# Completion of essential repairs and refurbishment at St Eugene's Cathedral



supported by funding of £250,000 from the Heritage Lottery Fund

# **LOTTERY FUNDED**

# and funding of £73,740 from the Northern Ireland Environment Agency





The aim of this project was to carry out essential repairs and maintenance primarily associated with damage caused by the entrance of moisture to the fabric of the building.

This moisture was affecting the internal finishes, stained glass windows and external masonry.

The damp entering the aisle wall at the choir was causing large sections of internal plaster to boast which was a hazard to choir members.

The Project included structural repair, safe access works and refurbishment of the Bell Tower. The wrought iron ladder and platform to the spire from the bell tower was unsafe and as a result the spire parapet gutter had not been maintained for several years.

Repairs and maintenance were also carried out to the external cast iron rainwater and waste fittings including gullies and outfalls.

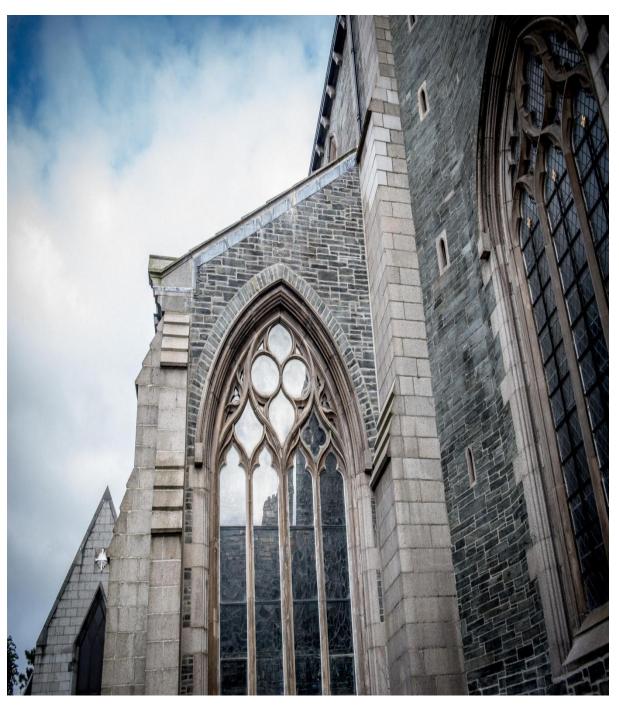
As a result of funding of £250,000 received from Heritage Lottery Fund and £73,740 funding received from the Northern Ireland Environment Agency, the project to carry out necessary repairs and maintenance enabled identification of areas of incursion of water and the necessary repairs and maintenance to be carried out to prevent further deterioration of the building fabric and finishes.

The damaged finishes and stonework were repaired. The risk of further damage to the stained glass windows was identified and averted. The structural defects identified will be remedied.

All external cast-iron building elements (rainwater goods, railings etc) were inspected, repaired and painted as necessary. The precious carved oak statues are displayed in the porch of welcome inside the great western door for the benefit of parishioners and visitors.

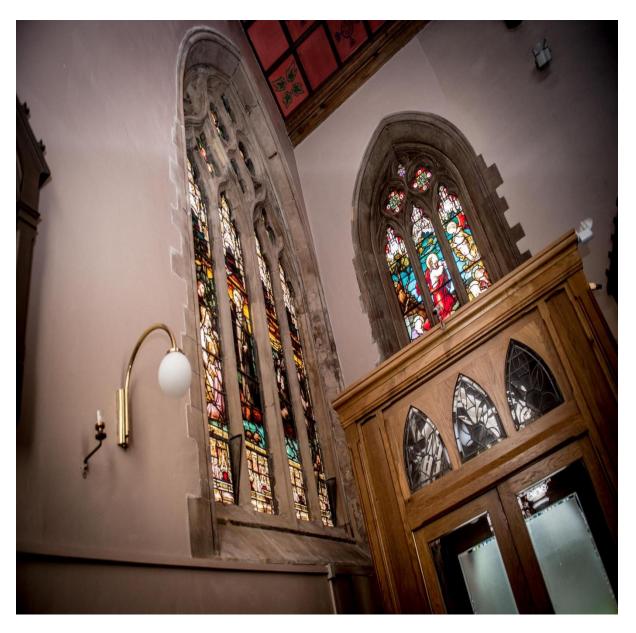
The main contractor was Stewart & McConnell, Derry and the work began in May 2015 and was completed in October 2015.

Please click on the links – the Conditional Survey Report; Image Gallery of the Refurbishment; Image Gallery – Hard Hat Tour; Multilingual Short Guide to St Eugene's Cathedral and online Learning Pack for Schools – short interactive tour of St Eugene's Cathedral.



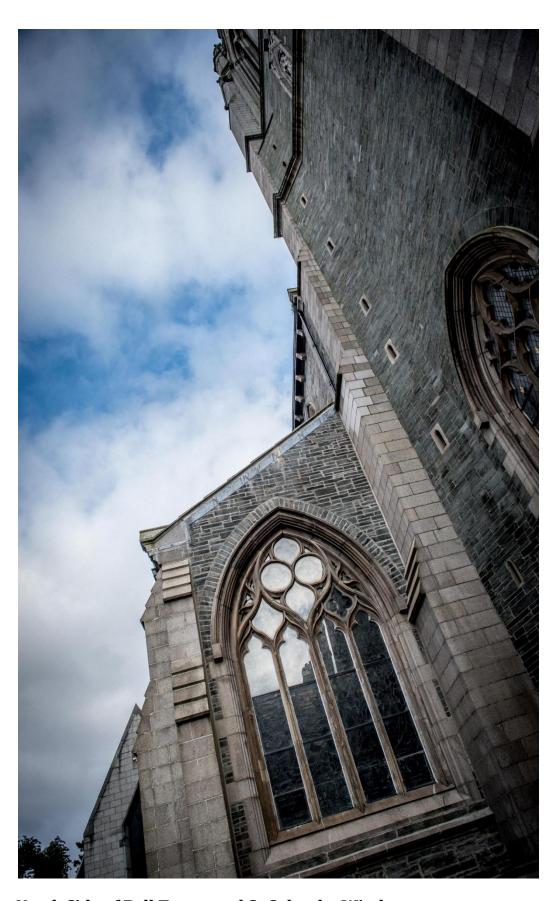
# St Columba Window

Damp had been entering this wall via the stone parapet and open joints above the window. The granite parapets and kneeler stone were lifted and new leadwork was installed, along with lime pointing to open joints.



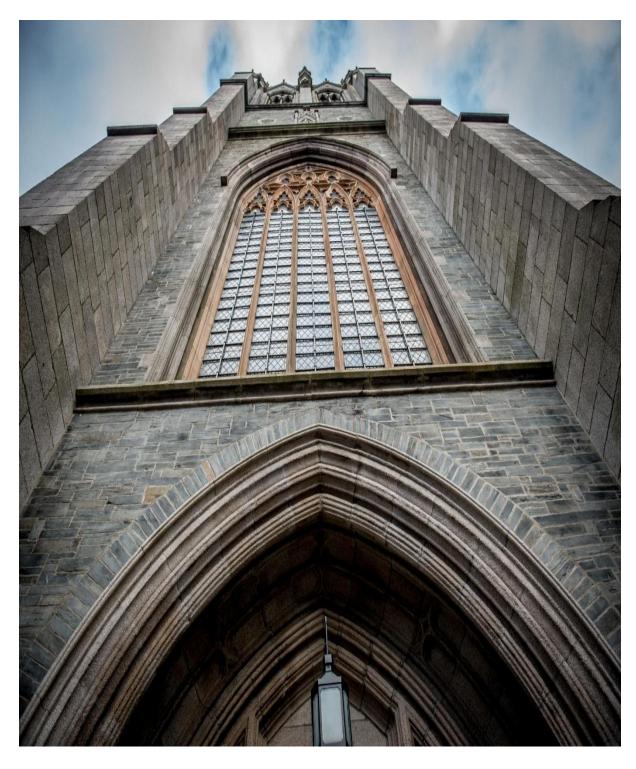
# St Columba Window

This window had suffered internal damage from long term damp. New stone sections were inserted to replace damaged tracery and reveals.



North Side of Bell Tower and St Columba Window

The areas of wall surrounding the window to the Great Western Porch had areas of open joints and significant cracks. All have been repointed using lime mortar.



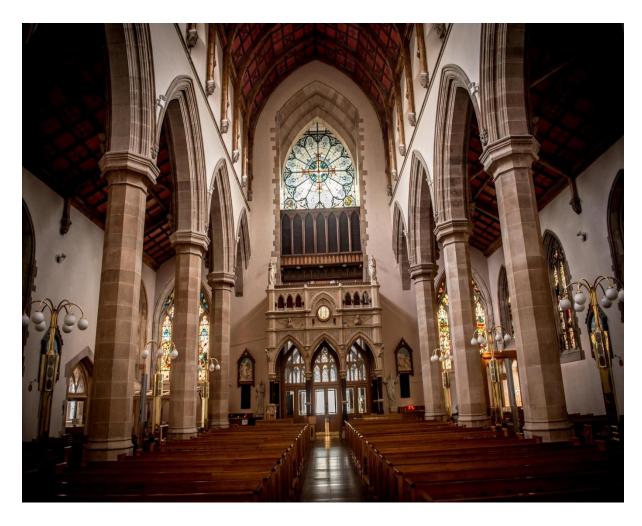
### **Bell Tower & Great Western Porch**

Open joints and cracks were contributing to penetrating damp. The entire wall from the statue of St Eugene down to the ground was raked out and repointed. The existing lantern was refurbished.



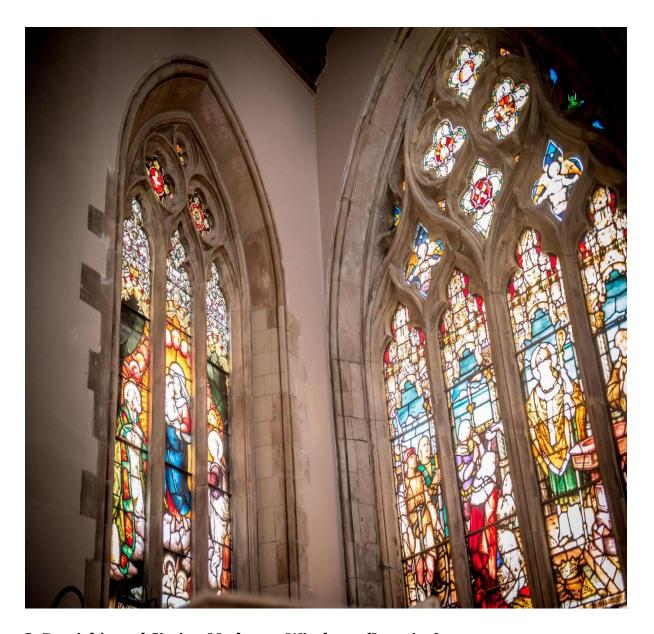
#### **Great Western Porch**

This is the main ceremonial entrance to St Eugene's Cathedral, and had become quite run-down. Stonework had been painted over to conceal large areas of damaged tracery, quoins and reveals. Damp entry points were dealt with from the outside, and paint was completely removed and new 'indents' of sandstone inserted. Lower walls were lined with sandstone tiles and a new setting created for the precious Austrian oak statues which had originally been part of the pulpit canopy removed in the 1980's.



# **Nave Interior looking West**

This is the incredible view enjoyed by the priests when celebrating Mass. St Patrick's window can be seen to the left, St Columba to the right. The Rose Window is actually internal to the Bell Tower.



## St Patrick's and Sistine Madonna Windows (Interior)

These windows are located on the most exposed corner of the building and have probably suffered from damp since the Cathedral was built. Major damage had been covered up with an epoxy cement and many parts of the tracery were barely holding in the stained glass. We carried out substantial and lengthy stonework repairs. This involved completely removing the stained glass from St. Patrick's window, allowing new stone mullions and tracery elements to be repaired. The glass was refurbished/ repaired and protected with new (ventilated) storm glazing. A substantial area of boast plaster was removed and replaced with layers of lime plaster.



# **South Porch**

Open joints and cracks contributed to substantial damp within this porch. The entirety was repointed and cleaned.



# **South Aisle Exterior Wall**

This is an exposed area of the Cathedral. The granite buttresses and wall panels had a lot of open joints and cracks. Large areas were repointed and cleaned.



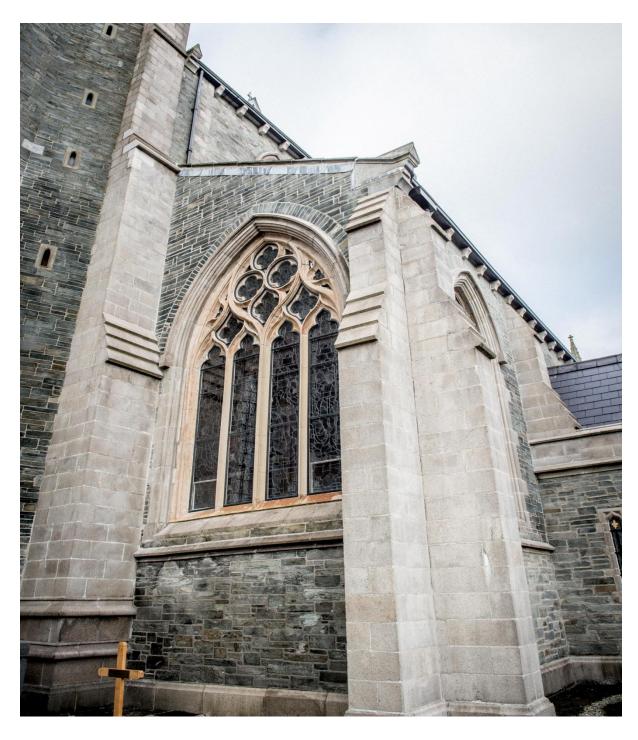
### **South Aisle Interior Wall**

Boasting plasterwork resulting from damp was threatening to fall on members of the Choir. This was stripped out and replaced with layers of lime plaster which will allow the wall to breathe as originally intended.



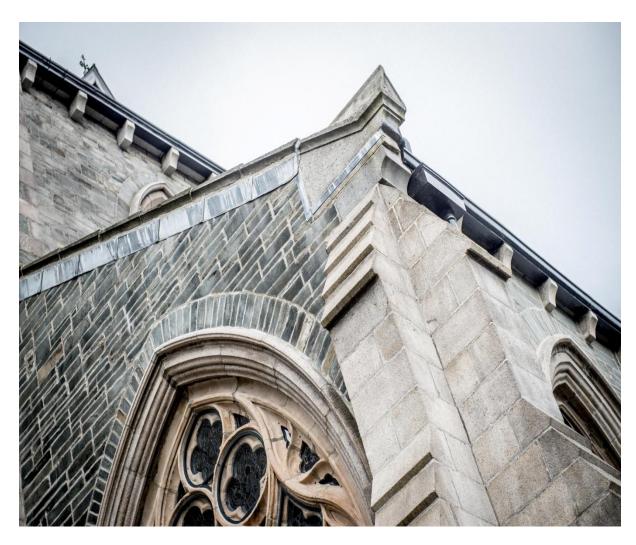
# Rainwater goods

All cast iron gutters and downpipes required maintenance and minor repairs. Joints were sealed, a number of sections replaced (using a custom mould) and all rainwater goods were painted.



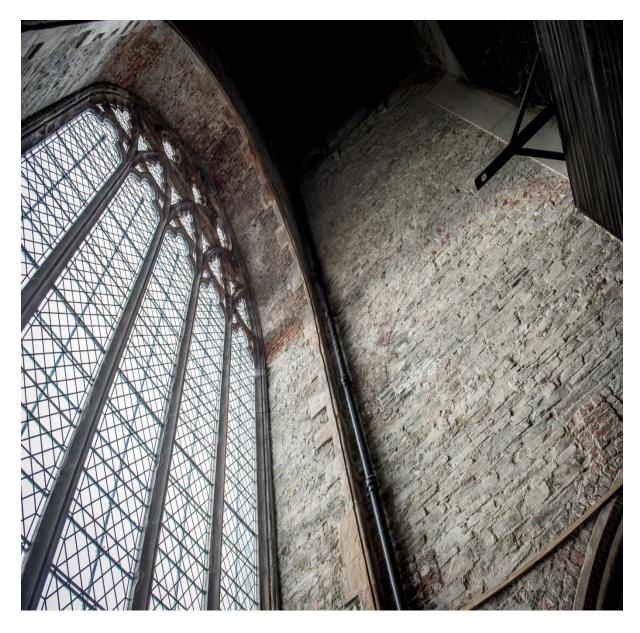
# St Patrick's Window (Exterior)

This window was in a very poor condition as a result of damp and unventilated storm glazing. A large number of stone 'indents' were required to the tracery, mullions and reveals. the storm glazing was replaced with a ventilated system. Damp was also entering at ground level as the area was waterlogged, this has been drained with immediate result.



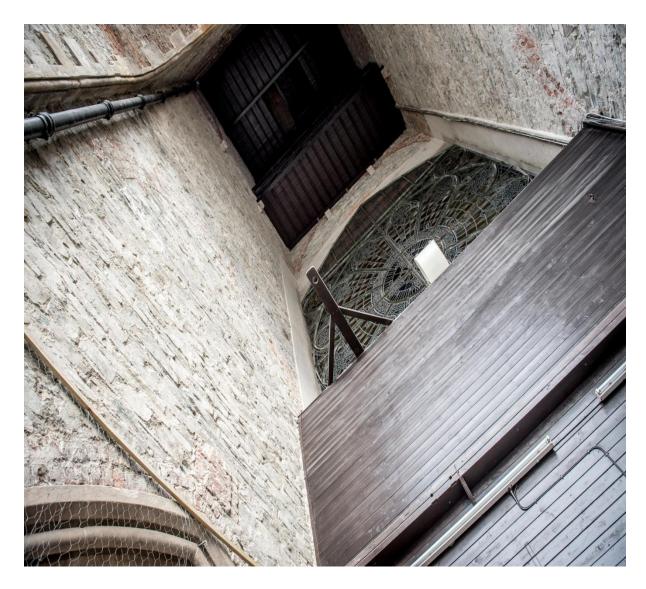
# St Patrick's Window (Detail)

Damp was entering these walls from the parapet, a cracked downpipe, damaged buttresses and generally from open mortar joints and cracks. Rainwater ran down the parapets to the back of the stone kneeler, whereupon it entered the corner of the building and into the reveal of the window (a process known as 'tabling'). The copings and kneeler were lifted and new leadwork inserted. All mortar joints (cement) were raked out and repointed using a breathable lime mortar.



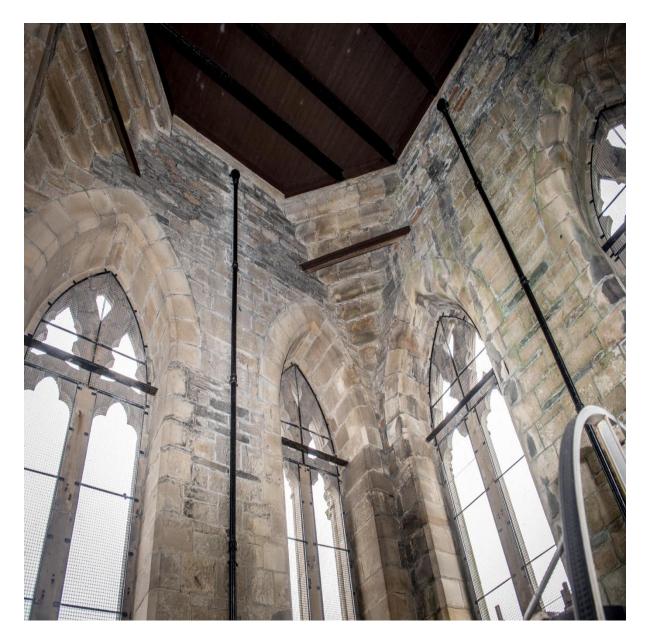
#### **Bell Tower Interior**

Large areas of these walls were suffering damage as a result of damp. The entire tower interior had been covered in a cement render, which was trapping damp inside the walls. This layer was completely removed, the walls repaired as necessary, and the structure can now breathe as originally intended.



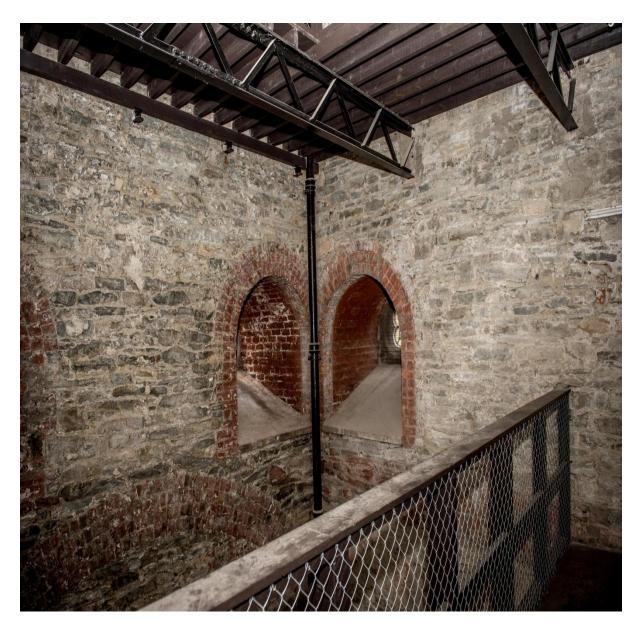
### **Bell Tower Interior**

This space also suffered from poor ventilation, trapping humid air and inhibiting evaporation of damp. We added ventilation to the top to create a stack-effect where fresh air is pulled in from the porch below and exits via the belfry, carrying moisture with it. You can see an original bell-pull eye in the middle of this picture.



### **Belfry**

The North and West walls were completely saturated, with water travelling downwards through the bell tower. The outlets on the spire parapet gutter were poorly detailed, and constantly blocked. New outlets were inserted, and the stone gutter sealed. The cast iron access ladder to the spire roof space was in a dangerous condition and was replaced with new galvanised ladders incorporating a fall arrest system.



Half Platform Level, Bell Tower (two levels below Belfry)

Walls were stripped of the cement render to allow the structure to breathe. Ventilation was added to two of the window openings. All wood and iron-work were painted.