Church	Nave	Windows	Timber single glazed lancet windows. 3nr decorative leaded stained glass windows. Other windows have plain decorative colour scheme. Several panes of glass are cracked / broken. Some inappropriate replacement glazing during previous repairs that does not respect the original type of glazing or colour scheme.	Poor condition. All windows affected by wet rot, particularly to the cills and at the base of the timber frame, many of which have previously been splice repaired.	Cut out defective timber and insert new splice repair using suitable timber species. Redecorate (cost included elsewhere).	N	1	-	Incl.
71		Killin & Ardeonaig Church	Nave	Windows		The decorative central leaded glass window on the south elevation shows signs of distortion to lower glazed panels.	Leaded glass specialist to inspect and advise on any remedial works (cost included elsewhere).	D	2	-	Incl.
72		Killin & Ardeonaig Church	Nave	Doors	Traditional timber panelled door leading to hall to upper gallery.	Fair condition. Marked in places commensurate with age. Varnished finish worn.	Prepare and redecorate (cost included elsewhere).	D	-	-	-
73	74, 75, 78	Killin & Ardeonaig Church	Nave	Services	Panelled central heating radiators.	Evidence of leaks from radiator valves and pipework staining floors below. Surface corrosion to several radiators.	Repair defective joints in radiator pipework and valves.	U	1	-	£300
74		Killin & Ardeonaig Church	Nave	Services			Replace radiators and boiler plant as part of energy efficiency upgrade.	D	5	-	£12,000
75		Killin & Ardeonaig Church	Nave	Services	6 large pendant light fittings, PA system, fire extinguisher.	Not assessed.	-	-	-	-	
76		Killin & Ardeonaig Church	Nave	Fittings	Church organ in north east corner.	Not assessed.	-	-	-	-	-
77		Killin & Ardeonaig Church	Lower Hall Beneath Gallery	Ceiling	Plastered, painted.	Fair condition. Hairline cracks present.	Remove flaking paint, fill cracks and decorate out (cost included elsewhere).	-	-	-	-
78	70	Killin & Ardeonaig Church	Lower Hall Beneath Gallery	Walls	Plastered, painted. Wallpapered on south wall.	Damp staining and mould under window on west wall. Wallpaper becoming detached on south wall. Area appears cold and lacking ventilation causing condensation and mould growth on west wall.	Heat and ventilate space to reduce condensation risk. Remove mould from walls and redecorate including wallpapering (cost included elsewhere).	D	2	-	Incl.
79		Killin & Ardeonaig Church	Lower Hall Beneath Gallery	Floors	Timber tongue and grooved flooring with carpet floor finish.	Carpet worn.	Replace carpet.	N	2	-	£250

Item	Photo / Dwg Reference	Building	Location	Element 1	Description	Condition	Recommendations	Category	Year	Cycle	Cost
80		Killin & Ardeonaig Church	Lower Hall Beneath Gallery	Stair	Timber stair and balustrade.	Fair condition. Timber marked commensurate with age. Varnish finish worn.	Prepare and redecorate (cost included elsewhere).	D	2	-	Incl.
81		Killin & Ardeonaig Church	Lower Hall Beneath Gallery	Windows	Timber single glazed small lancet window.	Fair condition.	Overhaul and decorate (cost included elsewhere).	D	2	-	£100
82		Killin & Ardeonaig Church	Lower Hall Beneath Gallery	Doors	Timber flush door to understair cupboard.	Fair condition.	Prepare and redecorate (cost included elsewhere).	D	2	-	-
83				Doors	Timber traditional panelled external door to north elevation.	Fair condition. Marked in places commensurate with age. Varnish finish worn.	Prepare and redecorate (cost included elsewhere).	D	2	-	Incl.
84		Killin & Ardeonaig Church	Lower Hall Beneath Gallery	Services	Pendant light fitting and spotlights. Bakelite light switch. Bell pull. Fire extinguisher.	Not assessed.	-	-	-	-	-
85	65	Killin & Ardeonaig Church	Upper Gallery	Ceiling / Wall	Plastered, painted.	Water ingress apparent to centre of north wall at cornice level (corresponding with position of bell tower above). Flaking paintwork and cracks in plasterwork extending down through wall to bell pull fixing. Hairline cracks in plasterwork and cornice above east window.	Undertake remedial works to bell tower and surrounding leadwork (cost included elsewhere). Carry out plaster repairs and redecorate on completion (cost included elsewhere).	U	1	-	Incl.
86	66	Killin & Ardeonaig Church	Upper Gallery	Ceiling / Wall		Hairline cracks in plasterwork and cornice above gallery column to west extending down through plaster wall.	Cut out and fill hairline cracks. Redecorate on completion of remedial works (cost included elsewhere).	N	2	-	Incl.
87	67	Killin & Ardeonaig Church	Upper Gallery	Ceiling / Wall		Hairline cracks in plasterwork and cornice adjacent to gallery column to east extending down through plaster wall.	Cut out and fill hairline cracks. Redecorate on completion of remedial works (cost included elsewhere).	N	2	-	Incl.
88		Killin & Ardeonaig Church	Upper Gallery	Walls			Redecoration on completion of plaster remedial works (cost included elsewhere).	N	2	-	Incl.
89		Killin & Ardeonaig Church	Upper Gallery	Floors	Timber tongue and grooved flooring with carpet floor finish.	Carpet torn.	Replace carpet.	N	2	-	£250
90		Killin & Ardeonaig Church	Upper Gallery	Windows	Timber single glazed small lancet window.	Deterioration to timber window frames. Broken pane of glass to eastern window.	Overhaul windows replacing rotten timber and cracked pane of glazing. Redecorate on completion (cost included elsewhere).	N	1	-	-
91	79	Killin & Ardeonaig Church	Upper Gallery	Services	Pendant light fitting, Electrical fittings, Fire extinguisher, bell pull chain.	Not assessed. Fire extinguisher last serviced 07/15. Use of electrical adaptors. No evidence of any PAT testing of electrical appliances.	Service overdue fire extinguisher (cost included elsewhere)	N	1	-	-
92	79	Killin & Ardeonaig Church					Review use of electrical appliances and adaptors and if required provide additional sockets to prevent potential overloading. Undertake PAT testing.	N	1	-	-
93		Killin & Ardeonaig Church	Boiler Room (accessed externally)	Ceiling	Timber boarded ceiling.	Hole made for access. Painted finish flaking.	Repair, fit proper ceiling hatch and decorate.	D	3	-	£300
94	80	Killin & Ardeonaig Church	Boiler Room (accessed externally)	Walls	Brickwork walls to lean-to and masonry harled wall to main church. Smooth render to lower part of walls. Brickwork chimney. Painted with masonry paint.	Fair condition commensurate with use of space. Harling loose and paint flaking to church wall.	Remove loose harling and redecorate.	D	3	-	£250
95		Killin & Ardeonaig Church	Boiler Room (accessed externally)	Floor	Concrete floor with drain.	Fair condition commensurate with use of space.	No work required.	-	-	-	-

Item	Photo / Dwg Reference	Building	Location	Element 1	Description	Condition	Recommendations	Category	Year	Cycle	Cost
96		Killin & Ardeonaig Church	Boiler Room (accessed externally)	Windows	single glazed small lancet window.	Some deterioration to timber frames noted. Flaking paint.	Cut out defective timber and insert new splice repair using suitable timber species. Redecorate (cost included elsewhere).	N	1	-	Incl.
97		Killin & Ardeonaig Church	Boiler Room (accessed externally)	Door	See external survey.			-	-	-	-
98	80	Killin & Ardeonaig Church	Boiler Room (accessed externally)	Services	Oil fired central heating boiler. Electrical supply and lighting.	Exposed aged electrical wiring.	Replace wiring as part of current electrical works (not costed).	U	1	-	-
99		Killin & Ardeonaig Church	Lean-to Store (accessed externally)	Ceiling	Timber tongue and grooved lined ceiling with former opening for rooflight to centre now boarded over.	Signs of water ingress around previous rooflight location but believed to be historic as rooflight removed and boarded and slated over.	No work required.	-	-	-	-
100		Killin & Ardeonaig Church	Lean-to Store (accessed externally)	Walls	Brickwork walls to lean-to and masonry harled wall to main church. Painted with masonry paint.	Fair condition commensurate with use of space.	No work required.	-	-	-	-
101		Killin & Ardeonaig Church	Lean-to Store (accessed externally)	Floor	Concrete.	Fair condition commensurate with use of space.	No work required.	-	-	-	-
102		Killin & Ardeonaig Church	Lean-to Store (accessed externally)	Door	See external survey.			-	-	-	-
103		Killin & Ardeonaig Church	Lean-to Store (accessed externally)	Services	Organ blower, electric light fitting.	Not tested, however surface corrosion noted to electrical conduit.	Replace wiring as part of current electrical works (not costed).	N	1	-	-
104	56, 57, 58, 59, 60, 61	Killin & Ardeonaig Church	Roofspace		Main roofspace above church hall (note: access restricted, east side of church roofspace and cupola only inspected). Roof comprises timber trussed rafters, purlins and ceiling ties. Roof structure overlaid with timber sarking boards which appear to be a later replacement. Metal brackets supporting trussed rafter connections at ceiling tie level. Timber branders supporting later replacement ceiling below (message in bottle in roofspace advises ceiling installed 1983). Approx. 100mm mineral wool insulation above ceiling.	Some movement and deterioration of structural timbers noted at base of trussed rafter to south elevation of octagonal shaped roof. Metal brackets support this rafter and may be a later repair. Signs of water ingress to underside of timber in this location but appears to be historic (roofing contractor advised he had replaced roof flashing above in last few years). Signs of water ingress to centre of roof on north side below cupola. Signs of water ingress to underside of cupola. Structural tie at base of cupola is rotten through with element in 2 pieces. Timber rafter on west side also decayed but has been spliced lower down. Evidence of insect attack to timbers which is advanced in some timber elements.	Structural Engineer to assess roof structure and provide recommendations.	N	1	-	£750
105		Killin & Ardeonaig Church	Roofspace				Provisional Allowance for repairs to structural timbers	N	1	-	£3,500

Item	Photo / Dwg Reference	Building	Location	Element 1	Description	Condition	Recommendations	Category	Year	Cycle	Cost
106		Killin & Ardeonaig Church	Paths		Stone slabbed path to north entrance to church.	Fair condition. Some cracked slabs.	Replace cracked slabs.	D	2	-	£100
107	85	Killin & Ardeonaig Church	Paths		Gravel formed driveway to west and north west.	Vegetation growth. Dispersion and compaction of chippings.	Supply additional gravel to match existing to supplement coverings which have become compacted and dispersed.	D	2	-	£500
108		Killin & Ardeonaig Church	Paths		Gravel formed track surrounding the perimeter of the property.	Some vegetation growth and accumulation of soil and other debris.	Remove vegetation and other debris to improve drainage around building perimeter.	N	2	-	£250
109		Killin & Ardeonaig Church	Paths		Concrete slabbed path to south leading to Church Hall.	Good condition.	No work required.	-	-	-	-
110		Killin & Ardeonaig Church	Hard Landscaping		Concrete paved hardstanding for external oil tank.	Fair condition. Moss growth to surface.	Remove moss to prevent slipping hazard.	N	1	-	£50
111		Killin & Ardeonaig Church	Steps		Concrete platt at the fire exit door from the rear of the Church Hall.	Fair condition. No handrail.	Consider fabrication and installation of handrail.	D	3	-	£600
112		Killin & Ardeonaig Church	Soft Landscaping		Grassed areas to north, west and south of church.	Good condition.	-	-	-	-	-
113	83, 84	Killin & Ardeonaig Church	Fencing		Timber post and rail fence to east.	Aged, heavily weathered. Wet rot to several fence posts.	Replace rotten fence posts.	N	1	-	£350
114		Killin & Ardeonaig Church	Fencing		Timber 'hit and miss' fence to south.	Good condition.	No work required.	N		-	-
115	81	Killin & Ardeonaig Church	Walls		Masonry Boundary wall to south west of church.	Fair condition. Heavily pointed with cement mortar. Some minor open joints and moss growth.	Remove moss and point up open joints in a suitable specified lime mortar.	N	3	-	£100
116		Killin & Ardeonaig Church	Gates		Cast iron gate to the east of the property.	Fair condition. No catch to secure gate in closed position. Flaking paint and surface corrosion evident.	Prepare and decorate as part of a planned maintenance programme.	N	1	-	£75
117	82	Killin & Ardeonaig Church	Gates		Cast iron double gates to west of property leading to Church Hall.	Fair condition. Flaking paint and surface corrosion evident.	Prepare and decorate as part of a planned maintenance programme.	N	1	-	£150
118	83	Killin & Ardeonaig Church	Services		Modern plastic bunded Titan oil tank adjacent to east elevation.	Not assessed.	Planned inspection in accordance with OFTEC Regulations (cost included elsewhere).	N	1	-	Incl.

Item	Photo / Dwg Reference	Building	Location	Element 1	Description	Condition	Recommendations	Category	Year	Cycle	Cost
119	86, 87, 88	Killin & Ardeonaig Church Hall	Roofs	Coverings	Pitched metal corrugated roof with plastic coated finish and proprietary metal flashings.	Good condition. Some deterioration to plastic coating at edges of corrugated roofing panels. Previous repairs to seal 2nr joints in flashings noted. Flashing and adjacent gutters full of leaves and other debris.	Continue with annual roof maintenance to include gutter cleaning (costed elsewhere).	U	1	-	Incl
120	89	Killin & Ardeonaig Church Hall	Roofs	Coverings	Small flat sections of roof covered with modern single ply membrane.	Good condition.	No work required.	-	-	-	-
121	89	Killin & Ardeonaig Church Hall	Roofs	Roof Windows	Polycarbonate domed rooflight to small section of flat roof above church hall.	Good condition.	No work required.	-	-	-	-
122	88	Killin & Ardeonaig Church Hall	Roofs	Rainwater goods	UPVC gutters and downpipes.	Good condition, however gutters are full of leaves and other debris. No balloon grating to gutter outlet on west elevation.	Fit balloon gratings to gutter outlets to prevent leaves and other debris from blocking downpipes. Clear gutters during annual roof maintenance (costed elsewhere).	N	1	-	100
123	91	Killin & Ardeonaig Church Hall	Roofs	Rainwater goods		Broken brackets to upvc downpipes (2nr).	Replace broken brackets.	N	2	-	£75
124		Killin & Ardeonaig Church Hall	Walls	Fascia Boards	Timber fascia boards	Good condition.	Redecorate as part of a planned maintenance programme.	N	3		£480
125	92, 93	Killin & Ardeonaig Church Hall	Walls	Walls Generally	Masonry walls with harled finish.	Good condition. Some cracks in harling. Plastic vents within wall blocked.	Clear blocked vents.	N	2	-	£150
126	92	Killin & Ardeonaig Church Hall	Walls	North Elevation		Crack in harling above the north side of the fire exit door to the east elevation.	Fill crack in harling and monitor.	N	1	-	£50
127	94	Killin & Ardeonaig Church Hall	Walls	East Elevation		Minor damage to harling around copper overflow pipe on east elevation.	Repair damage render and decorate.	N	2	5	£50
128		Killin & Ardeonaig Church Hall	Walls	South Elevation		Vertical hairline cracking in harling where Hall meets Church on south side.	Fill hairline cracking in harling and redecorate.	N	2	-	£50
129		Killin & Ardeonaig Church Hall	Walls	Walls Generally			Redecorate harling as part of a planned maintenance programme.	N	2	5	£2,940
130		Killin & Ardeonaig Church Hall	Windows	Windows Generally	Timber double glazed casement windows.	Good condition.	No repair work required.	-	-	-	-
131		Killin & Ardeonaig Church Hall	Windows	Windows Generally			Redecorate as part of a planned maintenance programme.	N	3	5	£400
132		Killin & Ardeonaig Church Hall	Doors	South Elevation	Modern timber panelled front entrance door with 2nr double glazed upper panels.	Good condition.	No work required.	-	-	-	-
133		Killin & Ardeonaig Church Hall	Doors	East Elevation	Timber fire exit door with upper Georgian wired glazing panel.	Good condition.	No work required.	-	-	-	-
134		Killin & Ardeonaig Church Hall	Doors	Doors Generally			Redecorate as part of a planned maintenance programme.	N	2	5	£150
135		Killin & Ardeonaig Church Hall	Services	South Elevation	External soffit mounted light fitting with sensor over front entrance door.	Light fitting not tested.	-	-	-	-	-
136		Killin & Ardeonaig Church Hall	Services	East Elevation	External bulkhead lighting over rear fire exit door.	Light fitting not tested.	-	-	-	-	-
137	94	Killin & Ardeonaig Church Hall	Services	East Elevation		Dripping copper overflow pipe on east elevation. Pipe bent upwards.	Plumber to repair leaking overflow.	U	1	-	£50
138		Killin & Ardeonaig Church Hall	Steps	East Elevation	Concrete step outside east elevation fire escape.	Good condition.	No work required.	-	-	-	-

Item	Photo / Dwg Reference	Building	Location	Element 1	Description	Condition	Recommendations	Category	Year	Cycle	Cost
139		Killin & Ardeonaig Church Hall	Hall	Ceilings	Plasterboard, painted. 1nr polycarbonate domed rooflight, with hatch and doors to roofspace below.	Good condition.	No work required.	-	-	-	-
140		Killin & Ardeonaig Church Hall	Hall	Walls	Plasterboard, painted.	Good condition. Minor isolated marks.	No work required.	-	-	-	-
141		Killin & Ardeonaig Church Hall	Hall	Floors	Solid concrete floor with carpet finish.	Good condition. Minor staining to carpet finish.	No work required.	-	-	-	-
142		Killin & Ardeonaig Church Hall	Hall	Windows	Timber double glazed windows with opening top casement.	Good condition.	No work required.	-	-	-	-
143		Killin & Ardeonaig Church Hall	Hall	Doors	6nr timber panelled door.	Good condition. Minor impact damage.	No work required.	-	-	-	-
144		Killin & Ardeonaig Church Hall	Hall	Doors	Timber external door with 2nr upper double glazed panels. Thumb turn lock.	Good condition.	No work required.	-	-	-	-
145		Killin & Ardeonaig Church Hall	Hall	Doors	Timber fire exit door to rear with upper Georgian wired glazed panel and push bar opening mechanism.	Generally good condition. Keeper and fixings loose and corroding at base of door.	Replace corroding keeper and fixings.	N	1	-	£25
146		Killin & Ardeonaig Church Hall	Hall	Services	Surface mounted ceiling light fittings, emergency lighting above external exit doors, mains wired smoke detection, fire extinguishers.	Not assessment made.	-	I	1	-	Incl
147		Killin & Ardeonaig Church Hall	Kitchen	Ceilings	Plasterboard, painted.	Good condition.	No work required.	-	-	-	-
148		Killin & Ardeonaig Church Hall	Kitchen	Walls	Plasterboard, painted.	Good condition. Minor isolated marks.	No work required.	-	-	-	-
149		Killin & Ardeonaig Church Hall	Kitchen	Floors	Solid concrete floor with carpet finish.	Good condition. Minor staining to carpet finish.	No work required.	-	-	-	-
150		Killin & Ardeonaig Church Hall	Kitchen	Windows	Timber double glazed windows with opening top casement.	Good condition.	No work required.	-	-	-	-
151		Killin & Ardeonaig Church Hall	Kitchen	Services	Hot water heater under sink, mechanical extract fan, built-in electric oven and hob, surface mounted ceiling light fitting, radiator, fire blanket.	No assessment made. No heat detector installed.	Install heat detector (review requirements as part of Fire Risk Assessment).	U	1	-	£150
152		Killin & Ardeonaig Church Hall	Kitchen	Fittings	Kitchen base and wall units, Stainless steel sink and drainer. Serving hatch.	Good condition.	No work required.	-	-	-	-
153	102	Killin & Ardeonaig Church Hall	Toilet	Ceilings	Plasterboard, painted.	Good condition.	No work required.	-	-	-	-
154	102	Killin & Ardeonaig Church Hall	Toilet	Walls	Plasterboard, painted.	Good condition.	No work required.	-	-	-	-
155		Killin & Ardeonaig Church Hall	Toilet	Floors	Solid concrete floor with vinyl floor finish.	Good condition.	No work required.	-	-	-	
156		Killin & Ardeonaig Church Hall	Toilet	Windows	Timber double glazed windows with obscure glass and opening top casement.	Good condition.	No work required.	-	-	-	-
157		Killin & Ardeonaig Church Hall	Toilet	Services	Mechanical extract fan, radiator, hand drier, ceiling mounted light fitting.	No assessment made, however extract fan noisy. No distress alarm fitted for persons requiring assistance.	Service extract fan. Fit alarm for persons requiring assistance.	D	2	-	£250

Item	Photo / Dwg Reference	Building	Location	Element 1	Description	Condition	Recommendations	Category	Year	Cycle	Cost
158		Killin & Ardeonaig Church Hall	Toilet	Sanitary Fittings	Close coupled WC, wash hand basin, baby change facility, grab rails.	Good condition.	No work required.	N	1	-	-
159		Killin & Ardeonaig Church Hall	Office	Ceilings	Plasterboard, painted.	Good condition.	No work required.	-	-	-	-
160		Killin & Ardeonaig Church Hall	Office	Walls	Plasterboard, painted.	Good condition.	No work required.	-	-	-	-
161		Killin & Ardeonaig Church Hall	Office	Floors	Solid concrete floor with carpet finish.	Good condition.	No work required.	-	-	-	-
162		Killin & Ardeonaig Church Hall	Office	Windows	Timber double glazed windows with obscure glass and opening top casement.	Good condition.	No work required.	-	-	-	-
163		Killin & Ardeonaig Church Hall	Office	Services	Radiator, surface mounted light fittings, smoke detector.	No assessment made.	-	-	-	-	-

Killin & Ardeonaig Parish Church, Edinburgh
Quinquennial Survey 2018

Cost Summary

	I	U	N	D	Totals
i. General	0	950	1150	0	**£2,150**
ii. Church External	0	20410	29325	5465	**£55,200**
iii. Church Internal	0	300	4750	28200	**£33,250**
iv. Boundaries and Gates	0	0	975	1200	**£2,175**
vi. Hall External	0	50	4445	0	**£4,495**
vii. Hall Internal	0	150	25	250	**£425**
	£0	**£21,860**	**£40,670**	**£35,115**	**£97,695**

NOTES	01	All figures are budget estimates and are for guidance purposes only
	02	All figures exclusive of preliminary items
	03	All figures exclusive of scaffolding
	04	All figures exclusive of temporary roof protection (over-roof)
	05	All figures exclusive of contingencies
	06	All figures exclusive of Value Added Tax
	07	All figures exclusive of professional fees
	08	All figures are exclusive of fees for Local Authority consents
	09	Allowance made in rates for structural works are subject to further investigations/monitoring
	10	Decoration included only where the existing standard is considered poor or where associated with an item of repair
	11	Clearing out rooms and protection of significant internal features not included.

ADAMS NAPIER PARTNERSHIP
Chartered Building Surveyors and Heritage Consultants
2 Copperbeech Court, Cavalry Park, Peebles EH45 9BU
admin@adamsnapier.co.uk www.adamsnapier.co.uk 01721588110

Appendix B

Photographs

i. General
ii. Issues

ADAMS NAPIER PARTNERSHIP
Chartered Building Surveyors and Heritage Consultants

External

1 **Church North Elevation**

2 **East Elevation (1)**

3 **East Elevation (2)**

4 **North East Elevation**

5 **South Elevation (1)**

6 **South Elevation (2)**

ADAMS NAPIER PARTNERSHIP
Chartered Building Surveyors and Heritage Consultants

7 **West Elevation**

8 **North West Elevation**

9 **Church Hall**

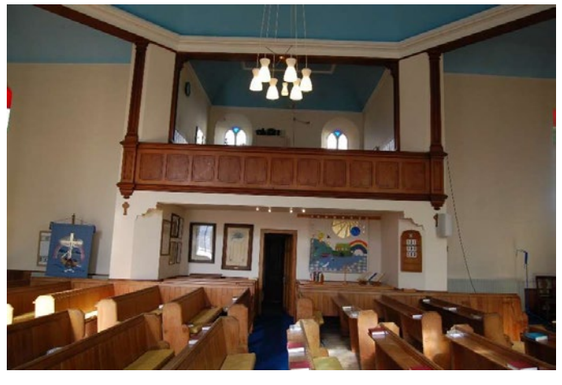
Internal

10 

Sanctuary (1)

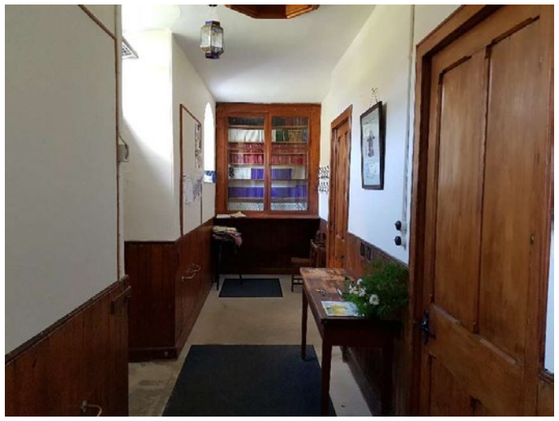
11 

Sanctuary (2)

12 

Gallery

ADAMS NAPIER PARTNERSHIP
Chartered Building Surveyors and Heritage Consultants

13 

Lobby

14 

Church Hall

External

15

Church
Roofs:
Church main roof pitches are generally well maintained and in fair condition.

16

Roofs:
'Flashband' temporary repairs and missing slate below window cill. Deterioration to timber louvres. Sealant around timber louvres cracked and missing in places.

17

Roofs:
'Flashband' temporary repairs and missing slate below window cill. Open joints between slates on angle could allow water to penetrate (note: timber rafter below this area in roofspace heavily decayed).

ADAMS NAPIER PARTNERSHIP
Chartered Building Surveyors and Heritage Consultants

18

Roofs:
Deterioration to timber louvres and fascias. Cracked slates, patched leadwork. Open joints around timber louvres and slating.

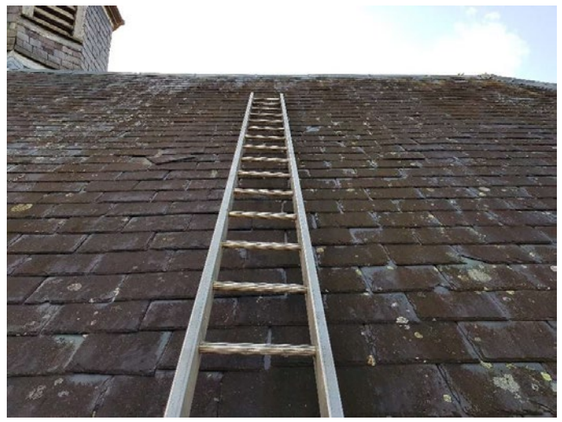
19

Roofs:
Deterioration to timber louvres and fascias. Cracked slates, patched leadwork. Open joints around timber louvres and slating.

20

Roofs:
Slipped and missing slates.

21



Roofs:
Slipped and cracked slates.

22

Roofs:
Cracked and missing pointing to verge of north elevation slating.

23

Roofs:
Stonework to bell tower appears to be out of plumb.

ADAMS NAPIER PARTNERSHIP
Chartered Building Surveyors and Heritage Consultants

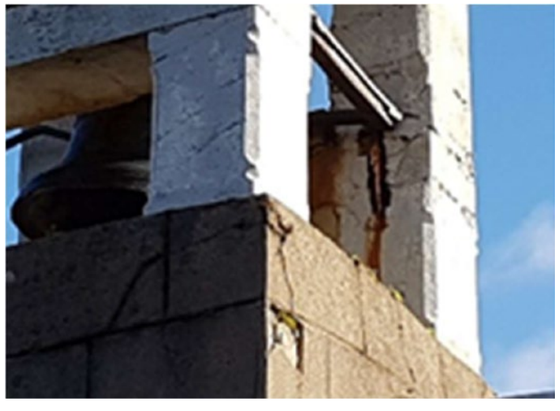
24

Roofs:
Stonework to bell tower appears to be out of plumb. Stonework heavily moss covered.

25

Roofs:
Cracked and spalling render to base of bell tower. Metal fixings corroding and cracks apparent in surrounding masonry. Stonework decorated with masonry paint, moss and algae growth.

26



Roofs:
Cracked and spalling render to base of bell tower. Metal fixings corroding and cracks apparent in surrounding masonry.

27

Roofs:
Hairline cracks to cement skew fillet of boiler house roof.

28

Roofs:
Lean-to, rooflight removed and boarded over in past. Staining of timber lined ceiling (assumed to be historic issue from when rooflight in place).

29

Rainwater Goods:
'Flashband' temporary repair to leadwork at base of chimney. Defective guttering where abuts chimney causing water runs off and staining of harling below.

ADAMS NAPIER PARTNERSHIP
Chartered Building Surveyors and Heritage Consultants

30

Rainwater Goods:
Debris and vegetation in gutter of single storey boiler house to north.

31

Rainwater Goods:
Corrosion to back of rainwater downpipe. Downpipe harled

32

Rainwater Goods:
Defective guttering where extension abuts main building causing staining to wall surfaces below.

33

Rainwater Goods:
Missing downpipe bracket. Surface corrosion and flaking paint. No caulking of joints.

34

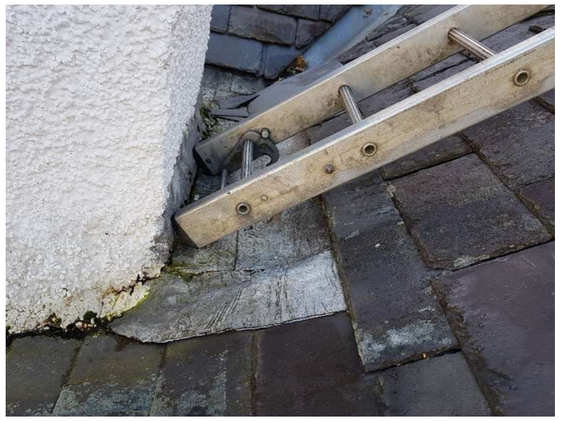
Rainwater Goods:
Open connections at base of downpipe into underground drainage system.

35

Rainwater Goods:
Staining to underside of gutter joint indicates leaking.

ADAMS NAPIER PARTNERSHIP
Chartered Building Surveyors and Heritage Consultants

35



Chimney:
'Flashband' temporary repairs to leadwork at base of chimney. Minor cracking to chimney render.

36

North Elevation:
Cracking to harling under window. Stone windows surround decorated with masonry paint.

37

North Elevation:
Use of impermeable masonry paints on stonework flaking off in places. Algae staining paintwork.

38

North Elevation Boiler House:
Cracks in door margin and harling above. Defective gutter staining wall below.

39

East Elevation:
Cracks in harling extending down from window cill.

40

North Elevation:
Cracked and spalling render at base of wall to boiler house extension to north. Plastic vent to door.

ADAMS NAPIER PARTNERSHIP
Chartered Building Surveyors and Heritage Consultants

41

North Elevation Lean-to:
Organ blower machine. Evidence of earlier harl on walls.

42

Windows:
Different types and colours of glass used for previous repairs which has detracted from aesthetic appearance of windows. Assessment of the significance of the historic glass and original colour scheme needed to inform future repairs.

43

Windows:
Defective timber at 'Y' intersection. Different styles and colours of glass used for previous repairs (clear white glass assumed not to be a later replacement).

44

Windows:
Sanctuary North Elevation - Rotten timber window cill and frames. Paint finish flaking.

45

Windows:
Extensive rot to window cill and lower part of frames. Moss growth. Cracked pointing around windows. Paint finish flaking.

46

Windows:
Window cill and lower part of frames rotten. Previous splice repairs to base of window frames. Painted decoration flaking. Cracked pointing around windows.

ADAMS NAPIER PARTNERSHIP
Chartered Building Surveyors and Heritage Consultants

47

Windows:
Cracked pane of glass to south west facing window of octagon. Different styles and colours of glass used in previous repairs.

48

Doors:
Base of timber door standards rotten to boiler house.

49

South Elevation:
Displaced key stone and eaves cornice above church window with gap above. Flaking paint and algae staining to gutters.

50

South Elevation:
Displaced key stone and eaves cornice above church window.

51

South Elevation:
Crack in render below window. Staining of wall finishes from corrosion of metal grille and fixings over window.

52

South Elevation:
Corrosion of window grille fixings causing cracking to window cill.

ADAMS NAPIER PARTNERSHIP
Chartered Building Surveyors and Heritage Consultants

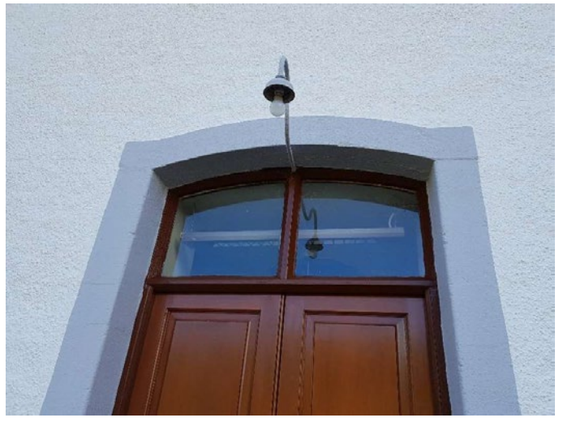
53

South Elevation:
Cracking to stone window cill and harling below. Rotten cill and base of frames to window.

54

North Elevation:
Soil and vegetation in perimeter gravel trench could hinder drainage.

55



West Elevation:
Cover missing from external light fitting. Non IP rated fitting.

56

Roospace:
Remains of earlier roof structure in roofspace.

57

Roofspace:
Rotten rafter in roofspace

58

Roofspace:
Broken horizontal tie to cupola.

ADAMS NAPIER PARTNERSHIP
Chartered Building Surveyors and Heritage Consultants

59

Roofspace:
Deterioration to roof timbers from insect attack.

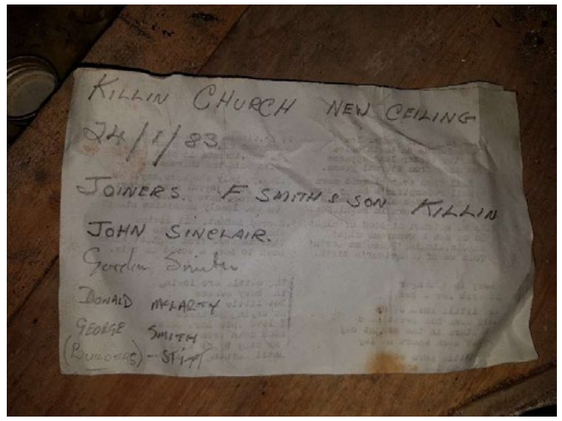
60

Roofspace:
Staining of roof timbers and wet rot to rafters to south side of church. This is believed to be historic as it is understood repairs have now been made to replace valley flashing above.

61

Roofspace:
Some movement in main elements of timber roof structure apparent to south side of church. Metal bracing may be earlier repair to arrest structural movement and should be inspected by Structural Engineer.

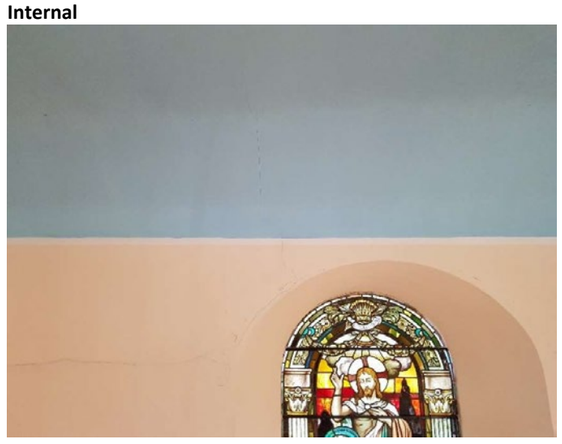
62



Roofspace:
'Message in a Bottle' – New church ceiling installed 1983.

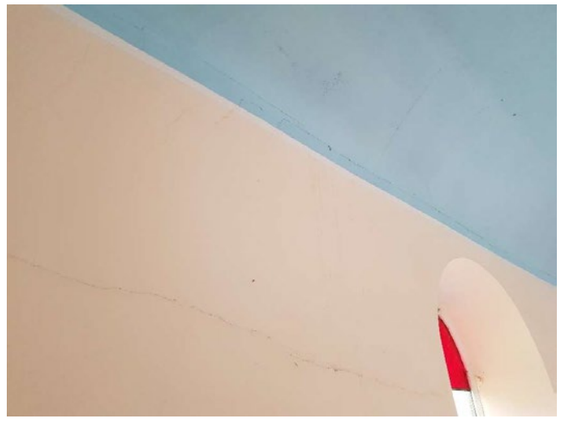
Internal

63



Church
East Wall / Ceiling:
Cracks in plaster wall and ceiling finishes around stained glass window.

64



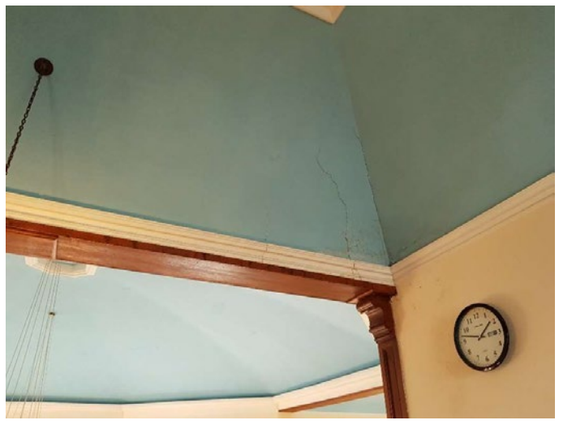
North Wall:
Extensive cracking to plasterwork ceiling and walls.

ADAMS NAPIER PARTNERSHIP
Chartered Building Surveyors and Heritage Consultants

65

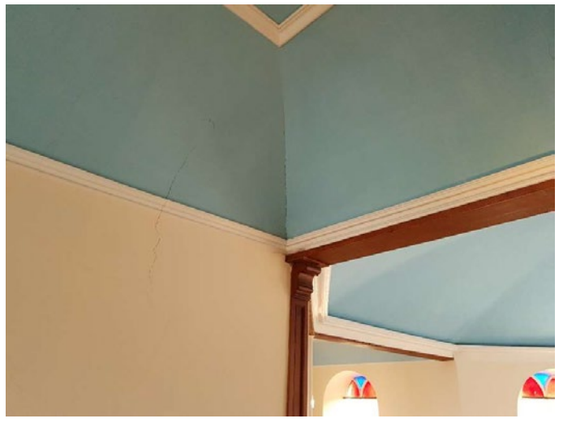
Gallery Ceiling:
Cracking to plaster and flaking of paint to ceiling and wall finishes.

66



Gallery:
Cracking to plaster above gallery.

67

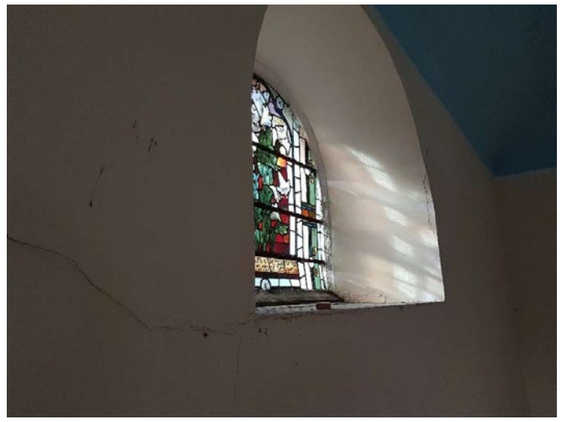


Gallery:
Vertical cracking to plaster and cornice.

68

Sanctuary:
Horizontal cracking to plaster on north wall.

69



West Wall:
Cracking to plasterwork around stained glass window.

70

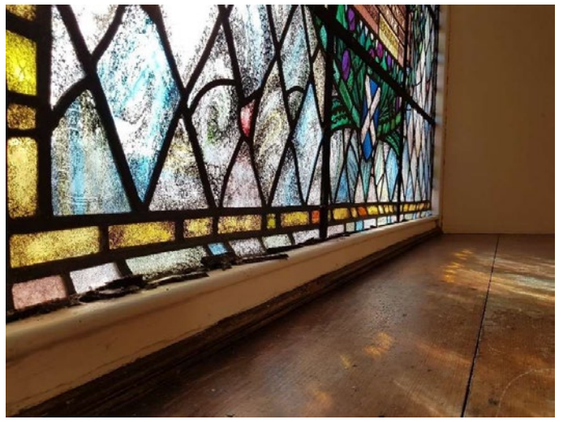
North Extension:
Condensation staining and mould growth on east wall under window.

ADAMS NAPIER PARTNERSHIP
Chartered Building Surveyors and Heritage Consultants

71

Upper Gallery:
Broken pane of glass.

72



Windows:
Defective putty and some distortion in lower part of leaded stained glass window.

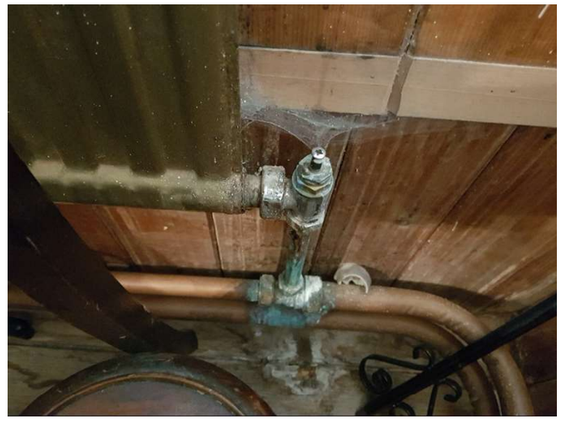
73

Windows:
Previous timber splice repairs at base of windows.
Inappropriate glazing replacements in clear glass.

74

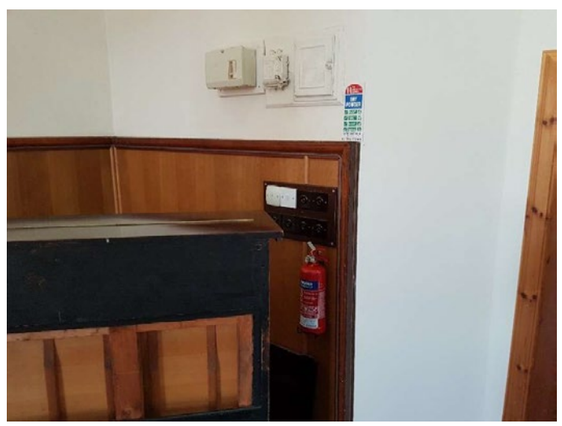
Sanctuary:
Staining to timber floorboards below central heating pipework. Higher than normal moisture content recorded in timber with meter indicating timber 'At Risk' of decay.

75



Services:
Leaking radiator pipework joint causing staining of floor finishes below and higher than normal moisture content with timber 'At Risk' of decay.

76



Services:
Aged electrical installation in process of getting replaced during inspection.

ADAMS NAPIER PARTNERSHIP
Chartered Building Surveyors and Heritage Consultants

77

Services:
Aged electrical installation including bakelite switches on wooden backplates not to current standards for electrical installation (note: electrical installation getting replaced during inspection).

78

Services:
Corrosion to radiators.

79

Services:
Use of extension leads. No evidence of any Portable Electrical Appliance Testing (PAT).

80

Services:
Oil fired boiler situated in adjoining external boiler house.

Boundaries & Gates

81

Boundary Wall:
Stone boundary wall to west heavily pointed with hard cement mortar.

82

Boundaries:
Stone boundary and metal gates to west, timber panelled 'hit and miss' fence to south. Concrete paving slabs and gravel paths.

ADAMS NAPIER PARTNERSHIP
Chartered Building Surveyors and Heritage Consultants

83

Fencing:
Timber post and rail fencing to east boundary. Rotten fence post. Oil tank on concrete slabs.

84

Fencing:
Timber post and rail fencing to east boundary. Rotten fence post.

85

Boundaries:
Gravel consolidated and dispersed at main entrance to church.

External

86

Hall
Roof:
Modern corrugated metal roofing with pvc coated finish. Finish degrading at edges. Gutters filled with leaves and other debris.

87

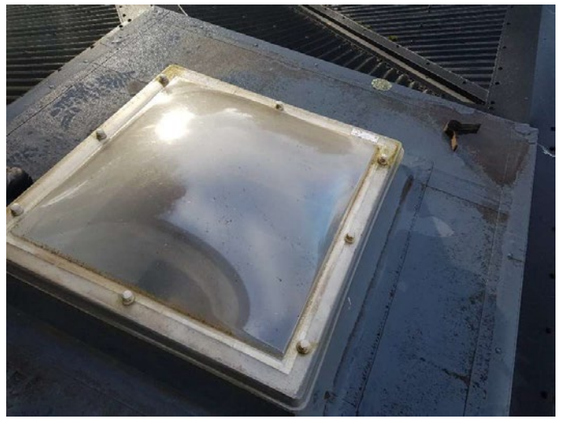
Roof:
Modern corrugated metal roofing with pvc coated finish. Gutters filled with leaves and other debris. Moss growth.

88

Roof:
Gutter filled with leaves and other debris. No wire rose to outlet to prevent blockage of downpipe.

ADAMS NAPIER PARTNERSHIP
Chartered Building Surveyors and Heritage Consultants

89

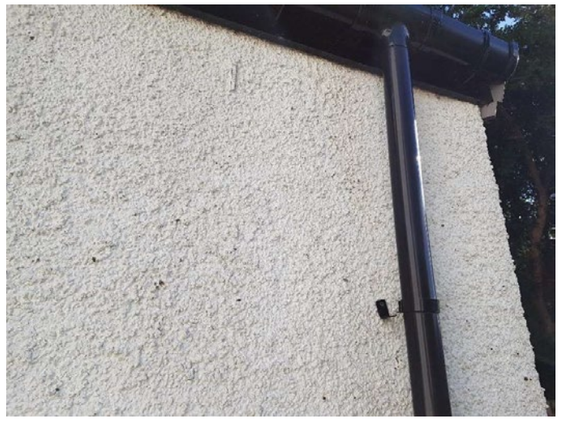


Roof:
Flat section of roofing covered with single ply membrane and containing polycarbonate rooflight

90

Roof:
Patch repair to joint in proprietary flashing sealed with silicone.

91



Rainwater Goods:
Broken downpipe bracket.

92

Walls:
Crack in render above fire exit door to east elevation.

93

Walls:
Hairline cracks in render.
Cavity ventilators blocked.

94

Walls:
Damage to harling and staining to wall surfaces from leaking overflow pipe.

Internal **Church Hall**

ADAMS NAPIER PARTNERSHIP
Chartered Building Surveyors and Heritage Consultants

95

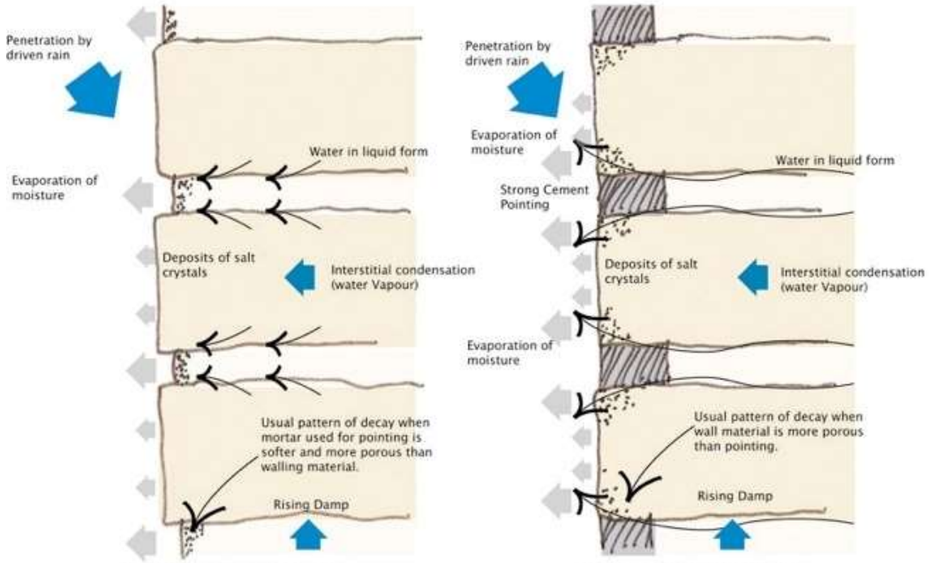
Roofspace:
Modern timber roof structure to Church Hall.

96

Electrical Installation:
Date of last inspection 02/05 and therefore well overdue.

Appendix C

Effect of Hard Impervious Mortar Pointing on Surrounding Sandstone



WALL BUILT OF POROUS MATERIAL

EFFECT OF IMPERVIOUS POINTING

ADAMS NAPIER PARTNERSHIP
Chartered Building Surveyors and Heritage Consultants
2 Copperbeech Court, Cavalry Park, Peebles EH45 9BU
admin@adamsnapier.co.uk www.adamsnapier.co.uk 01721588110

Appendix D

"Needing building work done?" - Health & Safety Executive. *A short guide for clients on the Construction (Design and Management) Regulations 2015.*

Adams Napier Partnership Ltd.
P180154 – Quinquennial Survey Report
Killin & Ardeonaig Parish Church

Need building work done?

A short guide for clients on the Construction (Design and Management) Regulations 2015

This is a web-friendly version of leaflet INDG411(rev1), published 04/15

This leaflet is aimed at you if you are a building owner, user or managing agent and are having maintenance, small-scale building work or other minor works carried out in connection with a business – as you will be a client with legal duties under the Construction (Design and Management) Regulations 2015 (CDM 2015).

Following the simple steps in this leaflet will help you meet your responsibilities as a client and ensure construction work and repairs are undertaken safely and without damaging worker's and other people's health.

What does CDM 2015 do?

Complying with CDM 2015 will help ensure that no-one is harmed during the work, and that your building is safe to use and maintain while giving you good value. Effective planning will also help ensure that your work is well managed with fewer unexpected costs and problems.

What do clients need to do?

Many clients, particularly those who only occasionally have construction work done, are not experts in construction work. Although you are not expected to actively manage or supervise the work yourself, you have a big influence over the way the work is carried out. Whatever the size of your project, you decide which designer and contractor will carry out the work and how much money, time and resource is available. The decisions you make have an impact on the health, safety and welfare of workers and others affected by the work.

CDM 2015 is not about creating unnecessary and unhelpful processes and paperwork. It is about choosing the right team and helping them to work together to ensure health and safety.

As a client, you need to do the following.

1 Appoint the right people at the right time

If more than one contractor will be involved, you will need to appoint (in writing) a principal designer and a principal contractor.

A principal designer is required to plan, manage and coordinate the planning and design work. Appoint them as early as possible so they can help you gather information about the project and ensure that the designers have done all they can to check that it can be built safely.

Health and Safety Executive

A principal contractor is required to plan, manage and coordinate the construction work. Appoint them as early as possible so they are involved in discussions with the principal designer about the work.

Getting the right people for the right job means your designers and your contractors need to have the skills, knowledge and experience to identify, reduce and manage health and safety risks. This is also the case if they are a company (known as having 'organisational capability' for the job). The designers and the contractors should be able to give references from previous clients for similar work and explain to you how they will achieve this.

Professional bodies can help you choose your architect and other designers. The Safety Schemes in Procurement (SSIP) website has lists of businesses which have been assessed on their health and safety management. A contractor may be a member of a trade association.

2 Ensure there are arrangements in place for managing and organising the project

The work is more likely to be done without harming anyone and on time if it is properly planned and managed. Sometimes the work is complex and uses many different trades. Often it involves high-risk work such as the work listed in the bulleted list below. The principal designer should understand these types of risks and try to avoid them when designing your project. The principal contractor or builder should manage the risks on site.

These are the biggest causes of accidents and ill health in construction work, and your designer and contractor can manage the risks by doing the following.

- Falls from height:
  - Make sure ladders are in good condition, at a 1:4 angle and tied or footed.
  - Prevent people and materials falling from roofs, gable ends, working platforms and open edges using guardrails, midrails and toeboards.
  - Make sure fragile roof surfaces are covered, or secure working platforms with guard rails are used on or below the roof.
- Collapse of excavations:
  - Shore excavations; cover or barrier excavations to prevent people or vehicles from falling in.
- Collapse of structures:
  - Support structures (such as walls, beams, chimney breasts and roofs) with props; ensure props are installed by a competent person.
- Exposure to building dusts:
  - Prevent dust by using wet cutting and vacuum extraction on tools; use a vacuum cleaner rather than sweeping; use a suitable, well-fitting mask.
- Exposure to asbestos:
  - Do not start work if it is suspected that asbestos may be present until a demolition/refurbishment survey has been carried out.
- Electricity:
  - Turn the electricity supply and other services off before drilling into walls.
  - Do not use excavators or power tools near suspected buried services.
- Protect members of the public, the client, and others:
  - Secure the site; net scaffolds and use rubbish chutes.

Discuss with your designer and builder before work starts and throughout the build how these risks are being managed.

3 Allow adequate time

Work that is rushed is likely to be unsafe and of poor quality. Allow enough time for the design, planning and construction work to be undertaken properly.

4 Provide information to your designer and contractor

Your designer and builder will need information about what you want built, the site and existing structures or hazards that may be present such as asbestos, overhead cables, and buried services. Providing this information at an early stage will help them to plan, budget and work around problems. Your principal designer can help you gather this information.

Putting together a 'client brief' at the earliest stages which includes as much information as you have about the project, along with the timescales and budget for the build and how you expect the project to be managed can help you to set the standards for managing health and safety.

5 Communicate with your designer and building contractor

Your project will only run efficiently if everyone involved in the work communicates, cooperates and coordinates with each other.

During the design and planning stage, you, your designer and contractor need to discuss issues affecting what will be built, how it will be built, how it will be used and how it will be maintained when finished. This will avoid people being harmed or having unexpected costs because issues were not considered when design changes could still easily be made.

Meeting with your designer and contractor as the work progresses gives an opportunity to deal with problems that may arise and discuss health and safety. This will help to ensure that the work progresses as planned.

6 Ensure adequate welfare facilities on site

Make sure that your contractor has made arrangements for adequate welfare facilities for their workers before the work starts. See the HSE publication *Provision of welfare facilities during construction work* (see 'Further reading').

7 Ensure a construction phase plan is in place

The principal contractor (or contractor if there is only one contractor) has to draw up a plan explaining how health and safety risks will be managed. This should be proportionate to the scale of the work and associated risks and you should not allow work to start on site until there is a plan.

8 Keep the health and safety file

At the end of the build the principal designer should give you a health and safety file. If the principal designer leaves before the end of the project, the principal contractor (or contractor if there is only one contractor) should do this. It is a record of useful information which will help you manage health and safety risks during any future maintenance, repair, construction work or demolition. You should keep the file, make it available to anyone who needs to alter or maintain the building, and update it if circumstances change.

9 Protecting members of the public, including your employees

If you are an employer, or you have members of the public visiting your premises, you need to be sure that they are protected from the risks of construction work.

Discuss with your designer and contractor how the construction work may affect how you run your business, eg you may have to re-route pedestrian access; make sure signs to your entrance are clear; or change the way your deliveries operate.

10 Ensure workplaces are designed correctly

If your project is for a new workplace or alterations to an existing workplace (eg a factory or office), it must meet the standards set out in the Workplace (Health, Safety and Welfare) Regulations 1992 (see 'Further reading').

Notifying construction projects

For some construction work (work lasting longer than 30 days with more than 20 workers working at the same time, or involving 500 person days of work), you need to notify HSE of the project as soon as possible before construction work starts. In practice, you may request someone else to do this on your behalf.

How can you find out more?

Your principal designer or principal contractor will be able to advise you on your duties.

Why you should comply with your duties as a client

If you do not comply with CDM 2015, you are likely to be failing to influence the management of health and safety on your project. This means that your project could be putting workers and others at risk of harm, and that the finished structure may not achieve good standards and be value for money.

If you don't appoint a principal designer or principal contractor you will be responsible for the things that they should have done.

Serious breaches of health and safety legislation on your construction project could result in construction work being stopped by HSE or your local authority and additional work may be needed to put things right. In the most serious circumstances, you could be prosecuted.

Fee for Intervention

HSE now recovers the costs of time spent dealing with material breaches of health and safety law. This is known as Fee for Intervention (FFI). FFI applies when an inspector finds something wrong that they believe is serious enough for them to write to you about. A fee is charged for the time spent by the inspector in sorting it out. Following the simple guidance in this leaflet may help you to avoid having to pay a fee.

Domestic clients

If you are having work done on your own home, or the home of a family member, and it is **not** in connection with a business, you will be a domestic client. The only responsibility a domestic client has under CDM 2015 is to appoint a principal designer and a principal contractor when there is more than one contractor. However, if you do not do this, (as is common practice) your duties as a domestic client are automatically transferred to the contractor or principal contractor. If you already have a relationship with your designer before the work starts, the designer can take on your duties, provided there is a written agreement between you and the designer to do so.

Further reading

CONIAC industry guides www.citb.co.uk/health-safety-and-other-topics/health-safety/construction-design-and-management-regulations/cdm-guidance-documents

Construction phase plan (CDM 2015): What you need to know as a busy builder Construction Information Sheet CIS80 HSE Books 2015 www.hse.gov.uk/pubns/cis80.htm

Health and safety in construction HSG150 (Third edition) HSE Books 2006 ISBN 978 0 7176 6182 4 www.hse.gov.uk/pubns/books/hsg150.htm

Managing health and safety in construction. Construction (Design and Management) Regulations 2015. Guidance on regulations L153 HSE Books 2015 ISBN 978 0 7176 6626 3 www.hse.gov.uk/pubns/books/l153.htm

Provision of welfare facilities during construction work Construction Information Sheet CIS59 HSE Books 2010 www.hse.gov.uk/pubns/cis59.htm

Workplace health, safety and welfare. Workplace (Health, Safety and Welfare) Regulations 1992. Approved Code of Practice and guidance L24 (Second edition) HSE Books 2013 ISBN 978 0 7176 6583 9 www.hse.gov.uk/pubns/books/l24.htm

Health and Safety Executive

Further information

For information about health and safety, or to report inconsistencies or inaccuracies in this guidance, visit www.hse.gov.uk. You can view HSE guidance online and order priced publications from the website. HSE priced publications are also available from bookshops.

This guidance is issued by the Health and Safety Executive. Following the guidance is not compulsory, unless specifically stated, and you are free to take other action. But if you do follow the guidance you will normally be doing enough to comply with the law. Health and safety inspectors seek to secure compliance with the law and may refer to this guidance.

This leaflet is available at: www.hse.gov.uk/pubns/indg411.htm.

Published by the Health and Safety Executive 04/15 INDG411(rev1)

Appendix D

Structural Report

31 January 2020

david narro associates

Nathaniel Felgate
Property Convenor
Killin and Ardeonaig Parish Church of Scotland

Dear Mr Felgate

Killin & Ardeonaig Paris Church

In accordance with your instructions, I confirm having carried out a walkover structural survey with a focus on the structural items noted in the Napier Adams Partnership quinquennial survey report of September 2018.

This report is based on a walkover survey of the church in August 2019, with further photographs of the bellcote received from a roofer in January 2020. No investigations were carried out as to the strength of individual structural members nor was any site investigation work or inspection of the foundations undertaken. No finishes were removed or floorboards lifted. No specific inspection was made in relation to timber decay or infestation, though where clear indications are present these are noted. For the purposes of this report the main church door is considered west facing.

Photograph 1. View from the west, showing the church entrance. The bellcote can be seen to the north and central cupola.

Description

We understand that the Church was constructed around 1744, with alterations and extension in 1831-2. A church hall was constructed to the north east around 2004.

Our survey and report was asked to specifically comment on:

1. The condition of the bell tower to the north
2. The extent of structural timber decay within the cupola and historic repairs apparent within the cupola roof space.

1. Bellcote (ref 2.7 of Adams Napier Report)

It was not possible to view the bell tower which sits above the north gable at close quarters during our visit in August 2019. A roofer later accessed the tower and took a series of photographs which were provided to us.

Photogrpah 02 - Roofers photograph showing overall bell tower construction

The bellcote appears to be predominantly constructed in stone. Stones form columns at each corner with intersecting horizontal stones, a pitched stone roof caps the assembly. Ferrous fixings are present between stones. The bell, which is of historical significance, hangs from internal ironwork. This ironwork is supported on timber plates set onto the horizontal sections of stone.

Some of the stonework has been painted. A cementitious render has been applied to the base of the tower.

Overall the bell tower appears to be out-of-plumb with a lean to the south. This could be suggestive of movement in the supporting structure below. Alternatively the lean may be due to deterioration of the stonework and it's fixings with a resulting sway of the masonry bell tower structure above roof level.

Ferrous fixings appear to have suffered moderate to severe corrosion. In at least one position this appears to have caused a stone to split.

The inappropriate cement render has begun to crack and spall. This represents a potential hazard, as sections of material may fall from height.

The general condition of the bell tower structure is poor and repair work is recommended to be undertaken as soon as practically possible.

Bellcote Recommendations

It is likely that some sections of stone will have to be replaced. It is our expectation that it will not be possible to do so whilst keeping the bell tower in situ. We therefore anticipate the stonework will have to be dismantled to allow repair. The construction and condition of individual stones should be assessed during the process. Care should be taken during dismantling, with the assumption that all stonework may be reused.

Ferrous fixings should be carefully removed, with replacement stainless steel pins and cramps installed to tie stones together in their original form.

It may be prudent to consult with a specialist for the rehanging of the bell and refurbishment of the hanging mechanism. Consideration can be made as to the reinstatement of timber support members or whether a more durable material would be better suited.

The cement render should be removed with a more appropriate external finish instated.

2. Cupola

The roof space was accessed from a hatch in the east section of the building. It is clear the roof has been subject to significant alteration and potentially repair over the life of the church. The timber structure of the original octagonal roof is still present, in some locations sarking has been left in place, with opening made to provide access between roof spaces. Access was not possible into the roof space to the north. A new ceiling appears to have been hung throughout the church in the 1980s.

The current arrangement of roof timbers which has resulted from past intervention is complex.

Photograph 3 – Original sarking can be seen to the octagonal roof, with the later adjoining west roof.

It is assumed that when the church was extended alterations were made to the roof structure, to allow a clear span between the slender cast iron columns installed below following wall removals. Heavy timber and ironwork trusses are in place. These are primary structural members and therefore their condition is important.

Photograph 4 – Slender cast iron column supporting corner of original octagonal roof above. The circular access hatch into the east roof space can be seen in the adjacent ceiling.

Photograph 5 – trussed members with rod present assumed to provide fixing to column below.

The vented cupola is located above the central octagonal roof. We understand that a large quantity of birds' nest material was removed relatively recently which had previously restricted access. Vents have since had mesh installed to prevent bird access.

The structural timbers which form the cupola show clear signs of significant loss of section due to infestation. This has in some cases resulted in significant loss of structural capacity to individual members. In the case of the cross trees tie members a complete loss of section has occurred. A significant portion of the heart wood has been consumed within the vertical spire member above. Structural repair or replacement is required.

Photograph 6 – Significant section loss in cross tree members within cupola

Cupola Recommendations

Whilst some individual members have lost structural integrity, as is particularly clear at the cross trees, the structurally significant deterioration of individual roof timbers does not appear to have led to any obvious movement or general distortion of the overall roof structure.

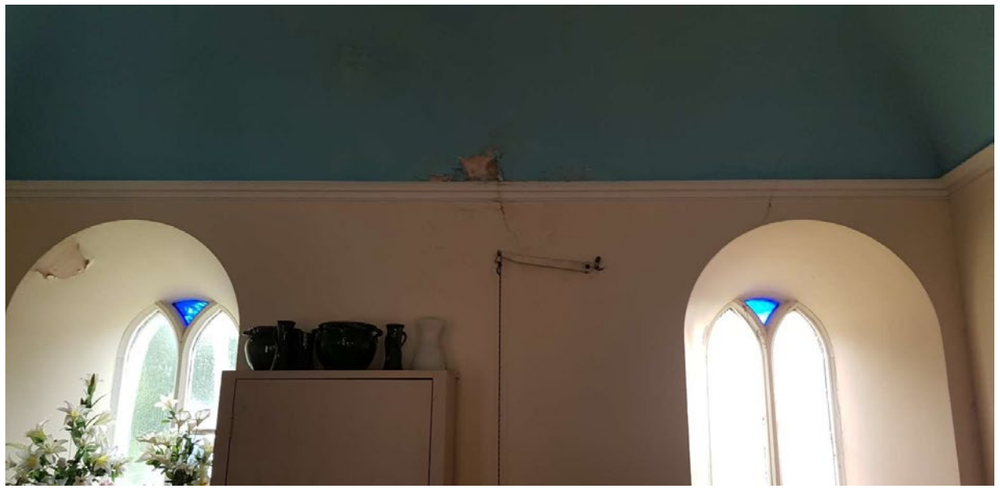
A specialist timber decay and infestation specialist should be engaged to survey the roof structure and provide comment on the nature of the decay/infestation and whether it is currently active. It seems likely that replacement, repair and treatment of a number of members will be required.

General

In addition to the two specific areas discussed above, some cracking was noted to the internal face of several walls. The location and extent of cracking seen is not a generally not structural concern, . We agree with Napier Adams assessment that most of these can remedied through periodic decoration and maintenance. Two area do however merit further investigation.

1. **Beam end to the west side of the north gallery**. The plasterwork cracking viewed may be indicative of distress in the structural member beyond. It was not possible to view this member from within the roof space intrusive investigation is therefore recommended to allow inspection of the structure beyond.

2. **Signs of water ingress below the north bellcote.** Further investigation is recommended to determine whether the structural support to the bell tower has been compromised.



Summary

1. Bellcote

Repair work is required.
Allow for:

- Dismantling of stonework,
- Some stone replacement,
- Removal of ferrous fixings,
- Installation of stainless steel fixings and reinstatement of bellcote
- Removal of cement render, making good of stonework behind

2. Cupola

Some individual structural timbers have been significantly affected by decay or infestation. A specialist timber survey is required to identify the nature and extent of decay.
Replacement & repair of at least some structural members will be required.

3. General areas

Further intrusive investigation is deemed necessary in two locations where internal cracking was observed.

I trust the above is sufficient for your current purposes, please do not hesitate to contact me should you wish to discuss any aspect in more detail.

Yours faithfully

Jonathan Narro
MEng (Hons) CEng MICE MEngNZ
Associate

David Narro Associates
5 Viewfield Place
Stirling
FK8 1 NQ

Appendix E

Timber Report

ERADAKIL LIMITED
Registered Office:
60 St Enoch Square
Glasgow G1 4AG

Commercial Office/ Yard
The Lettre House
Killearn G63 9LE

T 0141 339 9565
F 0141 357 3995
E info@eradakil.co.uk

Rot Eradication
Timber/Resin Repairs
Damp Proofing
Basement Waterproofing
Masonry Stabilisation
Woodworm Treatment
Consultancy

Killin and Ardeonaig Parish Church

Rot Survey/ Timber Condition Report
Roof Cupola

1.0 Remit for the Survey

1.1 To inspect the cupola from within the roof void, and visually from ground level in order to identify timber decay and wood borer degradation, and to provide recommendations for remedial work required, together with costs.

The roof cupola is an original feature of the octagonal church that was built in 1744, and is also octagonal.

2.0 Relevant timber size and configurations

2.1 The structure comprises eight posts that are checked and carried on collars of the principal roof trusses; they are connected together by octagonal sets of horizontal ties, one at the roof line, and the second at higher level on which the cupola roof is carried. These members constitute the main frame of the cupola to which the louvres and slated panels are attached, and on which the roof is carried. The roof is pitched, boarded, and slated. The rafters have curved firring pieces that form a bell shape to the slopes. There is an octagonal finial that has been cut back to the roof line and capped with lead.

Principal roof truss rafters	150x220 Douglas Fir
Principal roof truss collars	150x220 Douglas Fir
Ordinary roof rafters	170 x 90 @ 500 c/s Softwood
Cupola posts	ex 120x120 rough hewn Oak
Cupola horizontal ties	100x100 sawn Oak

3.0 Observations

3.1 The cupola void is littered with pigeon detritus. The softwood timbers are affected by woodworm activity; the oak posts and horizontal connecting timbers are unaffected. Some splitting of the posts and repairs were noted at the bottom where they are checked onto the truss collars.

3.2 The finial is octagonal and is carried on two 150x50 crossbeams connected to the eaves. It is assumed that it was damaged at some point, possibly during a storm, and was cut back to the apex and capped with lead. It is not known if there was a decorative emblem mounted to the finial, as there does not appear to be any historic photographs extant. Since that time, surface water has penetrated the lead capping, causing decay within the core and base of the finial, and to the centre connection of the crossbeams.

3.3 The cupola roof appears to be in good condition, and unaffected by timber degradation, except for the finial and crossbeams that support it.

3.4 It is likely that significant repairs have been undertaken to the cupola throughout its history; this is indicated by the contrasting condition of some of the timbers: For instance, there are small section internal framing timbers around the panels that have been extensively degraded by woodworm activity, but the panels themselves are satisfactory.

3.5 It is difficult to assess the condition of the louvres from inside the cupola as they are fitted with bird mesh. Based upon previous experience, any dilapidations will be to sills, external facings, and outer edges of the louvres.

4.0 Conclusions/ recommendations

4.1 The basic oak components that form the octagonal framework, and the cupola roof are in good condition, and can be retained. The posts should be resin repaired where they are split or damaged at the truss collar connections.

4.2 A decision will have to be made about the finial: It does not provide any structural function of itself, though the cross-ties on which it is supported act as lateral restraint to the roof. It could either be: 1) replaced to project through the roof as originally designed, 2) removed, or 3) left as is/ repaired, if considered to be historically important. A repair would consist of paring out degraded material/

from the core, shuttering the external faces that are partially missing, and filling the core with resin back onto new support ties. The support ties should be replaced.

4.3 Access for repair work will have to be from an external scaffold. The slates, flashings, panels and louvres should all be removed, and set aside for repair/ reuse, or replacement. The interior of the structure should be cleared of bird detritus and debris, and sprayed with an insecticide. Individual framing timbers should be assessed and replaced where necessary, together with the finial support ties and any work to the finial itself. Thereafter, external elements; louvres, panels, slates, flashings etc. can be reassembled. Sequencing will have to be considered in order to maintain structural integrity and overall protection during the repair process.

Indicative Costs

				£		
	ROT WORKS					
	C51 REPAIRING / RENOVATING / CONSERVING TIMBER					
	Carefully remove louvres, and set aside for reuse. Repair as required; frame, cill, facings, louvres, in Siberian Larch to match existing. Fit bird mesh to inner frame, and refix in position.					
A	louvres	4	nr	600	2,400	00
	Carefully take off vertical sarking boards from the oak frames, and set aside for reuse. Spray with insecticide solution, and refix on completion of other works with wood screws. Allow 20% replacements of thickness to match.					
B	sarking	6	m2	38	228	00
	Remove all pigeon detritus, and clean out the structure. Apply a dual purpose fungicide/ insecticide by means of a low-pressure coarse spray to all retained timbers within the cupola structure					
C	clean and spray internally		Sum		400	00
	Cut out and replace internal degraded softwood framing inc. finial support ties using C16 treated timbers of girth to match, allow for all cutting, jointing, shaping, etc.					
D	replacing timber frames		Sum		600	00
	Pare out degraded material from the core of the finial within the cupola. Fit plastic shutters to the degraded faces onto the new support ties and seal. Drill into the finial and pour TG6 structural epoxy pouring resin into the void. Strip out shutter on completion.					
E	resin repair to finial		Sum		800	00
	Prepare and inject thixotropic resin into the cracks and connections of the oak posts to the truss collars/					
F	resin repairs to posts		Sum		400	00
	Preliminaries items for this section of the work: protection, temporary supports, consumables, plant and equipment, supervision, travelling.					
G	preliminaries		Sum		2,000	00
				£	6,828	00

Eradakil Ltd.

Appendix 1

Configuration of the original oak structure, which is carried on the principal roof truss collars.

Oak Post and high-level Horizontal Tie, with roof above and sarking panel, all in good condition

Base of the finial and support cross-ties degraded and decayed by surface/ rain water entering at the external lead covering. A repair will involve replacing the cross-ties, preparing and shuttering the finial base, and pouring structural resin into the void.

Intensely wood borer degraded softwood support member had been let-into the oak post

Woodworm degraded softwood plates above unaffected oak frames.

Base of oak posts: connections to principal truss collars and ties. It is recommended that these be inspected individually and strengthened with thixotropic resin injections at the oak to oak connections.

Eradakil Ltd.
27th November 2020

Appendix F

Asbestos Report

SURVEYING
SOLUTIONS LIMITED

KL/GM/

13 June 2005

Mr Jack Rough
Treasurer
8 Gray Street
KILLIN
Perthshire
FK21 8SW

Dear Sir

KILLIN AND ARDEONAIG PARISH CHURCH

In accordance with instructions received from Mr D McRobbie on behalf of Killin & Ardeonaig Parish Church, a limited Type I Asbestos Survey was carried out on the Church Building, Main Street, Killin.

We were provided with a copy letter from the Church of Scotland Presbytery of Stirling dated 27 January 2005 headed Information Regarding Asbestos in Church Buildings issued by the Presbytery Convenor, K C Field.

The survey was undertaken and this report prepared in accordance with the guidelines given in that letter, a copy of which is attached as an Appendix to this Report.

A Type I Asbestos Survey was undertaken by our Kenneth Lang MRICS Chartered Building Surveyor who is further qualified to P402 Building Surveys & Bulk Sampling for Asbestos. A Type I Asbestos Survey involves an inspection of the buildings and an assessment of materials likely to contain asbestos. No physical sampling or analysis of materials is undertaken as part of a Type I Survey. Materials considered likely to contain asbestos are classified as either presumed or strongly presumed to contain asbestos.

This information can then be used for your guidance when arranging repairs, maintenance or alteration works to the building in the future.

……/-

RICS
40 NEW CITY ROAD, GLASGOW G4 9JT T 0141 353 3939 F 0141 353 2033 glas@surveying-solutions.co.uk
54/56 ROSE STREET NORTH LANE, EDINBURGH EH2 2NP T 0131 225 1212 F 0131 225 1022 edin@surveying-solutions.co.uk
www.surveying-solutions.co.uk

The inspection was carried out on a visual non-disruptive basis and there is, therefore, no guarantee that all possible asbestos content materials have been identified.

A separate assessment should be made in the event of any planned alteration or repair works and samples of suspect materials taken for analysis.

The Church building is a pre-1900 building with sections much older. It is of traditional construction with roughcast on the walls and timber framed pitched and slated roof. The age and construction of the building means that it is most unlikely that there would have been any asbestos type materials used in the initial construction of the original building. An extension has been added to the building in the last 5 years and it is extremely unlikely that there would be any asbestos content materials used in the extension. Nearly all asbestos products were prohibited for building purposes in 1999.

During the course of the inspection, the following materials were identified and considered to have a probable asbestos content:

Location	Material Description	Material Assessment	Recommendation for Management
Electrical switchboard to right (west) of altar	Asbestos cement dividing plate on switch.	Strongly presumed asbestos (Chrysotile content)	Do not disturb. Treat as asbestos and arrange for testing, analysis and appropriate disposal when next re-wiring or carrying out works on the switchgear.
Generally various locations	Older style Bakelite switches for electrical lights	Presumed asbestos content, low risk of accidental exposure. Any fibres present will be bonded to the plastic material.	No action meantime. It is recommended that the materials are not sanded or disposed off in fire without first testing to ascertain presence or not of asbestos fibres.
Front entrance hall	Flashback tape to switch fuses in distribution panel by entrance	Strongly presumed asbestos content material.	Do not disturb. Treat as asbestos and arrange for testing, analysis and appropriate disposal when next re-wiring or carrying out works on the switchgear.
Boilerhouse	Rope gaskets to boiler.	Strongly presumed to contain asbestos.	Record and arrange for appropriate testing analysis and disposal. It is recommended that precautionary notices be fitted advising those likely to be working on the boilers of the probable asbestos content of these gaskets.
Boilerhouse	Gaskets to boiler	As above.	As above.

The following is recommended as a minimum:

Ensure a record is kept of presumed and strongly presumed asbestos content material with suitable measures, e.g. signage to ensure the material is not inadvertently disturbed, together with full testing and analysis prior to any work in the area likely to disturb the material.

Any obvious deterioration in these materials must be investigated and samples taken for analysis.

Similarly before any major works involving these materials are undertaken, samples should be taken for analysis. This will allow appropriate methods of work to be determined to comply with relevant Legislation.

Surveying Solutions would be pleased to assist in the future should a further more detailed survey and analysis of materials be required.

Yours faithfully

Kenneth Lang
Director

Appendix G

Measured survey drawings

LDN Architects
57 - 59 Bread Street, Edinburgh EH3 9AH
T: 0131 222 2900
E: architects@ldn.co.uk

Job Title:

Killin and Ardeonaig Parish Church

Drawing Title:

Existing Ground Floor Plan

Drawing Status:

Existing Drawings

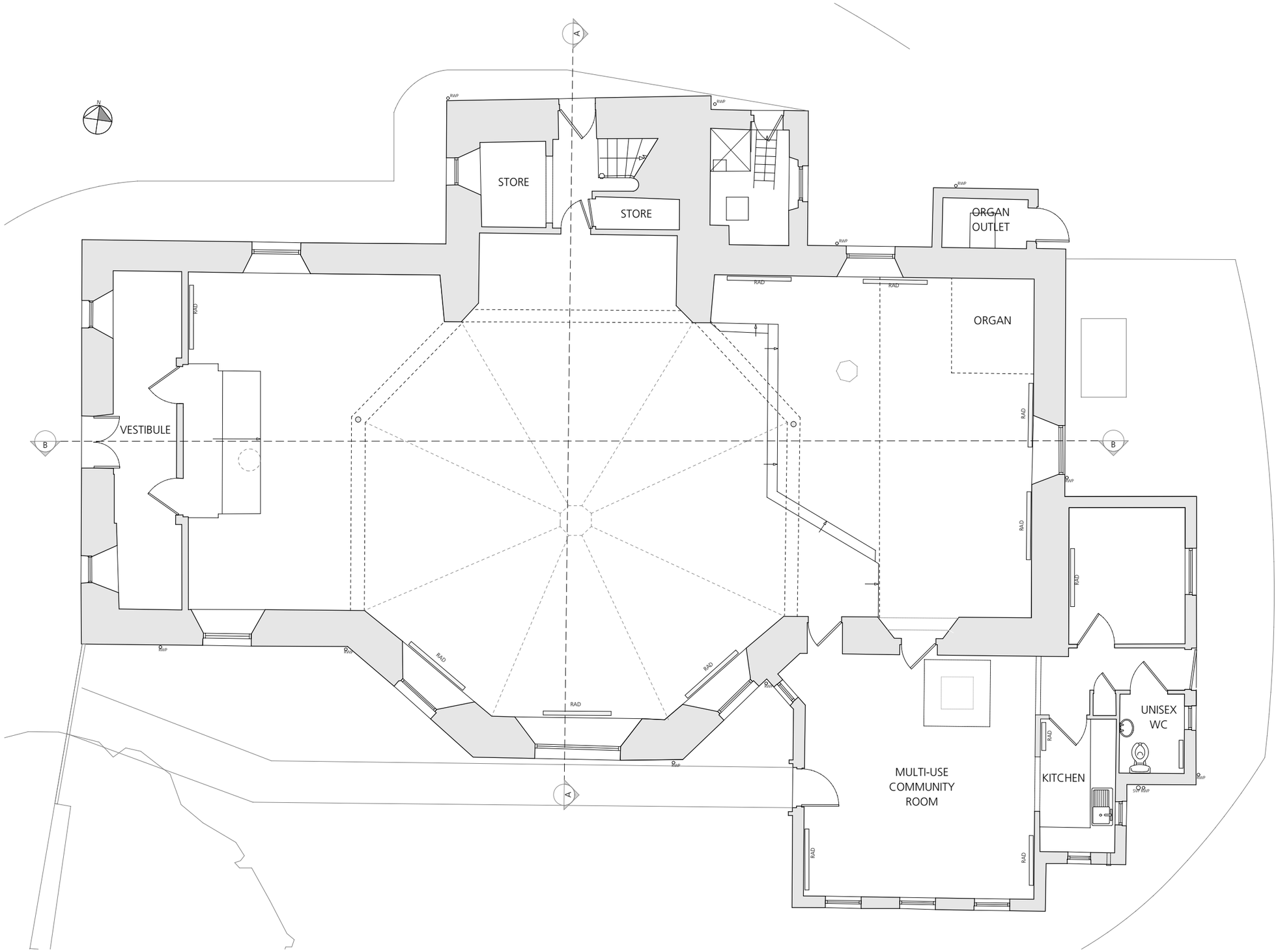
Drawing Number:

L(--)001A

Scale:	Date:	Drawn:	Reviewed:
1:50 @ A1	Sept 2020	FM	EB

Revisions:

A 20.01.2021 FM
Revised following client comments. Issued to client.



1:50 1m 2m 3m 4m 5m

LDN Architects
57 - 59 Bread Street, Edinburgh EH3 9AH
T: 0131 222 2900
E: architects@ldn.co.uk

Job Title:
Killin and Ardeonaig Parish Church

Drawing Title:
Existing Balcony Plan

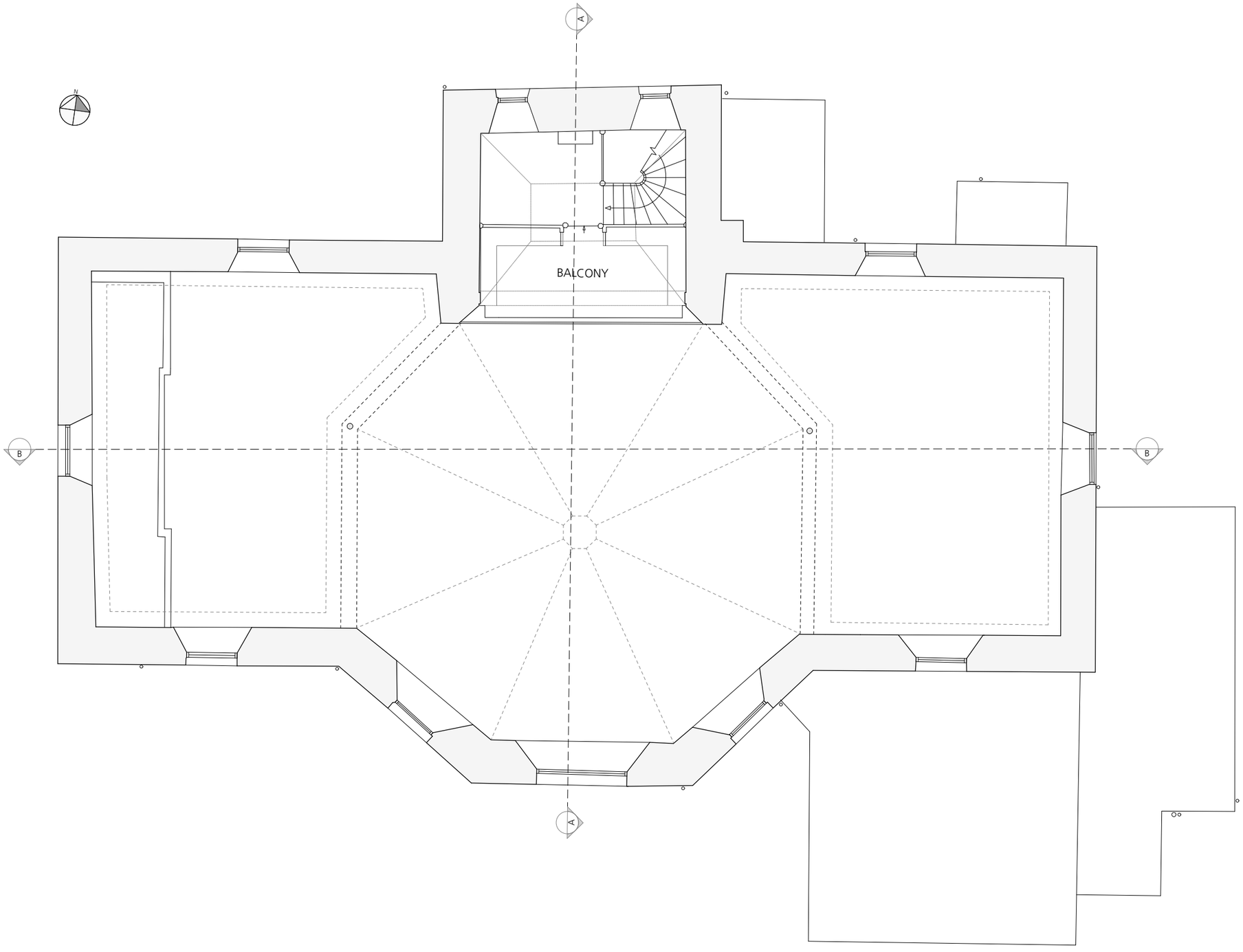
Drawing Status:
Existing Drawings

Drawing Number:
L(--)002

Scale:	Date:	Drawn:	Reviewed:
1:50 @ A1	Sept 2020	FM	EB

Revisions:

* - -



1:50 1m 2m 3m 4m 5m

LDN Architects
57 - 59 Bread Street, Edinburgh EH3 9AH
T: 0131 222 2900
E: architects@ldn.co.uk

Job Title:

Killin and Ardeonaig Parish Church

Drawing Title:

Existing Roof Plan

Drawing Status:

Existing Drawings

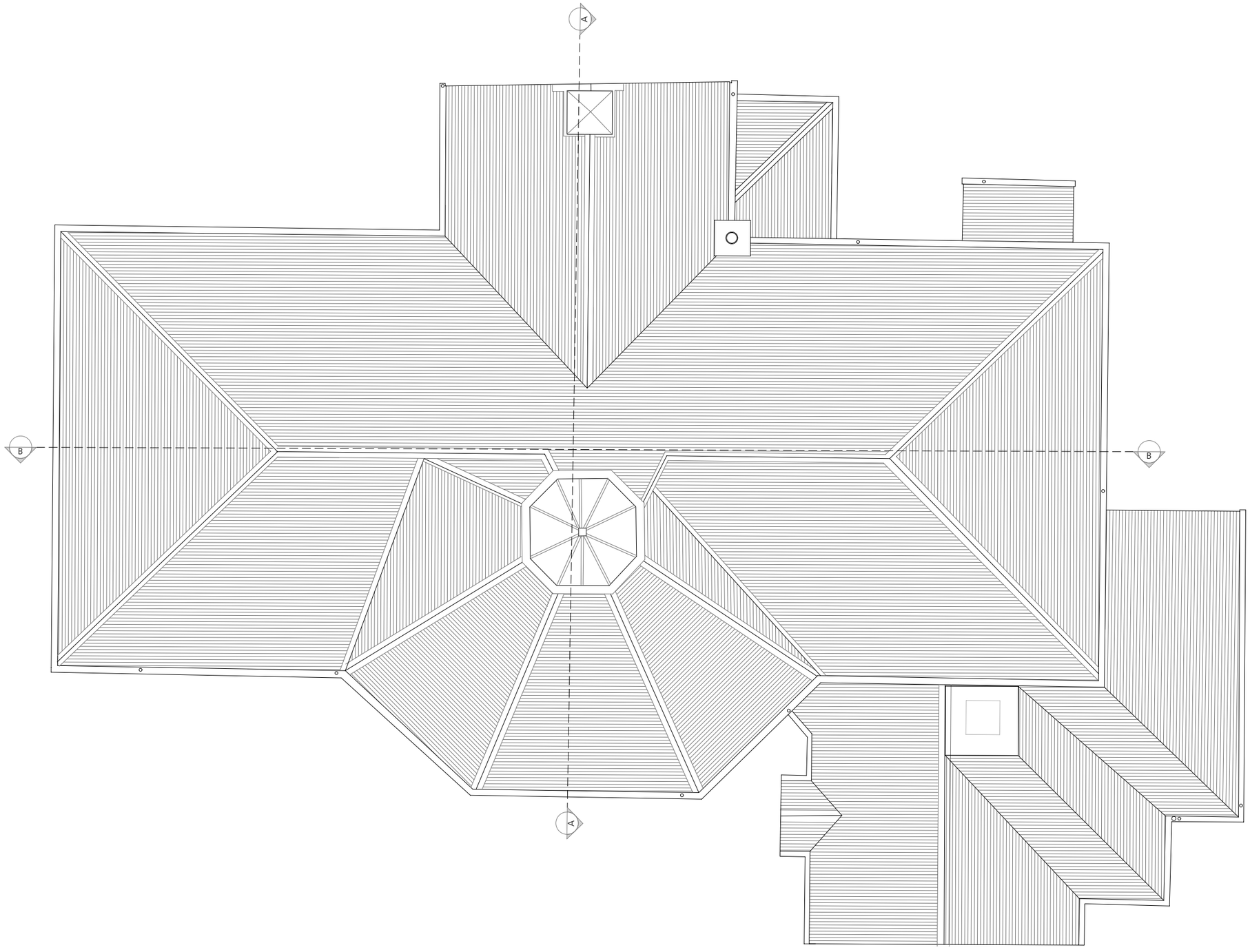
Drawing Number:

L(--)003

Scale:	Date:	Drawn:	Reviewed:
1:50 @ A1	Sept 2020	FM	EB

Revisions:

* - -



1:50 1m 2m 3m 4m 5m

LDN Architects
57 - 59 Bread Street, Edinburgh EH3 9AH
T: 0131 222 2900
E: architects@ldn.co.uk

Job Title:
Killin and Ardeonaig Parish Church

Drawing Title:
Existing Section A

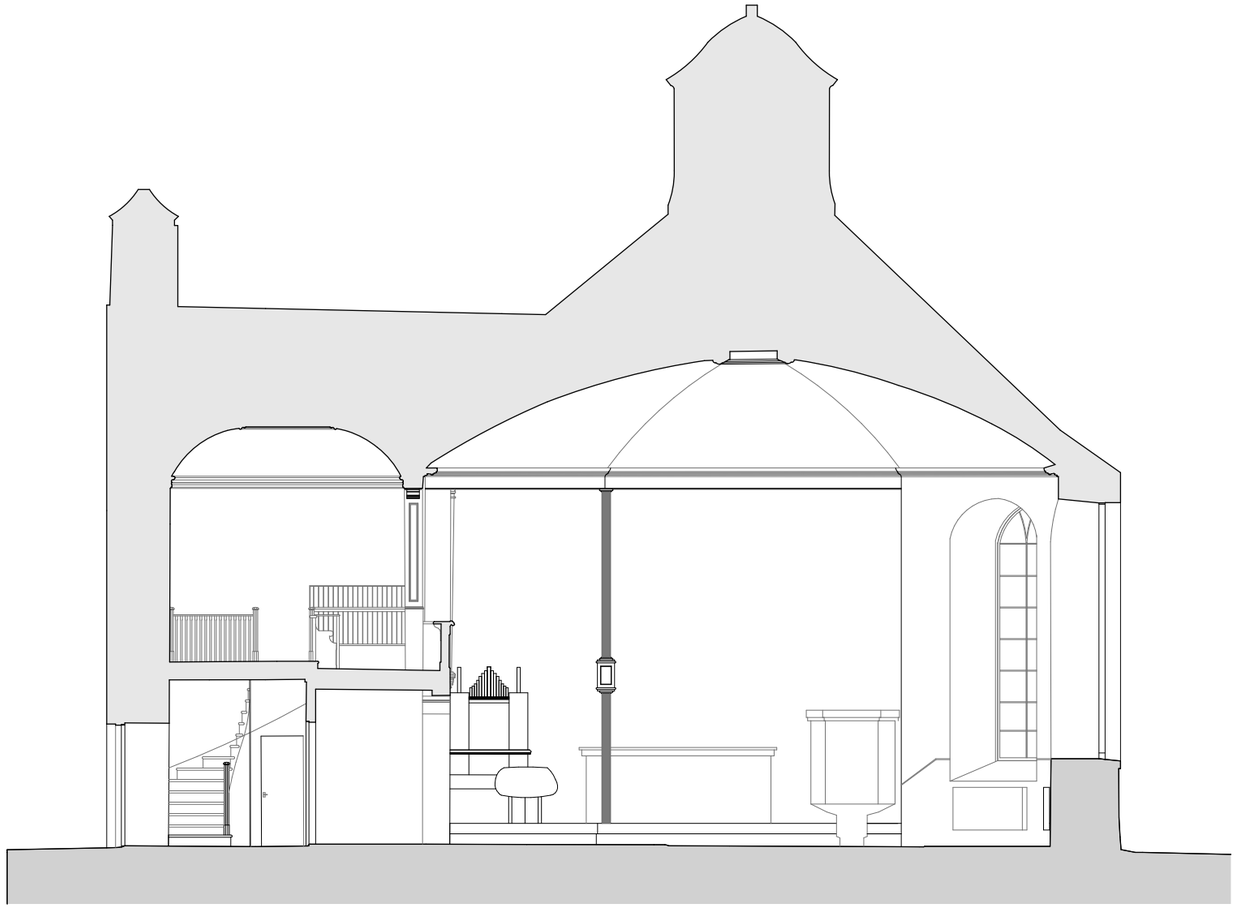
Drawing Status:
Existing Drawings

Drawing Number:
L(--)005

Scale:	Date:	Drawn:	Reviewed:
1:50 @ A1	Sept 2020	FM	EB

Revisions:

* - -



1:50 1m 2m 3m 4m 5m

LDN Architects
57 - 59 Bread Street, Edinburgh EH3 9AH
T: 0131 222 2900
E: architects@ldn.co.uk

Job Title:
Killin and Ardeonaig Parish Church

Drawing Title:
Existing Section B

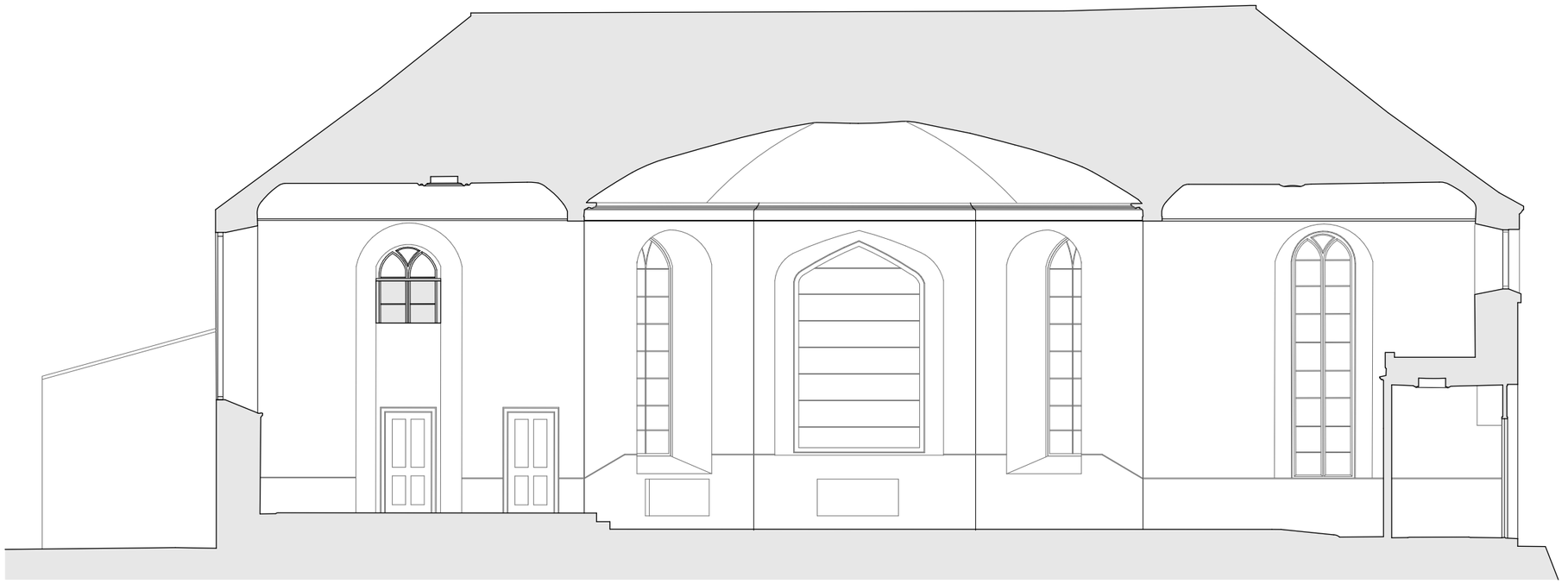
Drawing Status:
Existing Drawings

Drawing Number:
L(--)006

Scale:	Date:	Drawn:	Reviewed:
1:50 @ A1	Sept 2020	FM	EB

Revisions:

* - -



1:50 1m 2m 3m 4m 5m

LDN Architects
57 - 59 Bread Street, Edinburgh EH3 9AH
T: 0131 222 2900
E: architects@ldn.co.uk

Job Title:
Killin and Ardeonaig Parish Church

Drawing Title:
Existing East Elevation

Drawing Status:
Existing Drawings

Drawing Number:
L(--)010

Scale:	Date:	Drawn:	Reviewed:
1:50 @ A1	Sept 2020	FM	EB

Revisions:

* - -

1:50 1m 2m 3m 4m 5m

LDN Architects
57 - 59 Bread Street, Edinburgh EH3 9AH
T: 0131 222 2900
E: architects@ldn.co.uk

Job Title:
Killin and Ardeonaig Parish Church

Drawing Title:
Existing West Elevation

Drawing Status:
Existing Drawings

Drawing Number:
L(--)011

Scale:	Date:	Drawn:	Reviewed:
1:50 @ A1	Sept 2020	FM	EB

Revisions:

* - -

1:50 1m 2m 3m 4m 5m

LDN Architects
57 - 59 Bread Street, Edinburgh EH3 9AH
T: 0131 222 2900
E: architects@ldn.co.uk

Job Title:
Killin and Ardeonaig Parish Church

Drawing Title:
Existing North Elevation

Drawing Status:
Existing Drawings

Drawing Number:
L(--)012

Scale:	Date:	Drawn:	Reviewed:
1:50 @ A1	Sept 2020	FM	EB

Revisions:

* - -

1:50 1m 2m 3m 4m 5m

LDN Architects
57 - 59 Bread Street, Edinburgh EH3 9AH
T: 0131 222 2900
E: architects@ldn.co.uk

Job Title:
Killin and Ardeonaig Parish Church

Drawing Title:
Existing South Elevation

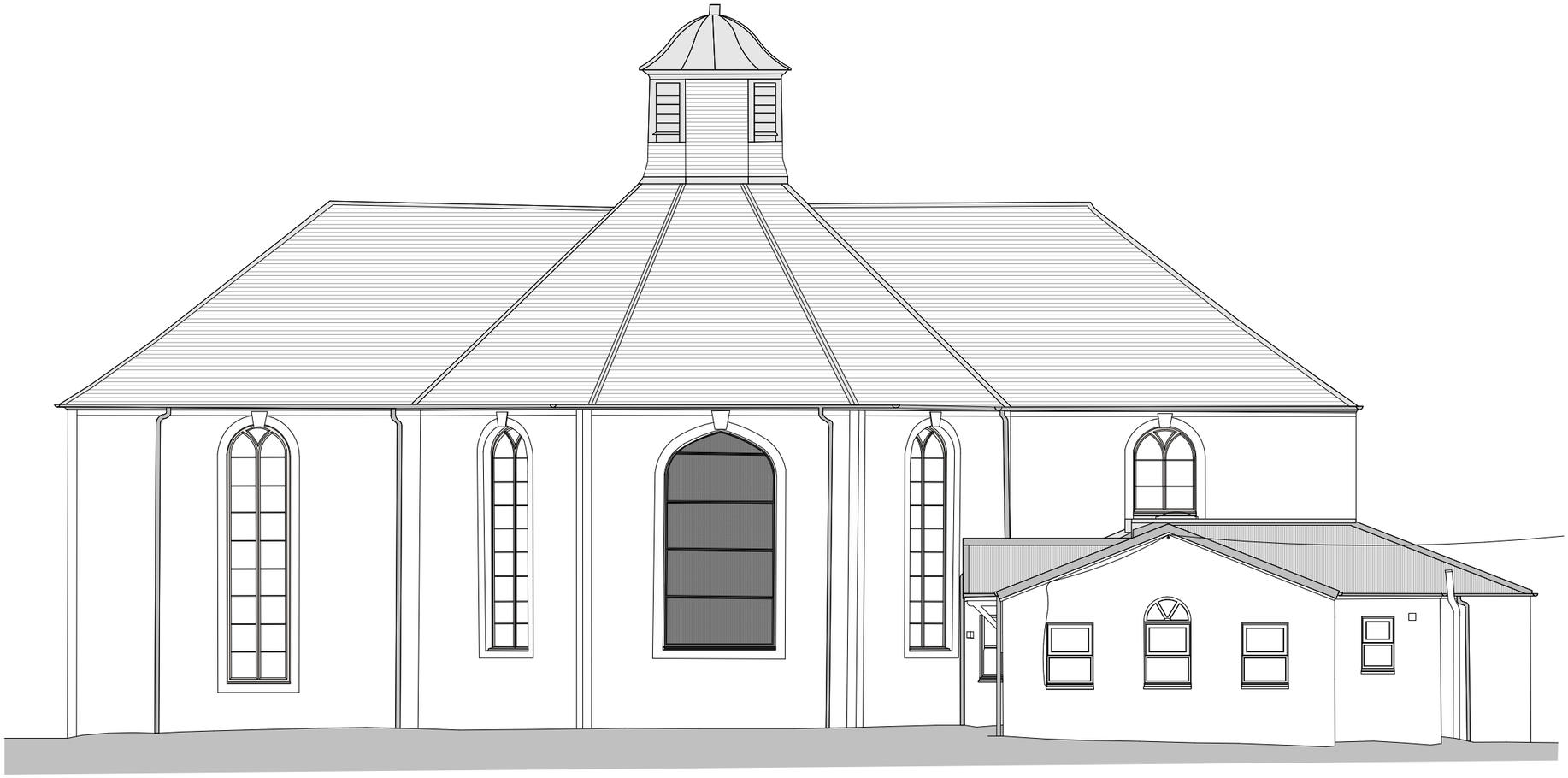
Drawing Status:
Existing Drawings

Drawing Number:
L(--)013

Scale:	Date:	Drawn:	Reviewed:
1:50 @ A1	Sept 2020	FM	EB

Revisions:

* - -



1:50 1m 2m 3m 4m 5m

Appendix H

Seating layout drawings

LDN Architects
57 - 59 Bread Street, Edinburgh EH3 9AH
T: 0131 222 2900
E: architects@ldn.co.uk

Job Title:

Killin and Ardeonaig Parish Church

Drawing Title:

Seating 1

Drawing Status:

SKETCH

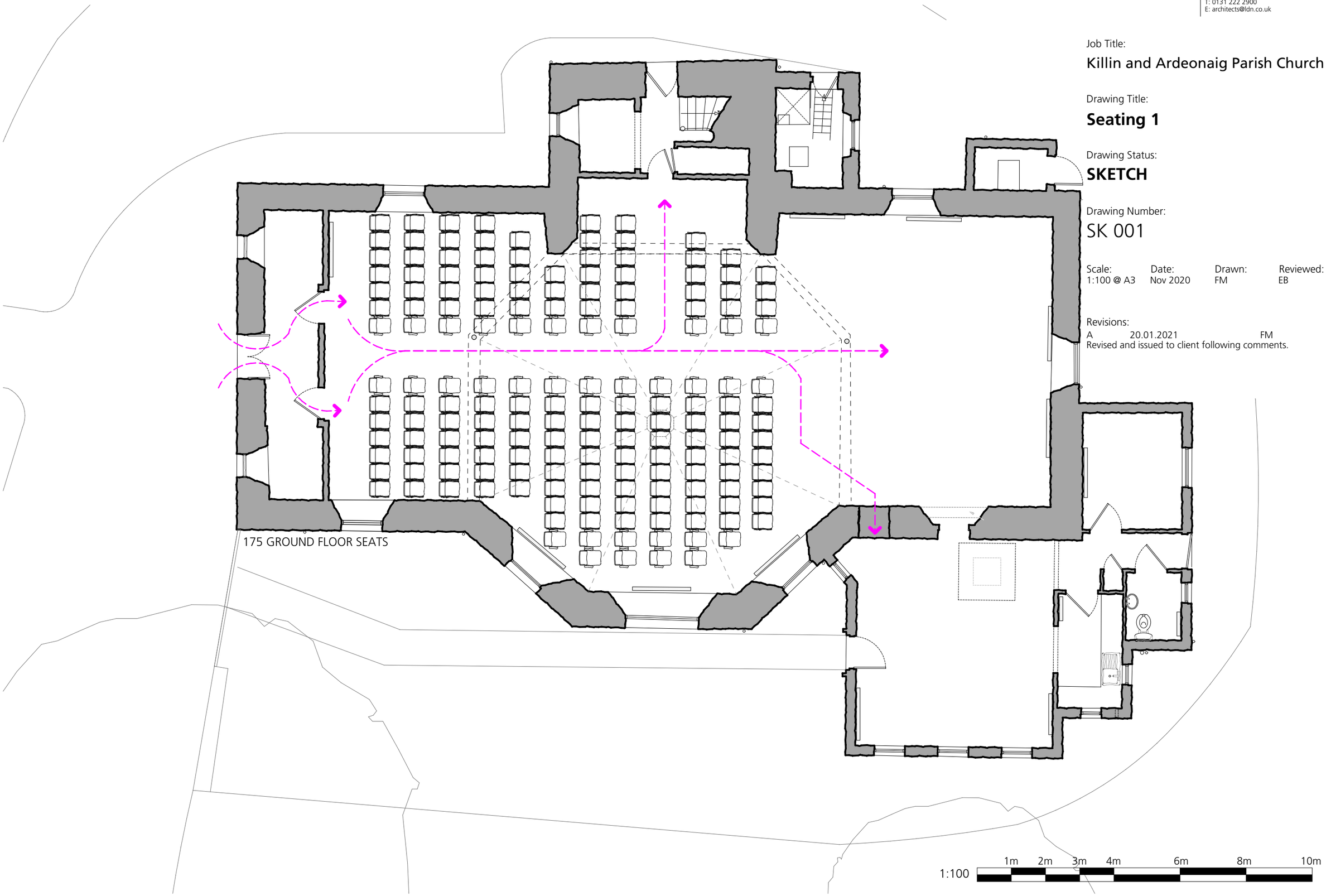
Drawing Number:

SK 001

Scale:	Date:	Drawn:	Reviewed:
1:100 @ A3	Nov 2020	FM	EB

Revisions:

A 20.01.2021 FM
Revised and issued to client following comments.



LDN Architects
57 - 59 Bread Street, Edinburgh EH3 9AH
T: 0131 222 2900
E: architects@ldn.co.uk

Job Title:

Killin and Ardeonaig Parish Church

Drawing Title:

Seating 2

Drawing Status:

SKETCH

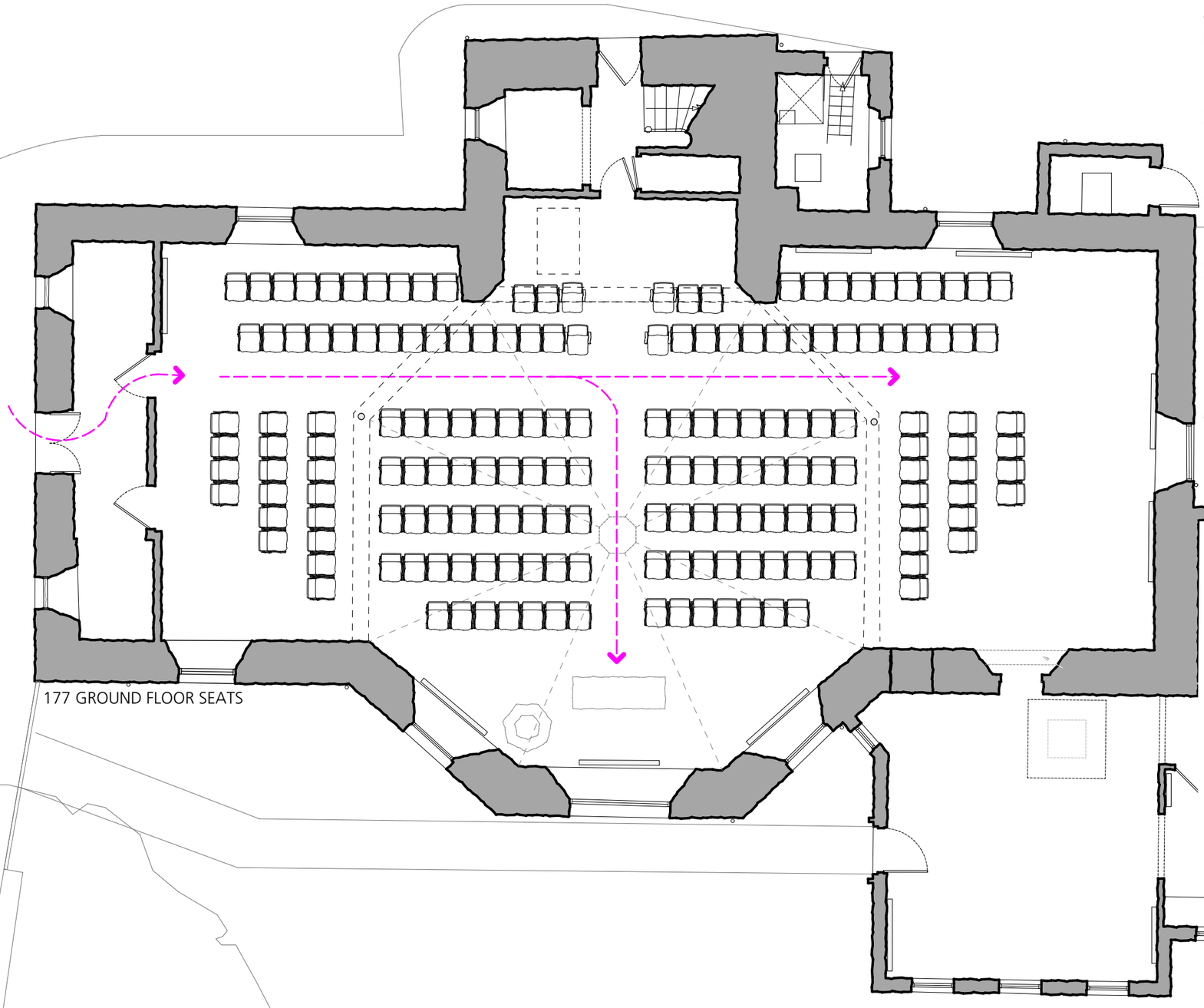
Drawing Number:

SK 002

Scale:	Date:	Drawn:	Reviewed:
1:100 @ A3	Nov 2020	FM	EB

Revisions:

A 20.01.2021 FM
Revised and issued to client following comments.



1:100 1m 2m 3m 4m 6m 8m 10m

LDN Architects
57 - 59 Bread Street, Edinburgh EH3 9AH
T: 0131 222 2900
E: architects@ldn.co.uk

Job Title:

Killin and Ardeonaig Parish Church

Drawing Title:

Seating 3

Drawing Status:

SKETCH

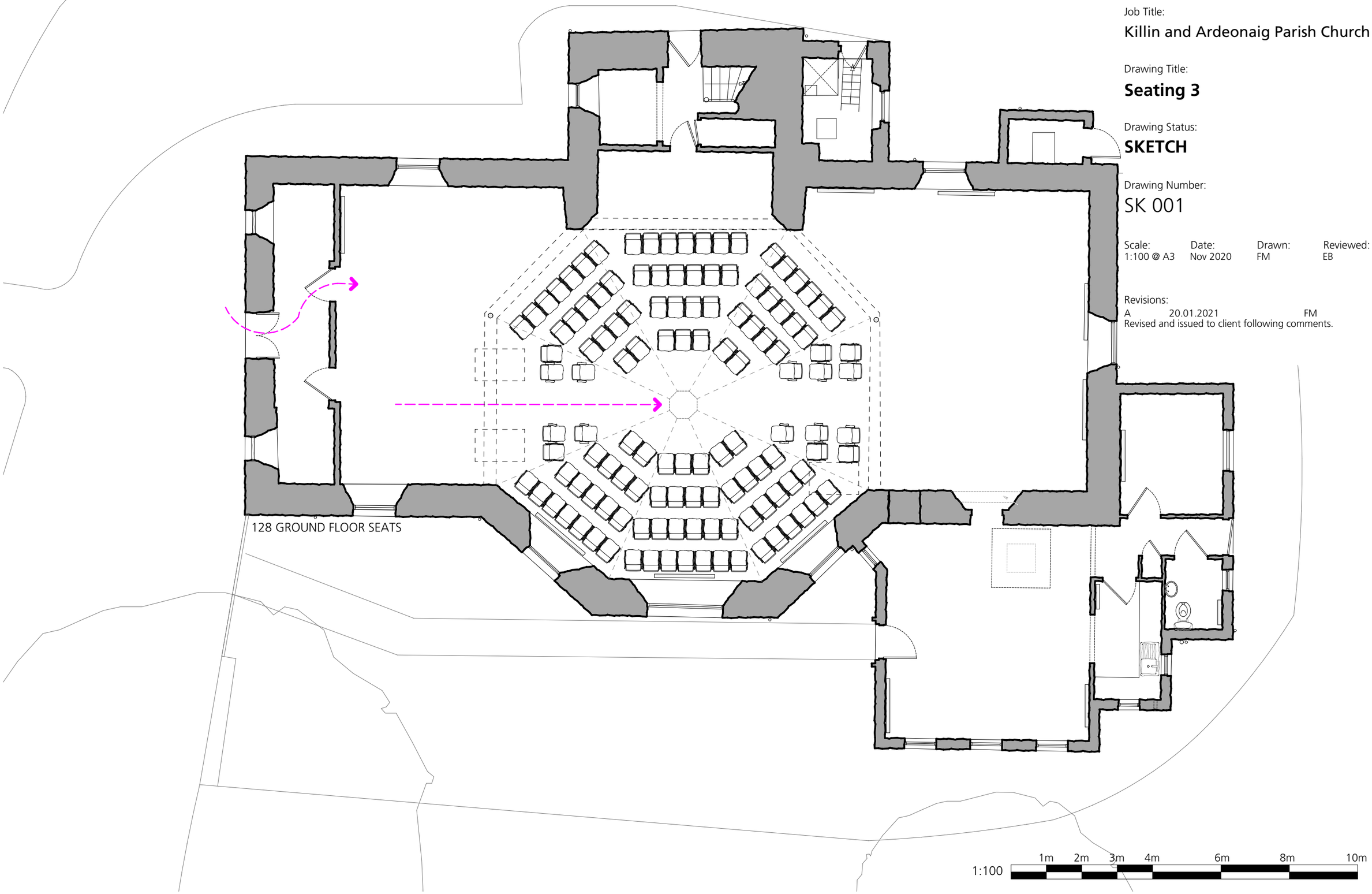
Drawing Number:

SK 001

Scale:	Date:	Drawn:	Reviewed:
1:100 @ A3	Nov 2020	FM	EB

Revisions:

A 20.01.2021 FM
Revised and issued to client following comments.



LDN Architects