03 Re-Use and Conversion

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3.1 Sustainability and the Historic Environment

3.1.0 Times change and buildings need to find new uses. PPS21 places a significant emphasis on the role that our historic building stock can play in meeting the needs of the community and also in achieving sustainable development. Older buildings are not only part of our heritage, but considerable energy is also embodied in the building material used in their construction. The energy requirement for their reuse and refurbishment is considerably less than that for replacement. So the sustainability principle of reduce, reuse, recycle applies to our building stock just as much as it does to every other aspect of resource consumption.

3.1.1 Throughout Northern Ireland, there is considerable potential to convert and re-use former schools, churches, mills, and farm buildings bringing new life to many beautiful and outstanding historic buildings that presently lie empty. This is a key aspect of the sustainability strategy for the countryside - nurturing our built heritage, bringing empty and redundant buildings into use and conserving the best of our traditional buildings. Policy CTY 4 - The Conversion and Reuse of Existing Buildings sets out the criteria for the assessment of these applications.

3.1.2 A good starting point for those interested in rescuing or refurbishing historic buildings is the Built Heritage at Risk Northern Ireland Register (BHARNI). This is available at www.uahs.org.uk.

3.2 Preserve, Maintain and Enhance

3.2.0 The preservation and enhancement of the historic environment is about understanding original aspects of the building and materials used. This is an area where specialist knowledge is important and you may need to enlist the services of a qualified conservation or restoration professional (a chartered architect) to help you develop your ideas. Particularly in relation to listed buildings but also in relation to the wider historic environment, prior to any planning or design work, research should be completed to understand the history of a building and to identify the characteristics of the original fabric and whether these are capable of adaptation.

3.2.1 In design terms, the sympathetic conversion of a suitable building for a variety of alternative uses is considered acceptable where

- reuse or conversion would maintain or enhance the form, character or architectural features, design and setting of the existing building and
- new extensions are sympathetic to the scale, massing and architectural style and finishes of the existing building.

3.2.2 For buildings listed as having special architectural or historic interest, applications will also be assessed against the policy provisions of PPS6.

3.3 Locally Important Buildings

3.3.0 Policy CTY 3 has a clear emphasis in retaining the best of our local buildings therefore there will be circumstances where the Department will require existing dwellings to be retained and sensitively incorporated into new development proposals.

3.3.1 The essential characteristics of vernacular buildings (relating to simplicity of form, proportion, solid and simple construction) are set out in Chapter 2 and Annex 2 to the PPS. Rural vernacular or traditional architecture is defined as the construction of small plain buildings in the countryside (particularly before 1925) where the dominant influence in siting, materials, form and design is the local ‘folk tradition’. Such vernacular buildings will have been typical, i.e., of a common type in any given locality and will lack the individualistic and ‘educated’ design features that characterised international fashions in formal architecture during the same period.
The retention and sympathetic refurbishment of non listed vernacular structures is encouraged, particularly where they make an important contribution to the heritage, appearance or character of the locality.

Aspects of the setting of these buildings, including hedgerows, trees, boundary walls and existing access arrangements are also integral to the contribution these buildings make to the character and appearance of local landscapes. Preserving and maintaining the physical setting of such sites is therefore an important design consideration. There are many good examples which demonstrate how to keep and integrate these building into exciting and innovative new projects.

### Advantages of Re-Use

Reusing existing buildings, particularly where these are of local historic importance is consistent with Policy CTY3 - Replacement Dwellings and central to CTY 4 - Reuse and Conversion. But there are other benefits that extend far beyond the confines of the site:

- Minimizing resource use and construction waste through the re use of existing materials;
- Minimizing visual impact - vernacular buildings ‘fit’ the landscape and are discreet in terms of scale, form and colour;
- Promoting adaptability - sustainability is about being able to adapt to the environment;
- Maintaining locally significant buildings as record of the past;
- Supporting traditional building and conservation skills.
Policy CTY3 and CTY 4 encourages the sympathetic conversion, with adaptation if necessary, of suitable buildings where this would secure upkeep and retention. Specifically for listed buildings but also favourable and where deemed appropriate for vernacular structures, this process will involve conservation and managing change so that their character and special interest is maintained. Applicants should have regard to the following principles of conservation:

1. Minimum intervention: based on respect for the existing fabric

2. Maximum retention of fabric: the least possible loss of the original fabric

3. Reversibility: avoid using process or materials whose future removal would damage the original historic fabric

4. Legibility: replacements or new additions should be distinguishable from the original
**3.6 Sympathetic Conversion**

3.6.1 Sympathetic conversion of a structure requires an understanding of the present condition, including the exterior as well as setting of structure which contributes to overall special interest or character of the site. This understanding will inform future proposals, allowing designs to maintain and enhance form, character, architectural features, and setting of the existing building.

**The Right Skills**

3.6.2 Building conservation requires specialist skills, involving knowledge and experience of historic buildings. For listed buildings and where special features have been identified as part of vernacular structures, applicants are encouraged to seek expert advice to inform proposals. In some cases, their input may extend beyond the preparation of designs and the planning application process to the supervision of work being undertaken. The use of experienced and skilled workers ensures that works are competently and correctly completed. More information on the availability of professional conservation skills in your area can be obtained from the Royal Society of Ulster Architects or the Ulster Architectural Heritage Society’s Traditional Skills Directory (see www.rsua.org.uk).

**Principles of Repair**

3.6.3 The purpose of repair is to work beyond the scope of regular maintenance to remedy defects, decay or damage and return the building to good order without major alteration or restoration. The successful repair depends on the extent to which the original design and materials are understood and appropriate research will be an important part of this process. The aim is to allow the retention of as much of the original as possible and repair of like with like.

**3.7 Change**

3.7.1 Maintaining and enhancing building form, character and architectural features is a central concern of Policy CTY 4. The policy requires a design approach that respects and reinforces the signature characteristics and architectural traditions of the area. This is achieved through restoration and repair of the existing structure and through the blending in of new buildings or extensions. Rather than proposals for new additions that copy the existing historic architectural style, any new element should blend with the existing structures and landscape setting by having regard to the following qualities:

- Context, including landscape setting
- Appropriate siting
- Appropriate height and massing
- Compatible scale
- Good proportion overall and also in its elements and details
- Choice of materials and colours should complement the surrounding context

3.7.3 The extension should be designed to become an integral part of the property both functionally and visually, well proportioned and in balance with the shape of the existing property. The height, width and general size of an extension should be integrated so as not to dominate the character of the existing structure.
Extensions to existing vernacular structures tend to be most successful when they are high quality, and reflect the architectural expression of their own time. Variations in the contemporary design approach include:

- **Innovative contemporary approach**; which can involve new shapes and materials.
- **Traditional contemporary approach**; drawing on traditional shapes, massing, materials and/or siting to influence the design solution. The contemporary expression may come in the shape, proportion and composition of windows and doors or other elements.

‘Reproduction’ or ‘pastiche’ reproduces the architectural styles, language, proportion and detailing of the past – usually from the 18th and 19th centuries. This approach can lack authenticity and is frequently the least successful.
Accommodating modern living space requirements and meeting sustainable design standards are the critical design challenges for traditional buildings. “Traditional Buildings in Ireland – Home Owners Handbook” sets out a number of practical issues for consideration at the outset of the design process.

1. Reach an understanding as to what is significant about your house - use this significance as a fundamental basis for any decisions about alterations or extensions.

2. Understand how the house, or a similar house, has already evolved with the changing needs of past generations. Traditional houses were extended either along their length or upwards, but rarely in width.

3. The proportion of the plan form is crucial to traditional character.

4. Accommodation needs. Modern living makes demands on traditional buildings that can only be met by alteration and adaptation. In general, amendments to the internal layout in response to the demand for services, additional and separated room space may have significant effects on the integrity of a vernacular structure or the quality of the internal spaces themselves considering the traditional narrow plan characteristics. Where possible, changes to structure and layout should be minimised and improvements in amenity accommodated within the new build elements of the project.

The example on the left of Rock Cottage, Castlewellan, Co. Down is taken from Traditional Buildings in Ireland – Home Owners Handbook. It was originally a two room property with a form characteristic of the Mournes. Initial proposals to extend upwards and then in length was considered and rejected in favour of a rear extension. The preliminary proposals for extending the cottage to the rear are shown here. This final design (proposal 3) proved successful in allowing the original dwelling to remain the dominant feature of the site.
Retrofitting Vernacular Buildings

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3.8.0 Retrofitting vernacular buildings to high standards of energy efficiency and sustainable design requires the applicant to deal sensitively with an existing structure. Notwithstanding this requirement, greater energy efficiency gains can come from the refurbishment of an existing building compared to its demolition and replacement.

3.8.1 Not all measures to improve energy efficiency are consistent with preserving and enhancing the character of historic buildings and a balanced approach to accommodating these arrangements is needed. The starting point should be the question of character; what is authentic, unique and significant about the building?

Upgrading thermal efficiency should also focus on areas where heat loss is most pronounced such as roofs, walls, floor, doors and windows. To achieve this, an important distinction between traditional and modern construction should be made—some modern materials are impermeable and can result in trapped moisture and condensation within the building.

3.8.2 Although more flexibility will apply to retrofitting vernacular buildings as compared to the listed structures, specialist advice should be sought when retrofitting historic buildings generally. The broad principle of minimal intervention and preserving and enhancing the character of a building should still apply. Appropriate retrofitting measures can include:

Windows - Improvements to thermal performance whilst retaining and repairing existing windows; Reducing draughts through single glazed sliding sash windows without loss of original character by installing proprietary brush seals and draught stripping. Secondary glazing offers scope for further improvement.

Walls - Solid masonry walls - either brick or stone – are generally built without damp proof courses. These walls absorb moisture from the ground and also laterally from inside and out. They need to breathe to allow this moisture to evaporate out again.

Avoid removal of original plasters especially if this is simply to reveal rubble stone beneath. This dilutes character and removes the first line of defence against ingress of moisture from driving rain.

If external or internal plasters are in need of renewal, repairs should be carried out on a like for like basis, adhering to the original mix of materials.

Roofs - Proposals to improve the thermal performance of the roof space have to be considered in relation to the use and performance of the rest of the building and the need to maintain ventilation levels and avoid moisture problems.

Floors - Generally when original solid floors remain such as stone flags on earth these are best retained. Replacement of these with concrete floors, damp proof membranes and insulation can exacerbate rising damp in solid masonry walls.

Services and Renewable Energy - The insulation of heating and hot water pipes, the use of low energy lighting and high energy efficiency appliances can reduce overall energy demand. The use of low and zero carbon emission energy sources is also attractive in relation to retrofitting historic structures. An example is provided by solar hot water and photovoltaic (PV) installations which are less visually intrusive when sited on the ground or located to the rear of the building.

3.8.4 ‘Historic Buildings & Energy Efficiency’, published by the NIEA provides valuable additional guidance on how to comply with part F of the Northern Ireland Building Regulations in regard to historic buildings.

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