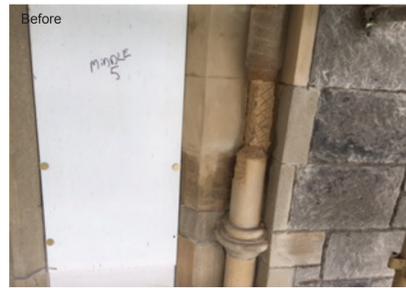


St Michael's – Works Commence On Site



Building Work by Numbers

- 4000** - hours, number of individual man hours spent on restoration
- 1015** - metres length of new lime mortar pointing
- 375** - square metres area of stone cleaning
- 172** - number of individual stone repairs and stone replacements
- 80** - number of bespoke brass fixings to support storm glazing
- 32** - square metres area of new storm glazing
- 26** - metres highest point of repair work completed from Ground Level



St Michael's – Stained Glass Windows



St Michael's – Stained Glass Windows

Glass Cleaning & Repairs
All the existing stained glass windows on the main building facade have been carefully and expertly cleaned down and repaired where necessary. The brass work on the Rose windows has also been repaired and cleaned.

Storm Glazing
The old defective storm glazing has been removed and replaced with new safety clear glazing fixed in place with specially crafted brass fixing bolts. The completion of the windows have provided a shape new appearance to the building facade.



St Michael's – Tympanum at Main Entrance



St Michael's – Tympanum

An expert artist was employed to complete the repair and restoration of the Tympanum above the main entrance to St Michaels Church. Monica Liddle from Emyvale in County Monaghan has extensive experience in restoration of sacred artwork on old church buildings.



St Michael's – A Rejuvenation

St Michael's Church, Enniskillen is that very rare thing, a Catholic church located in the historic high status centre of an Irish town. The church was completed in 1875 and greatly contributes to the historic centre of Enniskillen with its magnificent 19th century French Gothic Revival elevation onto Darling Street designed by the architect John O'Neill. The great public façade of St Michael's has given many gifts to Enniskillen over the years; wonder; identity; continuity; respect and veneration; symbol and spirituality. Time and the elements however have taken their toll on this wonderful public face of St Michael's. Frost has split the stone; dust, rain and wind have worn it smooth; dirt and traffic fumes have all built up in layers masking the building's original beauty and clarity.

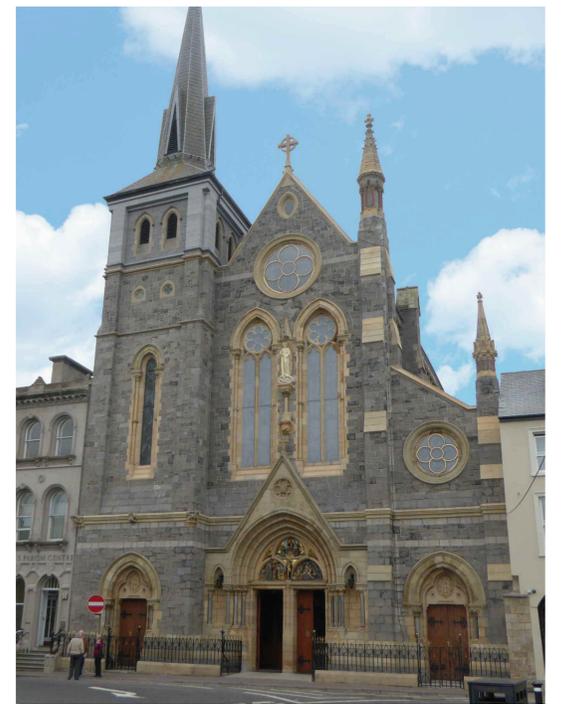
Several years ago Parish put plans in place to address this deterioration but did not proceed with them conscious of more urgent demands on scarce resources. All changed earlier this year however when serious cracking of the stone was identified with the potential to fall and cause serious injury. The repair of the historic stonework had now become a straightforward, urgent matter of public safety.

A careful analysis of the condition and defects of the Darling Street elevation was then carried out by conservation architects Mullarkey Pedersen Architects, who have worked closely with St Michael's Parish over many years in a collaborative effort to care for and maintain this great building of such historic significance. The photographs attached show some of the significant range and type of decay which our team identified as a consequence of their investigations. Many of the more delicate, ornate elements have been the most damaged and it is these very features which give the façade much of its detail and quality. Having identified the multiple problems our team then drew up a scope of works to address the issues to the best conservation standards. The new interventions had to allow for the maximum amount of existing material to be retained. They were to be harmonious in colour, tone and texture.

Of course work of this nature, on a building of such quality, must be carried out by craftsmen with experience and skill, these we had in Rainey Restoration, one of Ireland's finest and most experienced stonemasons. Rainey were not alone in this work and we must also thank the stone cleaners 'Keep it Clean', stained glass specialist Glass Marque and Monica Liddle who carried out the magnificent restoration of the tympanum above the main entrance. Most of all however we would like to thank Mr Noel James of Mullarkey Pedersen Architects whose knowledge, experience and tenacity were central to the successful completion of the project and, of course, Monsignor Peter O'Reilly and his predecessor Monsignor Sean Cahill without whose vision and due diligence this work would not have been possible. All of the Team see their own individual input as part of a greater historical continuum which is the great building itself. We are the stewards at the service of St Michael's Parish, Enniskillen, as a parish community that seeks to fulfil its duty to both past and future generations in handing on this magnificent part of the parish heritage in the best possible condition.



before



after



St. Michael's Church, Enniskillen A Rejuvenation

Facade Repairs

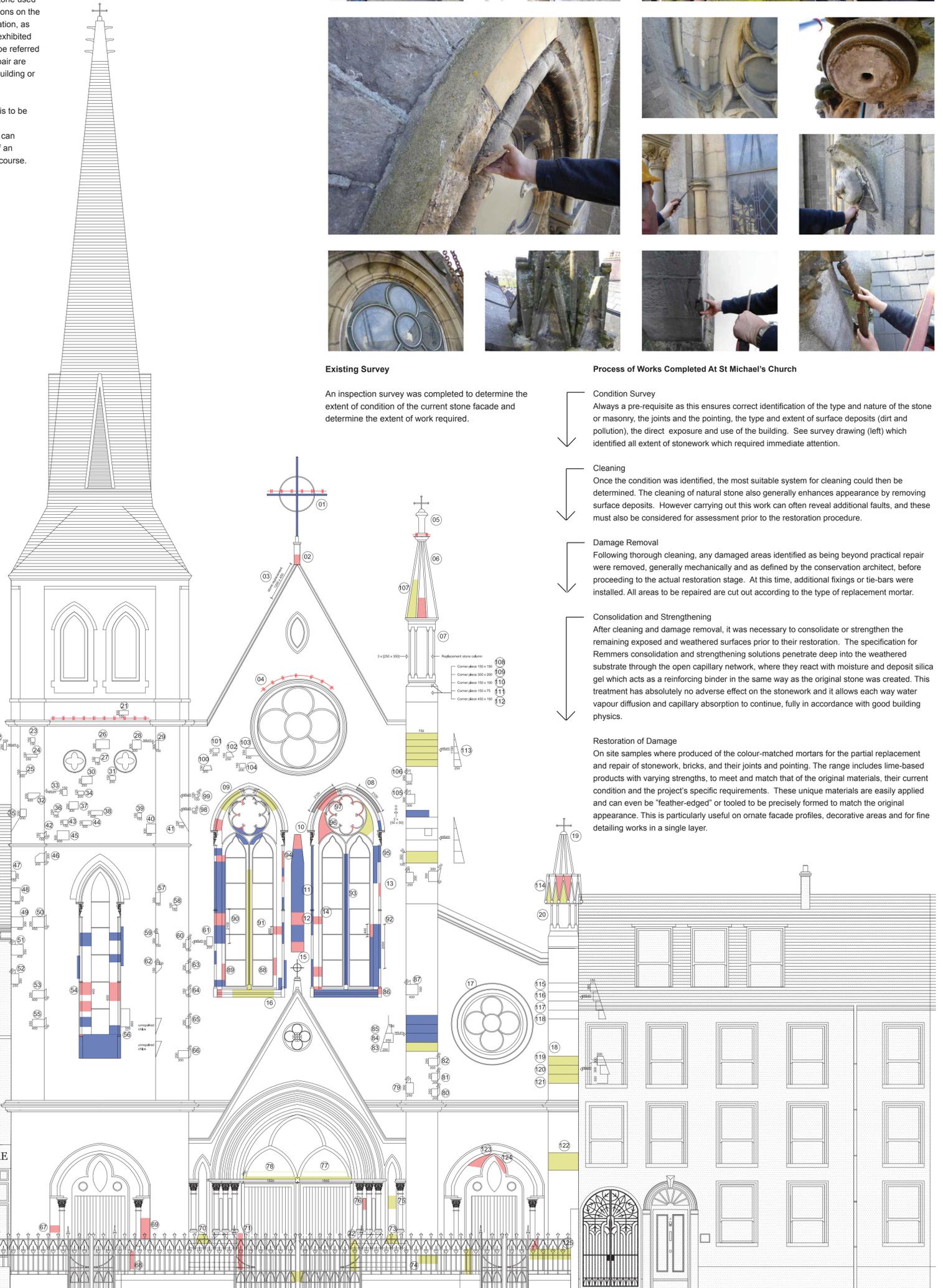
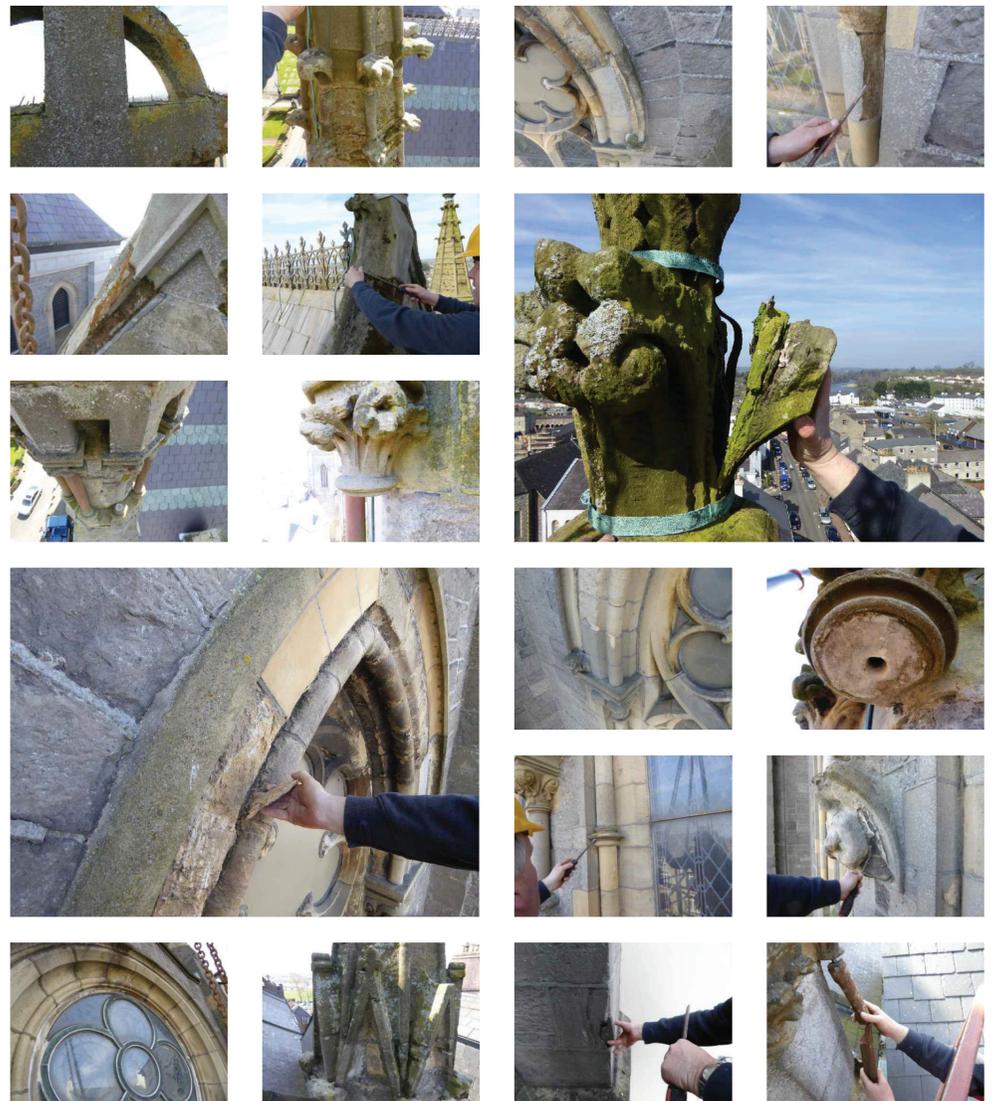
Much of the Province's built heritage is constructed of stone – castles, churches, cathedrals, stately homes, houses and cottages, all use this material in a vast variety of ways and styles. Considering the large stock of stone masonry buildings it is perhaps indicative of the good inherent properties of the stone that more failures are not observed.

'Possibly one of stone's biggest assets is also its major difficulty. Because it is so durable, decay of stone (whether natural or induced) happens over a long period and consequently can pass unnoticed. When the time comes for repair, careful judgements have to be made.'

Repair Guidelines

The first step of any repair scheme must be to evaluate the existing state of the stonework and the degree of intervention/repair necessary. From a position of knowledge the most appropriate decisions for a building can be taken. Mullarkey Pedersen Architects advocates that those contemplating major work should research or commission a detailed analysis of their stonework. This should be clear about any previous interventions as well as the source of stone used and possible substitutes. This evaluation also has implications on the type of repair techniques to be undertaken and their application, as they can often be matched on various stages of decay, as exhibited by different stones or elements of the building. It can also be referred to as a "palette of techniques" when various methods of repair are matched to particular stone problems, possibly in the one building or even the one facade.

As with all repairs of an historic building the best approach is to be conservative in the extent of the works and retain the maximum amount of historic material. Decayed stonework can contribute significantly to the character and patina of age of an historic building and should not be removed as a matter of course. Where stones are hastening the overall decay of a building however or their condition constitutes a health and safety risk their repair will be necessary.



KEY	
	Remove mortar and repoint lime mortar
	Buff stone
	Mortar repair
	Colour wash
	Bird repellent tape

Existing Survey

An inspection survey was completed to determine the extent of condition of the current stone facade and determine the extent of work required.

Process of Works Completed At St Michael's Church

- Condition Survey
Always a pre-requisite as this ensures correct identification of the type and nature of the stone or masonry, the joints and the pointing, the type and extent of surface deposits (dirt and pollution), the direct exposure and use of the building. See survey drawing (left) which identified all extent of stonework which required immediate attention.
- Cleaning
Once the condition was identified, the most suitable system for cleaning could then be determined. The cleaning of natural stone also generally enhances appearance by removing surface deposits. However carrying out this work can often reveal additional faults, and these must also be considered for assessment prior to the restoration procedure.
- Damage Removal
Following thorough cleaning, any damaged areas identified as being beyond practical repair were removed, generally mechanically and as defined by the conservation architect, before proceeding to the actual restoration stage. At this time, additional fixings or tie-bars were installed. All areas to be repaired are cut out according to the type of replacement mortar.
- Consolidation and Strengthening
After cleaning and damage removal, it was necessary to consolidate or strengthen the remaining exposed and weathered surfaces prior to their restoration. The specification for Remmers consolidation and strengthening solutions penetrate deep into the weathered substrate through the open capillary network, where they react with moisture and deposit silica gel which acts as a reinforcing binder in the same way as the original stone was created. This treatment has absolutely no adverse effect on the stonework and it allows each way water vapour diffusion and capillary absorption to continue, fully in accordance with good building physics.
- Restoration of Damage
On site samples were produced of the colour-matched mortars for the partial replacement and repair of stonework, bricks, and their joints and pointing. The range includes lime-based products with varying strengths, to meet and match that of the original materials, their current condition and the project's specific requirements. These unique materials are easily applied and can even be "feather-edged" or tooled to be precisely formed to match the original appearance. This is particularly useful on ornate facade profiles, decorative areas and for fine detailing works in a single layer.