Old House New Home

An RIAI publication on how to Understand, Reimagine, Conserve your Historic Home
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Cover image – A Victorian house re-imagined for contemporary living. Inside cover – The project includes the conservation of the exterior character, including the rebuilding of the prominent chimney stack to the return. Diarmuid Brophy Architects. Photography: Ros Kavanagh.
Introduction

Many owners of historic homes were likely to have been drawn to the beautiful features, craftsmanship and materials that come with such buildings. However, the demands of modern lifestyles often necessitate the remodelling and reimaging of a home, whilst retaining its key characteristics. The reimagining of derelict or vacated buildings can be even more daunting where these qualities, masked by poor condition or previous alterations, can be easily overlooked in redevelopment proposals.

Conserving or adapting a historic home is a complex process that requires architectural advice from the outset. A Registered Architect with expertise in conservation has the necessary skill-set to unlock the potential of our built heritage stock. The RIAI has published a useful Skills Matrix on our website which explains the level of expertise recommended for conservation work if your home is architecturally significant.

To support you and your Registered Architect, the RIAI and its Historic Building Committee have published this free online guide. *Old House New Home* explains how to understand your home, conserve period features and reimagine it for contemporary living. It includes a wealth of case study projects by RIAI Registered Architects, which represent different sizes, conditions, characteristics and locations – from homes in urban and suburban settings to the adaptation of farmhouse complex, their yards and outbuildings.

As well as making distinctive architectural homes, the reuse and repair of existing buildings is an important response to climate change and urban revitalisation. Consideration of reuse and reimagining of existing building stock, their embodied energy and craftsmanship is a carbon neutral option, which is part of sustainable development. Many historic building types, such as former banks, school houses, commercial premises or Garda stations, at the core of historic towns, provide great opportunities as they can be adapted creatively to residential use.

*Old House New Home*, which is supported by the Department of Culture, Heritage and the Gaeltacht and the Creative Ireland Programme, hopes to encourage more people to consider the repair and reuse of vacant or under-utilised buildings in urban and rural settings. This heritage-led approach meets the sustainable development objectives of the United Nations (UN) and underpins the National Development Plan Project Ireland 2040. Many of these projects illustrated in this online publication have a wider relevance and application, which can be readily transmitted or transferred to other situations and contexts.
Understand | Reimagine | Conserve

Each building has its own unique character, arising from its architectural significance, building type, construction method and situation. These characteristics need to be considered and understood as the starting point to unlocking the potential of a historic home. Once the key qualities are understood, the logic and strategy for extending, adapting, conserving or restoring your home can be developed in detail with your Architect.

A Registered Architect with expertise in conservation has the necessary skillset to help you unlock this potential. (see also Chapter 2. Working with an Architect)

While a single design approach will rarely be applicable, this guide explains some common themes and successful solutions that have emerged as valid approaches to adapting, extending and conserving historic homes in urban, suburban and rural contexts. We have structured this information into under a three-part process: Understand, Reimagine, Conserve.

Understand
Understanding is reached, at the outset, through research and investigation of your existing building. Led by your Architect, this process provides key information, for example the existing condition of the building fabric; the location of services and drainage; and structural and damp defects. Areas of previous alterations or loss in a historic building are also gathered as they may suggest locations of future intervention or where best to locate a new extension. This important research may identify an element requiring restoration or the location for upgrading works.

It is important to spend time at this stage to see beyond a bad condition, poor quality repairs and previous ad-hoc extensions. This will also identify the potential of the historic building and the appropriate level of intervention required to make it a comfortable and contemporary home. Your Registered Architect will guide you through this process.

Owning a Historic Home or a Protected Structure

A historic building project has many objectives - the repair and upgrading of the original structure using appropriate materials and skills, the careful modification of the existing fabric without loss of character and the design of contemporary space where necessary to enhance existing accommodation. Diarmuid Brophy Architects. Photography: Ros Kavanagh
Reimagine

Reimagining builds on the outcomes of the ‘Understand’ research and survey stage, as it provides the context for new proposals. Designs to reimagine a historic home should be based on conservation principles such as minimal intervention, reversibility, respectful alteration and repair. Importantly, in the case of a protected structure, it should determine a suitable approach to upgrading, extending and conserving the historic fabric.

*The Architectural Heritage Protection Guidelines for Planning Authorities* provide detailed information into the planning and development process for owners of protected structures. Many of the case studies showcased in this e-publication underwent this process. The projects selected demonstrate the variety and diversity of potential design solutions that are possible for protected structures. It is hoped that the case studies will inspire property owners to see the opportunity in a historic building project and the benefit of working with a Registered Architect.

Conserve

Respect for the original structure, its plan and setting, architectural character and the nature of its construction must be central to the design process to avoid undermining its authenticity and significance. This tends to be a process that carefully weighs up environmental and legislative concerns to meet the owner’s wish list and requirements, responsibilities, and budget parameters. Minimal intervention is a core conservation principle, one that is both cost-effective and heritage sensitive. The reuse of existing building stock is also a key contribution to sustainable development as the most carbon neutral building is one that already exists.

Sustainable development is particularly important to combating urban sprawl and encompasses the reuse and adaptation of vacant and derelict buildings, prompting the revitalisation of town centres where social infrastructure and cultural activities are accessible.
Guiding Principles

Conservation is the process of caring for buildings and places, and managing change to them in such a way as to retain their character and special interest. Historic structures are a unique resource. Once lost, they cannot be replaced. If their special qualities are degraded, these can rarely be recaptured. Damage can be caused to the character of a historic structure as much by over-attention as by neglect.

(Extract from the Architectural Heritage Protection Guidelines. Department of Culture Heritage and the Gaeltacht.)


The redevelopment of a protected structure ensures the minimum of impact through good design and the use of appropriate materials and skills in the conservation of the original building, retaining its key characteristics, its patina of age and mature setting – example of conserved farmhouse project, Litts Architecture.
Advice from Registered Architects

- Understanding the value of a building or place informs ways for conserving and reusing it, appropriate to its typology, significance and character.
- Use expert architectural advice when considering undertaking works to a historic home or building.
- Your home is part of an ongoing process of evolution and all actions of repair and modification add to its overall value where high-quality materials and good design are used.
- Good design unites the building’s past to the future without removing its integrity and key characteristics.
- Adhere to the principle of ‘Doing as much as necessary and as little as possible’.
- Dramatic interventions in a protected structure are rarely appropriate. It is important to ensure that the cultural heritage value is passed on.
- Restoration of lost features needs to be based on the evidence of known detail of the structure and should not be conjectural or imposed.
- The reduction of a historic building to a facade is rarely acceptable, where it is part of an integrated streetscape or terrace, due to the structural impact it may have on the adjoining properties.
- Any new features should be sympathetic to the remaining historical features and should reflect the society of the time.
Whether you are planning to extend, renovate or conserve your home, an RIAI Registered Architect has the qualifications, vision and experience to take you expertly through your building project.

Where can I find a Registered Architect?
The RIAI website riai.ie contains useful advice on working with an Architect, it also allows you to find a Registered Architect in your area by consulting the RIAI Practice Directory on our homepage.

We recommend to visit the website of your chosen Architect as it will indicate their approach to design and give exemplars of residential work. In Ireland, the title ‘Architect’ is registered and a person cannot use the title ‘Architect’ unless they are on the Register of Architects. Being placed on the Register reflects the standard and competence of an Architect. Check that your Architect is registered on our homepage: riai.ie.

When do I need an Architect with Conservation Experience?
If you own a historic home that is of architectural importance, please consult the RIAI Skills Matrix for Conservation Projects on the RIAI website: riai.ie/work-with-an-architect/working-with-an-older-building

RIAI Skills Matrix for Conservation
The matrix explains the level of expertise recommended based on the importance of the building and the extent of work intended to it. There are three skill levels of RIAI Conservation Accredited Architects - Grade 1, 2 and 3. An RIAI Grade 1 Conservation Architect, reflecting the highest qualification or experience, is required for work on architecturally significant buildings or badly damaged buildings. An Architect with conservation expertise will guide the most appropriate development approach for a historic building/protected structure, in terms of its reuse, its repair and its reimagining.

If you cannot find a suitable RIAI architectural practice with conservation expertise, please complete our online form: riai.ie/work-with-an-architect/ask-a-question. Please provide details of the project, address, location and the RIAI can provide a list of architects in your area.
Understand

What is a Building Survey and Conservation Report? The starting point of a typical residential project, where the house is a historic building or protected structure is a detailed Building Survey and assessment of its condition and significance.

A Conservation Report or Architectural Heritage Impact Assessment is required for a protected structure i.e. a building that is considered to be of built heritage significance assessed under the criteria of the National Inventory of Architectural Heritage of Ireland (NIAH). Refer to Appendix B, the Architectural Heritage Protection Guidelines- Department of Culture Heritage and the Gaeltacht.

A record is made of the history of the building including an examination of the origin of the structure. For example, the inclusion of a building in the first edition of the Ordnance Survey Ireland (OSI) maps suggests a date of c. 1840.

The impact assessment will indicate how the proposed development works will affect important historic features and the overall character and structure of the building.

It is worth considering that of the 185 historic towns established in Ireland many originated as medieval boroughs created under charter. Original building fabric from the 16th and 17th century (or older) may still be present and discovered during a building’s refurbishment. Its long-term survival and record is important. Consultation with National Monument Service is recommended in these instances and the cultural heritage significance can be confirmed.

This initial survey forms the basis for planning future modification, as the opportunity for intervention may be guided towards areas of damage, the restoration of a loss of a feature or the site of a previous extension or structure.

The Conservation Report remains as the reference point for all works in a protected structure. It is an invaluable investment for the owner of a historic property as the basis for pre-planning consultations as well as on-going maintenance of the property.

What is a Pre-Planning Consultation? A Pre-Planning Consultation can be held with the Local Authority. The Architectural Heritage Impact Assessment with photos, maps etc. informs the discussion about the property’s potential and assists the discussion. Opening up works to confirm underlying defects, concealed significance or origins or to confirm previous alterations that will inform the overall design strategy may be agreed formally with a Local Authority as part of the planning process. A detailed schedule of work to be undertaken by a skilled contractor is formally agreed with the Local Authority, implemented and reported on in the conservation report/planning documentation. This is particularly relevant and an appropriate way to undertake work to a badly damaged or poorly maintained property.

Reimagine

To Extend or not Extend? The first thought of many owners is to consider an extension to their home, whereas in many cases the re-working of existing but poorly functioning space may be sufficient to improve natural light and enjoyment of rooms and to make a critical connection to the garden amenity. Retaining living spaces within the historic footprint is often financially prudent and more environmentally friendly as heat is allowed permeate equally through the original building and not just in parts of the plan.

Integrating Old and New Integrating old and new space is critical so that the natural flow of space within the original plan is retained and the legibility between the old and new structure is understood. The point of connection for an additional space or level of subdivision may vary greatly depending on the site context, plan type and orientation. In a terrace situation...
and squares are in place as this is the most sustainable form of development for our cities and towns and an important response to our housing shortage.

When Less is More
Sometimes minimal intervention to a home is preferable from both environmental and structural reasons. An old building regulates and moves moisture differently to a newly constructed heavily-insulated extension and historic fabric is likely not to achieve similar thermal values to new build construction. It is likely that there will be a disparity between the two types of construction with the historic building performing differently to the new build. With this in mind, it may be preferable not to open plan internal spaces and to avoid fully integrated old with new spaces. Instead the retention of original openings and their joinery where possible is guided as it provides greater flexibility and management of heating and ventilation. Consideration should be given to the planning of new services to avoid their location centrally within the building fabric. New services also require service routes or runs to the exterior which may adversely impact on significant plasterwork ceilings, chimney breasts or timber floors. For this reason, where possible new services are best planned to the exterior and where possible within new build elements. In summary the primary design objective should holistically look at a historic building, to address its design deficiencies and to extend or conserve it in a sympathetic manner that ensures the survival of its original integrity and character, whilst improving its overall accommodation - the ambition being to pass on a well conserved building for future generations to enjoy.

Conserve
This publication hopes to prompt the reimagining of the many redundant spaces in our cities, towns and countryside and inspire people to consider their future upgrade and adaptation as contemporary homes. Our built heritage is unique and our buildings embody stories of past lives and traditions, craftsmanship and innovation. Historic buildings provide distinctive homes arising sometimes from their generous proportion and volumes or arising from the craftsmanship, tactile elements and quality materials used in their construction.

The enhancement or upgrading of existing buildings will become a significant part of our collective response to Climate Change Adaptation and it is important to understand that reusing resources properly and dealing with thermal under performance in an historical building should be addressed as part of the overall design strategy. Importantly the use of appropriate upgrading materials and details to sustain original roof, windows, pointing, render and the original construction materials of a historic property is of huge importance in creating a dry, comfortable energy compliant home. Knowledge and funding to improve building performance is available from your Architect and through Local Authorities grant schemes and other local organisations such as the Heritage Council and the Irish Georgian Society.

When undertaking a major refurbishment it is important to consider new build/alteration along with the overall property performance and general repair and not to overlook areas of defect, particularly at roof level. A well-maintained property is one that will perform well and be the most resilient to extremes in climate change. Repairs and modifications should be neighbourly i.e. the inappropriate repair of brickwork pointing or the removal and replacement with inappropriately designed windows can badly erode the historic character of adjoining properties and streetscapes over time.
Advice from Registered Architects

• Carefully consider the Conservation Principles previously set out as best practice by the Architectural Heritage Guidelines for Local Authorities.
• Well-considered design intervention rather than extensive structural alteration to avoid undermining and the original structure makes good environmental and financial sense.
• Make alterations that are guided by respect, which don’t undermine the original building and which have regard to previous alterations and extensions.
• Reuse and retain original fabric in-situ where possible and consider appropriate methods of upgrading and enhancement to improve thermal performance.
• Find new uses that are compatible with the historic building plan that respects the key characteristics of the property as well as the culture which created them.
• Respect the patina of age and the authenticity of original craftsmanship, materials and design as part of the significance to pass on.
• Do as much as is necessary and as little as possible.
• Redundant Buildings retain significant accommodation and may not require additional space but re-ordering or re-making of badly modified spaces.
• Generosity of design, the provision of amenity and the use of high quality materials are key criteria for adding to or converting historic buildings into multiple units. Over intensification of use and inappropriate levels of subdivision diminishes the overall character, experience and value of a historic property.
• Have regard to historic planting schemes and landscape designs, which can be urban, suburban and rural.
• Consider landscapes that were created as the layout of historic streets and the amenity of historic properties. Mature planting contributes significantly to the setting of a historic property as well as reducing the negative impact of weather.

A former coach house with outbuildings has been sensitively adapted to provide a contemporary home of high-quality design. New alterations to the existing building fabric have been clearly defined.

dbb Architects, Photography: Philip Lauterbach.
Design Advice for Protected Structures

- Engage a Registered Architect with the relevant Conservation experience (See also P. 14, The RIAI Skills Matrix for Conservation).
- Respect the scale and setting of the protected structure.
- In the case of a historic terrace, respect its overall uniformity and be consistent with rooflines, roof features and projecting returns.
- Avoid radical attic alterations that impact adversely on the original plan, structure and the decorative finishes of the upper floors and stairwell.
- Introduce complementary plan forms such as the courtyard extension to the rear of the historic property to retain natural light, ventilation and enjoyment of the rear garden amenity.
- Minimise over-extending floor plans and overlooking which may affect adjoining neighbours’ amenity.
- Avoid building across and enclosing windows to reception spaces at upper floors as this reduces the natural light and ventilation to the principal interiors.
- Reduce the impact of flat roof extensions at lower ground floor levels by the use of high-quality roof finishes and grass roof design.
- Introduce overhead roof glazing to ground floor extensions above original opening to retain natural light to original rooms and to articulate the connection between old and new structures.
- Avoid adverse structural impact from excessively large interconnecting openings.
- Retain structural integrity of paired return structures and shared chimney stacks.
- Retain chimney stacks in use as part of the heating and ventilation regulation system for historic properties.
- Avoid robust and complex forms that are out of scale with the principal structure.
- Retain decorative features and details such as chimney stacks and staircases as part of the historic narrative and craftsmanship of the original building.
- Use high-quality materials, craftsmanship and design skills to add value and to improve environmental performance appropriate to its construction and historic character.
- Avoid inappropriate external repairs, removal of original detail or inappropriate replacement which erodes historic character over time.
- Reduce the impact and presence of new build by utilising original boundaries, screen walls and return structures and mature planting.
- Retain a significant proportion of garden space, amenity and boundary walls. Create high quality boundary walls appropriate to the character of the site.

Images l-r:
Reuse and good repair of vacant or under-utilised urban buildings for contemporary homes is integral to addressing housing demand, a vital part of climate change mitigation and supportive of urban centre renewal of Irish cities, towns and villages – Restoration of a Dublin Street building at 18 Ormond Quay, by Dublin Civic Trust / Kelly & Copan Architects. Photographer (Before) Ros Kavanagh, (After) Graham Hickey
The Building Regulations apply to the design and construction of a new house, but also to extensions to existing houses, to changes of use such as conversions or subdivision, and to new or replacement building services, such as new heating, electrics or sanitary services. The older building itself must only comply where ‘material alterations’ are undertaken. These are defined as changes which would affect the structure, fire safety or the use of the house by people with disabilities. Generally, it is not necessary to upgrade the entire house, but the changes must not give rise to any ‘new or greater contravention’ of the Regulations.

Technical Guidance Documents to each part of the Building Regulations (Parts A to M) permit ‘alternative approaches’ in the case of buildings of historical or architectural importance, where there is a requirement for compliance. The Architectural Heritage Protection Guidelines and the Advice Series booklets published by the Department of Culture, Heritage and the Gaeltacht provide guidance to owners in upgrading such buildings.

A Registered Architect with expertise in historic buildings can advise on how to achieve such alternative solutions. The greatest challenges in older buildings are presented in the provision of universal access (Part M), fire safety (Part B) and upgrading of thermal performance, where changes undertaken give rise to the need for compliance.

Alterations to buildings which are protected structures, including extensions, are exempt from compliance with Part L ‘Conservation of Fuel and Energy in Dwellings’.

Bringing Back Homes, a design aid in determining the impact of building regulations on existing building and guidance manual published by the Department of Housing, Planning and Local Government, 2019.


Historic Houses and the Building Regulations

The re-ordering of this small house allows for a central courtyard space at the heart of the plan. The courtyard creates a well-lit interior and addresses regulatory concerns. Eva Byrne Architect.
Exemptions also apply where a building is subject to the National Monuments Act 1930-2004, i.e. it is included in the Record of Monuments and Places. Advice can be sought from the National Monuments Service regarding the significance and status of a site.

Even though it is not a requirement, you may as a homeowner wish to upgrade the thermal performance of your building to reduce heating costs or to save energy. Such an upgrade will require planning permission and you will need to demonstrate that changes respect the character and significance of the building, and employ compatible materials.

Buildings which are not protected structures do not enjoy the same exemption. However, Part L allows considerable leeway for buildings of architectural or historical interest. In older buildings of traditional construction with permeable fabric, the aim should be to improve energy efficiency as far as practicable without affecting the character of the building or increasing the risk of deterioration. The Regulation requires repair rather than replacement of historic windows and doors, and stipulates that internal insulation should not damage historic plasterwork or flagstone floors, or introduce further moisture into the structure.

The Building Control (Amendment) Regulations (BC(A)R) introduced the additional need for statutory certification of compliance with the Building Regulations. This requires owners, builders and registered construction professionals to demonstrate that works have been designed and constructed in accordance with the Building Regulations, and inspected at key stages. The requirement applies to dwellings only in the case of an extension over 40m² or where there is more than one unit in the house. The Regulations allow owners of dwellings to opt out of the certification process, but it is important to remember that the requirement to comply with the Buildings Regulations remains.

References
The Building Control (Amendment) Regulations, S.I.9 - Client Guidance Note. PDF File (353 KB)
Opt Out for Domestic Projects click HERE
BC(A)R Code of Practice for Inspecting and Certifying Buildings and Works. PDF File

 Undertaking the conservation of a Georgian townhouse is a significant commitment and one supported by a Registered Architect with appropriate knowledge and experience. See also p. 14 The RIAI Skills Matrix for Conservation. Howley Hayes Architects.
Understand
Reimagine
Conserve
This split-level Victorian terrace house, with its main entrance at first floor level and a secondary entrance under the stairs was in a poor state of repair before it was given new lease of life creating a modern, light-filled home while still retaining its original character. The Architect introduced the idea of living ‘upside down’ with the bedrooms downstairs and living rooms upstairs.

Space was added with an extension of just 3m² to create an enjoyable living room in the downstairs return, the floor level was lowered, forming a well-proportioned airy room that sits right into the garden. The roof was stripped and re-roofed using original and replacement natural slates. The brickwork to the rear was repointed with a traditional flush finish and lime render replaced. An unstable tall slender chimney was taken down brick-by-brick and rebuilt.

In order not to cover original features with insulation on internal or external walls, energy-efficient measures were used such as draught-proofing windows and doors, new double glazed sash windows, a de-centralised ventilation system and heating with web-enabled controls. By avoiding major extension works, the client could focus the budget on a higher level of specification and standard of finish.

Project: Extension and Remodelling of a Victorian Protected Structure
Location: Portobello, Dublin 8
Practice: Diarmuid Brophy Architects
Case Studies

Project: Reimagining two Apartments within a 1840s House
Location: Pearse Street, Dublin 2
Practice: Horan Rainsford Architects

This project involved the complete refurbishment of a 1840s house, a protected structure over a contemporary shop. The house had been sub-divided to provide two small (sub-standard) two-bed apartments on the upper floors, with an estate agent’s office at ground level, and with storage in the low-ceilinged basement. Alteration works that had previously been undertaken (c. 1970s), did not provide any fire safety measures or acoustic separation, and were generally sub-standard.

The building stood in poor condition following a sustained lack of maintenance. Initial stripping work revealed significant structural displacement but also architectural features. Key conservation works included the strengthening of all corners at all levels through needling, and in particular the repair of the front façade.

This involved the removal of the inappropriate cement render, extensive repair of the brick, including ‘heli bar’ restraints, and traditional Irish ‘Wiggin’ to the brickwork to provide an attractive facade. The coordination of all services, including the fire and acoustic separation of the apartments from each other and from the café in particular, were carefully managed so as to have minimal impact on the existing historic fabric.
This Protected Structure c. early 19th century, had been subdivided into nine bedsits which had significantly altered its character. The client’s brief was to refurbish and provide four apartments within the historic building. As in yacht interiors, dimensions of utilitarian areas, such as the kitchen and bathroom, have been reduced to enhance social areas.

Developing the idea of traditional wainscoting, walls were lined with oak paneling. By varying the depth of the oak paneling, bathrooms, kitchens and storage are accommodated, while maintaining the character, details and proportions of the original rooms. Oak doors and panels lift, slide or fold to reveal utilities. As in yacht interiors, dimensions of utilitarian areas are contracted in order to enhance social areas.

Careful consideration was made of the provision of new services within the building. Service routes were carefully planned to minimise the impact on the Georgian fabric and sustainable technologies were included such as solar panels and green roofs to external structures.

Technically, fire and sound transfer are difficult issues to deal with in historic buildings. In this instance, suspended floors were acoustically upgraded by incorporating a secondary structure within the depth of the original floors to divide the structural load from the original structure supporting the Georgian decorative ceiling and cornices.

Project: Reimagining Apartments within a larger Protected Structure
Location: Northumberland Road, Dublin 4
Practice: Lawrence and Long Architects
Living over the Shop

‘Living above the Shop’ has been a way of life in Ireland for centuries, but when the shop is a protected structure, made up of highly decorative historical rooms it brings extra challenges.

The project was to convert a landmark 19th century bank building on College Green to retail use with apartments above. Its prime location and the views overlooking College Green prompted the decision to convert the under-utilised upper floors of the building to nine high-quality apartments.

The original staff entrance off Andrews Street was converted as the lift and stairs access to the apartments at fourth floor level. Above this level, the apartments are arranged around the three perimeter sides of the block and accessed from a central landscaped courtyard area.

The presence of the building’s old banking hall in particular created a particular challenge for the servicing of the apartments. The solution involved a new raised floor above the existing fourth floor level to create a service zone. This enabled the apartment services to be brought horizontally to the extremities of the building floor plate, thereby avoiding interference with the historic rooms and decorative features below. This plenum also incorporated the acoustic and fire barriers between the retail and residential parts of the building.

Integrating old and new Elements

The goal was to preserve the building’s historic character and qualities, while providing the comfort and conveniences of a 21st century home, such as contemporary bathrooms and kitchens. To maintain the historic character within all of the apartment spaces, the existing windows, walls and roof profiles were repaired and upgraded.

Case Studies

Project: Urban Residence in a former Banking Hall
Location: College Green, Dublin 2
Practice: Donnelly Turpin Architects
Case Studies

Project: Urban Residence on Dawson Street
Location: Dawson Street, Dublin 2
Practice: PKA Architects

Built as part of Joshua Dawson’s 1700s grand plan for the lands between Grafton Street and Kildare Street, three 18th-century townhouses on Dawson Street were combined in the early 19th century to form Tuthill’s Hotel. At the time, their original ‘Dutch Billy’ elevations to Dawson Street were replaced by the unified facade that we see today.

The hotel use had ceased long before being purchased by the current owners in 2016. The ground floors had been converted into a number of retail units; the upper floors had been turned into low-grade rental offices; and the overall condition of the property did little justice to its location on one of the most important and most fashionable streets of Georgian Dublin.

In this adaptation and reuse project the three houses were remodelled from top to bottom: providing serviced offices on the upper floors of nos 51a and b; upgrading the ground floor retail and restaurant units; and converting the top floors of the Dawson / Duke Street corner into a duplex apartment. The programme of repairs, renewals and remedial works included extensive structural repairs, conservation of the historic fabric, wet and dry rot remedial treatments, as well as the installation of new services and facilities.

The highlight of the original architecture is the main entrance staircase of no 51b. Its rotten threads were renewed with white oak replacements, its balustrades were painstakingly restored and its panelled walls were restored to return the entire to its original splendour.

The dilapidated condition of the upper floors of 51c facilitated the design of a two-storey duplex apartment with its own private access from Duke Street, an en-suite bedroom at second floor level and a double-height kitchen / dining and living room above.

The unsound structural condition of the original roof – and a parapet that was on the verge of collapsing into Duke Street – created the opportunity to re-imagine the upper-level living space: a new steel and timber structure was installed and profiled to create a vaulted interior that echoes the gabled roof of the 18th century original.

The Architects’ philosophy is that the combination of contemporary interventions with the conservation of original fabric reflects the reality that historic properties must evolve if they are to last, and that this evolution contributes to making an architecture that is richer than either new or old on its own.
This conversion involved the reimagining of two Georgian Houses c.1815, which had suffered a 1960’s remodelling into a bank branch. The 1960’s project involved a number of ‘improvements’ which included the creation of an open-plan banking hall at ground floor, the provision of a large flat-roofed extension across ground floor and basement levels. The upper levels of the buildings were largely left in their original Georgian format, but were in a very dilapidated state.

Our clients felt that this property offered an opportunity to create a restaurant space using the open-plan ground floor and to combine the upper levels of the two buildings to create one large and elegant 350sqm city home. The roof of the ugly flat-roofed extension could be reimagined as a 100sqm roof garden.

Employing best conservation practice, remaining original features were retained and restored. New interventions including kitchens, bathrooms and the main staircase are all marked as modern interventions into the historic fabric. The remaking of these vacant buildings above street level has provided a unique contemporary home in the city centre. This is an exemplar of reuse that may inform urban regeneration in any town or city in Ireland.

Case Studies

Project: Conversion of two Georgian Buildings
Location: Camden Street, Dublin 2
Practice: DMVF Architects

This is an urban set piece. It includes the successful reimagining of two vacant city centre buildings to create a remarkable city dwelling above the historic thoroughfare. Photography: Ruth Maria Murphy
Case Studies

Project: Apartments in a Protected Structure  
Location: Granby Row, Dublin 7  
Practice: Cathal Crimmins Architects

This project consists of the adaptation of an early 19th century five-bay, three-storey protected structure. The building forms part of a terrace and was originally constructed as an engineer’s drawing office to the rear of 28 Parnell Square, then the home of Sir John McNeill, an eminent railway engineer. It was subsequently converted to a school and later back to offices and a language school. The buildings were completely modernised in the 1980s, including the removal of joinery and plasterwork, internal re-plastering, and extensive structural work, which significantly altered their character. The structure was vacant for some time, impossible to let as offices.

The client’s brief was to refurbish the building to provide three apartments, one on each floor within the building. Much of the inappropriate 1980s work was reversed including the removal of services. The stud partitions, which had been installed on every floor circa 1989, were removed and new ones erected, creating internal spaces befitting the proposed residential use.

The existing Georgian sash windows were repaired, draught-proofed and restored to their original state. External plasterwork was repaired and painted. Some new openings on the first and second floor were created to the rear. A window on the rear elevation at ground level was converted to a patio door, giving access to a private courtyard. To enclose this private courtyard, a new gate and new 1800-mm high garden railings were erected. Bin stores and bicycle parking were provided in the arched carriage entrance to the rear yard. Since completion, the rear 19th century return building has also been converted into new apartment units, creating an interesting group surrounding a landscaped courtyard.

A 19th century school building has been reworked, including poor previous alterations, to provide apartments for city living. Original architectural features, as part of the wider Georgian character, have been rediscovered. Photographs provided by Client.
The Officer’s Mess dates from 1886, replacing an earlier barracks Mess, originally built as Sir William Robinson’s house. Using the experience gained with protected structures in an earlier project phase, analysis of the historic fabric informed the sub-division into residential units. The utilitarian servants’ rooms contrasted with the more decorative Officers’ quarters. Original features determined the planning of duplex units and minimised interventions. The resulting 13 apartments have generous provision of light and retained historic fabric.

Surviving features informed the thermal upgrade works. In the Officers’ quarters, internal thermal linings to external walls would have impacted negatively, so upgrades were restricted to draught-proofing and installing slimline double-glazed units in the original timber windows. Windows at basement level were re-glazed with this salvaged historic glass, as these featureless walls could be thermally upgraded on the inner face.

Externally, the roof structure and stacks were repaired and re-slated with Penhryn Slates including new flashings and cast-iron rainwater goods. The brickwork was cleaned, repaired and re-pointed. Ironwork railings and steps were repaired and reinstated with some adjustments. Granite and Sandstone plinths and steps were cleaned and repaired.

The Officer’s Mess was formerly the most prestigious of the redundant military buildings in Clancy Quay Barracks. Its generous, decorative interior and entertainment spaces have been adapted to provide high quality residential living. Photography: Fionn McCann
This project shows that it is possible to use all of the floors of a city building for a variety of uses – retail, office and residential, while maintaining its integrity and historic quality. The only floor that currently remains unused is the basement, which awaits further changes in the law before it can be used.

What allowed for the mixed uses was the insertion of a new stairs from the street to the first floor, where it connects to the original 18th century central stairs. This allowed for independent access to the upper floors.

Technology to monitor and control fire risks was crucial to the project.

The ground floor and half of the first floor are in retail use; the other half of the first floor and part of the second floor are in office use and the remainder of the upper floors is residential, with a roof terrace at second floor level.

From the street, the only hints as to the complexity of the building are the stone plaque dated 1780 and the side door leading to the upper floors.
This Georgian town house on a prominent city square is a handsome mid-terrace structure with ashlar granite rustication to the ground floor and a fine free-standing Doric door surround. Internally there are generous rooms rising from basement to third floor level, of which the ground floor entrance level and the first floor, piano nobile, are particularly impressive with high ceilings enriched with fine decorative plasterwork in the Rococo style. To the rear stands a three-storey return. Whilst in use as commercial offices, the house had been heavily renovated on a number of occasions and valuable historic fabric was removed, principle rooms were subdivided, historic links between rooms blocked and a crude link between house and rear service wing constructed in the 1980s.

The brief called for a comfortable, family home, with a generous office space in the basement, large entertaining rooms and ample spare bedrooms and bathrooms for visiting family and friends. The main challenges were to understand previous alterations and loss and to improve the internal spaces necessary to make a contemporary home. Key conservation and redevelopment strategies included: treasuring and repairing all surviving, high-quality, decorative fabric (hand-modelled plasterwork, decorative ironwork and the original joinery to the staircase and some windows); removing all unsatisfactory, room divisions and pastiche additions; externally making good masonry and partially rebuilding and repairing the front façade, including the carved granite Doric columns and entablature to the door surround returned the property to prominence.

The historic roof was restored by the provision of natural slate, new copper valleys together with the repairing of chimney stacks and brick flues to facilitate three open fires and one stove. Internally, the restoration of lost character to the principal reception spaces as well as designing high quality contemporary interventions for two new kitchens and new bathrooms were undertaken. The design of a new fully-glazed link to the return structure, in the form of a winter garden unlocked the potential of the property and provided access to an outdoor amenity space of a new raised contemporary garden with lower level water feature. As part of a contemporary home mechanical and electrical services were provided to a high specification, including a mist suppression system for fire safety and a new three-storey passenger lift in the rear return.

**Case Studies**

*Project:* Georgian Townhouse  
*Location:* Merrion Square, Dublin  
*Practice:* Howley Hayes Architects

A Georgian town house on a prominent city square has been expertly restored to make a comfortable contemporary family home. Photography: Howley Hayes Architects
This house in Synge Street was in poor condition – divided into ten bed-sit flats, with multiple poorly constructed extensions to the rear, the accommodation was neither pleasant, nor safe for the occupants.

The client was looking for a family home with flexible accommodation and a strong relationship with the rear garden. The house now provides three bedrooms, two of them en-suite, a spare bedroom/study and two interconnected reception rooms at entrance level. In the basement there is a formal dining room, kitchen and family room – all interconnected and with natural light from the front and opening into the garden to the rear.

Unlike the majority of Dublin terraced houses, which are two bay, this house has an additional narrow bay, the original location of a carriageway, to the right hand side of the front door. This arrangement enabled us to locate all the serviced rooms (bathrooms, utility etc.) within this bay, reinstituting the main historic spaces in their generous original form, while providing ample sanitary and storage provisions at every level.

Conservation works to the house included restoration, by skilled craftspeople, of the original decorative plasterwork, ironwork and joinery as well as lime pointing and repairs to brickwork. To the rear, the new extension with its extensive windows is clearly modern, but aligns with the rear of the extension of the next door property, while also acknowledging the original carriageway.

Contrasting, but natural materials have been used to differentiate the new additions from the historic parts of the house. A glazed section, between old and new, both highlights the contrast, and brings light into the staircase in the heart of the house. The floors within the extension are at half landing level, creating a contrasting scale to the historic rooms, and the changes in level are used to articulate the flow of space, create interest, and provide views out into the garden from the heart of the house.
One of a pair of semi-detached Victorian houses, this home had been rather unsympathetically extended and sub-divided into three units prior to it being purchased by our clients in 2013. Their brief was to restore the property to its original single-family use; conserving those historic elements that contribute to its special interest, while adapting the protected structure to the realities of 21st century family living.

The location of the kitchen and dining room is one of the first, and most critical, decisions to be made in adapting three-storey historic properties to modern lifestyles. In this case the design decision was determined by the previously-constructed ground floor extension. The redesign of this level became the main focus of the project, except for the installation of bathrooms on the upper level and the remodelling of the interconnecting hall floor rooms, now used as the master bedroom and sitting room for the parents of this growing family.

The structure and plan at garden level were retained with the exception of the installation of a contemporary staircase within a newly-created double-height void, and the insertion of a series of roof lights into the existing mono-pitch roof of the rear extension. This has transformed a previously gloomy area into a south-facing kitchen, dining and living space that is bathed in sunshine and daylight, even on the darkest of days.

The Architects’ philosophy is that the combination of contemporary interventions with the conservation of original fabric reflects the reality that historic properties must evolve if they are to last, and that this evolution contributes to making an architecture that is richer than either new or old on its own.
This fine Victorian house had gone through many changes since being built in the 1870s. At one stage the original pantry was demolished and replaced with a glazed conservatory stretching across the rear garden. The draughty conservatory could only be used on certain days of the year and left the inner spaces with little daylight or fresh air. We wanted to open the back of the house to the garden without creating internal rooms beyond.

The new extension is glazed on three sides, with a high clerestorey window above to maximise daylight throughout the day and allow extended views over the mature garden. The ceiling slopes up over the new open plan living spaces, emulating the scale and grandeur of the original drawing rooms of the house.

A timber ceiling to the rear creates a lower, more intimate area to the living space which extends to the over-sailing roof outside.

Case Studies

Project: Garden Room Extension
Location: Sandymount, Dublin
Practice: David Flynn Architects

A garden living space has been recreated from the footprint of a former servants’ annex to a Victorian residence. Photography: Barbara Corsica
Case Studies

Project: Extension with a Hidden Garden Room
Location: Ranelagh, Dublin 6
Practice: McCullough Mulvin Architects

This extension, on a corner site on a quiet residential street, is part of the great contemporary project that architects engage with to enhance and revitalise old housing stock for contemporary living.

The residence ‘floats’ a new singular roof plane over part of the rear of the site to create a new sunken garden room enclosing a calm courtyard, proportioned on a golden section ratio. A rooflight over the steps to the new room generates a conversation between open and closed spaces. Dissolving boundaries between inside and outside space and integrating living rooms with garden spaces through an undulating ground plane under a floating single plane, this extension reinforces the idea of the traditional Dublin type, the single storey villa with its ingenious split section.

The outdoor spaces echo this split-level arrangement, sinking the garden room and terrace below the hidden courtyard, between old house and new, then raising the garden to its original level, to create volume and spaciousness as well as privacy and intimacy.
A 400-year-old disused farm cottage was carefully repaired and sensitively extended to provide a modern family home on a busy dairy farm in Co. Wicklow.

The original single-storey cottage was in poor condition. It had lain vacant for many years, yet held huge sentimental value to our client, who had treasured memories of family times in the old kitchen, and sitting at the hearth with older generations. A series of additions and alterations had been undertaken over the years which negatively impacted the lighting levels and character of the cottage. An extension was required to provide space for modern living standards. The proposal had to successfully knit into the existing enclave of working farm buildings, and connect to the surrounding landscape.

The kitchen-dining space was located within the original cottage to respect the original uses and to protect and continue the client’s memories of family gatherings. The works included the repair and reuse of the original kitchen hearth. Repairing and insulating the old stone and mud walls entailed special care and natural materials in order to maintain their breathability. The roof and floor were replaced in entirety. Double-glazed painted timber sash windows were installed. A glazed link forms the connection between the cottage and the new volume. The extension steps down with the natural contouring of the site to provide airy living spaces opening from the kitchen, a utility and boots zone, and a 2-storey bedroom element to the west.

The new simple vernacular volume beds into the site and creates a natural divide between working dairy farmyard to the north, and domestic gardens to the south. The living area avails of south light and views to the hazelnut orchard, whilst the bedrooms have sweeping views westward over the valley. A modern inset fireplace anchors the new living space, an echo to the original kitchen hearth. The limited palette of robust materials used – render, metal, glass – is highly practical and economic, and responds directly to the materials used in surrounding structures.

At all times, the farm house connects both functionally and visually to the activities of the dairy farm. It successfully interweaves traditional and contemporary design. This project honours farming life and demonstrates the beauty of the local vernacular.
The Cow House is part of a historical farmyard which also includes the Steward’s house. The design approach focused on the retention of the external form and character of the original structure as part of the farmyard complex.

The contemporary interventions were carefully inserted into this historical context. Within its old granite walls, the refurbished Cow House comprises a living/dining room at ground floor level and two bedrooms with en-suite shower rooms at first floor level. A free standing timber structure was inserted to support the first floor and the roof. Stainless steel-framed and double-glazed ‘lanterns’ were placed on the roof to light all internal spaces. The demolished section of the front wall was rebuilt with granite supplied from the nearby Ballynockan quarry.

A new façade of glass and Douglas Fir was set back behind the granite piers, mediating between past abandonment and present occupation. The materials included polished concrete for the ground floor, stair and the cooking island, Douglas Fir for posts, flitch beams, floor joists, floor boards, partition studwork and wall cladding, Birch-faced plywood partition cladding and suspended stairs, laminated timber beams, glass, mild steel, stainless steel and salvaged Blue Bangor slates.
This project involved the repurposing, renovation and extension of an 1890s national school as a family home. Abandoned in 1997, it was due to be demolished having laid decaying since. The school building now accommodates the key living spaces for a young family, with a new extension to the rear intrinsically linked via existing opes in the original stone and brick rear facade.

The extension is clad in vertical black stained larch, grounding it in its setting, whilst distinguishing it from the traditional wet dash of the existing. Whilst distinctively modern the new extension is configured to remain subordinate to the original, the form tempered by a traditional pitched roof.

Internally the large classroom accommodates the main living spaces. The floor level has been raised in part to allow views from the kitchen and dining, with a snug unobtrusively demarked by a change in floor level. A top lit double height volume linking the old building and new extension draws light from above into the main living spaces.

Case Studies

Project: Renovation, Adaptation and Extension of a 1890s National School
Location: Killygarry, Cavan
Practice: Craftstudio Architecture

The adaptive reuse of a landmark national school has retained its key qualities and original setting to create an innovative home. Photography: Richard Hatch
A single-storey cottage had been adapted into a two-storey picturesque gate lodge c.1875 by the Guinness family, as part of their planned landscape now known as St. Anne’s Park. This protected structure, although possibly not intended as a residence at 45 sq.m, has been a family home since the 1950’s. It was modified extensively and extended over the years, resulting in the loss of historic features. In recent times it has become quite a damp and dark house.

The architects’ priority was to identify and repair original fabric, to remove or reverse previous inappropriate interventions and upgrade services to create a comfortable home.

A new extension incorporating a kitchen and shower-room opens onto a courtyard on the footprint of the original yard. A new door opening in the southern wall of the rear living room connects with this courtyard. A remodelled non-original staircase improved circulation in the living spaces and brought natural light into the centre of the plan, whilst allowing for storage and service space underneath. A new terrazzo floor unifies the original gate lodge with the extension.

Underfloor heating and application of lime mortar to solid stone walls eliminated previous dampness. Re-instatement of a natural slate, insulated roof along with upgraded windows ensured a better thermal performance.

Project: Extension and Remodelling of Historic Gate Lodge
Location: St. Anne’s Park, Raheny
Practice: City Architects Division, Dublin City Council

This bijoux parkland lodge was part of a former 19th century estate belonging to the Guinness family. The conservation and extension of this property was undertaken as part of the wider amenity enhancements. Photography: Ros Kavanagh.
This traditional cottage overlooking Carragh Lake in Co. Kerry has been refurbished and extended. The concrete extension was added in a manner that complemented the hues of the surrounding countryside.

The cottage contains an open-plan living, kitchen and dining room, and extended to accommodate a bedroom and a bathroom. The first phase of the extension involved completing a pitched-roof structure containing the bedroom, which emerges from the sloping site.

The gabled form of the bedroom extension mirrors that of the old cottage, but is constructed entirely from concrete to lend it a monolithic feel reminiscent of Ireland’s vernacular stone buildings. The old cottage features a traditional white lime-washed exterior, which the studio chose to contrast by introducing a colour that references hues from the surrounding countryside.

The remote site is very exposed to the wind and rain, which informed the choice of concrete for the outer shell. The concrete was cast in situ using wooden boards that have left the texture of their grain on the surfaces. The boards run vertically, so when rain falls on the building the pattern of the wood is emphasised. The interior of the new extension features cement mixed with lime that is painted white to create a sense of consistency with the existing cottage. The material creates a slightly textured surface with softened edges that evokes the appearance of traditional lime-based render.
The brief for this project was to convert two adjoining buildings – a two-bay carriage house and a small stable – into a comfortable, two-bedroom residence.

The conservation approach taken was to restore as much of the historic fabric as possible and that the required contemporary interventions would be sub-servient to the existing so as to retain and reveal the historic character. Internal features such as the timber and wrought iron screen to the stalls and the structural timber post in the carriage house were retained.

All existing original windows and doors were restored while the new windows and doors were modern, high performance, double-glazed units. The hay loft of the carriage house was converted into bedroom and bathroom accommodation, while the living space is located on the ground floor. The bathrooms, storage, stairs and utility are grouped together; pushed to the blank rear wall, allowing the habitable spaces to be light-filled and address the courtyard.

The kitchen and dining room are located in the single-storey stable, accessible via a new opening inserted between the rooms. A small porch was added in a contemporary language serving as both a formal entrance and a draught lobby to the living space.
The Coach House is situated to the rear of a Victorian Terrace, a protected structure, built in 1865. It is a simply constructed, single-storey building made with random rubble granite walls, cut grey granite cills, yellow brick arches and natural slate.

A shared understanding of the important elements of the building – i.e. the stone walls, roof structure, layout and stable character led to the agreed approach “to do as little as possible and as much as necessary”. The works consisted of the change of use from a stable/storage building to a residential unit and included the construction of a single-storey extension, the reinstatement of lost door openings to the inner courtyard, the repair of facades, floor and roof, and minor modification of the internal layout.

The outcome is an attractive dwelling with striking modern interventions of W20 Steel windows and doors, Carrera marble elements, a double-sided glazed fireplace, profiled pitched ceilings – all within a simple layout that retained the character of the historic arrangement. Internal glazed doors provide vistas and glimpses through the building that maximise the sense of scale.

Key to the beauty and success of the finished building were the best practice conservation works, carried out by experienced craftspeople including a lime-wash finish to exposed brickwork, breathable linings to the walls, traditional lime render finish to the exterior and simple repairs of the original roof structure.

Project: Extension and Remodelling of a Victorian Coach House
Location: Clonskeagh, Dublin 6
Practice: de Blacam and Meagher Architects
Project Architect: Lenzie O’Sullivan
Useful Resources

The RIAI website features useful information and we recommend you visit the following pages:

Work with an Architect: Your Home
riai.ie/work-with-an-architect/work-with-an-architect-your-home

Is Your Home a Protected Structure?
riai.ie/work-with-an-architect/working-with-an-older-building

RIAI Skills Matrix for Conservation Projects

RIAI Standard of Knowledge, Skill and Competence for Conservation Accreditation.
This is designed to provide guidance for RIAI Members applying for RIAI Conservation Accreditation. It is the standard against which applications for RIAI Conservation Accreditation will be assessed.

The Department of Culture, Heritage and the Gaeltacht has published general advice on planning issues relating to architectural heritage, a publication entitled Architectural Heritage Protection Guidelines for Planning Authorities (2011). These statutory guidelines set out guidance for protecting architectural heritage and also the principles of conservation that should apply to any proposed alterations to a historic building. Appendix B (Architectural Heritage Impact Assessments) of that document sets out the type of information that the owner should prepare when lodging a planning application.

The Department of Culture, Heritage and the Gaeltacht publishes the Advice Series booklets, for owners and custodians of historic buildings on how best to repair, maintain and adapt their properties.

The National Monuments Service of the Department of Culture, Heritage and the Gaeltacht can advise on the protection applying to any particular monument or place under the National Monuments Acts by reason of its being entered in the Record of Monuments and Places and should be consulted if there is any doubt as to the status of the site.

A number of readily available resources, such as historical mapping and publications that will assist in establishing background contextual information, are available online such as myplan.ie.

The Reference Section of your Local Library may also have information on the history of your property and local area.

Bringing Back Homes – Manual for Reuse of existing buildings’ published by the Department of Housing, Planning & Local Government
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Case Studies
The Case Study contributions by RIAI Members is kindly acknowledged as is the contribution by the photographers. Every effort has been made to credit copyright holders, but please contact communications@riai.ie for any omissions.

Design
It is the intention that this resource may be continually added to overtime by other practices/practitioners adding to the endeavour as historic house projects are delivered.

Conversion of Stable and Carriage House to a Residence by MVK Architects.
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