



**St. Brigid's Church
Drumkeeran
Co. Leitrim**

Renovation of Roof and Bell Tower



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1.0 PRELIMINARY PARTICULARS:

1.1 Project:

RENOVATION OF ROOF & BELL TOWER

Location:

ST BRIGID'S RC CHURCH, DRUMKEERAN CO LEITRIM

1.2 General Description:

The proposed works comprise of the refurbishment of the bell tower, the windows, the roof and the installation of a new day chapel and toilet facilities internally.

1.3 Scope of report:

This brief report is intended to accompany the planning application to help explain the rationale for the proposed development.

A visual survey was carried out from a Tele-porter and the condition of the roof noted on all elevations.

This report shall recommend Appropriate remedial action where required .



2.0 Core Data

(a) Purpose of assessment:

The purpose of this assessment is to support an application for planning permission for refurbishment of the bell tower, restoration of the roof and installation of a glazed partition internally to form a day chapel and toilet facilities.

(b) Name & Address of Structure:

St Brigid's RC Church
Lugmeen
Drumkeeran
Co Leitrim.

(c) Brief Description:

Detached Roman Catholic church, built in 1869, on a T-plan with side aisles to five-bay nave, sacristy, four-stage castellated tower and octagonal entrance porch to west end. Pitched slate roof with coping stones, corbels and stone cross finials to gable-ends. Random coursed stone walls with cut stone quoins. Stained glass triple lancets to transepts and west gable, pointed-arch windows to aisles and drop-arched windows to clerestorey, segmental-headed windows and single and double light windows in pointed-arched surrounds to tower. Half-octagonal double-height entrance porch with segmental-headed upper windows with stained glass and slated roof with stone corbels. Gabled entrance bay with shoulder-arched doorways with timber battened double doors separated by engaged column supporting statue of St. Brigid and surmounted by sculpted tympanum. Interior with open truss timber roof, side aisles and square-ended chancel. Date plaque to site. Graveyard with variety of grave markers. Site bounded by wall with cast-iron gates

This church, set back from the road on an elevated site, occupies a pleasant position and can be seen from afar. Architectural quality is apparent in the form and construction of this church. The elaborate entrance and stained glass window add artistic and technical interest. As a centre of religious activity in Drumkeeran, this is a socially significant structure

(d) Ordnance survey Map reference:

1264-B 1:2500

(e) National Grid Reference:

X,Y = 191040, 324525

(f) Details of Statutory Protection:

County Leitrim Draft Development Plan 2015-2021 Record of Protected Structures Ref: 30901803
Categories of interest: Architectural, Artistic and Social technical.

(g) Assessment Prepared By:

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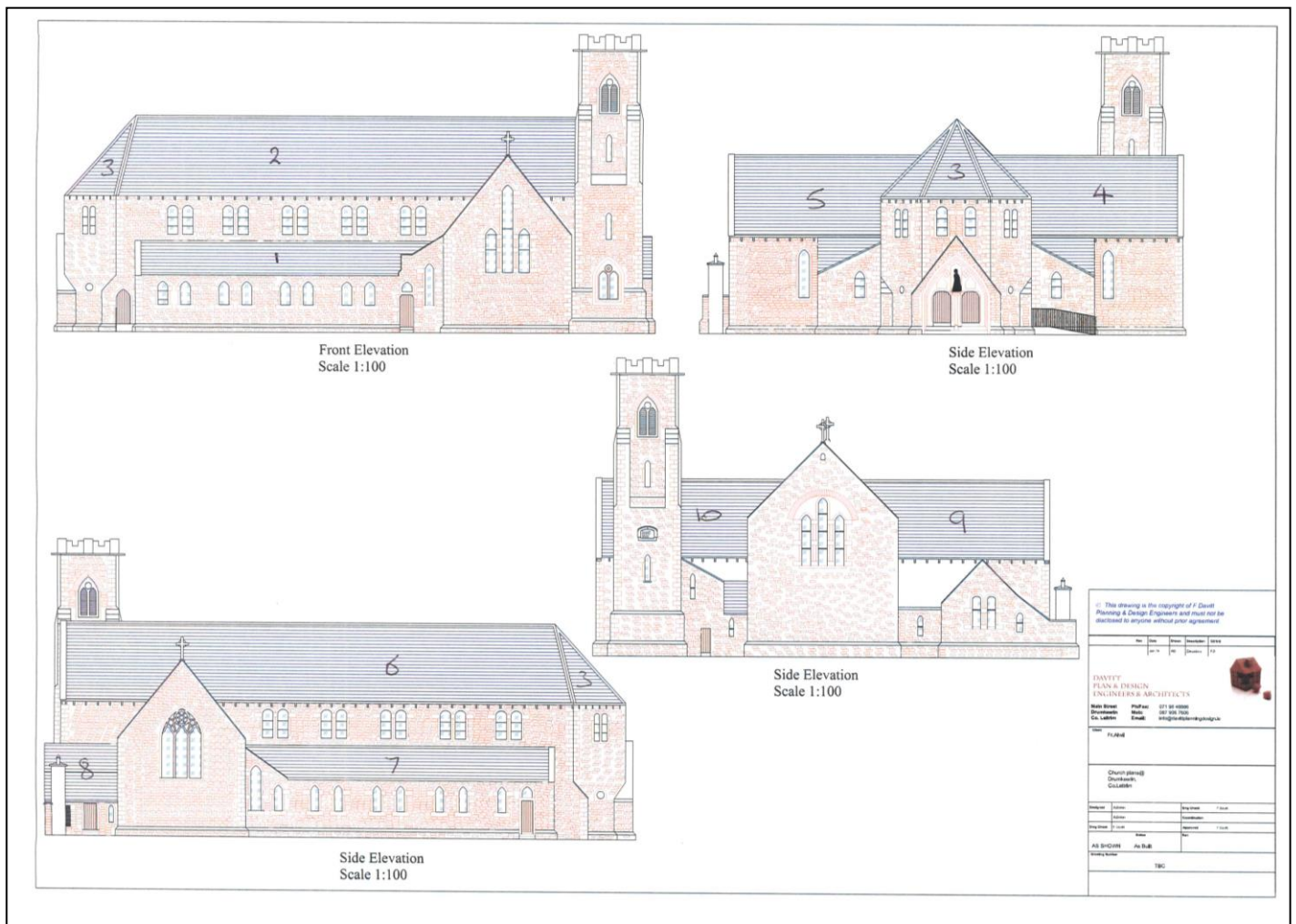


3.0 CONDITION SURVEY.

An initial ground level survey was carried out in April 2014, and it was noted that the roof appeared to be in reasonable condition, with evidence of repairs having been carried out over the years, however as the roof continues to permit water ingress we under took to carry out a close visual inspection.

On the 3rd November 2014 we inspected the roof from a Tele- Porter and carried out a visual survey and make photographic records of the typical issues found. In general it was noted that a substantial portion of the roof has been repaired inappropriately historically and a significant number of the slates have become thin and brittle. It was also noted that the rainwater goods are in a poor condition and are of inappropriate material.

To assist with recording and reporting we have broken the roof into 10 sections as per the below diagram.



Below is a summary of the defects recorded under each section of roof.



Roof No 1.

Description:

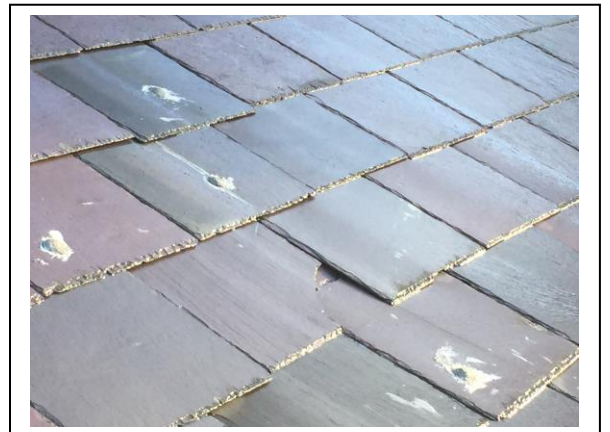
Low level South Facing roof over the South Aisle with 'Blue Bangor' Slate finish. Rain water Goods are extruded aluminium with PVC down pipes.

Survey Notes:

Roof 1 is in quite a poor condition with a variety of repairs of variable standards, we also noted a number of broken slates, or slates with fissure or hair line cracks. It was also noted that the darker blue slates where much thinner and many have cracked.

We also noted that a substantial number of slates have been glued and/ or doweled into place and therefore this section of roof has been subjected to substantial repairs over the years.

It was also noted on a number of locations that slates have slipped and this would suggest that nail corrosion is becoming an issue.





Roof No 2.

Description:

High level South Facing roof over the naive with 'Blue Bangor' Slate finish. Rain water Goods are extruded aluminium with PVC down pipes.

Survey Notes:

The eastern end of Roof 2 is in reasonably good condition and may have been repaired substantially when the octagonal entrance porch was repaired, however the western end is in quite a poor condition with a variety of repairs of variable standards, we also noted a number of broken slates, or slates with fissure or hair line cracks.

We also noted that a number of ridge tiles are missing and that the pointing has broken away.

It was also noted on a number of locations that slates have slipped and this would suggest that nail corrosion is becoming an issue.





Roof No 3.

Description:

High level east Facing octagonal roof over the Entrance with 'Blue Bangor' Slate finish. Rain water Goods are extruded aluminium with PVC down pipes.

Survey Notes:

Roof 3 is in reasonably good condition and is thought to have been repaired substantially .

It is noted that the hips have been covered in aluminium tile trim which is inappropriate. Also finial is in poor condition and flashing around it appears to be defective.



Roof No 4.

Description:

High level east Facing over South transept with 'Blue Bangor' Slate finish. Rain water Goods are extruded aluminium with PVC down pipes.

Survey Notes:

Roof 4 is in very poor condition and looks to have been repaired substantially with inappropriate techniques. There is evidence Butyl rubber having been used to seal slates and a number of slates have been doweled. We also noted a number of cracked slates and slipped slates which also suggest that the nails may be corroded. The lead valleys and abutments also require attention.





Roof No 5.

Description:

High level east Facing over North transept with 'Blue Bangor' Slate finish. Rain water Goods are extruded aluminium with PVC down pipes.

Survey Notes:

Roof 5 is in very poor condition and looks to have been repaired substantially with inappropriate techniques. There is evidence Butyl rubber having been used to seal slates and a number of slates have been doweled. We also noted a number of cracked slates and slipped slates which also suggest that the nails may be corroded. The lead valleys and abutments also require attention.

The lower portion of this roof is in particularly poor condition with a substantial number of broken/ cracked slates.





Roof No 6.

Description:

High level North Facing roof over the naive with 'Blue Bangor' Slate finish. Rain water Goods are extruded aluminium with PVC down pipes.

Survey Notes:

The eastern end of Roof 6 is in reasonably good condition and may have been repaired substantially when the octagonal entrance porch was repaired, however the western end is in quite a poor condition with a variety of repairs of variable standards, we also noted a number of broken slates, or slates with fissure or hair line cracks.

We also noted that a number of ridge tiles are missing and that the pointing has broken away.

It was also noted on a number of locations that slates have slipped and this would suggest that nail corrosion is becoming an issue.

There is a large repair evident in the centre of the roof where the slates have been reattached with aluminium clips.





Roof No 7.

Description:

Low level North Facing roof over the North Aisle with 'Blue Bangor' Slate finish. Rain water Goods are extruded aluminium with PVC down pipes.

Survey Notes:

Roof 7 is in quite a poor condition with a variety of repairs of variable standards, we also noted a number of broken slates, or slates with fissure or hair line cracks. It was also noted that the darker blue slates where much thinner and many have cracked.

We also noted that a substantial number of slates have been glued and/ or doweled into place and therefore this section of roof has been subjected to substantial repairs over the years.

It was also noted on a number of locations that slates have slipped and this would suggest that nail corrosion is becoming an issue.

There are considerable issues with the rain water goods which are resulting staining and damp ingress.

We also note the existence of iron brackets which are located along the abutment with the naïve which would suggest that a gutter was originally installed at this location. At sometime this was removed and the roof of the naïve now discharges onto the aisle roof increasing the volume of water .





Roof No 8.

Description:

low level North Facing Roof over Sacristy with 'Blue Bangor' Slate finish. Rain water Goods are extruded aluminium with PVC down pipes.

Survey Notes:

Roof 8 is in very poor condition with a number of broken slates, however the main issue here is the roof pitch which is too low for natural slate.



Roof No 9.

Description:

High level West Facing Roof Northern transept with 'Blue Bangor' Slate finish. Rain water Goods are extruded aluminium with PVC down pipes.

Survey Notes:

Roof 9 is in very poor condition and looks to have been repaired substantially with inappropriate techniques. There is evidence Butyl rubber having been used to seal slates and a number of slates have been doweled. We also noted a number of cracked slates and slipped slates which also suggest that the nails may be corroded. The lead valleys and abutments also require attention.





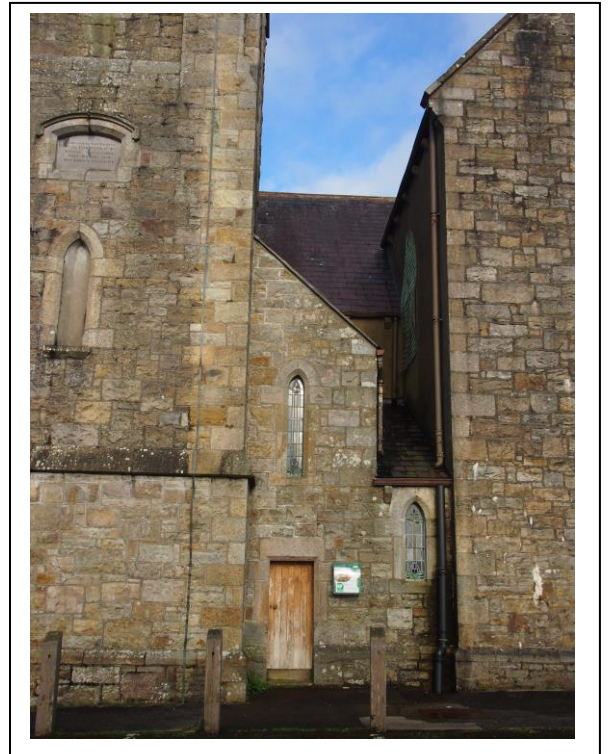
Roof No 10.

Description:

High level West Facing Roof Southern transept with 'Blue Bangor' Slate finish. Rain water Goods are extruded aluminium with PVC down pipes.

Survey Notes:

Roof 10 was not accessible from the teleporter nor is it very visible from the ground being located behind the belfry, however there are signs of poor repairs and therefore we can assume that the roof is in similar condition to the adjoining roofs. It would also be important to inspect the lead flashings & abutments in this locality as there are a lot of interfaces.





4.0 Recommendation

Due to the apparent extent of defective roof slates and the proliferations of poor and ineffective repairs we must consider that to carry out effective restoration we would have to strip a considerable portion of the roof covering. Therefore we should consider a coordinated replacement of the entire slate roof finish. In doing so we can also make the necessary timber repairs and repairs to lead work. I would also propose that insulation should be installed and a high quality new breather felt provided to act as a secondary line of defence.

To preserve the character and authenticity of the building every effort should be taken to reuse as much slate as possible, however due to the dilapidation of the roof the salvage figure is likely to be as low as 30%. This being the case I suggest the recycled slate should be used on the two isles which are closer to eye level. This strategy will also suit the most effective mode of working whereby I suggest that the main naïve roof should be restored first, with the salvaged slate stock piled for use on the lower surfaces. This approach will negate any risk of the lower roof being damaged with scaffolding after it has been finished.

New slate should be high quality Welsh Penrhyn Bangor Blue slates County Grade (8mm Nominal Thickness). New ridge tiles should also be installed.

We also recommend that the rain water goods should be replaced with cast iron deep flow sections suitable to discharge the water effectively from the many roofs.