

**THE CONVERSION OF REDUNDANT FARM
STEADINGS TO OTHER USES**

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Cover Photograph: Owen Logan

The photograph shows Murray Bonthron and David Fyfe, two stonemasons from Perthshire discussing work in progress with architect Tom Morton at a farm steading conversion in rural Fife.

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EXECUTIVE SUMMARY

1. Scotland is richly endowed with traditional farmsteads, mostly dating from the 18th and 19th Century. Although this building stock forms an important part of our architectural and agricultural heritage, its worth is often undervalued and unrecognised. The rapidly changing face of agriculture has rendered many farm steadings redundant, resulting in their gradual decline and, in some cases, complete loss. More than ever before, this group of buildings is under threat.

2. Our built environment, in whatever shape or form, represents a significant investment of embodied energy which deserves to be sustained rather than squandered. We must aim to recycle entire buildings in order to exploit this resource. Therefore, if we value the continued existence of the steading form, and its contribution to the wider landscape, a way forward must be found to arrest the decline of such buildings and to protect and perpetuate their future.

3. The key to this future lies with keeping farm steadings 'alive' either by adapting them to different agricultural uses or by promoting their careful conversion to new uses. While this process of change is inevitable if steadings are to survive, enormous care must be exercised to ensure that it does not subvert the character and setting of the very buildings it seeks to preserve.

4. The sensitive conservation and creative conversion of redundant farm steadings to alternative uses should be actively encouraged, rather than passively accepted, and could become an integral part of the wide-ranging scope of Scotland's rural initiatives. Hand-in-hand with this strategy, however, stricter and more effective controls need to be put in place, firstly to afford better statutory protection to the existing building stock and, secondly to ensure that conversion projects are carried out to the highest standards, with adequate safeguards against inappropriate or unsympathetic development.

5. The concept of 'Rural Conservation Areas' first mooted two decades ago, deserves further consideration. This could give farm buildings, together with other countryside features such as dykes and hedges, the same level of statutory protection and access to potential grant aid, as their counterparts receive in the more urban Conservation Areas.

6. Fitting development could be encouraged through the promotion of good design, as laid out in the Scottish Executive's recent consultation document *The Development of a Policy on Architecture for Scotland*. This needs to be taken forward in order to devise a strong rural design policy, with particular reference to existing buildings. Although considerable work has already been done in this field, through the publication of *National Planning Policy Guidelines* (NPPG's) and *Planning Advice Notes* (PAN's), much still needs to be achieved. Lack of knowledge is a serious impediment to promoting good design: some local authorities have little idea of the extent of their farm building stock, or of how to deal with them in architectural terms. In order to improve the quality of rural development, more regional studies are required, and better informed design guidance and technical advice prepared in order to educate and enlighten developers and practitioners alike. Exemplary design should be recognised, publicised and, if appropriate, rewarded so that the principles behind successful conversion work become more widely disseminated.

7. To help achieve all this, more proactive, rigorous and, if necessary, prescriptive planning policies need to be considered, so that greater influence can be brought to bear at the planning stage of the project and stricter qualitative controls exerted during its implementation. While the impetus for producing good design must rightly come from the architectural profession, it falls to the planning authorities to be the arbiters and monitors of such matters.

8. The planning system as it stands, seems unable to deal successfully with this burden of responsibility and appears ill-equipped for some of the tasks it is expected to perform. It seems to find difficulty not only in identifying and responding to poor design, but also in recognising and fostering good design. Planning policies, as well as the detailed legislation under the statutory acts, need to be reviewed and reassessed so that more effective control and enforcement procedures are put in place. As part of this review, serious consideration should be given to introducing the need to obtain detailed 'architectural permission' - perhaps determined by a better qualified architectural panel - as distinct from the more strategic 'planning permission'. In addition, the establishment of a planning 'certification' procedure should be contemplated to ensure that developments are inspected and checked for compliance with the granted permission.

9. In addition to providing encouragement on wider design issues, more specific financial incentives could be considered. Better directed grant aid, with fewer conditions and impositions on their take-up, could be made more widely available for the repair and conversion of steadings. Low interest loans could be offered to developers to facilitate larger more problematic developments, and financial incentives offered to developers/farmer partnerships. Encouragement should also be given to farmers to work with Buildings Preservation Trusts in order to secure the future of their redundant steadings; the establishment of a charitable 'Steadings At Risk Trust' which could take advantage of existing grant aid could be a step in the right direction. Incentives should also be provided to encourage the proper use of traditional materials, with greater emphasis placed on promoting appropriate building skills and techniques. In more general terms, potential developers should be encouraged to consider 'life-cycle costings' as opposed to concentrating simply on the initial capital outlay. In order to promote this approach, particularly with commercial developers, some degree of financial incentive in terms of grant aid or tax relief should be investigated.

10. The imposition of VAT can be a serious impediment to the financial viability of a conversion project. While conversion to residential use now generally attracts some relief, in that VAT is recoverable on completion of the project, the taxation legislation remains a confusing and difficult hindrance to many developers. The system could be reviewed so that the conversion of redundant buildings generally, to whatever use, is zero-rated for VAT at source. This would be a prime incentive for recycling our existing building stock.

11. There are many detailed recommendations which can be given to inform and influence 'best practice' on the conversion of farm steadings to other uses. However one of the overriding principles should always be to adapt the proposed new use of the steading to suit the physical and architectural constraints of the buildings itself, rather than vice-versa. Any conversion works should subscribe to the best principles and practice of conservation and ecological design. They should promote the use of traditional materials and building

techniques, and be 'low-impact' in physical and environmental terms. The works should be of the highest quality in all respects, and be a fitting testament to our commitment to securing the long term survival of redundant steadings. Above all they should seek to enhance and perpetuate the enduring quality of the traditional steading form.

CHAPTER ONE INTRODUCTION

BACKGROUND

1.1 Scotland has a rich stock of traditional farm buildings, mostly dating from the early 19th Century when widespread changes in agricultural practice and animal husbandry resulted in the extensive development and improvement of farm steadings. These simple buildings, while not perhaps strictly vernacular, have since become an essential part of the Scottish landscape, reflecting the diversity of local farming types, building materials and constructional methods.

1.2 The provenance of many of these buildings is difficult to establish. While some of the larger estates and enlightened landowners employed architects or master builders for such work, and have retained their papers for posterity, many resorted instead to the Victorian pattern books such as Stephen & Burn's *Book of Farm Buildings* or J C Loudon's more famous *Encyclopaedia of Cottage Farm and Villa Architecture and Furniture* which illustrated sixteen 'farmeries in various styles' designed for Scottish conditions. Others simply built or extended their buildings in a less considered way, meeting new demands with new structures in a relatively haphazard manner. In many ways this is the charm of the typical farm steading: it is functional and unpretentious *building* rather than refined and composed *architecture*.

1.3 Since the Second World War there has been an inexorable decline in the use and upkeep of older farm buildings, as the mechanisation of the agricultural industry has created new requirements for accommodation and equipment, and the number of agricultural holdings has dramatically reduced. In this time many of our traditional steadings have fallen into disuse and disrepair: some have been so extensively adapted or disfigured by brutal - but practical - alterations that their original form is now barely recognisable; others have been demolished altogether to make way for portal frame cattle sheds and cavernous grain stores which sit awkwardly on the land; and only a very few survive largely intact, properly maintained, and used for the purpose for which they were first built.

1.4 There is no doubt that the traditional farm steading is under greater threat now than it has been at any time in its history. As far back as 1976, in his book *Traditional Farm Architecture in Scotland*, Robert Scott Morton propounded that 'this corpus of buildings is doomed'. Their salvation now surely rests with their sensitive conversion to new uses.

1.5 Many farmers today find that their older buildings have become a liability rather than remaining an asset. As farm incomes continue to decline, the financial pressures on farmers and estate owners to diversify their operations are well known. There is little or no incentive for them to finance the upkeep of superfluous buildings when the opportunity exists to dispose of them, either by way of the bulldozer or to a purchaser willing to take on the burden of responsibility. The buildings are threatened on the one hand by dereliction, and on the other by commercial developers (who are keen to meet the demands of commuters or holiday-home customers) or private purchasers (who often lack the knowledge, skill and experience to realise their aspirations). The threat of dereliction is plain, and needs little explanation, but the threat of inappropriate development is more difficult to evaluate.

1.6 Only a small proportion of the existing stock of traditional farm buildings is afforded any meaningful protection. Some of the more distinguished structures are listed by Historic Scotland as being of special architectural or historic interest, but such are their humble origins that many of the more work-a-day buildings remain unrecognised and vulnerable. This imbalance is currently being redressed by Historic Scotland's re-survey of their existing 'lists' to which many agricultural buildings will be added. Similarly, the 'Scottish Farms Building Survey' presently being undertaken by the Royal Commission on the Ancient and Historical Monuments of Scotland (in association with the National Museums of Scotland) will contribute greatly to our recorded knowledge of such buildings, their groupings, and indeed in some cases, their very whereabouts. Even so, the measure of protection is slight.

1.7 Although the traditional farm steading is a robust and adaptable structure it is rarely a match for the insensitive developer. The pressures are great: financial, time, availability (or lack of) appropriate materials and skills, market expectations and forces, building regulation requirements, planning conditions, profit margins, and so on. All of these pressures, and more, create problems which call for carefully considered solutions to be found. Any change is bound to exert some stress not only on the equilibrium of the building fabric itself, but also on the architectural composition of the steading as a whole and its relationship with the landscape. If old steadings are going to survive, this change is inevitable: it is important therefore that it is properly directed and managed.

1.8 One of the prime aims of building conservation, championed by Sherban Cantacuzino, is to keep buildings 'alive' by making them useful again, by giving them a new purpose if necessary. This is what now has to happen to redundant steadings if we value their survival in the new millennium.

PURPOSE AND SCOPE OF REPORT

1.9 This report was commissioned by the Scottish Executive, Central Research Unit. Its main purpose is to provide guidance on the sensitive and appropriate conversion of redundant farm buildings, illustrating best practice, identifying the key problems and making recommendations for their resolution.

1.10 Although it touches upon various alternative uses, it concentrates on the residential conversion of old steadings, within a geographical area south of the Great Glen. Other related buildings such as farmhouses, worker's cottages, mills and the like, are beyond the scope of this report.

RESEARCH METHODS AND LIMITATIONS

1.11 This report has been produced largely as a result of desk-based research, part of which has involved the compilation of the detailed Bibliography in the Appendix.

1.12 There is a broad collection of published and archival material on the history and development of Scottish farm buildings. Robert Scott Morton's book, *Traditional Farm Architecture in Scotland*, together with Fenton & Walker's *The Rural Architecture of Scotland* are particularly noteworthy. There is also a wealth of material held in the National Monuments Record and the Scottish Record Office. However, there is little in the way of

practical guidance on their conversion to new uses. There are a number of local authority advice notes, and a recent pamphlet prepared by the Society for the Protection of Ancient Buildings in Scotland entitled *Caring for Farm Buildings* which concentrates more on their repair and maintenance than their conversion. More significantly, Historic Scotland have recently published a comprehensive *Guide for Practitioners* entitled *Rural Building of The Lothians - Conservation and Conversion* which has particular relevance to this report and, without doubt, has a wider significance for farm buildings in Scotland as a whole.

1.13 This research has also drawn on Susanna Wade Martin's *Historic Farm Buildings*, and Gillian Darley's *A Future for Farm Buildings* which although prepared more with England and Wales in mind, remain relevant to Scotland also. Other valuable sources have been R W Brunskill's *Traditional Farm Buildings of Britain, and their Conservation* and Ingal Maxwell's *Building Materials of the Scottish Farmstead*.

1.14 This review of published and archival material has been supplemented by our widespread experience as practising Architects working almost exclusively on the conservation, alteration and re-use of old buildings.

STRUCTURE OF THE REPORT

1.15 This report is divided into four main chapters. This chapter has set out the background and scope of the report, and has described its purpose and limitations. The remainder of the report is arranged as follows.

1.16 *Chapter 2* attempts to put the traditional steading form into its rightful historical context. It investigates how farm steadings developed in relation to agricultural improvements, and describes the variety of built forms which were constructed to meet changing farming demands. It also sets out the degree of legislative protection currently given to steadings and describes current trends to increase our knowledge of such buildings through survey and recording work.

1.17 *Chapter 3* makes a case for the sensitive re-use of steading buildings by converting them to new uses, and provides a general overview of how this might best be achieved. It looks at the range of possible uses and the current government policies which will influence their conversion. It also investigates various constraints imposed by the statutory consent procedures and financial limitations, and describes the difficulties of maintaining qualitative control over developments.

1.18 *Chapter 4* sets out more detailed guidance aimed at developers and practitioners, of how conversion work should be handled in architectural and building terms. It attempts to lay down some important principles with regard to alterations and interventions to the built form, and on the use of traditional materials. It also looks at the treatment of individual elements of the buildings and provides recommendations of how change can be accommodated.

1.19 *The Appendix* to this report contains a comprehensive bibliography and suggestions for further reading. While the emphasis of this compilation has been placed on Scottish farmsteads, it also includes references to historical works, as well as to more general publications relating to farm buildings in England and Wales, or Great Britain as a whole. References are also included to relevant publications of wider interest concerning the repair and re-use of existing buildings generally.

CHAPTER TWO BRIEF HISTORY AND DESCRIPTION OF TRADITIONAL FARM STEADINGS

HISTORY

2.1 There were two main historical periods of agricultural prosperity which influenced the development of farm steadings - the period of the Napoleonic Wars, spanning the turn of the 18th Century and the 'High Farming' period from the mid 19th Century onwards. Regional surveys have shown that most of the surviving agricultural building stock dates from 1750-1880s. It is from buildings of this period that most opportunities now arise for conversion to other uses, and it is important to understand their historical context.

Early Buildings

2.2 Rural buildings before the 18th Century were constructed by local communities using ready-to-hand materials, such as rounded stones, earth, unworked timber, thatch, turf and clay. They were built in sheltered locations and visually integrated with the landscape.

2.3 The farmstead of this pre-improvement era was typically a simple single storey linear building with at best two habitable rooms (the 'but and ben') and a garret, with the byre and stable under the same roof. Evidence suggests that these so-called 'longhouses' or 'byre houses' were built throughout Scotland. Unlike the manorial feudal system in England, the early agricultural pattern in Scotland was based on the fermtoun or clachan - a cluster of up to a dozen farming households working their communal land using the run-rig system of cultivation with its infield and outfield division of land. There are now virtually no standing remains of these early farmsteads: they have either disappeared altogether or been subsumed into later developments. Many were simply replaced during the agricultural revolution or the Age of Improvement. Bruce Walker's survey of farm buildings in Grampian (1976 - 77) showed that no buildings survived from before the 1770's, and it seems that the rest of Scotland has fared little better.

18th Century Improvements

2.4 The 1707 Act of Union of the English and Scottish Parliaments heralded a period of rapid change in Scottish agriculture. The Act allowed Landowners to give long leases to their tenants in return for improvements. Grain prices rose during the Napoleonic Wars and landlords hoped to attract 'improving' tenants who would increase output, allowing higher rents to be levied.

2.5 Improvements began in the fertile lowlands from where they slowly spread to more remote highland areas. The land was cleared and drained, the infields and outfields of the fermtouns were enclosed, shelter belts were planted, and the buildings replaced by larger steadings, with separate farmhouses and groups of labourers' cottages. New crops and methods of crop rotation were introduced and, with the industrial production of iron, new farming machinery was invented. For example, the threshing machine replaced threshing by hand, and the iron plough - which required but one man and two horses - took over from the wooden plough which previously occupied up to four men and eight oxen. Communications

were improved by the construction of new roads, bridges and canals. Although the system of tenured strip fields was still in evidence in maps of the lowlands up to the 1750s, by the turn of the century the landscape had been transformed.

2.6 18th Century rural buildings were usually constructed by local tradesmen using both local and imported materials from a palette which now included quarried stone, slate, clay pantiles, sawn timber, wrought iron and lead. This processing and transporting of materials tended to regularise the design of new steadings, and limited the scope for regional variations. The steading layout itself developed from the simple linear form into a three or four sided courtyard with a two storey farmhouse. Sometimes the earlier buildings were incorporated into the new extended layout, but more often they were cleared away.

19th Century Improvements

2.7 When the Napoleonic Wars ended in 1815, grain prices fell and imports once more became available. As a result, agricultural improvements slowed down for a time, although the richer estates continued to build. By the late 1830s the economy began to recover: the population was expanding and the demand for grain and livestock began to rise. The coming of the railways opened up access to markets in highly populated areas and encouraged the transport of materials for building. New scientific farming methods were put into practice by progressive landowners and farmers, who introduced artificial fertilisers and animal feed which in turn intensified production in cereal and livestock farming. This new approach was promoted by the Royal Agricultural Society, founded in 1838, who adopted the motto *Practice with Science*. The second half of the 19th Century became known as the period of 'High Farming'.

2.8 New buildings were required to farm effectively and many earlier buildings were once again either replaced or extended. A new steading layout evolved around multiple yards, which were sometimes covered. Large farms were established in the richer areas of the Lothians, Berwickshire, and parts of Roxburgh, Fife, Perthshire, Angus, Aberdeenshire and Moray. The most advanced farming was in East Lothian where the land was fertile and the soil well-drained. A farm buildings survey carried out in 1968 for East Lothian County Council (as it was then called) showed that many fine examples of farm buildings survived from this period. The larger estates generally consisted of a 'Home Farm' or 'Mains' with a small number of satellite tenanted farms. Some of the richer estates developed their own distinctive building style. The formal courtyard form with arched gateways and balanced facades, found in many of the grand Home Farms, was derived from the Roman model, revived in renaissance Italy and later exported. The enthusiasm for improvement was such that several pattern books and pamphlets on the design of farm buildings in the formal style became available from the early 19th Century onwards. Regional character, while diluted, was still expressed through the use of materials and the building form, influenced by the type of farming. Holdings were generally smaller in dairy and hill farming areas while the crofts of the West Highlands and Islands were not touched by the improvements until much later. Small vernacular buildings were still being constructed into the 19th Century, mainly in the north west, to suit a different economy, culture and scale of farming.

2.9 Industrialisation had an impact on the development and supply of building materials during this period. The variety now available included quarried ashlar stone, West Highland slate, cement, imported timber, local and imported brick, plate glass, cast iron, corrugated

iron, lead, wrought iron and steel - all of which helped to create a more sophisticated pattern of building.

2.10 By the second half of the 19th Century the rural population was in decline and the availability of labour became more difficult, encouraging wider mechanisation. Farm buildings were adapted to suit as this prosperity continued into the 1870s, when grain prices again collapsed and new building declined once more.

20th Century Developments

2.11 On the whole, the 20th Century has not been kind to traditional farm buildings. By the time the agricultural economy improved in the early 20th Century, the construction industry had become influenced by national trends, which adopted non-traditional materials and building methods, and signalled the demise of any regional character.

2.12 Throughout the century it became progressively cheaper, quicker and easier to replace existing and unsuitable buildings with bland modern sheds. This drive for efficiency epitomised the agricultural industry throughout this period. Horses were replaced by tractors, leaving stables and horse gangs standing empty. Mechanical means of mucking-out replaced the hand fork, leaving byres too cramped to be used. Combine harvesters, introduced to the Lothians in the 1920s, took over from the threshing machine, leaving many barns without a purpose and, together with other powered field machinery, created their own demands for shelter and maintenance, rendering old cart sheds and stores redundant.

2.13 In the post war period, there was an increasing reliance on artificial fertilisers, herbicides and pesticides which boosted yields and prompted the construction of cavernous stores and silos. The management of livestock also intensified, resulting in the construction of modern purpose-built animal sheds. As a backdrop to all this farms became less diverse in their activities, leading to the need for ever more specialised buildings. The decline of horticulture and soft fruit production in Scotland, together with the introduction of 'set aside' resulting from the over production of cereals, and the widespread amalgamation of farms have all contributed to the jeopardy that many traditional farmsteads are now facing.

2.14 As we enter a new century, the agricultural industry is facing many challenges, and has taken steps to diversify its activities. As part of this approach, many redundant farm buildings have been converted to new uses, with varying degrees of success. As yet more such buildings become available, it is important that they are dealt with sensitively. To this end, an understanding of the steading form and its constituent buildings is essential.

DEVELOPMENT OF THE STEADING FORM

2.15 Robert J Naismith in *Buildings of the Scottish Countryside*, provides a very clear illustration of the development of the farmstead pattern through simple diagrams. A similar analysis is given in R W Brunskill's *Traditional Farm Buildings of Britain*. The Naismith diagrams while not intended to be in strict chronological order, still serve to show how farmsteads evolved from the simple 'longhouse' shown as Type A through a variety of open and closed, single and double courtyard patterns, culminating in the type of large roofed-in structure illustrated as Type J. All of these patterns incorporate a number of different

buildings, each serving a different purpose, which are described in more detail below. In some of the examples the farmhouse is integrated into the body of the steading; in others it is detached. In the later plans, the more refined farmhouse may be located at some distance from working steading. As Naismith points out, many steadings, particularly those in the richer agricultural areas, may also be elaborated with horse-gang mills, separate arcaded cart sheds and a variety of other ancillary buildings.

The Ideal Plan

2.16 Writers in the late 18th Century commented that farm steadings were too often a random collection of buildings and advocated a compact and efficient layout forming a parallelogram around a protected yard. In his *Encyclopaedia of Cottage, Farm and Villa Architecture and Furniture*, first published in 1833, J C Loudon set out the general principles and illustrated model designs for the arrangement of farm buildings which included eleven farms built in Scotland together with another five designed for Scottish conditions but never built. He classified buildings by function, i.e. storehouses for food and produce, buildings for lodging and feeding livestock, buildings for preparing food and dairy tasks, stores for portable farm machinery and implements, and lodgings for farm workers.

1.

2.17 Loudon recognised that the type of farming and the size of the farm would be the primary factors in determining the extent of a steading and the building types within it. However, he also offered the following guidelines, 'to which practical men may recur for application to peculiar localities.' The buildings, he posited, were to be arranged around a courtyard with the tallest building, usually the barn, 'placed on that side from which the coldest winds blow.' As well as sheltering the yard, this was considered favourable for drying corn and cooling the horses working the threshing machine. The barn should be adjacent to the livestock houses to minimise the work in distributing feed and litter. The cattle sheds should be closest with the stables beyond. The latter should face east to take advantage of the morning light for grooming the horses. The cart sheds, which were often open at the side, should not lead on to a yard with large animals and should preferably face north to protect the contents from the extremes of the weather. Loudon further recommended that all the barn doors and cattle yards should be visible from the farmhouse parlour.

2.18 In all but the smallest holdings, the farmhouse itself consisted of three parts: apartments for the family and servants, farm stores, and offices. Unmarried female servants lodged in the attic or back kitchen of the house while the men were more often accommodated over the stables or byres, often in poorly lit and under-ventilated conditions, or in a separate bothy. To avoid direct sunlight, the ideal position for the pantry and dairy was on the north side of the house. As previously mentioned, various locations for the farmhouse in relation to the steading are illustrated in R J Naismith's diagram.

2.19 By the mid-19th Century, when the reduced labour force and increased wages encouraged farmers to improve efficiency, many of the wealthier farms put these ideas into practice. Although formal layouts began to appear on large estates in the 18th Century, their number increased dramatically in the early 19th Century, promoted by Loudon and others whose publications and pattern books were directed to the landed gentry. The landowners became increasingly interested, not only in the ideal plan but also in the style of farm buildings. They introduced 'architecture' into the Home Farm by building showpiece steadings, in keeping with the architectural aspirations of the great house. On smaller farms

it was seldom viable to build on such a scale but many farmers improved the layout of the steading by infilling and extending existing buildings to create a more modest version of the ideal plan.

Regional Variations

2.20 Although the evolution of the steading form was a national trend, which to some extent diluted regional characteristics, it is important nevertheless to recognise that the rate of change in agricultural methods and building improvements varied across the country. This was primarily dictated by the type of farming and the economy of the region.

2.21 In *An Agricultural Atlas of Scotland* (1976), J T Coppock provides a comprehensive analysis of farming types and land use. He identifies eight predominant types of farm: Intensive; Dairy; Hill Sheep; Cropping; Upland; Rearing with Intensive Livestock; Arable Rearing and Feeding; and Rearing with Arable; and describes their regional distribution throughout Scotland. Each will have its own subtle operational and regional characteristics, which will not only have dictated the types of building erected for its use in the past, but will also influence those required for its efficient running in the future.

2.22 More simply, in *Traditional Farm Architecture in Scotland*, Robert Scott Morton subdivided the country into four broad areas in order to analyse the farm buildings - the arable farms of the east, the dairy country of the south west, and the mixed agricultural lands of the Borders and the north east. The demands of different types of farming can be highlighted through comparison.

2.23 Arable farms, for instance, had a greater variety of buildings than those required for dairy or hill sheep farming. The steading may have contained some or all of the following, depending on the size and the main activity of the farm: one or more barn; a threshing mill with horse gang or later a steam engine house; a first floor granary; arcaded cartshed; stores; tables with hayloft; bothy; and byres or covered courts for cattle, if kept. The farmhouse may have been detached in larger farms.

2.24 Dairy farms, on the other hand, required minimal storage for crops and fewer cart sheds than arable farms. Only larger farms built a threshing mill, sometimes powered by a water wheel. Horse mills were rare in dairy farms (although examples do exist in Dumfriesshire). The farmhouse was usually located at the centre of a symmetrical 'U' plan steading, adjacent to the cow houses and milking parlour. The double courtyard, or 'E' shape plan, was developed for larger farms.

COMMON BUILDING TYPES AND THEIR CHARACTERISTICS

2.25 Although the traditional farm steading is generally perceived as a single building, it is in fact a collection of individual buildings, strung together under a common roof in a variety of ways. Each building was designed for a specific purpose and each has its own peculiarities and idiosyncratic features. It is important to understand these attributes and characteristics so that they can be respected in any proposal for conversion to an alternative use. Apart from the farmhouse itself the most common types of building can be summarised as follows.

The Barn

2.26 J C Loudon compared the barn with the farmhouse kitchen, as it was the place where most of the food consumed in other parts of the farm was prepared and stored. Its floor area was dependent on the size and type of the farm. An arable farm obviously produced more crops than a grazing or dairy farm of the same size. It was the practice in Scotland to store the crops outside in ricks, bringing them into the barn to be threshed. Where there was no provision for threshing, the barn was used to prepare the feed for livestock, and to store hay and straw.

2.27 The main external characteristics of the barn are its relatively high walls often containing tall double doors to allow laden carts to unload on the threshing floor. Air slits in the walls and/or timber louvred vents in the roof provide ventilation. The doors sometimes stopped short of the ground and a 'lift', in the form of timber boards, was fitted to allow the doors to clear the manure in the yard, keeping the threshing floor clean. The introduction of threshing machinery modified the layout and appearance of the barn and led to the construction of associated buildings to accommodate power sources.

The Horse Gang and Power Buildings

2.28 Horse, water, wind and steam power were all used in the 19th Century, mainly to drive farm machinery. In each case the power source was housed in a separate building divorced from the machinery itself. It is an interesting statistic that by 1845 in East Lothian alone, there were 386 farms with threshing machines of which 269 were powered by horses, 80 by steam engines, 30 by waterwheels and 7 by windmills.

2.29 The horse gang or mill was attached to the barn, on the side furthest from the yard. It might be circular or polygonal, open or partly enclosed, with a conical or faceted roof depending on the region. Within the horse gang, a team of two or four horses walked in a circle, rotating a central post which by a system of gearing transmitted power to the threshing machine. Where a nearby stream could be diverted to form a lade, a water wheel might be attached to the barn. Steam engine houses can be identified by their prominent chimneys.

The Cart Shed

2.30 The most common form of cart shed is open along one side to allow easy access for the storage of carts and farm machinery. On the smallest farms there may only be two bays, whereas the largest may have needed up to a dozen. The openings were usually formed by stone or brick piers with arched heads. Less commonly the openings were delineated by timber or cast-iron columns supporting flat lintels. The bays were spaced to suit the carts, generally eight to ten feet and were occasionally fitted with doors. The cart shed usually faced away from the cattle yard, and was often built as a separate building outwith the main body of the steading. They sometimes carried a loft in the upper floor, used as a granary or for storing hay.

The Granary

2.31 This was often located over the cartsheds and can be identified by its regularly spaced small windows and, in some cases, an external stair. This location was considered favourable because the air circulated freely below. The granary is also found over the threshing area of the barn and, in smaller steadings, sometimes extended the full length of the range.

The Stable

2.32 The importance of comfort, light and ventilation was recognised earlier in the construction of stables than in the lodgings for other livestock. Not only were proper windows installed but they were often provided with shutters or adjustable louvres. Some stables had louvred vents on the roof and their floors were often cobbled. J C Loudon advocated that all the openings should be on one side, or in the roof, in order to avoid cross draughts. He recommended that the internal space should be 16 feet wide and 9 feet tall with no loft over, unless the floor was well constructed and the ceiling plastered, to avoid debris falling on the horses. However, as many surviving stables do indeed have lofts it seems that this advice was not always heeded. The more prestigious stables of the larger estates were built as separate yards which also contained coach houses, harness and tack rooms and grooms' quarters. The stables themselves were sometimes richly finished with strapped lath and plaster walls and ceilings, cornicing and stone flag or herringbone brick floors. The main internal characteristic of stable buildings are the trevisses, forming the stalls, which may be constructed of timber or cast-iron with sturdy newels. Hay hecks, or simple feeding troughs were usually provided.

The Byre, Dairy and Cattle Sheds

2.33 Cattle were kept for a variety of reasons including manure production, meat or dairy produce. Many surviving buildings date from the 19th Century when there was an increase in livestock farming. The byre, or cowhouse, opened off the main yard for ease of disposing manure. Accommodation for cattle had a lower specification than that of the stables. Early buildings may have had ventilation slits, or open pipe vents built into the wall. These were later replaced by windows with shutters or louvres. The ceiling was generally quite low and the cows were often tethered two to a stall. The trevisses were not as elaborate as those found in the stables. These were made of timber or stone with a feeding trough at the end. The floor was generally cobbled with a drainage channel at the end of the stalls.

2.34 The Dairy was usually attached to the farmhouse. J C Loudon described it as a large, clean room with a stone floor, and a lofty plastered ceiling. Milk was converted to butter and cheese and the produce was stored on racks in an adjacent room. Some dairies were elaborately tiled or built of glazed faience brickwork. Others were simply limewashed on a regular basis.

2.35 Feeding sheds were used for loose cattle in a yard or field. They were open-fronted with the roof supported on columns or piers, with a feeding trough along the opposite wall and no internal divisions.

The Entrance Pend and Courtyard

2.36 Although perhaps not strictly a building as such, a common characteristic of many steadings is the entrance pend which leads to a sheltered courtyard. At its simplest the pend may be nothing more than a gap between two buildings - often on the north side - although in the more elaborate Home Farms the entrance may be marked by a grand archway in some cases surmounted by a clock tower, belfry, spire or doocot.

2.37 The courtyard itself is usually open, affording ready access to the perimeter ranges of building. Occasionally the yard may contain a bull pen, a sheep fold or ancillary buildings. In later steadings on livestock farms they were sometimes designed as a fully covered cattle court. In more recent years many courtyards have been infilled later sheds.

Other Buildings

2.38 Numerous other lesser buildings might be found incorporated in or around the traditional steading. These include bothies, turnip houses, forges, clock towers, belfries, doocots, piggeries, poultry houses, implement sheds, labourer's cottages, and kennels. All of these buildings, and more, provide ample opportunity for sensitive conversion and re-use.

RECORDING AND PROTECTION

2.39 Compared to many other old or historic buildings, relatively little is known about farm steadings in Scotland, and they are afforded scant protection. Although these shortcomings are currently being redressed, there can be no room for complacency and it is imperative that adequate protection is put in place. To enable this, and to encourage a better understanding of the steading form, it is important to be able to identify such buildings, to record their layouts and structural characteristics and, in some cases, to establish their very whereabouts.

Recording

2.40 Before the 19th Century, very little information was recorded or kept about farm buildings. Old estate papers, held at the Scottish Record Office, as well as other archival sources such as the National Monuments Record of Scotland, the National Museums of Scotland and the Scottish Agricultural College, may provide some information. Old maps may also throw up helpful clues, but these were rarely very accurate until the 1st edition Ordnance Survey maps were produced in the mid 19th Century. Victorian pattern books and other contemporary publications, such as trade journals and periodicals provide a useful record of some buildings. For example, Loudon's *Encyclopaedia of Cottage, Farm and Villa Architecture and Furniture* in its various editions since 1833, and Stephens and Burns *Book of Farm Buildings* of 1861, both contain examples of Scottish steadings. A number of architects who specialised in farm buildings, such as John Cunningham and William Gray also published volumes of drawings. Gray's *Treatise on Rural Architecture* of 1832 is a useful reference in this respect.

2.41 It has only been in recent times, however, that a start has been made on the systematic recording and protection of old farm buildings. In 1968 a pioneering study of farms was carried out by East Lothian County Council. Similar studies have since been undertaken by other local authorities. In 1976, Robert Scott Morton's book *Traditional Farm Architecture in Scotland* illustrated the great diversity of Scottish agricultural buildings, a theme picked up in Fenton & Walker's *The Rural Architecture of Scotland*, of 1981, which contained a sample survey of Grampian farms. The work of the Scottish Vernacular Buildings Working Group, and the Historic Farm Building Group, disseminated through its publications and journals, is also significant. Ingval Maxwell's *Building Materials of the Scottish Farmstead* is particularly noteworthy in this respect.

2.42 Although a number of other individual surveys have been undertaken in various areas over the years, most notably again by Ingval Maxwell in Angus, Midlothian and Hopetoun; by Stuart Eydman and Nils White in West Lothian; and by Don Stevenson of the Scottish Agricultural College, as part of the North West Fife Rural Initiative, it was not until 1993 that the Royal Commission on the Ancient and Historic Monuments of Scotland, in association with the National Museums of Scotland, made a proposal to embark on a co-ordinated national survey of farm buildings. In order to make this exercise manageable the country was divided into 15 study areas with a representative sample of steadings selected from each for detailed assessment and recording. This survey is now well advanced, with its findings being released in published instalments which provide descriptive lists of the chosen steadings, together with catalogues of survey records and the sources of historical documentation. To date three such instalments have been completed - Orkney, Sutherland and East Central Scotland.

2.43 Historic Scotland have also carried out significant work recently as part of their ongoing survey of buildings which are regarded as sufficiently worthy to be 'listed' as of special architectural or historic interest. As a result of this exercise, a large number of farm buildings have been incorporated in the new lists - about 1,800 to date, representing around 4% of the total stock of listed buildings. The aims and implications of the listing process are described in more detail in Historic Scotland's pamphlet entitled *Farm Architecture - The Listing of Farm Buildings*.

2.44 In addition, Historic Scotland have recently published a *Guide for Practitioners on Rural Buildings of the Lothians* which although principally directed at the sensitive conservation and conversion of farm buildings in the Lothian area, will undoubtedly have a wider significance, both in recognising the types and characteristics of farm buildings and in understanding the principles and methods used to secure their continued existence.

Protection

2.45 Despite the burgeoning interest in their historical value and future wellbeing, farm steadings remain a vulnerable and relatively unprotected category of building. The Historic Scotland listing process described above is the only meaningful protection afforded to such buildings, but only a small proportion will qualify as being sufficiently meritorious to gain 'listed' status. Those fortunate enough to do so are given statutory protection against unauthorised works: any alterations, extensions or demolitions will require Listed Building Consent from the local authority. The listing process may also help to secure the long term

survival of the buildings by making grant aid available and triggering VAT relief in certain circumstances.

2.46 Occasionally, very old farm buildings may be listed by Historic Scotland as 'Scheduled Ancient Monuments', but such would be their historical and archaeological importance that it is highly unlikely that consent would ever be granted for their restoration or re-use. Other more recent steadings attached to settlements may fall within local Conservation Areas and thereby be afforded a measure of modest protection. The wider countryside areas designated as National Scenic Areas (NSA), Environmentally Sensitive Areas (ESA) or Areas of Great Landscape Value (AGLV) offer no specific additional protection to the buildings which lie within them, although any proposals for their conversion might be looked at more critically by planning authorities. The impending designation of two National Parks may ultimately offer greater protection to redundant steadings.

2.47 In the majority of cases, however, redundant or vacant steadings are unlisted and remain vulnerable, especially as 'permitted development rights' remove normal planning controls from their adaptation or demolition as part of agricultural activities. The buildings most at risk are those embedded in working farms. Redundant steadings on abandoned farms will often find a restoring purchaser, or developer, whereas those which remain on active farms can simply become a hindrance to efficiency, and be cleared away to make room for new purpose-built sheds and stores.

CHAPTER THREE THE RE-USE OF REDUNDANT STEADINGS

THE CASE FOR CONSERVATION AND CONVERSION

3.1 Since the Second World War there have probably been more far reaching changes in the agricultural industry than in all the preceding generations put together. During this time the number of farms in Scotland has been reduced by a third, to something in the region of 32,000 holdings, employing a greatly reduced workforce. During this period the general trend has been to create larger farms through farm amalgamation, relying ever more on mechanisation to increase output at reduced costs, often with the help of significant subsidies. Arable farms can now manage with one employee for every 500 acres, with modern machines able to harvest 70 acres in a day. Since the 1970s the European Union Common Agricultural Policy has also had a strong influence on the type of farming carried out in Scotland.

3.2 The results of these changes and trends can be clearly detected not only on the landscape of the countryside but also on the buildings of the farmstead itself. The continuing trend of amalgamating farms gives rise to whole sets of redundant buildings, as the centre of farming operations is transferred elsewhere. Furthermore, the need to house new and larger machinery, or to provide the additional storage, drying and packing plant needed to process vastly increased yields, for instance, has resulted in many buildings either falling into disuse or being unsympathetically adapted. A 1956 publication by W G Benoy entitled *Farm Buildings - Conversions and Improvements* was directed not at their re-use for dwellings or other purposes, but at their adaptation for continuing agricultural use. Although its intentions were honourable, recognising that most post war farms contained 'a backbone of old buildings, too good to pull down but not suitable for their new purposes', it could be argued that the book contained some fairly drastic and insensitive guidance. The influence of such guidance can be seen in buildings modernised during the late 1950s and 1960s. Even so, this was no doubt preferable to their wholesale demolition to make way for new portal frame sheds and silos. Twenty-five years later in 1981, in Fenton and Walker's *The Rural Architecture of Scotland* a sample survey of farm buildings in Grampian found that almost every steading had been altered or gutted in some way, which raised concern over the decline of farm buildings in Scotland as a whole. This provided a graphic illustration of the vulnerability of such buildings which in the majority of cases are exempt from normal planning controls and thereby prone to what could be viewed as inappropriate development.

3.3 There has, however, been an increasing awareness over the last few decades of the importance of old farm buildings. Although this concern is relatively new, it reflects the growing interest in conservation and environmental matters in the widest sense, whether related to the built heritage, the quality of food production, or more weightier global issues. Since the oil crisis of the early 1970s, the concept of sustainable development has gained credence and momentum. The notion of reusing old buildings, and if necessary of adapting them to new uses, suddenly became a viable and credible proposition. The specialism of building conservation flourished, its principles developed and refined as it became a respected discipline.

3.4 During this process it was recognised that one of the basic aims of conservation was to keep buildings alive; that redundant buildings in particular represented a huge resource which did not deserve to be wasted; that the energy embodied in their structures should be put

to good use rather than squandered by demolition. The very fact that the work involved in their repair and re-use was not only labour-intensive but also cheaper in energy terms than building anew added substance to the conservation argument. It has been widely agreed that the recycling of entire buildings through conversion to new uses offers considerable environmental benefit.

3.5 Unfortunately, the initial zeal to save old buildings often led to misguided and poorly handled conversions. In 1981, for instance in the Scottish Civic Trust's report on *New uses for Older Buildings in Scotland* prepared for the Scottish Development Department, it was regretfully stated that 'no outstanding examples of domestic farm building conversion can be instanced. Sometimes good intentions have been nullified by lack of respect for the forthright functional tradition of the original building'. Since that time, our understanding of such buildings and the ways in which they should be treated has moved on considerably. There is also a more realistic recognition of the threats to their future wellbeing, one which includes inappropriate development.

3.6 The work of such organisations as the Historic Farm Buildings Group, the Society for the Protection of Ancient Buildings, the Architectural Heritage Society for Scotland, the Scottish Civic Trust, the Scottish Vernacular Buildings Working Group, the Association for the Protection of Rural Scotland, Historic Scotland and SAVE Britain's Heritage have been crucial in raising the general awareness of the importance of old farm buildings. For example, in 1991 the Historic Farm Buildings Group hosted a conference in Edinburgh entitled 'A Future for Scotland's Historic Farm Buildings' which was attended by well over 100 delegates.

3.7 The Government too has provided a measure of encouragement with their farm and rural diversification programmes which recognised that alternative sources of income had to be sought to compensate for declining farm profits. Furthermore, the powerful conservation lobby has steadfastly fought to maintain the traditional farming landscape, not only in terms of fields and boundaries, but also the buildings themselves, which provide a vital contribution to the countryside. But retaining farm buildings is not just about aesthetics: it is also about recognising their historic value. This is an important distinction which must not be forgotten - even the most unappealing buildings may have great historic significance. In England, past surveys of historic farm buildings were carried out by English Heritage, the Society for the Protection of Ancient Buildings and the National Trust. North of the border, recent work by Historic Scotland, who have added many steadings to their stock of Listed Buildings, and the Royal Commission on the Ancient and Historic Monuments in Scotland who are undertaking a comprehensive survey of farm buildings throughout Scotland, have helped enormously to identify and record historically important steadings.

3.8 Despite all this good work, many farm steadings today are redundant and the fabric of the buildings is being gradually eroded. The Scottish Civic Trust's *Buildings at Risk* register contains an increasing number of such buildings, and it could be argued that unless concerted action is taken soon it can only be a matter of time before they are lost forever. As the needs of commercial farm businesses change, redundant farm steadings need to be made useful again; and in order to survive they need to be 'kept alive'. This could be achieved through developing alternative uses for the buildings. They are an important resource, not just in building, aesthetic and historical terms, but also in the way they can provide new opportunities for sensitive rural development.

ALTERNATIVE AND PREFERRED USES

3.9 Redundant steadings offer a wide range of opportunities for conversion to other uses, but not all of them will sit easily with current planning policy, or indeed the limitations of the buildings themselves. Some new uses are more 'disruptive' than others and careful consideration should be given to the appropriateness of any given proposal.

3.10 There is widespread agreement, however, that wherever possible old farm buildings should be retained for agricultural use, even if they have to be adapted to serve a different purpose from that for which they were originally built. This principle was identified in the influential 1980 Montagu Report prepared for the British Tourist Authority *Britain's Historic Buildings: A Policy for their Future Use*, and is still supported today. There are of course genuine difficulties with this approach: many of the buildings have been rendered redundant in the first place because they were either surplus to the requirements of the farm, or simply unable to adapt to modern agricultural demands. Nevertheless, as machinery becomes more versatile and manoeuvrable, and farm diversification proposals are encouraged, this assumption deserves to be challenged. Given the right backing, abandoned buildings could be adapted and returned to agricultural use as 'low-level' ancillary accommodation. Similarly they could form the basis of a new smallholding or hobby farm, or perhaps a farm shop.

3.11 Failing this, it has been argued that a compatible new use should be sought, which limits disruption to the character and fabric of the buildings. Conversion into light industrial or commercial use, such as workshops, craft studios, open plan offices, garden centres, riding schools, or restaurants, can often be achieved with minimal interference.

3.12 There is little doubt that conversion into residential use remains the most popular option. However, it is also the most disruptive, in terms both of the buildings themselves and of their immediate landscape. There is a general and well-founded scepticism about the appropriateness of residential conversions, where the desire to save the buildings has to be balanced against the perceived dangers of the spread of new housing in the countryside. Nevertheless, before such proposals are dismissed other factors should be taken into account, such as the repopulation of the countryside, the increasing trend to work from home to reduce transport pressures, the provision of affordable rural housing and the regeneration of the rural economy. With careful design and proper control, the conversion to residential use can be a very successful means to securing the continued existence of steading buildings.

3.13 Residential steading conversions can take many forms, ranging from the creation of a single house for a private restorer through to the subdivision into multiple dwellings by a commercial developer. Housing may be provided for the owner's own use, or for sale, rent or holiday letting and it may be purpose-built or entirely speculative. While there is a distinct trend towards high-cost conversions for the so-called executive market, the potential for affordable local housing to suit lower income families has yet to be exploited. Perhaps the most apposite conversion into residential use would be to provide habitable accommodation for agricultural workers.

3.14 In all this, the fate of the farmhouse, so often associated with steadings, must not be forgotten. With residential conversion, the integration of the farmhouse into the scheme should be relatively straightforward. With other developments, an alternative use may have to be found for the farmhouse, as well as for the steading itself.

CURRENT POLICY

Overview

3.15 Current Scottish Executive guidance requires planning authorities to encourage the re-use of existing rural buildings. Where this involves their conversion for residential purposes, this policy has to be carefully balanced against others which seek to control the creation of new housing in the countryside.

3.16 The Scottish Office's discussion paper *Towards a Development Strategy for Rural Scotland (1997)* expands on its earlier consultation paper *Rural Framework (1992)* in setting out a broad range of policies aimed at those living and working in rural areas. It promotes the concept of sustainable rural development in general, and the re-use of redundant buildings in the countryside in particular.

3.17 A follow up consultation document *Investing in Quality (1998)* aims to develop policies on the design of housing in the countryside. Although the thrust of the report is directed at new-build development, it acknowledges the importance of converting existing buildings, particularly steadings, for residential purposes and argues the case for preparing national information on the quantity and quality of such work, and its affect on the rural environment and society. It also questions the effectiveness of planning controls and suggests preparing an overview of the scale and potential for converting existing buildings. The Scottish Executive Rural Affairs Department continues to support policies which encourage farm diversification, including that of finding new uses for their redundant buildings.

3.18 Published through the agency of Historic Scotland, the green paper *Protecting the Built Heritage (1996)* sets out a wide range of issues relating to heritage legislation and policies. More recently, the Scottish Executive's *The Development of a Policy on Architecture for Scotland (1999)* promotes the concept of ecologically sound design in a way which has a benign impact on the natural world, and recognises the importance of adapting and extending our existing building stock in achieving this aim.

National Planning Policies

3.19 The Scottish Executive publishes *National Planning Policy Guidelines* (NPPG's) which address planning issues of national importance, and provides a framework for regional and local policy making and development control. These guidelines are supported by Planning Advice Notes (PAN's) which provide more detailed guidance for local authorities, professionals and developers. The key aim quoted in all relevant policy documents is to foster sustainable development of rural communities by considering the long term consequences of development. In line with this aim, the Government encourages the sensitive conversion and re-use of redundant steadings.

3.20 The key documents are as follows:

- NPPG 3: Land for Housing
- NPPG 15: Rural Development
- NPPG 18: Planning and the Historic Environment

- PAN 36: Siting and Design of New Housing in the Countryside
PAN 39: Farm and Forestry Buildings
PAN 44: Fitting New Housing Development into the Landscape

NPPG3 Land for New Housing

3.21 In most cases, the conversion of a farm steading into residential use effectively constitutes the development of new housing in the countryside, and is therefore subject to many of the policies outlined in NPPG 3. NPPG 3 emphasises the role the planning system can play in providing housing land while at the same time protecting and enhancing the environment. While current policy focuses on new housing within existing settlements, it also recognises the growing need to provide appropriate development in the countryside, and the way in which the re-use of existing buildings can contribute to that need.

3.22 The guidelines direct planning authorities to consider the potential for the conversion of existing buildings into dwellings - it makes particular reference to traditional farm buildings, suggesting that those 'which no longer meet their original purpose can be converted and re-used to provide homes with modern standards of amenity and fittings'. The guidance goes on to suggest that:

Even where planning authorities operate a policy which seeks to resist isolated new housing development, they should look sympathetically at proposals for the sensitive re-use, conversion or rehabilitation of traditional buildings which are structurally sound and largely intact, can be accessed safely and readily provided with water, drainage and other services. The addition of limited new housing to converted or rehabilitated buildings may in appropriate circumstances lead to the creation of a cohesive and satisfactory group of new houses in the countryside. But redevelopment should not automatically extend to the replacement of wholly derelict or totally dilapidated buildings, or where the proposed housing is of a different scale, or character to what had existed previously.

3.23 The guidance also draws attention to the need for good design and the sensitive use of materials, and directs that due consideration is given to matters of environmental quality and energy conservation. It also states that any development should aim to minimise the loss of prime agricultural land, and protect the natural and built heritage. It concludes by giving specific recommendations to planning authorities on the formulation of structure and local plan policies, instructing them to 'provide for the conversion and re-use of existing buildings, including redundant farm buildings'.

NPPG 15 Rural Development

3.24 NPPG 15 is intended to complement the Government's discussion paper *Towards a Development Strategy for Rural Scotland*, and sets out how land use planning can assist the rural areas of Scotland to achieve sustainable development. Among other matters it aims to promote agricultural diversification, and to identify the potential for new and affordable housing in the countryside. It warns against the threat of suburbanisation, and recognises that the re-use of redundant buildings is an important planning issue which faces most rural authorities.

3.25 The guidance also states that

An important issue for economic development in rural areas is achieving a quality of development on the ground which respects the integrity of the built and natural environment ... It is essential, therefore, that development in rural areas is designed to a high standard so contributing to environmental quality.

3.26 The policy guidelines include specific advice to local authorities to consider the conversion potential of existing buildings in their approach to rural development. These guidelines state that:

The re-use and conversion of existing rural buildings has an important role in meeting the needs of rural areas for housing and business development and increasingly for tourism, sport and recreation facilities. Conversions can help reduce demand for new premises in the countryside, contribute to the quality of development in rural areas and stimulate the local economy, thus achieving sustainable development objectives. The conversion and re-use of redundant rural buildings, particularly for business should be encouraged provided that conversion does not lead to dispersal on such a scale as to undermine the vitality of existing settlements. Care should be taken to ensure that the form, scale and general design of conversions are in keeping with their surroundings and complement the wider settlement policies for the area.

3.27 NPPG 15 states the importance of local authorities identifying existing rural buildings which have potential for development, and makes some tentative suggestions for their possible adaptation. It describes the possible restructuring of farms to provide low density, low impact housing and 'lowland crofting', and reinforces current policies on agricultural diversification schemes which generate rural employment opportunities. It specifically states the Government's enthusiasm for establishing farm-based retail enterprises, such as farm shops, and recognises the implications they may have on the re-use of existing buildings.

3.28 The guidance confirms the Government's commitment to safeguard Scotland's built heritage by encouraging its preservation, conservation and enhancement. It acknowledges that this can be best achieved through the appropriate and productive use of its building stock. It also confirms the importance of promoting tourism, retailing and recreational opportunities in rural areas, and specifically recognises that the re-use of farm buildings can help to provide sports and recreation facilities. It suggests that in order to promote rural development, planning authorities should devise local plans which 'identify opportunities for re-use/conversion of agricultural buildings and set out the criteria against which applications for residential and business re-use will be assessed'. It also directs that local plans should 'set out policies encouraging farm diversification and promote opportunities for innovative forms of new business development'.

3.29 NPPG 15 concludes that a successful and sustainable rural policy will need to accommodate many forms of new development, which, among other aims, should attempt to re-use redundant buildings wherever possible.

NPPG 18 Planning and the Historic Environment

3.30 NPPG 18 sets out the Government's planning policies in relation to the historic environment, and recognises its fundamental contribution to Scotland's heritage. While the thrust of the guidance is directed at historic listed buildings it acknowledges that many locally significant buildings fall outwith the protective legislative framework. It stresses that such buildings can be an important local resource, and often merit protection on that basis.

3.31 The guidance reinforces the principle that:

recycling existing buildings will minimise the consumption of materials and energy used in demolition and redevelopment ... Avoiding the neglect and loss of built fabric and promoting the efficient use and re-use of land and buildings within the historic environment are two ways in which the planning system can contribute in a practical way towards sustainable development.

It goes on to suggest that 'new economic uses should be found for historic buildings where they can no longer reasonably be expected to serve their original purpose over the long term'.

3.32 The guidance stresses the need for the careful and sensitive treatment of historic buildings if they are adapted to new purposes, and suggests that the best viable use should be identified which is compatible with the fabric, setting and character of the building. It defines the 'best viable use' as not necessarily the most profitable use, but one that is viable over the long term with minimum impact on the special architectural and historic interest of the building.

3.33 The guidance calls for planning authorities to specify the criteria that will be applied to proposals for the alteration or re-use of listed buildings and to ensure that any such proposals are based on detailed knowledge of traditional building materials and techniques. It also demands that any development is of a high quality in terms of construction and design.

3.34 NPPG 18 highlights the role that new development and the re-use of buildings can play in securing the long term future of the historic environment. Despite this, it acknowledges that many historic buildings are at risk from neglect and that their loss would constitute an unnecessary waste of environmental and material sources. To help prevent this, it touches upon the role of planning enforcement powers, Building Preservation Trusts, and the need to consider 'enabling development' in certain circumstances.

PAN 36 Siting and Design of New Housing in the Countryside

3.35 PAN 36 gives advice on how planning authorities can enable new housing in the countryside to be developed in harmony with the landscape, and is particularly relevant where steadings are to be converted into residential use. While it generally counsels against isolated rural development it recognises that there is a growing demand for such accommodation and in certain cases there will be justification for adopting a more permissive policy.

3.36 The Advice Note makes particular mention about the dangers of the suburbanisation of the countryside by the use of inappropriate designs and materials in housing schemes. It

suggests that as part of the process of allowing such development, planning authorities and developers should first consider the potential for converting and rehabilitating existing buildings. It goes on to cite examples of run down or dilapidated traditional buildings which have been successfully converted and restored to provide modern homes. It states that ‘planning authorities should continue to look sympathetically at proposals for the sensitive re-use, conversion or rehabilitation of traditional buildings’ and reiterates the conditions given in NPPG 3 described above. It is interesting to note the PAN 36 also suggests that the design of new housing groups could take its inspiration from the traditional steading form.

3.37 The Advice Note recommends that planning authorities produce and disseminate relevant design guidance and goes on to give quite detailed advice itself on such matters as roof forms, fenestration, materials, chimneys, dormers, porches, outbuildings, boundary treatments and access roads which although primarily directed at newly built housing, also bears some relevance to conversion work.

PAN 39 Farm and Forestry Buildings

3.38 PAN 39 sets out to give general advice on the siting and design of farm and forestry buildings. While the bulk of the advice is directed at new design, it suggests the opportunities for re-using existing buildings should not be overlooked.

3.39 It states that

In certain circumstances it may be possible to rehabilitate and convert existing buildings to accommodate modern processes and new activities. This may be less expensive than erecting a new building and can offer the additional advantages of retaining a mature setting and conserving traditional materials and finishes. However care is required to ensure that additions or alterations are in sympathy with existing buildings.

3.40 Despite this advice, it goes on to recognise that in many cases a purpose-built new building may be the only practical way of meeting new demands, in which case proper consideration should be given to the future of redundant farm buildings. It acknowledges the importance of such buildings and advocates their retention and re-use for other purposes.

3.41 The Advice Note also suggests that where new building is located next to an existing development the opportunity may present itself to review the whole site and carry out improvements to existing buildings.

PAN 44 Fitting New Housing Development into the Landscape

3.42 PAN 44 follows up on advice given in PAN 36, described above. It is mainly directed at larger residential development on the periphery of built-up areas, and provides advice on how they can relate sensitively to the landscape.

3.43 The Advice Note restates many of the general principles concerning good design, the use of appropriate materials and the need to foster sustainable development. It also encourages the consideration of redevelopment opportunities.

Local Planning Policies

3.44 Local authorities prepare development plans, in line with national policy, which focus on the specific conditions and needs of an area. These consist of structure plans which set out a strategic policy framework for land use, built environment, infrastructure and community services; and local plans which apply these policies to local conditions and provide site specific detail for future development. Together, these plans are intended to control development strategy for 10-15 years. There may be opportunities to present a case for an amendment to a local plan, for example to change the designated use of a site from agricultural to residential, dependent on the site conditions and the specific circumstances of the proposed development. Some local authorities offer more detailed guidance for applicants through small pamphlet design guides and policy advice notes.

3.45 The structure plans for lowland regions have recognised that the demand for housing in rural areas may outweigh the availability of suitable sites, and therefore encourage development towards 'preferred building groups' or by the conversion of existing buildings to residential use. Where possible, these will be within or adjacent to existing settlements which will be identified in the local plan for each area. The planning authority will consider the suitability of a group to absorb new development. Some existing building groups may be considered complete and therefore not suited to extension.

3.46 A 'preferred building group' will usually be three or more buildings, suitable for conversion to residential use, enclosed by natural or man-made boundaries. Each application for conversion and extension will be judged on whether the proposed development reflects the scale and character of the existing buildings and whether the whole can be contained within perceived boundaries. Planning applications which affect undeveloped productive fields or mature trees would not be favoured; those reliant on the construction of new access roads may be considered too intrusive; and sites within 400m of a working farm or rural industry will not be permitted. Where there is potential conflict between a proposed development and a working farm, the local authority will support the existing agricultural use. In some circumstances, the parties may wish to enter into a voluntary agreement with the local authority, under Section 75 of the Town & Country Planning Act (Scotland) 1997, to restrict or regulate the use of land to allow a development to go ahead. The siting of new housing groups will be resisted if the local authority considers that there are adequate opportunities for development within existing groups. Single houses will only be permitted where they are adjacent to an existing group or where it can be proved that there is a specific local requirement.

3.47 Specific advice on the conversion of farm buildings may be found in the design guides prepared by many local authorities. Where possible, their priority will be to retain farm steadings for their original function. In this respect, unless it is listed, no formal permission is required for altering or extending an existing farm building provided it remains in agricultural use. For other cases, when a change-of-use by conversion is proposed, the local authority will judge the proposal against the policies set out in its development plan, which should broadly ascribe to the recommendations laid down in the NPPG's and PAN's described above. Such development will normally have to demonstrate that:

- there will be no adverse effect on the viability of a farming unit, or conflict with the operating of a working farm.
- there is no longer an agricultural use for the buildings.

- the steadings are structurally sound, and capable of being converted without an inappropriate degree of rebuilding or alteration to its external appearance which would detract from its architectural character and integrity.
- the building makes a positive contribution to the landscape, and has no adverse impact on countryside, amenity or nature conservation.
- satisfactory access arrangements and other road requirements can be met.
- satisfactory public or private water supply, drainage facilities, and other services can be provided.
- there will be no adverse impact on ancient monuments, historic gardens or archaeological sites.
- the siting and design of the proposal and the use of materials meet the approval of the planning authority.

3.48 Where buildings are deemed suitable for conversion, preference would be given to a use which retained the character of the original spaces, often lost by sub-division. Examples might be workshops or studio spaces, buildings for tourism or open plan offices and conference rooms. A sensitive conversion to housing is the most demanding change-of-use as it requires the designer and the client to find a creative solution which makes positive use of the open-plan characteristics of many steadings. Perhaps the most onerous challenge is the division of a large steading into multiple housing units as this is likely to necessitate alteration to the external form and setting of the buildings.

3.49 In general, proposals for conversion will be considered if they respect the local environment and landscape setting, consider the impact on the long view of the buildings from across the countryside and select materials suited to the regional style. Careful choice of materials is equally important for the external works and landscapes which create the new setting for the buildings.

3.50 The detailed design criteria to which most local authorities subscribe, will include the following:

- new detailing must respect the architectural characteristics of the existing buildings.
- existing openings and external building features should be re-used wherever possible. New openings should be limited and respect the balance of solid wall to opening area.
- alterations to the roof, including raising the ridge or eaves, and the introduction of dormers should be avoided if possible. Traditional rooflights may be permitted, subject to number and size.
- preference will be given to accommodating change on non-public elevations.
- open courtyards should be retained as a common space and their traditional finishes preserved.
- extensions or new-build elements should not detract from the architectural integrity of the steading.
- proposed garaging, garden stores and other ancillary accommodation should wherever possible be allocated within the existing building.
- landscape design and specification must be appropriate to the countryside setting. Individual garden areas will only be permitted if they are appropriately detailed. New planting of indigenous species will be encouraged.

- boundary treatments, car parking, access and services should be well integrated with the proposal as a whole. Their cumulative impact in a scheme of multiple units can fundamentally alter the setting of the building group if not given detailed consideration at the planning stage.

3.51 Many local authorities have adopted a policy whereby normal permitted development rights for later extensions, garages, garden sheds and conservatories are removed as a condition of planning consent. This means that formal permission will need to be sought from the local authority for any such later work, which in other circumstances would be exempt from planning controls. This is intended to protect the rural setting of the building group, especially from the demands made by division into multiple ownership, and to resist the 'suburbanisation' of the countryside.

CONSENTS

3.52 The conversion of a redundant farm steading to any other use, other than for an alternative agricultural purpose, will require a number of statutory approvals, some of which may at times conflict with each other. The main approvals are required from the planning and building control departments of the local authority, but other consents may also need to be sought in certain circumstances. It is advisable to consult with the local authority at the earliest opportunity.

Planning Permission

3.53 Planning permission will normally be required for a steading conversion, as the external appearance will undoubtedly be altered. Many planning authorities have developed their own policies and guidance for such work, and their advice should be sought. Some of the more general policies are described in the previous section.

3.54 As well as requiring permission for the physical alterations to the building, consent will also normally be needed for 'change-of-use'. There are eleven classes of building use recognised for planning purposes, and changing from one to another usually requires formal approval. Again some of the criteria used for determining the validity of a change-of-use application are set out in the previous section.

3.55 Normally, submissions for full planning permission and change-of-use are considered as a single application. Outline planning permission for a steading development is not usually relevant, but most authorities will consider a stand-alone application for change-of-use in principle, in advance of a more comprehensive submission for full planning permission being made. This may provide the applicant with some comfort that the project is acceptable, before commissioning the preparation of a more detailed scheme.

3.56 In determining applications, the planning authority may consult with other local authority departments to assess the suitability of the project, for instance with regard to road access or drainage. In certain circumstances - if the building is listed or falls within a Conservation Area for example - further opinions may be sought from Historic Scotland and amenity societies.

3.57 Permission, if granted, may carry with it certain conditions which must be complied with. These may be related to the use of materials, or wider design matters, or may demand that further details be subject to the approval of the planning authority at a later date. In larger steading redevelopments it is increasingly common for 'permitted development rights' to be removed, thereby restricting future piecemeal extensions or alterations. Again, this is outlined in the previous section. In some cases, where restrictions cannot be imposed through normal planning conditions, the planning authority may propose entering into a legally binding agreement with the applicant, in order to achieve its aims. This may, for example, prohibit development on adjacent land or, where enabling development is proposed, insist on a sequence of work which safeguards the future of the steading buildings.

Building Control Approval

3.58 In addition to planning permission, approval in the form of a building warrant will also be required from the building control department of the local authority, in order to ensure that the proposed conversion work complies with current building regulations and technical standards.

3.59 This 'change-of-use' also requires approval under building law, which uses different criteria than those for planning law described above. Building law defines seven major categories of use. When a steading is converted to a new use, it will in effect become subject to building regulations for the first time and will normally be required to meet current standards. These generally relate to more technical constructional issues, such as structural stability, drainage, safety, insulation, ventilation and daylighting. Conversion to residential use is not especially onerous in terms of obtaining a building warrant, whereas the creation of offices, for example, may be more demanding, attracting a greater raft of building regulations.

3.60 In some instances, the demands of the building regulations may be at variance with planning conditions, particularly where they affect the external appearance of the building. The provision of adequate daylighting and ventilation, for example, may require additional fenestration which despoils the plain appearance of unbroken masonry so characteristic of the steading form. The introduction of insulation to roofs and walls can have a dramatic affect upon interiors, especially where original roof structures are exposed. Furthermore, the imposition of damp courses, membranes, vapour barriers, and the like can fundamentally alter the way the buildings behave, and occasionally create more problems than they solve.

3.61 It is usually possible to enter into negotiation with the building control department if such conflict occurs. Local authorities will generally adopt a common sense approach to such difficulties and may regard some elements of the building as being 'deemed to comply'. The local authority also has the discretionary power to relax or dispense with certain regulations if it can be demonstrated that the existing building can not be reasonably adapted to suit.

Listed Building Consent

3.62 If a building is listed by Historic Scotland as being of special architectural or historic interest, any proposed works which are perceived by the planning authority as affecting or

altering its character will be required to obtain Listed Building Consent. The application should be made to the local authority, usually in tandem with the submission for planning permission. The authority will generally notify and consult with Historic Scotland as well as national and local amenity societies before determining the application. In some cases an application may be called in by Historic Scotland for a direct decision.

Other Consents

3.63 A number of other consents may be required, depending on the nature, scale and location of the proposed development. These include:

- Scottish Environmental Protection Agency Consent - if work, for example, involves the installation of a new septic tank and outfall, or any changes to water courses.
- Road Construction Consent - if the work involves the construction of new public roads, or the upgrading of existing ones.
- Feudal Superior's Consent - if the title deeds specify that consent should be sought from the Feudal Superior for any works.
- Conservation Area Consent - if the buildings fall within a Conservation Area and involve full or part demolition.
- Scheduled Monument Consent - if the works involve any repair or alteration to a Scheduled Monument, including the disturbance of adjacent ground.

CONTROLS AND QUALITY

3.64 Despite the wealth of good-intentioned guidance resulting from planning policies, there has been widespread concern, expressed in *Investing in Quality* and other government documents, about the spread of mediocrity in rural development. The conversion and rehabilitation of farm steadings presents an opportunity to reverse this trend, and to begin improving the quality of the built environment in the countryside. For this to be achieved the works must be carried out to high standards - both in terms of design and construction - and be properly controlled. It must rightly fall to the architectural profession to take the initiative in promoting the understanding of good design. The Scottish Executive, through its recent consultation document *The Development of a Policy on Architecture for Scotland* has advanced the discussion on this issue, and brought it into the public domain. However, it reverts to the planning authorities to be the main arbiter of good design, and it rests largely with the planning system to try to ensure that high standards are maintained. These are responsibilities for which planning authorities may require additional support to carry out effectively.

Statutory Controls

3.65 Although the latest guidelines are critical of past failures and seek to discourage this type of development, their future success will depend on the ability of the planning authorities to enforce policy in order to achieve quality in design and to ensure compliance with the consents once granted.

3.66 In England, the problem of 'barn blight' - the insensitive conversion of agricultural buildings - has resulted in calls for urgent new planning guidance and procedures to be put in hand. To a lesser, but equally important, extent the same could be said of Scotland.

3.67 While, in principle, a fair measure of control can be exercised over steading conversions through the normal planning permission procedure, it is only if the building is listed that more demanding standards can be readily applied. Evidently, the majority of farm buildings fall outwith such strictures and the control over insensitive development is weakened. A case for establishing 'Rural Conservation Areas' has been put forward in the past, within which unlisted farmsteads would be offered the same level of protection and control as buildings in the more urban Conservation Areas.

3.68 The advice given in government policy directed to planning authorities is to concentrate on the main elements of a design and not become involved in points of detail. While this policy is not intended to prevent the emergence of radical or contemporary solutions it is often interpreted as such by the planning authorities and may ultimately result in poor or inappropriate design in its place.

3.69 It seems unreasonable to expect planning officers to sit in judgement on architectural matters just as it would seem equally unfair to prevail on architects to decide on strategic planning issues. It is salutary to note that the majority of planning applications are prepared, commented on, judged and, though the committee system, ultimately authorised by individuals outwith the architectural profession. Given this anomaly, the fostering of good quality design is a difficult challenge. Too often, innovative design is rejected in favour of safe mediocrity or pastiche. By the same token the inadequacies of poor design are simply not recognised, or cannot be properly resolved.

3.70 In addition to 'planning permission' which should deal with wider more strategic matters, there is, perhaps, a case for obtaining 'architectural permission' which should be determined by an architectural panel and concentrate on design and detailing issues. It is often said that 'the devil is in the detail', and more rather than less attention to the minutiae of the application is required in order to exert adequate control on possible variations at a later date.

3.71 Conditions are often attached to the granting of planning permission, in an attempt to control the quality of the proposed development. Although some measure of strict legal control can be imposed by the use of Section 75 agreements, most conditions are insufficiently forceful or specific, and may be open to abuse. Even the standard condition that work should start within five years of the approval being granted can be interpreted as the digging of a foundation trench and no more, allowing the applicant to complete the approved works at leisure - in ten, fifteen, or even fifty years time. In such circumstances it is difficult to imagine how any realistic planning control can be maintained on a development which in theory could be built decades after it was approved, by which time policies and standards may have changed significantly. It would be sensible, therefore, to introduce a time limit not by which the works should start, but by which they should be substantially complete.

3.72 Arguably the greatest challenge facing planning authorities is ensuring compliance with the consents that have been granted. Once the approvals have been issued, the planning authority has little or no future involvement with the project. It is a general failing in the

design and procurement process of all building work that planning permission is sought at a relatively early stage in the development of a project. It is inevitable that further design decisions and amendments will be made as the scheme matures, over which the planning authority will have very little control in practice.

3.73 In some cases, once permission has been obtained by the original applicant, the responsibility for completing the detailed design may transfer to another party, perhaps a developer, who may employ a different architect or consultant. This lack of 'following through' can contribute to a decline in the quality of the work, and lead to potential conflict with the planning authorities. It has to be said, however, that although the planning authorities can often take a firm and positive stance at planning permission stage, their response to changes at a later stage has been argued by some to be ineffectual, allowing all manner of so-called 'non-material changes' to slip through the planning net.

3.74 Without encumbering the planning system further, a more effective method needs to be devised to monitor, control and rectify unauthorised deviations to permitted schemes. Among other things, this may involve reconsidering the timing of detailed applications, imposing more rigorous conditions, and providing more opportunities for formal re-evaluations, inspection and ultimately enforcement action if required.

3.75 While other statutory controls, such as compliance with Building Warrant conditions, are checked by regular inspections and ultimately 'signed off' by the issue of a Completion Certificate, no such procedure exists for planning applications. Unless an equivalent procedure is introduced to planning law, it is unrealistic to expect planning authorities to exert any meaningful control over building projects for which they have granted permission. In the meantime, the planning authority will have to continue to rely on chance reportings of deviations from approved schemes.

3.76 If material changes to the approved scheme are identified, by whatever means, the planning authority may decide to initiate enforcement procedures to ensure compliance with the terms of the planning permission. However, it must be recognised that the resources available to planning authorities are inadequate to pursue most enforcement proceedings. The right of appeal available to applicants who have transgressed the planning conditions will often deter a local authority from taking appropriate action.

3.77 Once the development has been completed, the planning authority can, in theory, exercise some control over future changes by insisting that the 'permitted development rights' are withdrawn as a condition of planning permission, as previously described. It is important that such controls are maintained, especially in multiple developments, over possible future changes such as window replacements, external decoration, extensions and conservatories, fencing and boundary treatments and individual adornments to dwellings.

Other Controls

3.78 Apart from the strictures of the Planning and Building Acts, there are no other significant statutory controls on the conversion of steadings. There may be conditions attached to grant awards, and these can be useful in helping to promote and maintain high quality work.

3.79 Perhaps the most important control of all should be self-imposed by developers themselves, be they individual restorers, or large commercial companies. It is imperative that they become more aware of the importance of good design and gain an understanding of how this can be applied to a conversion project. To begin with developers should choose professional advisers who can demonstrate the required skills for dealing with old buildings, and who understand the need for sensitive design and the informed use of materials.

3.80 In any project there will invariably be financial constraints, but the natural inclination to counter such problems by reducing the quality or specification of materials and workmanship should be resisted, sometimes quite literally at all costs. Other more imaginative ways of making the financial equation work should be sought.

3.81 The choice of procurement method, building contractor and construction programme will all have an influence on costs and quality. It is a common adage in the construction industry that there is an unrequited relationship between the three main concerns of all building work - time, cost and quality - in that only two can be mutually improved or achieved, but usually at the expense of the third. In other words, it may be feasible to complete the project more quickly and at a lower cost than first anticipated, but always at the expense of quality. Conversely it should be possible to maintain quality within reasonable costs, provided sufficient time is allocated for the project. Bearing this in mind, the 'traditional' procurement approach remains the best suited for work to traditional buildings in which a properly worked out design is put out to competitive tender, and constructed to a realistic programme.

3.82 Building operations are something of an inexact science, particularly when works to old buildings are concerned. Sufficient time should be allowed for the construction work, and adequate supervision provided to ensure that the quality of work is upheld. As with professional advisers, the choice of contractor is often instrumental in the success of the project. There are many companies, particularly in rural areas, who retain the traditional trades and are well disposed for such conversion work. There is a tendency for some contractors, whenever they encounter a problem, to want to demolish rather than repair, simply because it is quicker, easier and cheaper. There are others, more experienced in working on old buildings, who take an immense pride in conserving and restoring the building fabric and, in doing so, bringing back life to the building as a whole.

FINANCIAL CONSIDERATIONS

3.83 For many farmers, redundant farm steadings represent a liability rather than an asset. In extreme cases the buildings may have fallen into such a state of dereliction that they attract the attention of the local authority who may choose to serve a Dangerous Buildings Notice under Section 13 of the Building (Scotland) Act requiring the buildings to be made safe or, ultimately demolished.

3.84 It is not surprising, therefore, that many steadings could be regarded as having negative value. They may be relatively inaccessible, lacking adequate services, and in such disrepair that they are beyond economic salvation. As such they can be unmarketable as an asset and, unless purchased or restored by an enthusiast regardless of financial propriety, will slip further into dereliction.

3.85 It is difficult, if not impossible, to give typical costings for a steading conversion. So much depends on its location, its remoteness from roads and services, its physical condition and, of course, its proposed end use. The one constant in the financial equation should be the quality of the work - be it in repair, alteration or new-build - which should not be compromised to provide a quick-fix financial solution.

3.86 It is generally accepted that the repair and conversion of a steading will usually be no cheaper - and probably more expensive - than building new accommodation of an equivalent floor area. This will even apply to a well-kept steading: despite the fact that its walls and roofs may be relatively sound, the cost of general upgrading, alterations, site works and dealing with unforeseen problems will often outweigh those of building anew on an empty site. This imbalance is compounded by the addition of professional fees and VAT, both of which tend to be more onerous for existing buildings than new ones.

3.87 It may prove difficult, therefore, to justify the conversion in pure financial terms. For the individual restorer and commercial developer alike, the proposed development costs may exceed the market value of the finished building. In common parlance, the project will not 'stack up', thereby creating a pressure to 'dumb down'. In such a situation there is too often a tendency to know the cost of everything, but the value of nothing, and there is a fine balance to be struck between maintaining quality and providing value-for-money.

3.88 In this respect it is important to look beyond the short term cost of the project at the wider 'life-cycle' costing spread over the projected life of the building, and in some cases beyond. Such costings should take into account operating costs, for energy, labour and maintenance, and other 'cost-in-use' expenditure, such as the future replacement of materials or installations. These future financial predictions should influence the design process. However, while this approach may find favour with the private restorer who may have a more enlightened and longer-term interest in the project, it is difficult to persuade commercial developers to take the same view, unless there is some financial incentive available.

3.89 In many cases, therefore, it is likely that some financial help, or an alternative mechanism for development is required in order to facilitate the conversion of steadings to other use. This may take many forms - from the availability of loans and grants to VAT relief, from setting up special partnerships for development to the establishment of Building Preservation Trusts. These are discussed in brief below.

Grants and Loans

3.90 There are a number of sources for potential grant aid which are identified in the following section. However, none are specifically directed at the conversion of redundant steadings to new uses. Very often the awarding of grants from any one agency, relies on commitments from others, and occasionally the conditions imposed on an award discourage its uptake. In any event the expected level of grant aid is usually very low and will rarely contribute significantly to any funding shortfall.

3.91 For commercial developers, one of the problems of converting larger steadings into, say, multiple residential use is the difficulty of long term funding and cash flow. Unlike a modern housing estate where individual houses can be sold as work proceeds, dwellings in a more confined steading development can be difficult to market in this piecemeal way.

Regardless of the obvious site and safety issues, potential buyers cannot always visualise how the finished development will turn out, thereby hindering marketing and suppressing sales potential. In this situation the availability of short-term interest free bridging loans would encourage more ambitious projects.

Value Added Tax

3.92 VAT legislation is wide ranging and complex. Its application to building work is particularly complicated and specialist advice should be sought on the VAT implications for individual projects.

3.93 In general terms, however, the conversion of a redundant steading to residential use (but not for other uses) should qualify for VAT relief provided the building has not served as a residence since 1973. Some difficulty may occur if a part of the building provided habitable accommodation - such as a bothy or groom's quarters - in which case further advice might be needed to clarify the exact tax position. Where a steading conversion does qualify for tax relief, different rules apply for commercial developers and individual owners. In both cases, however, unlike building a new house which is zero-rated from the outset, for conversion work the VAT has to be paid and ultimately reclaimed upon completion. For a large project this can mean that a substantial amount of finance is tied up in VAT payments over a considerable period: a sum which fails to attract interest and which could more usefully be put to financing the project in other ways.

3.94 The cost of alterations to steadings which are listed, and which have been granted Listed Building Consent, are zero-rated for VAT provided they are used for residential, religious or charitable use. However, repair works which can be substantial on such projects, are standard-rated for VAT. Despite the challenges presented by this legislation - in terms of it working against the best principles of conservation and sustainability - it does at least offer some financial encouragement to developers, although not necessarily in the best directed way. If the conversion is for domestic use, the VAT on repairs can usually be recovered under the terms of the legislation described in the preceding paragraph.

3.95 Where permission has been obtained to rebuild a ruinous steading as a house, the entire project may be zero-rated for VAT from the outset provided no more than one wall and the foundations are incorporated into the new work. In such a case the temptation to demolish and rebuild sound building fabric in order to obtain the benefit of VAT relief is obvious. It is for this reason that local authorities will often impose planning conditions which safeguard the retention of the existing buildings.

3.96 Conversion of steadings for other uses, such as for office or commercial purposes, are subject to different VAT rules. For business use, in particular, the VAT may be able to be reclaimed. Specialist professional advice on such matters is recommended.

Partnerships

3.97 In some circumstances, it may be possible to set up special partnership arrangements in order to realise a development project. These partnerships may involve funding bodies

such as Local Enterprise Companies or 'facilitators' like Building Preservation Trusts, or simply a collection of like-minded individuals.

3.98 Direct partnerships between farmers and developers can be a successful and mutually beneficial enterprise, where in return for a share of the profit, the farmer effectively donates the property and land to the developer. This removes the purchase price from the initial financial equation and helps to make the project viable.

3.99 The role of Building Preservation Trusts should also be investigated, particularly if the purpose of converting a redundant steading is not profit-led. Although there are a number of such Trusts which might facilitate conversion projects, there is a case perhaps for establishing a specific trust for redundant steadings, along the lines of The Scottish Redundant Churches Trust or The Buildings at Risk Trust. The setting up of a 'Steadings at Risk Trust' would be a good start. Such a Trust would be able to draw on a wide range of potential grant aid, working in partnership with farmers to bring back life to those steadings which are unable to attract the more conventional developer.

SUMMARY OF SOURCES OF POSSIBLE FINANCIAL AID

3.100 There are a number of grant-awarding schemes which may be available for the conversion of redundant steadings. The availability of grants may change annually and from region to region. For updated information the relevant funding body should be contacted. Reference should also be made to the current edition of the booklet *Sources of Financial Help for Scotland's Historic Buildings*, published by the Scottish Civic Trust, which contains details on many of the grants described overleaf.

European Union Structural Funds

3.101 Since 1994 funds have been available from the European Union for the following objectives:

- Objective 1: for regions with less than 75% European Union average income (e.g. Highlands and Islands). Farmers and crofters may benefit through business diversification and marketing.
- Objective 2: for declining industrial areas in west central and east central Scotland.
- Objective 5a: for adapting structures in agriculture and forestry.
- Objective 5b: for promoting economic development in specific rural areas: Dumfries and Galloway, North and West Grampian, The Borders and rural Stirling/Upland Tayside. Funds may for example be directed towards the provision of tourism, leisure and recreation, and environmental protection.

3.102 Under Objectives 1 and 5b funds have been used to convert existing farms steadings for tourist accommodation and long term residential use. In early 1999, it was agreed that funding would be made available from the Rural Diversification Programme to convert redundant farm steadings into homes for letting. However, the structural fund comprises a rolling programme and, at the time of writing, this is under review.

3.103 From 2000 onwards new proposals will form part of the EC Agenda 2000 in which a range of new programmes will ensure greater integration with local community agenda 2000 programmes. Funding will vary geographically and according to local requirements. Eligibility criteria are likely to be more rigorous, and objectives 2 and 5b are to be replaced with a new document which will focus to a greater extent on employment in declining rural and urban areas. It seems likely that funding of farm steading conversions will be reduced under the new programme despite the commonly held view that such conversions have a very positive effect on the surrounding local rural environment.

Scottish Executive Rural Affairs Department

3.104 Grants available for the alteration or improvement of vernacular rural buildings through the then Scottish Executive Rural Affairs Department have been co-funded by the European Union; under the *Rural Diversification Programme*, (Objective 5b), and the *Highlands and Islands Agricultural Business Improvement Scheme*, (Objective 1). As described above, applications for these schemes closed at the end of October 1999 and the programmes ceased to operate at the end of the year. Both schemes were well subscribed during their six year term and it is likely that European Union funding will continue to be available in some form. The Scottish Executive Environment and Rural Affairs Department is currently in consultation with local authorities to determine a new funding strategy across the country, which will address the Highlands & Islands and Lowland Scotland. Other sources of funding for this type of development are set out below.

3.105 *The Scottish Countryside Premium Scheme* is available to farmers and crofters outwith designated Environmentally Sensitive Areas and provides assistance for land management and retaining features of importance to Scottish heritage, including exterior works to vernacular buildings to make them wind and water tight. The SCPS and ESA designations have now been replaced with the *Rural Stewardship Scheme* which enables farmers to apply for funding to conserve historic sites, some elements of designed landscapes, and for example, in some circumstances features such as dykes and doocots.

3.106 *The Scottish Rural Partnership Fund* is comprised of three separate grant schemes, available through the Scottish Executive Rural Affairs Department, aimed at the voluntary sector in rural areas.

Scottish Executive Development Department

3.107 *The Empty Homes Initiative* was set up to encourage the redevelopment of property for housing, which has been empty for more than 6 months. Buildings may be in public or private ownership. Local authorities may bid for funding for projects in their area which are innovative, represent value for money and which bring funding from other sources.

Scottish Homes

3.108 The role of Scottish Homes is to enable the provision of new or improved housing for rent, owner occupation and shared ownership. It provides funds for developments by housing

associations and co-operatives, developers and private individuals. Some of the grants available are referred to below. A full list is available from Scottish Homes Regional Offices.

3.109 *Rural Empty Property Grants* are available throughout rural Scotland to assist in the renovation of privately owned, empty or redundant property into residential homes for rent to local people on an assured tenancy basis. Level of grant ranges from 10-33%.

3.110 *Rural Home Ownership Grants* are available to people on low to middle incomes in areas where there is a shortage of low-cost owner occupied housing. Grants range from 10-40%. Additional funds may be available for the installation of essential services.

3.111 *Improvement, Repair and Conservation Grants* are awarded to owner occupiers in designated areas and are similar to local authority schemes described below.

Scottish Enterprise

3.112 Scottish Enterprise is comprised of a central body and a network of Local Enterprise Companies across Lowland Scotland, outside the area covered by the Highlands and Islands Enterprise described below. It is funded by the government to promote economic development and runs a number of grant schemes. A list of LEC's is available from Scottish Enterprise in Glasgow.

3.113 *The Scottish Enterprise Rural Loan Scheme* provides loans, usually below the bank rate, to small and medium businesses in rural areas, depending on the potential for employment. All business sectors, other than primary industries, tourism and retailing, are eligible to apply for loans for property purchase and development, as well as for working capital.

Highlands & Islands Enterprise

3.114 The area covered by Highlands and Islands Enterprise and its network of Local Enterprise companies ranges from Argyll to the Shetlands and from Moray to the Western Isles. Incentives are available for a variety of economic and social developments including training, manufacturing, tourism, fisheries and agricultural projects, and some service industries. Funding may be by grants or loans. Applicants are expected to raise 50% of the required finance from other sources.

Historic Buildings Grants

3.115 Grants for works to historic buildings are currently available from three sources: central government, local authorities and joint schemes.

3.116 Grants from central government through the agency of Historic Scotland include; *Building Repair Grants* for eligible listed buildings of outstanding merit, for which competition is stiff, and the *Special Grants Programme*, which provides funding for voluntary bodies, currently under review. Other central government grants are available for

Ancient Monuments, the maintenance of thatched buildings, and projects in Conservation Areas.

3.117 Local authorities have the power to offer small Historic Buildings Grants for unlisted buildings, provided they are convinced that the building is of merit. Joint schemes are aimed at the repair of buildings in Conservation Areas in towns and urban conurbations, and are unlikely to be relevant to farm steadings.

Lottery Funds

3.118 Heritage Lottery funding is available in principle for the sympathetic re-use of buildings, through capital and revenue grants. Applicants must demonstrate that their project will help preserve and enhance, or widen public access to, specific aspects of the physical heritage.

3.119 Any organisation or individual may apply, but the Heritage Lottery Fund do not expect to offer grants for individual buildings or sites in private or commercial ownership. Projects which include privately owned property as part of an 'umbrella scheme' may be put forward by a public or other non-profit making organisation.

3.120 Competition for funding is generally very strong and there is a two stage application process for projects with a total cost over £500,000. In order to maintain a balance and a regional spread of awards, funds are being increasingly directed towards smaller to medium sized projects whose total project cost, for both revenue and capital projects, must be above £5,000 and usually not exceeding £100,000. Applicants must usually be prepared to provide at least 25% of the total eligible project costs. Other Lottery funds, directed towards Arts or Sports projects, may be available depending on the proposed use of the conversion work.

Local Authority Grants

3.121 The Housing Scotland Act of 1987 defines the need for grants for improvement and repair, and for funding for conversion work in order to increase the housing stock.

3.122 Local authorities administer discretionary improvement and repair grants for work to existing housing and, therefore, these would not normally be attributed to steading conversions. However, such work may qualify for a conversion grant which applies to non-domestic property being converted into a dwelling, provided the steading is not derelict, and the proposed work is not tantamount to building a new house. The finished house must also be the main residence of the applicant. Dwellings for tourist accommodation or holiday use would not qualify. Grants are discretionary and subject to availability; at present the maximum level of grant stands at 50 per cent of an approved expenditure of £12,600.

3.123 When funds permit, steading conversions have been supported through the use of such grants. Up until 3 years ago funding was ring-fenced into a series of payments for specific expenditure types. However, the overall level of funding has been reduced over the last few years and now comprises a single lump sum. The funding of steading conversions in the private sector now represents a low priority and thus local authorities are able to offer little financial encouragement to such projects.

3.124 Further information on local authority grants is contained in the booklet *House Improvement and Repairs Grants* issued by the Scottish Executive Development Department. A review of the grant system is currently being considered and is outlined in the Scottish Executive's consultation document *Better Homes for Scotland's Communities*.

Landfill Tax Credits Scheme

3.125 Operators of landfill sites pay a tax to the government with the option of contributing an additional sum of up to 20% to approved environmental groups. The contributions are allocated to environmental objectives such as the conservation of buildings of architectural interest. Conditions of the scheme are that the project must be in the vicinity of the landfill site, open to the public and operated on a non-profit making basis. The recipients of the scheme must be a non-profit distributing groups and cannot be controlled by a corporate body or local authority. Further information is available from ENTRUST Scotland in Paisley, who are the private sector regulator responsible for the operation of the scheme.

Scottish Tourist Board

3.126 Grants are no longer administered by the Scottish Tourist Board. This activity has now been passed to the Enterprise companies.

Trust Funds & Other Awards

3.127 The range of these funds varies but, in general, they are only available to voluntary or non-profit making organisations which are registered charities. Further information on nationwide grant giving bodies can be found in the "*Directory of Grant Making Trusts*" published by the Charities Aid Foundation. Some of these bodies, which have not already been mentioned, are listed below:

The Architectural Heritage Fund

National Heritage Memorial Fund

The Pilgrim Trust

Shell Better Britain Campaign, Community Projects Fund

Henry Ford European Conservation Awards

British Trust for Conservation Volunteers (for repair of traditional buildings by conservation volunteers)

Rural Initiatives Scotland Grants (for voluntary projects with community benefit)

Scottish Community Enterprise Investment Fund (for loans for community business)

Scottish Community Projects Fund (for community groups wishing to employ professional assistance)

The Chase Charity (for historic buildings in rural areas, preferably with community use)

The Ecology Building Society (for regeneration of redundant buildings).

CHAPTER FOUR DESIGN CRITERIA AND GUIDANCE

GENERAL AIMS AND PRINCIPLES

4.1 Having examined the historical and physical attributes of traditional farm steadings and expounded a case for their sensitive conversion to alternative uses, this chapter provides more detailed guidance on how this might best be achieved. This guidance is intended to acknowledge the diversity of the steading form and its regional variations within the context of the Scottish landscape. It does not seek to impose standard solutions or to stifle imaginative design. It does, however, aim to set out the underlying principles and general 'rules of engagement' for dealing sensitively with the adaptation of steadings to new uses. The following general principles apply:

- Traditional steadings represent a significant reserve of embodied energy. Any conversion should seek to preserve and build on that energy; it should aim to be low-impact and sustainable in environmental terms, and subscribe to the best practices of conservation and ecological design.
- The fundamental aim of conversion work should be to recycle the entire original building, retaining or restoring the fabric of the existing structure with the minimum of intervention. Where such intervention is unavoidable it should be sympathetically executed and, if practicable, designed to be legible, and reversible in the longer term. In general, the newly imposed use of the steading should be expected to adapt to the building rather than vice versa.
- There should be a general presumption against demolition, but where this is deemed necessary, all useable materials should be carefully salvaged and re-used wherever possible.
- Building materials and constructional methods chosen for repair and alteration work should be carefully considered, rigorously applied and strictly controlled. There should be a presumption in favour of traditional materials and practices, taking into account local characteristics and variations, which match or complement those used in the original construction. The temptation to use inappropriate or mass-produced materials, such as stock windows, concrete roofing tiles and plastic guttering, must be resisted.
- In any conversion project, repair and alteration works are not mutually exclusive. They go hand-in-hand and should be treated with the same respect. Conservation and conversion must always work with, rather than against, each other.
- Conversion work must always respect the form and character of the existing buildings, in order to maintain or reinforce their architectural integrity. Attention to detail is paramount; simplicity, authenticity and robustness should prevail over ostentation and inappropriate 'quick fix' solutions.
- The trend towards gentrification and suburbanisation (characterised by the Association for the Protection of Rural Scotland as far back as 1931) must be avoided. The over-embellishment of steadings with domestic paraphernalia such as the ubiquitous coach lamp and the twee porch canopy is a common failing.

- Alterations should be kept to a minimum, particularly where they affect the appearance of the building. Existing openings should be re-used and new ones introduced with circumspection. Roof profiles should remain largely unaltered and special features retained. Where change is inevitable it should be restricted to non-public elevations if possible, or concentrated in a particular area and acknowledged as an honest intervention.
- Extensions or additions to existing buildings should generally be discouraged, except where they can be shown to enhance the architectural composition of the steading group, or are essential to the success of the proposed conversion. Where new work is introduced, it should be sensitively designed in terms of scale and use of materials, whilst being clearly discernible from the original buildings.
- The impact of the conversion work on the landscape setting should be minimised and disguised by the sensitive design of access roads, parking, external lighting, gardens, planting, boundaries, service provisions and the like.

ASSESSMENT AND EVALUATION

4.2 A sensitively designed conversion will always be founded on sound survey and investigative work. In any such project the importance of undertaking a comprehensive assessment of the existing steading in order to evaluate its 'adaptability' in physical, architectural and financial terms cannot be too highly stressed.

4.3 If done properly, this will provide an essential understanding of the historical, structural and spatial attributes of the steading, and help to inform subsequent design work. More significantly, perhaps, it will also enable potential problems to be identified and addressed at an early stage, thereby influencing the likely success, or otherwise, of the project.

4.4 A number of interrelated exercises will contribute to this overall assessment and it is strongly recommended that these are carried out by individuals, or a team of people, who are well versed in the construction of old farm buildings, the use of traditional materials and building practices, and the consequences of conversion to new uses. Professional consultants - architects, engineers and surveyors - should be able to demonstrate their expertise in such work before being commissioned.

4.5 As a first step, it is important to carry out a detailed historical analysis in order to gain an understanding of the genealogy of the buildings. This would normally involve archival and documentary research, supplemented by physical investigation and 'building archaeology' of the steadings themselves. Historic Scotland, the Royal Commission on Ancient and Historic Monuments of Scotland, and Estate records are useful sources for the more prestigious steadings. Information on less noteworthy structures may be more difficult if not impossible to find, in which case the skilled interpretation of physical evidence of the steading buildings in situ becomes paramount. Further information on possible sources for archival research is given in Chapter Two (Recording and Protection).

4.6 In almost all cases, unless trustworthy existing drawings or records are available, a comprehensive measured survey will be required in order to produce accurate plans, elevations and sections. This is a vital exercise, often overlooked by potential developers, which should be carried out at an early stage so that realistic proposals can be formulated.

4.7 Added to this, and of equal importance, is the need to carry out a detailed condition inspection of the buildings and adjoining land, in order to identify defects, hazards and other shortcomings and to assess the extent of likely repair and remedial work required. This assessment should take account of the general state of disrepair and dereliction of the buildings, together with a detailed investigation of the building fabric itself. Particular note should be taken of timber decay, dampness and structural condition. Steadings which have grown incrementally are prone to structural weakness at the interface between different stages of building. Foundations, or lack of them more likely, will need to be checked, and areas of subsidence or structural movements may require expert analysis. Site conditions should also be assessed, particularly with regard to drainage and the provision of services.

4.8 In addition to constructional and site problems, old steadings may present a number of residual hazards or problems resulting from their agricultural use. Accumulated animal waste within the buildings and drains may have to be cleared, possibly resulting in the need for some sterilisation. Externally, the ground may have become soft - causing local subsidence - where byres or stables have been mucked out over generations. Similarly old middens, disused fuel stores, silted up mill lades and silage pits will all require careful thought. Defunct machinery can also be hazardous. Possible contamination by chemical fertilisers or other agricultural products should be carefully considered, particularly in storage areas. The underfloor areas of threshing barns and granaries may be choked with grain residue, leading to rodent activity and other infestations. More benign forms of wildlife may also be discovered such as bats and barn owls which are protected under the 1981 Wildlife and Countryside Act. Advice should be sought from Scottish Natural Heritage, as wilful damage to their habitat may result in prosecution. Their presence may demand the provision of purpose-built nesting and breeding boxes, and may even affect the timing of building work.

4.9 It is recommended that the results of the survey and investigative work are lodged with the Royal Commission on the Ancient and Historic Monuments of Scotland 'Scottish Farm Building Survey' programme. Indeed, it may be advisable to follow their methodology for some of the survey works so that it can be incorporated in future publications. For instance, the measuring and surveying of machinery or other fittings, in their correct context, even if they are ultimately to be stripped out, provides a valuable record for those with an interest in farm buildings and agricultural practices.

4.10 The detailed survey and condition assessment should prove invaluable when preparing early indicative costings for repair and alteration work. Such costs are generally only as good as the quality of information on which they are based, and it follows that their accuracy will be reinforced by a comprehensive evaluation of the existing building future.

ADAPTABILITY

4.11 The traditional farm steading form, although seemingly the epitome of a 'long-life, loose-fit' building form, does not always readily adapt to a new use. Whilst many are spacious in terms of overall floor area, the typical steading is rarely grand in scale and not all

of its available space is usable. Its ranges are long and thin; upper floors, where they exist, are often low and coomed; fenestration is sparse; and the interior and exterior fabric will most probably have been ravaged by generations of harsh agricultural use. In some ways this lack of sophistication has been both their downfall and their salvation. On the one hand, their inability to adapt to meet modern agricultural demands has led to their redundant state, while on the other, their robust, unrefined and well-ventilated construction has often prevented them from falling into complete dereliction.

4.12 The biggest challenge with any conversion scheme is how to meet modern standards and expectations without destroying the very attributes of the steading and its setting which attracted the development proposal in the first place. This conflict is particularly pronounced with housing work, where a large number of statutory requirements, financial pressures and market forces come into play. These have to be balanced against the constraints of the steading form and its structural limitations; this, in turn, may present unlikely or idiosyncratic opportunities.

4.13 The most important principle when contemplating how best to adapt a steading, is to let the existing buildings dictate the nature of the conversion - and indeed the lifestyle of its prospective new occupants in some cases - rather than vice versa. It is interesting to reflect that most steadings exemplified the notion of 'form following function', well before such a concept entered the vocabulary of architectural theory during the 20th Century. In their adaptation to new uses, a reversal of that trend is called for. The new function should be made to follow the existing form of the buildings, and be modified to suit if necessary. This may well result in some peculiar planning, in some awkward spaces with windows in odd places, in some strange configurations of rooms. Dwellings, in particular, will probably need to depart from conventional layouts. Living areas may be better planned on upper floors, garaging may have to be remotely located, gardens may become communal rather than private.

4.14 In any conversion, the way the steading is subdivided is of paramount importance. Again this is most obvious in residential conversions, particularly where multiple dwellings are created. In such a case it is usually advisable to divide the steading into its readily identifiable components - such as stable, barn, and byre - and to allocate individual houses to each: in other words one should work with the existing structural divisions rather than against them, even though this may result in an arbitrary array of dwelling sizes some of which may not concur with the developer's notion of the 'ideal mix'. Certain building types will lend themselves to particular uses - cartsheds for communal garaging being an obvious example. Where individual buildings are too small, they should be combined with their natural partners: horse gangs with the threshing barn, stables with the hay store, and granaries with the cartsheds are all good matches. Conversely, very large ranges may have to be subdivided: if so they should try to follow natural divisions, suggested perhaps by the disposition of existing openings, internal partitions or even external pipework. In general terms, vertical divisions into houses, rather than horizontal ones into flats are more successful.

4.15 The same principles apply to a smaller steading being converted into a single dwelling, although the problem is compounded by the need to interconnect the individual 'components'. As with larger developments, certain buildings lend themselves to particular uses and should remain undivided wherever possible. Horse gangs, attached to the outside of steadings with views across the landscape though the large existing openings are often well

disposed for conversion into a large living space. Stables, usually containing original window openings, are also suitable for habitable accommodation without resorting to extensive external alterations. Barns are more difficult to deal with: their large open spaces inviting a communal use, but their lack of fenestration conspiring against it. In such a case it is usually possible to introduce discreet windows to the non-public elevations. Cartsheds isolated from the main steading are ready made for garage use while those incorporated into the body of steading may lend themselves for conversion into living or dining rooms, or entrance halls, provided the infill to the arched openings is carefully handled. Upper floor granaries, with their regular disposition of openings can often readily be converted to bedrooms. Byres, because of their previous intensive livestock use, and their lack of windows may be better suited to ancillary accommodation and storage.

4.16 The desire to compartmentalise individual buildings is unfortunate; 'open plan' layouts are generally easier to accommodate, less disruptive, and obviate the need to provide contorted circulation routes. The courtyard steading is particularly difficult to deal with in this respect. The configuration of its narrow ranges makes it very difficult to subdivide them into separate rooms and provide independent circulation. In such a case, it may be necessary to create an enfilade of rooms, all directly connected with each other. Alternatively, there may be justification for constructing a new circulation 'corridor'. This simple device is most effective in a courtyard setting of a U-shaped steading, where it not only provides internal access to the range to which it is attached, but also acts as a link between the flanking ranges, avoiding the need to pass through the central block altogether.

MAJOR INTERVENTIONS AND EXTENSIONS

4.17 Intervention is a loose term, which in architectural parlance can be applied to any change that is inflicted on an existing building and one which can be interpreted - or indeed misinterpreted - in a number of ways. At one extreme, even the removal of cobwebs, in an absurd but genuine sense, is an act of intervention. At the other, few would disagree that the demolition of an entire range or the construction of a new extension constitutes a major intervention to the steading form.

4.18 By definition, the very act of converting a steading to a new use is bound to give rise to a whole gamut of interventions; they are an inevitable consequence of the conversion process, and need to be carefully managed so that their cumulative effect is minimised. Sherban Cantacuzino, the renowned conservationist, extols the virtues of finding new uses for redundant buildings but also acknowledges that 'it is a paradox that in order to maintain the fabric of an old building, it is often necessary to destroy some of it in the first place.'

4.19 Handled with care and sensitivity, this loss is arguably a price worth paying particularly if it secures the long term future for the rest of the building: it becomes a damage limitation exercise in a sense. Some ways in which this can be achieved for individual elements of the building, are suggested and described in the ensuing sections. Beyond these specific recommendations, however, it is unrealistic to assume that major interventions will not be called for in some cases. Following the survey exercise described above, some analysis of the existing buildings should be made, whereby historical significance and architectural merit is balanced against physical condition and conversion potential. In certain instances, wholesale demolition of some structures may be perfectly justified: clearing away modern infill buildings to restore original courtyards, or knocking

down derelict outshots and superfluous sheds which have no intrinsic value should be uncontentious, particularly if their removal enhances the overall composition of the building group. The often-used argument that such unworthy structures should be retained as evidence of the historical development of the buildings, simply does not hold good if it only serves to impede the ultimate survival of the original steading. Some challenging value judgements may be called for, and it is important that these are made with skill and understanding.

4.20 Ruinous steadings, or individual ranges, present an altogether more difficult problem. Strict traditionalists may posit that they should be rebuilt as near as possible to their original form. However, where the balance of new work would significantly outweigh the old, or where the restoration would be largely conjectural, or where changes have to be introduced in any event to cater for a new use, the validity of this approach is questionable; while it may be stylistically authentic it is ultimately historically deceitful.

4.21 In some cases it may be possible to simply consolidate the ruined part of the steading, carrying out essential repairs to eliminate any danger, clearing out rubble for re-use elsewhere, and providing turf 'soft toppings' to exposed wallheads. Depending on orientation, such a space can offer the opportunity to create a sheltered and private walled garden space with the minimum of intervention.

4.22 It is more likely, however, that the pressure to rebuild on the site of a derelict range will be hard to resist, particularly where it helps to reinforce the original steading form. To rebuild in the style of a 'converted' farm building is architecturally misleading and would fool only the most casual observer. A more sincere approach would be to accept the need to construct a new building which acknowledges the scale, massing and spirit of the original steading but steers clear of mimicry and pastiche.

4.23 In certain cases, fairly radical interventions may be justified if they help to secure the continued existence of the steading. The roofing in of an open courtyard, for example, may be a perfectly reasonable proposition if the steading was being converted to a garden centre or a restaurant. In other cases, it may be preferable to introduce a single major intervention which is blatantly new, rather than to inflict an accumulation of subtler smaller ones which confuse the composition. One large full height opening in an otherwise blank masonry wall, albeit making an uncharacteristically strong architectural statement, can be less disruptive than a series of equally uncharacteristic smaller ones.

4.24 On the whole, complete new extensions beyond the 'footprint' of the existing steading should be discouraged, except where they are discreet or confined, and make a positive contribution to the internal workings or the external composition of the conversion. The introduction of the courtyard link corridor described above may fall into this category. Other 'decorative' or 'applied' structures, such as canopies, porches, bay windows, sun rooms, and like should generally be prohibited. Such suburban touches of individuality can rarely be successfully accommodated and are at variance with the relative anonymity which characterises the steading form. With careful siting and design it may be possible to incorporate a storm porch or a garage block into an individual dwelling, but on the whole such extensions are best avoided. The mock Victorian conservatory, manufactured from bright white plastic components, stuck on the outside of a simple stone steading, epitomises all that is bad about insensitive extensions.

4.25 The market demand for conservatories is a serious issue with residential developments, and one which cannot be dismissed lightly. They are not easily accommodated in conversion work, except within the privacy of a courtyard or on sheltered external elevations where an unassuming lean-to structure - more in the spirit of a functional planthouse than an elaborate conservatory - may be considered appropriate. Wherever possible, the provision of future extensions such as conservatories should be anticipated in the original conversion proposals, so that their siting and design is premeditated. This is especially important with multiple housing developments where the possible proliferation of random extensions needs to be strictly controlled.

4.26 Similarly, the temptation to dress up new extensions as pretend horse gangs or fake cartsheds must be resisted. Despite its often outwardly haphazard appearance, the steading form has an underlying logic which can be confused by such additions, applied out of context. The location and scale of individual elements within a steading have a meaning and purpose, which will be irrevocably disturbed by constructing, say, a new extension in the form of a horse gang adjacent to an original byre, or indeed by building an uncharacteristic number of pseudo-cartsheds in the wrong setting.

4.27 In all cases the underlying criteria for significant interventions are fairly straightforward. They should be limited in terms of scale, disposition, and their use of materials, and be easily discernible from the original building; there should be no intention to deceive; they should be polite and well-mannered, distinguished yet distinguishable. They may attempt to reflect the robust and enduring nature of the original steading, blending seamlessly with it while avoiding slavish imitation. On the other hand they may aim to provide a refreshing contrast, while avoiding a jarring juxtaposition of styles and materials. They should be durable, and weather as gracefully as the buildings they adorn. Above all, they require skilful handling, for which no firm prescription can be made.

BUILDING MATERIALS AND METHODS

4.28 The conversion of old steadings results in great 'stress' not only on their physiognomy or general appearance, but also on their physiology, or on how the building fabric performs under the new conditions. Although the buildings themselves are often physically robust, they are essentially unrefined structures; they are unheated, uninsulated, well ventilated and sparsely finished.

4.29 The imposition of a new use will almost certainly have a profound effect on the equilibrium of the building fabric, and on how it reacts to its immediate climate, inside and out. Conversion to housing is especially 'stressful' in this respect. Danger occurs when perfectly functional and healthy buildings are suddenly subjected to the introduction of insulation, waterproof membranes, vapour barriers, sealants, impervious coatings, draughtproofing, double-glazing, efficient heating systems, new service installations, and most of all people. This invasion is bound to alter the fabric's immediate environment, sometimes with disastrous consequences. Buildings that were once open and permeable can become virtually hermetically sealed, triggering defects and problems which were not a threat previously. Where such buildings once relied on allowing moisture to move unheeded through its structure, permitting absorption and evaporation in equal measure, they are suddenly expected to behave like modern buildings which rely heavily on a system of impervious barriers designed to hinder such moisture movements. It is important, therefore,

to understand the need for old buildings, such as steadings, to 'breathe' and to give proper consideration to the materials and building methods chosen for their repair and alteration to new uses.

4.30 One of the greatest assets of farm buildings is that they respond well to relatively straightforward repairs using simple materials and skills which are compatible with the existing construction. They have developed the patina and stature of old age which needs to be treated with a certain reverence. There is a tendency in modern building to want to standardise, to make everything plumb and level, to straighten, to tidy and polish, to iron out all the creases and to remove all signs of old age, all of which are quite at odds with the endearing character of traditional farm buildings. Their benign decrepitude is often mistaken for serious decay. Structural problems, timber decay and dampness are met with irrational horror rather than afforded proper analysis. Whole walls and roofs are rebuilt unnecessarily to eliminate an inoffensive bulge or a simple sag, perfectly usable timbers are spuriously discarded for fear of rot attack, thick masonry walls are sluiced with chemicals and rendered with cement in the misguided belief that their moisture content is dangerous. Old buildings rarely respond well to such extensive surgery and indeed are often badly damaged by treatment in this way.

4.31 Such profligate 'solutions' to imagined problems typify all that is undesirable about using modern ersatz building materials and 'quick fix' constructional techniques for work on old buildings. Steel replaces timber, concrete replaces stone, cement replaces lime, varnish replaces paint, plastic replaces iron, and so on, because they have become easier to use, or cheaper to buy, or are mistakenly considered to be superior to more traditional materials. They are harder and stronger, quicker-setting and faster-drying, more waterproof and less permeable, easily applied and 'maintenance free' so the assumption is that they must somehow be 'better'. This assumption has long been challenged by those working with traditional buildings and is now being questioned more widely. In order to secure the future of old farm buildings, a more long-term and holistic approach needs to be adopted, which endeavours to understand not only their basic constructional attributes but also how they behave and react to the likes of moisture and air movements - so that materials and building techniques used in their conservation and conversion are compatible.

4.32 The informed use of so-called 'traditional' materials is crucial in this respect. This is not the place to give a full account of such a large subject, but it should be recognised that the original 'good design' of early farm steadings was not so much a conscious act, but more a natural response to the limitations of the materials available at that time. At its simplest, traditional materials can be defined as those materials used in the construction of traditional buildings. A more refined definition would acknowledge that they are generally primary, unprocessed materials which were capable of being crafted, wrought or assembled, thereby revealing the skill of the tradesmen using them. They were commonly used in an area before modern means of transport, manufacturing, processing and cheap energy enabled mass produced materials to become widely available. The materials and the way they are put together tend to be well established, and have inherited a certain cultural meaning through their enduring quality.

4.33 While there will always be some intellectual debate about the nature of traditional materials, it is generally accepted that encouragement should be given to the use of timber, stone, thatch, clay and lime products, brick, slate, lead, iron, and the like, obtained from local sources and used in the correct way. The use of salvaged and recycled materials should also

be supported, but where new ones are required they should be from an indigenous and sustainable source wherever possible. Care should be taken with their selection and specification to check their environmental credentials. Certain types of insulation, timber particle boards, plastic goods, and cement based products are particularly suspect in ecological or conservation terms, not only with regard to their composition, but also with the processes involved in their manufacture. In some cases, concern has been expressed about the long term health risks of certain materials and building products.

4.34 The way in which materials are used or put together is as important as the products themselves. For repair work, they need to be compatible with the existing structure and applied or constructed in a similar way. The use of lime-based products, in particular, requires skilled application and a good understanding of their limitations. Although there are now numerous advice notes and technical guides about the use of a wide range of traditional materials, there is still a shortage of expertise in the building industry. The use of experienced tradesmen or, in some cases, specialist conservators, can not be too highly stressed. Related to this, the environmental approach to dealing with timber decay and dampness should be adopted.

4.35 Alterations and new work should be circumspect in its choice of materials, using a limited palette which acknowledges the existing buildings without necessarily copying them. The use of indigenous timber is to be encouraged, and can be used very successfully instead of stone or brick, helping to distinguish new work from old. Unfortunately, the greatest challenge of all is to resist the inexorable pressure of the building industry to use modern mass-produced materials and profit-led building practices. This challenge can be met on the one hand by imposing stricter controls and, on the other, by ensuring that traditional materials, and the expertise in using them, become more readily available.

ROOFS

Coverings

4.36 The vast majority of standing roofs are covered with slates or pantiles although examples of thatch, plain tiles, stone-slabbed and turf roofs may still be found. Corrugated iron, often painted with red lead, was commonly used for lesser buildings and as a replacement for earlier defective coverings from the turn of this century.

4.37 Slates were usually of Scottish or Welsh origin, although some were also brought in from the Lake District or Northumberland. They were generally laid in diminishing courses on full sarking to provide a durable, weatherproof and fairly airtight roof. Where greater ventilation was required - such as cattle byres - roofs were sometimes 'half-slatted' leaving gaps between each slate fixed to battens rather than full sarking.

4.38 Clay pantiles, most commonly found along the eastern seaboard, were hand-made and hooked over battens. They were held down by their own mass, rather than mechanical fixings. Due to the nature of their manufacture, the tiles varied in size, profile, and coloration, and thereby provided a more ill-fitting and less uniform roof than slates, allowing for greater ventilation but providing less weatherproofing. Pantiled roofs are not generally found in areas of higher rainfall, although in some of the more exposed areas they may have

been bedded or pointed from the underside in lime mortar. To improve weatherproofing further, some eaves were slated, rather than tiled, over the stone wallhead.

Structure and Form

4.39 Most roofs are simple in form, consisting of straightforward pitches running between gable ends, although hipped roofs are especially popular in Peeblesshire. Although early cruck-framed roofs can still be found, the commonest form of construction over narrow ranges is the 'close-coupled' roof, consisting of rafters and collars made up of sawn timbers to form A-frame trusses. These trusses are closely spaced, usually at 16" to 18" centres, and covered with butt jointed timber sarking boards to receive slating, or with individual battens for tiling.

4.40 As timber technology developed, other truss forms such as the scissor truss, the lattice truss and the more sophisticated king and queen post trusses, used in conjunction with purlins, were employed to provide cover over greater spans. More intricate conical or polygonal roofs can be found over horse gangs or engine houses, where the elaborate timber structure is often integrated with gearing mechanisms for the adjacent threshing mill. In some unusual cases the ridge and eaves are inclined to follow the contours of the land, rather than being built horizontally.

Other Features

4.41 The beauty of steading roofs is, paradoxically, their endearing plainness. Features are conspicuous by their absence except on the formal estate farms where embellishments such as overhanging eaves, decorative bargeboards and finials were often added to reflect the landowner's status. The line of most roofs is broken only by simple 'swept' or louvred ventilators, small cast iron skylights and the occasional hay loft door built off the wallhead eaves. Chimneys and dormers are rare sights, except where they serve a bothy, a boiler house or grooms' accommodation. Rainwater gutters – where they exist – are usually of cast iron, although examples of lead and zinc rhones can be found; in many cases there are no gutters at all.

Guidance for Conversion Work

4.42 The simple roof form is a fundamental characteristic of the traditional steading – its proportions and relatively clean lines should not be disturbed without due cause. The angle and configuration of roof pitches, ridge lines and eaves should be retained wherever possible.

4.43 The principal aim, therefore, in any proposed conversion must be to repair the existing roofs with the least disturbance or alteration, except of course where later or inappropriate structures need to be removed in order to restore the original roof profile.

4.44 It is likely that the roof structure will need some careful repairs. Timber decay and structural movement or racking of the trusses are among the more obvious defects, but these rarely require wholesale replacement of the structure. Roof coverings, also, will probably need to be replaced or extensively repaired unless the buildings have been regularly

maintained. In any case a higher specification will often be required for conversion work. During such an operation it is essential that wherever possible the existing roof covering material is salvaged and re-used, although there may be cases where it is decided to discard the covering, such as corrugated iron, and restore the original material, such as thatch.

4.45 In the case of slates and pantiles, it is often difficult to obtain matching material to supplement salvaged stock. Scottish slate can only be obtained second-hand: unless and until a slate quarry is reopened in Scotland it remains a diminishing and increasingly valuable resource. Welsh and English slates are more easily obtained. However, with endeavour, suitable matching slates can usually be traced. If this proves impossible, it is wiser to concentrate different slate types on separate pitches, rather than attempt to mix them in randomly with existing slates: a single pitch of Welsh slates in an otherwise Scotch-slatted steading will look more attractive than trying to disguise the inadequacy by haphazardly distributing them throughout the roofs.

4.46 It is also important to recognise and match the characteristics of the existing slating, such as the pattern of diminishing courses and half-slating wherever possible, although the latter will probably have to be sacrificed if the accommodation below is habitable. The use of standard sized imported slates rarely looks authentic and should be avoided.

4.47 Old pantiles are much more difficult to replace with second hand stock, due to their irregular hand-made profile. This can vary from one building to another and it is rare to find a good stock of matching tiles. Again, it may be necessary to concentrate the use of sound original tiles on a single pitch, using replacement stock for the remainder. Because of their unpredictable profile, it is wise to ensure that any replacement second hand tiles come from a single source. Even so they are always likely to be ill-fitting and unholed for modern fixings. While this is perfectly acceptable for agricultural use, it can pose problems for conversion work.

4.48 Wherever possible, old pantiles should be laid with their overlap facing away from the prevailing weather. However, as handed profiles were not made, this will depend entirely on the orientation of the pitch. As a general rule, if there is a limited stock of old pantiles and a choice of where to use them, their use should be restricted to south and east facing pitches. In any event, the pantiles will probably need to be holed to take mechanical fixings, and the underlying substrate adequately protected by one or two layers of breathable felt as a secondary line of protection. If necessary new clay pantiles can be purchased, but these are usually machine made and are blandly uniform in appearance. Nevertheless, they are more acceptable than concrete tiles or other substitute materials which should be avoided entirely.

4.49 In some cases, there may be a justification for re-using corrugated iron roof cladding, now regarded almost as a vernacular material, particularly on outhouses or over ancillary accommodation. Thatch - in straw, reed or heather - or even turf also may be an appropriate roof treatment in certain circumstances, especially on very early buildings if it can be shown that this is how they were originally roofed.

4.50 It is essential that rainwater goods are thoroughly repaired or newly installed where none exist. In many cases improvements will need to be made to the disposal arrangements. In general, robust cast iron fittings should be used. Plastic guttering and pipework looks cheap and out of place and should be avoided.

4.51 One of the main consequences of conversion work is that adequate insulation has to be introduced to the roof structure, which in turn gives rise to the need to provide additional ventilation. Unless this is carefully handled, it can have a profound effect on the appearance of the roof. With a simple coupled roof, insulation can generally be laid at ceiling or collar level, resulting in a 'cold' roofspace which has to be ventilated to the outside to help minimise the risk of condensation. In some cases, for example where no underslating felt exists on the top of butt-jointed sarking boards, or where loosely fitted pantiles are hung on battens, sufficient ventilation may already be provided.

4.52 If additional ventilation has to be introduced, discreet slots should be inserted at eaves level if possible. This is relatively simple if the roof has overhanging eaves, but careful detailing is required for the close-eaves of most steading roofs. Clumsy modern fascias and proprietary ventilators should be avoided. To help air movement, vents are also required near the ridge level. Where existing swept or louvred roof vents survive, they should be re-used, although they may require some modification to make them weatherproof. With some ingenuity, it is possible to design a continuous vented ridge flashing, particularly where there is no ridge member between the trusses. In smaller roofs, it may be possible to provide adequate ventilation through the gable ends without having to disturb the roof itself. The claypipe vents built into the wallhead below eaves level in some byres can also be put to good use.

4.53 In cases where the roof structure is to remain exposed from the underside – for instance in order to display a particularly interesting arrangement of trusses – the difficulty of introducing insulation is compounded. This can be inserted between the rafters, but in doing so some of the timber structure will become concealed, and the provision of adequate ventilation is made more onerous. In such cases, it may be worth constructing a superimposed roof over the existing structure, incorporating insulation, ventilation and a new substrate for replacement roof coverings. The disadvantage of this approach is the inevitable change to the ridge and eaves lines, but this has to be 'traded off' against being able to preserve and display an important roof structure intact and undisturbed. In some cases, such as horse gangs where the height of the apex and eaves in relation to other buildings is not critical, this compromise may be worth making. If necessary, where the style of the steading allows, overhanging rafter feet and flat-topped ridge roll flashings can be introduced as part of the superimposed roof in order to maintain a constant eaves and ridge line.

4.54 One of the more prosaic consequences of conversion work is the proliferation of vent and exhaust pipework created by the new service installations. It is essential that these are terminated through the roof in an orderly fashion, with lead slatepiece flashings and caps. Alternatively, proprietary terminals are now available which lie flush with the roof covering. In some cases it may be possible to collect a number of pipes together and terminate them within a louvred vent housing. TV aerials, similarly, should be carefully located, if possible within the roofspace itself. Roof-mounted solar panels are best avoided altogether.

4.55 The introduction of chimneys and new flues must also be carefully considered. Wherever possible existing stacks should be used for flueing new boilers or open fires. Where this cannot be achieved, the introduction of 'industrial' metal flues may be more appropriate than building new masonry chimney stacks. If a new chimney has to be constructed, a simple ridge stack, kept as small as possible, will be least obtrusive.

4.56 The biggest threat to the steading roofscape is the demand for daylight into converted upper floors and roofspaces. It should be possible to use existing skylights, hay loft openings and the like, but there is usually the need to supplement these with new openings. Small additional skylights, or even a run of properly proportioned units, set as flush as possible with the roof covering are the least disruptive. Small cast iron lights are still available – either new or second-hand – but these tend not to meet modern expectations for residential use, and proprietary double glazed and fully weatherproof 'conservation' rooflights are now manufactured in the same style and proportions.

4.57 Where new dormers are required, great care is needed with their distribution, design and detailing. Apart from the most formal of steadings, a regimented or symmetrical array of dormers will look alien and awkward. To avoid upsetting the architectural composition of the steading they should be simple, robust and used sparingly, preferably on courtyard elevations which are not seen from afar. Modern, oversized box dormers with horizontally proportioned fenestration and flat roofs are entirely inappropriate. At the other extreme, highly embellished and over-mannered traditional dormers, such as canted Victorian bays, are equally out of character. Small unprepossessing dormers which reflect rather than mimic existing features are usually the most successful. Modest openings with swept or catslide roofs built in the manner of original ventilators, are the least obtrusive. Straightforward wallhead dormers with stone or timber cheeks, using the proportions of a hayloft opening, can also be used to good effect but care must be taken not to create the false and inauthentic impression of a surfeit of haylofts. Raised wallhead gables, and small triangular dormers may also be appropriate.

4.58 In exceptional circumstances it may become necessary to raise the height of the existing roof in order to create adequate headroom. This should generally be resisted, but if the roof structure has to be replaced for other reasons, or indeed if it no longer exists, there may be a case for such a drastic alteration. This may be achieved simply by steepening the pitch of the roof, although if the building forms part of a wider group with similar pitches this may prove aesthetically disturbing. In some cases it may be possible to heighten the wallhead in matching masonry, but unless the building is to be harled this can rarely be achieved seamlessly. In such a case, it is probably wiser to cap the wallhead, and build a new band of structure to support the raised roof, in different and 'legible' materials such as timber or even glass, acting as clerestory. In this way it become obvious that the roof has been changed, but the original buildings can still be seen and recognised.

EXTERNAL WALLS AND OPENINGS

Structure and Finishes

4.59 Stone was the predominant walling material used in the construction of Scottish steadings, unlike England where timber was far more widely used. Examples of mass clay, cob, wattle or brick walls can be found, but these are relatively rare.

4.60 Walls were generally massively built using stone bound with clay or lime mortar, usually about two feet thick, and sitting on rudimentary foundations, if any at all. They range from the simple random rubble of earlier buildings, built of well weathered field stone with wide joints and pinnings, through to the finely jointed ashlar masonry of the sophisticated 19th Century Home Farm. As would be expected, there are also many regional variations,

displaying the use of different locally quarried stones and building techniques - from the softer mellow sandstones of the Lothians and Galloway to the hard angular whin of the Borders, Argyll and parts of Perthshire.

4.61 Stone walls were pointed with soft lime mortar, fully applied over the faces of the stones and, in later work occasionally 'lined out' on the bedding joints. Early rubble-built walls would almost certainly have been harled or plastered with lime mortar and given frequent applications of limewash to provide a protective and sacrificial coat which was expected to be patched or renewed on a regular basis. In most cases this soft coating has long since weathered away, but the tradition survives in some areas such as Dumfries and Galloway where for hygienic reasons the rendered walls of the dairy farm are often, and aptly, finished with a bright white limewash. In other areas, natural pigments such as copperas and sienna were added to the limewash to give a more earthy and subtle finish.

Openings and Fittings

4.62 Traditional steadings were essentially cheap and functional buildings, with openings and other features provided only where they were essential. As many buildings were constructed to give shelter or storage, it is no wonder that openings were sparse; perhaps the singlemost important feature of steadings is their characteristic stone ranges with long expanses of uninterrupted masonry. Openings for ventilation, daylight or access were often concentrated within protected courtyards leaving the more exposed outer perimeter untouched, except on the more formal Home Farms where the entrance facade would sometimes be given special architectural treatment.

4.63 Most openings are small and functional; ventilation slits, stable and byre doors and windows, hayloft loading doors and the like. While many will have dressed stone margins, providing rebates for window and door frames, others will be more crudely formed with unchecked splayed or straight jambs and rudimentary cills. Much larger openings are found on cartsheds, coach houses and implement stores which may be divided into arcaded bays by square masonry piers or, more rarely, cast iron columns surmounted by monolithic stone lintels or shallow segmental arches. It is common to find a hayloft or granary above the cartshed, with its own smaller openings positioned above the mid-span of larger openings beneath, thereby reducing the load on the vulnerable lintels.

4.64 Many openings, such as the tall narrow ventilation slits found in byres and barns, were left open and unglazed. Others were infilled with a variety of windows, shutters and doors exhibiting wide regional variations but sharing the common characteristics of simplicity and functionality. Most were manufactured of timber, painted in traditional colours or the Estate livery.

4.65 Doors were usually of stout boarded construction, with single, double or divided leaves as used on stables. More elaborate panelled doors may be found on later steadings. Wider openings to stores and implement sheds were often protected by horizontally sliding timber shutters mounted externally or by heavy outward opening doors as often found on coach houses. Arcaded cart sheds were often left open or fitted with open-boarded doors.

4.66 Window styles are many and varied, often reflecting distinct regional characteristics, such as the horizontally-proportioned 'laying panes' of Perthshire. Multi-paned fixed lights,

vertically sliding sashes, and side hung casements can all be found with varying astragal configurations. A large number of windows incorporate louvres, hoppers or boarded shutters in lieu of glazing in order to provide permanent or controlled ventilation.

Guidance for Conversion Work

4.67 Conversion work will inevitably call for repairs and alterations to be made to the external masonry, openings and finishes. Structural defects such as cracking or bulging walls and subsidence need to be treated sensitively and with cautious optimism. While underpinning and stabilisation may be required in some cases, the soft and yielding construction of the original building is often able to accommodate considerable stresses. The temptation to demolish and rebuild defective areas, rather than carry out careful repairs should be vigorously resisted. The qualities of the original masonry building will rarely be successfully matched in such an operation.

4.68 A common problem in conversion work is that ground levels need to be altered in order to direct moisture away from the building or internal levels have to be reduced to provide a sound basis or solum for a new floor. This can expose the shallow footings or the base of the wall and trigger the need for underpinning. If internal heights permit it is often better to superimpose a new floor on to an existing one, thereby avoiding the need for excavation altogether.

4.69 In any repair work to masonry, a conservative approach is essential. There is rarely any need to replace worn or weathered stones (unless they are structurally unsound) and certainly never an excuse for wholesale stone-cleaning. Replacement stone, where required, should match the existing in colour, texture and composition. This is often difficult to achieve and a degree of perseverance may be required to identify an appropriate supply. An obvious source is to salvage stone from any downtakings or alterations being made as part of the conversion work - such as demolishing derelict outbuildings, removing internal walls, or making slappings for new openings. Other local sources such as neighbouring farms, local contractors, demolition firms and specialist architectural salvage yards are also worth investigating.

4.70 The pleasing appearance of an old masonry wall is not so much due to the stones themselves but to the mortar which binds them together and, more specifically, to their pointing or finishing. Wholesale repointing is often carried out as a matter of course without proper thought or due analysis, using incorrect materials and ill-conceived techniques which ultimately serve only to accelerate the decay of the masonry rather than preserve it.

4.71 Wherever possible, the original pointing, harling or rendering should be retained and locally repaired in order to perpetuate the appearance of graceful old age. In this respect the use of soft lime-based mortars is an essential ingredient for successful work; if necessary an accumulation of repairs can be disguised by the application of traditional limewash. Despite their convenience the use of cementitious mortars, renders and modern masonry paints are entirely unacceptable and positively damaging in some circumstances

4.72 Some steadings built in impervious stone such as whin or granite do not have the same water-bearing capacity as those constructed of softer sandstone. Rainwater simply runs off the stones and is concentrated on the joints instead. In exposed situations, where the

pointing is defective, the water can be forced under wind pressure deep into the body of the masonry. It may dry out harmlessly, but it may find its way out behind window lintels or other openings. In extreme cases the water may penetrate the wall altogether. This is not an undue problem for a cow byre or cartshed, but it can prove a serious difficulty once the building has been converted. It is vital, therefore, that the pointing of such hard masonry is kept in prime condition.

4.73 Most masonry walls will lack any form of damp-proofing, although later steadings may incorporate a slate damp-proof course. As part of the conversion work it is often stipulated - whether by Building Control, mortgage providers, or developer's briefs - that some means of damp-proofing is introduced by chemical, electrolyte or physical means. In most cases this is probably unnecessary, usually ineffective and possibly detrimental to the building fabric. With adequate external perimeter drainage, proper ventilation and careful internal detailing there is rarely any justification for such drastic so-called 'remedial' work.

4.74 The introduction of insulation, on the other hand, can not be dismissed so lightly. A solid stone wall - even two feet thick - provides inadequate thermal protection and will certainly require to be upgraded for residential use. The only practical way to achieve this is to strap the walls with a timber framed internal skin incorporating insulation behind the wall finish. The vexed question of vapour barriers will also need to be addressed, but with a combination of design skill and reasoned argument, the strict Building Control requirements can often be overcome. In such cases it is important that the composite wall is allowed to breathe by providing adequate ventilation. Before strapping out the wall, it would be prudent to remove old built-in timbers, such as dooks and bilgates, which will be covered up by new finishes. Many such timbers have survived because they have been well-ventilated and exposed. Once closed in they may be prone to attracting timber decay.

4.75 In any conversion scheme there is an inevitable pressure, not least through the demands of Building Regulations, to introduce new openings or to alter existing ones in order to provide adequate daylight and ventilation to new habitable accommodation, or to take advantage of views and orientation. This is especially difficult with courtyard steadings where a serious conflict often arises between the desire to preserve the self-effacing outward-looking elevations, and the temptation to punctuate the plain stonework with new openings in order to exploit the prospect of the surrounding landscape.

4.76 Wherever practical, existing openings should always be re-used, regardless of how they relate to the spaces within. This may result in some idiosyncratic internal planning and unusual fenestration patterns. If it proves impossible to re-use an opening, it should be blocked in such a manner that evidence of its original existence is not lost altogether. This can be achieved by simply recessing the blocking and leaving the original jambs, cill and lintel in position. In some cases, however, it may be justified to salvage these dressings in order to form a new opening elsewhere.

4.77 In general existing openings should not be unduly altered. The widening of small openings to form 'picture windows' or the filling in of cartshed arches to create smaller doors should be discouraged. More subtle changes, such as converting a window into a door, or vice-versa, can usually be accommodated if handled with care, for instance by leaving the lintel and jambs intact.

4.78 Where the existing openings are very crudely formed, some modification may be needed to accept new windows and doors; rebates may have to be cut to receive frames, or cills introduced where none exist. In such cases, simple robust solutions should be sought; if matching stone can not be found, a slate or tile cill will be more in harmony than one manufactured in concrete. Before making changes to existing openings, it is always worth considering whether compensatory modification could be made to the joinery elements instead.

4.79 The formation of new openings in existing walls requires very careful consideration, as their cumulative effect can often blight the character of the steading. Alternative means of introducing light and ventilation should be explored, such as through skylights. In all cases new openings should be used sparingly with due thought given to their distribution and detailing. It is often less disruptive to make new openings into a courtyard setting, leaving the outer perimeter walls untouched. This is usually quite feasible, as the narrow width of many steading ranges will not accommodate a double bank of rooms, thereby allowing a single aspect into the courtyard. Where the plainer expanses of external masonry have to be disturbed, the use of narrow apertures, reminiscent of ventilation slits, can be used to good effect. Alternatively, rather than peppering the elevation with a number of inauthentic looking openings, it may be less discordant to make a single bigger opening, treating it as a discernibly modern 'intervention'. In less formal steadings, a regular pattern of new openings will usually appear false and over-designed; a more random distribution is often more in keeping. Notwithstanding this, the regularity of granary windows, cartshed openings and ventilation slits found in the grander steadings may influence the disposition of new fenestration. In stable buildings the knocking through of the hay-heck niches, often arch-headed, can be a successful way of providing new openings.

4.80 While it is important to acknowledge and respect the size, proportions and detailing of existing openings when forming new ones, it is not always wise to slavishly imitate the original form. As mentioned above, the formation of one larger opening instead of an accumulation of smaller ones, may prove the better solution. Within a courtyard setting, such an opening may quite naturally match in with those of adjacent cartsheds or machinery stores. Outwith the courtyard, they may be disguised by sliding timber doors, acting as external shutters.

4.81 In all cases, the detailing of the new openings is of great importance. Salvaged materials can be used successfully to provide matching dressings. If these are not available, the use of other materials can be perfectly acceptable if handled sensitively. The indentation of old bricks into a stone wall to form new window or door jambs was common practice and is still valid today as a cheap and effective solution, and aesthetically far more appealing than using pre-cast concrete or cement render.

4.82 Just as important as the openings themselves, are the window and doors which are fitted into them. In all likelihood, there should be some extant fittings in the steading which can provide stylistic clues to the design of the new windows and doors. The use of stock mass-produced fittings is rarely, if ever, appropriate. New fittings will therefore almost certainly have to be especially designed and purpose-made. The use of materials is equally important. Softwood rather than hardwood timber will invariably be the most appropriate choice, although in some instances metal may be acceptable. The use of upvc and aluminium fittings should be avoided.

4.83 Original openings which never had any windows or doors - such as narrow ventilation slits and wide cartshed arches - should be left open, if at all possible. This will obviously depend on the layout of the internal accommodation and in most cases they will probably need to be infilled. In some instances a 'minimalist' approach can prove successful. For ventilation slits, a single thin metal-framed fixed light, possibly using smoked glass, will recede into the masonry and become barely detectable externally. The same principles can be applied on a larger scale to cartshed openings, although it is more difficult to achieve an elegant solution. If internal space permits, a separate screen built in the shadows behind the openings to form a shallow portico can be attractive; this approach is particularly successful behind the arches of an arcaded cartshed where a simple loggia can be created. This is also a useful technique to use where a run of cartshed openings is subdivided by freestanding cast iron columns.

4.84 Where more conventional doors or windows are needed to infill such wide openings, they should be simple and workmanlike rather than over-fussy or elaborately divided. Straightforward close-boarded, outward opening, traditional doors are perfectly suitable where the cartsheds are to be used for secure storage or garaging. Where glazing is required for habitable rooms, the doors or windows can be designed to reflect the character of traditional joinery fittings. This can be achieved, for instance, by substituting the close-boarding of a traditional door with narrow vertical panes separated by thin, metal or hardwood astragals set at the same centres as the original board widths. Another solution is to use the pattern of an open-boarded door, infilling the gaps with glass.

4.85 Existing windows and doors require equally careful consideration. Original fittings should be repaired and re-used complete with their glass and ironmongery wherever feasible. However, such is the pattern and ill-fitting nature of most windows - let alone their state of neglect and disrepair - that their re-use may only be appropriate for outbuildings or stores. For habitable accommodation, new fittings will almost certainly be called for, which will need to comply with modern standards. Again, simple unpretentious installations are the most successful. Basic boarded doors, with iron or timber furniture, will suffice in most cases, rather than elaborate panelled doors with brass ironmongery. Similarly, windows should invariably be purpose-made sash and case units or side hung casements, with their proportions determined by existing fittings or those on other local buildings. Rarely, if ever, will modern stock windows be an acceptable substitute. Despite their perceived drawbacks, traditional joinery-made windows can quite readily be manufactured to be as durable, secure and weatherproof as mass-produced units. Even the lure of double glazing can be accommodated if necessary, although care must be taken not to compromise the appearance of the window. If necessary, additional security and insulation can be provided by adding internal folding shutters or external sliding doors.

4.86 There is often a misguided tendency to try to standardise new windows and doors in the conversion work, thereby losing the charming assortment of fittings so often found in many steadings. A variety of window styles, for example, is commonplace, and care should be taken to maintain this diversity.

4.87 There has also been a tendency to move away from traditional colour schemes for external decoration. The modern penchant for the 'knotty pine' look has resulted in the extensive use of inappropriate wood stains and varnishes which are quite out of keeping. A similar criticism can also be levelled at the widespread application of ubiquitous white gloss paint. The joinery of most steadings was protected - decorated is perhaps too sophisticated a

description - by strongly coloured paints in a flat or semi-flat finish. Many farms and estates have distinctive liveries which have survived many generations. Deep blue-greens and reds are not uncommon and it is a sad consequence of many conversions that this richness is obliterated by bland and unimaginative colour schemes. A wide variety of traditional paints, with authentic solid colours and finishes, is now available, and their use is to be encouraged.

FLOORS

Structure and Finishes

4.88 The floors of most redundant steadings are rudimentary in the extreme, which is not surprising given the treatment to which they were subjected, be it by animals or machines.

4.89 Many floors are simply made up of well compacted earth or clay. In some byres and sheds this has been built upon by layers of mud and manure deposited by animals, so that the internal floor level has become considerably higher than originally intended.

4.90 Other floors, such as in stables or dairies, were often cobbled with well rounded fieldstones, or laid with setts or grooved flagstones falling to drainage channels and gullies. In some areas, brick paving or clay paviours can be found. In others, the original floor may have been overlaid or replaced with a mass concrete screed. Timber floors are not so common at ground level, except in 'cleaner' areas such as threshing barns or bothies, where it was common practice to lay wide floorboards over rough timber joists set directly on to the earth solum. Not surprisingly, many of these floors have disintegrated over time.

4.91 Upper floors, where they exist to form the likes of haylofts or granaries, are generally constructed of timber joists spanning the width of the range and supporting thick timber boarding. The bearing ends of the joists are usually housed into pockets cut into the inside face of the external stone wall, with their load sometimes distributed on to continuous horizontal timber battens, or bilgates, set into the masonry. In later buildings, concrete slabbed upper floors may be found, occasionally supported by steel beams.

Guidance on Conversion Work

4.92 In areas which are to remain uninhabited, such as stores or garaging, every effort should be made to retain, repair or restore the original floor surface. Cobbles, setts, flagstones, or even earth, can be perfectly adequate provided they are allowed to 'breathe', and the space is kept well ventilated.

4.93 Within habitable accommodation, however, the original solid floors will certainly need to be upgraded to provide a level, hygienic and damp free finish. To satisfy building regulations insulation may also be required but this is not usually necessary over larger areas.

4.94 Current conservation practice recommends that any new floor structure - such as a concrete slab - should be overlaid on a separating membrane applied to the existing surface. In theory this will allow the new floor to be removed at a later date without damaging the original, which can then be re-exposed. In practice this is often a difficult proposition, and unless the floor is of such architectural or historic importance that it merits such precious treatment, a more practical solution may have to be found.

4.95 Most existing floors are very uneven, often laid to falls to hidden or broken drains. They may be contaminated with animal waste or affected by local soft spots and subsidence. Existing timber ground floors will almost certainly be vulnerable to decay, and can conceal defects in the solum. Any superimposed floor, laid on a defective substrate is bound to be suspect and will inevitably raise the internal floor level, possibly to an unacceptable height in relation to existing openings and ceilings. The disadvantages of this overly precious approach outweigh the questionable advantage of catering for the remote future possibility that the original floor will be re-exposed.

4.96 A more pragmatic approach would be to carefully take up the existing floor and replace it with a new one set to the desired level. The important spin-off from this is that a valuable stock of flooring material can be salvaged for re-use elsewhere rather than being entombed under a new floor. Indeed, in some cases, the original floor surface - such as flagstones or clay pampments - can be uplifted and relaid using the new floor structure as the substrate.

4.97 Laying a new concrete floor, on a proper base and incorporating a damp-proof membrane and insulation as required is the most straightforward way to replace an existing floor. A 'finishing zone' should be provided if necessary to accommodate a choice of surfaces, such as timber boarding on battens, tiles on screed, or salvaged flagstones on bedding mortar. Alternatively, a suspended and insulated timber floor over a well ventilated solum may be considered, although greater excavation may be required and care should be taken to avoid disturbing or undermining the shallow footings of the external walls.

4.98 Timber upper floors are easier to retain. Old floorboards in particular are full of character and deserve special attention. They should be carefully repaired and pieced in with matching timbers. However, this may not be practical where extensive works are required to upgrade or repair the floor construction, or where it is disrupted by new services or superimposed partitions. In such cases, the floorboards could be carefully taken up and relaid elsewhere.

4.99 The joisted structure will need to be assessed in terms of size, spacing and condition, to ensure that any new loadings imposed as a result of the conversion work can be accommodated; this is rarely a problem if the upper floors have previously been used for storage. There may, however, be problems with the bearing ends of joists and horizontal bilgates where they are housed into the external masonry walls and are particularly susceptible to timber decay: timbers built into south and west facing external walls are especially vulnerable to penetrating dampness and may require extensive spliced repairs. Where floor timbers have survived intact, their longevity may well have been assured by their open construction and free air movement. Unfortunately, the conversion process is bound to drastically alter the immediate environment around existing timbers. The introduction of finishes, insulation, vapour checks and heating can suddenly trigger or accelerate the decay or deterioration of vulnerable timbers. Careful consideration, therefore, needs to be given to the long-term wellbeing of the joisted structure, and particularly to the built-in bearings. As a precautionary measure, it may be sensible in some particularly vulnerable areas to cut back all bearing ends and remove any built-in timbers, and to support the joists on isolated runners bolted to the walls, thereby avoiding contact between masonry and timber. If serious cutting back and splicing of joists is needed to deal with decayed ends, (particularly if both ends of the same joists are affected), the opportunity presents itself to alter the span direction of the structure. In such a situation it may be possible to reconfigure the sound but shortened joists

to run parallel with, rather than perpendicular to, the external walls. They will, of course, need to be supported by new beams or cross walls and provided with structural ties to the flanking masonry.

4.100 There will often be a requirement to upgrade the floor construction to introduce sound deafening, fire-proofing or insulation (particularly over open cartsheds used as garaging for instance). The routing of services can also be challenging, and should be given careful thought so as to avoid damaging or despoiling the original building fabric.

INSIDE SPACES, FINISHES AND FITTINGS

General Description

4.101 The interiors of most working steadings are very plain, reflecting their functional nature. Bare floors, unplastered walls and the exposed underside of roofs, are commonplace. Walls were once limewashed annually in animal houses although this practice has long since been abandoned. In the interests of hygiene dairies were often tiled or lined with glazed bricks and fitted out with slate or marble shelving. Bothies and stables may have been plastered internally, or lined out with timber matchboarding to provide a small measure of relative comfort. Indeed, in some of the more sophisticated stables on the larger estates, the equine occupants were treated to more comfortable quarters than their grooms.

4.102 Although the interior spaces were relatively sparse, what fittings did exist were robustly constructed. Although many will have been stripped out, some will have survived. Stout doors with simple but effective 'woodmongery' may connect individual ranges or spaces. Stable fittings can be particularly attractive, with their thick curved timber stalls lined with trevis boards set into timber or cast iron posts and newels. In some cases the stalls incorporate quite grand iron railings, overthrows, and hay checks or mangers. Saddle racks and other tack fittings can also be found. Cattle were treated less luxuriously but, even so, their simpler trevisses, feeding troughs and hay racks often survive.

4.103 A whole array of fittings and machinery may be found associated with the production of power and the milling of crops. Engines and boilers, water wheels, horse gang gearings, millstones, threshing machines, hoppers and steep timber stairs/ladders to upper floor granaries are all common features.

Guidance on Conversion Work

4.104 The inevitable need to upgrade and insulate walls, floors and roofs has been described in the preceding sections. Elsewhere, it is common good practice to ensure that any new internal fitting out is kept as simple and unprepossessing as possible. Ostentatious finishes, extravagant fixtures and elaborate decoration schemes are rarely successful.

4.105 Existing internal doors, and other useful joinery fittings where they survive, should be salvaged, repaired and re-used. They can also provide a useful pattern for manufacturing new fittings.

4.106 Sadly, many of the agricultural installations will need to be removed during the conversion work, although with careful planning some may be able to remain in-situ; stable stalls for instance, have been retained to form office work stations; water wheels and mill gearing can often be left untouched. However, where fittings have to be taken out, they should be carefully recorded and dismantled, rather than broken up. Smaller fittings, such as saddle hooks, mangers and troughs can often be used elsewhere to great effect, but larger fittings will generally appear entirely out of place and theatrical if they are moved from their original position. In such case, it is better to offer the fittings to a specialist salvage company or, perhaps, to a local museum.

4.107 With some ingenuity, existing fittings can be adapted or reconfigured to make something entirely different. The newels, trevisses and ironwork salvaged from dismantled stable stalls can be successfully redeployed, for instance, in the design of a new staircase or balustrade, and the hayrick baskets used for storage elsewhere.

OUTSIDE SPACES, SERVICING AND EXTERNAL WORKS

General Description

4.108 Built of locally quarried stones, most steadings have a direct and immediate relationship with the surrounding landscape; they have a true sense of belonging to the ground upon which they are built. Despite their rural setting, often in exposed and open locations, old steadings are rarely visually obtrusive; their simple forms, sometimes following the contours of the land itself, and their traditional materials harmonise with the wider countryside. They are self-effacing and inward looking, turning their back against exposure to the elements, and yet they remain an essential, instantly recognisable and endearing feature of the landscape.

4.109 Steadings usually consist of groups of buildings, creating a variety of spaces around and between them; some formal, others less so, but all of them serving a useful purpose. The commonest and one of the most attractive features of steading developments is the sheltered courtyard flanked on three or four sides by stone ranges and secured by fencing, gates or a more formal entrance pend. This was essentially a working yard with its entrance, or open side, usually facing north, away from the prevailing elements. It gave access to various buildings around its perimeter and provided some shelter for animals. In some cases, it may incorporate a bull pen, a sheep fold or have been covered over completely. On larger farms, two or more yards may exist, providing space for cattle courts or stack yards. Over the years, many of these yards have been infilled with a plethora of later ancillary buildings, usually built to lesser standards. In some cases ranges run parallel with each other to form narrow 'mews' or alleyways.

4.110 Many of the courtyards were simply left as earth, although others were laid with well rounded fieldstone cobbles, setts, loose stone or concrete covered with an accumulation of manure and mud. There was often little or no provision for adequate drainage, except by way of underground cundies or channels which were rarely properly maintained.

4.111 Outwith the courtyard setting, the land was quickly given over to open grazing for livestock, or to the tended fields of arable farmland which sometimes directly abutted the stone perimeter walls - its fields and boundaries defined by stone dykes, hedging or simple

fencing. Iron park railings may be found on the more formal estates. In more remote areas the steading will usually be served by a rudimentary access track, although larger farms and estates may have properly maintained roads. Due to the increased dependency on farm machinery and vehicle transportation, ever larger external areas are given over to hardstandings, access and manoeuvring space, which sometimes occupy more room than the buildings they serve. Silage pits and middens can also take up considerable space.

4.112 Steadings which took advantage of water power would have been fed by a mill lade, or pond controlled by sluices or dams. Since the demise of this power source, many such features have been lost or simply fallen into disuse, although evidence of their existence can usually be found.

4.113 The provision of external services – incoming and outgoing – is fairly rudimentary. Drainage, where it exists, is often defective. In some cases there is no provision at all for rainwater disposal from the buildings; the run off from the roofs is simply allowed to saturate the ground. Where surface water drains are provided they often take the form of stone cundies which run to a nearby burn or soakaway, accepting discharges from adjacent field drains along the way. Soil and waste drainage sometimes takes the same route, although if there is an adjacent farmhouse it will probably connect into a private septic tank.

4.114 Incoming water is often supplied from a private source, unless the steading has access to a public mains supply. Collecting and holding tanks, and even small dams, are often constructed nearby. Power supplies – almost always electricity rather than gas – and telephone lines are invariably brought in on overhead lines strung from posts.

Guidance on Conversion Work

4.115 During conversion work the pressure to alter and modify the external spaces and immediate landscape is as great as it is for the buildings themselves. In some ways this can be beneficial where, for instance, original courtyards are cleared of unwanted later buildings or where swathes of concrete hardstanding are grubbed up; or where old silage pits are removed. But in others, the demands of a new uses -particularly those of housing – generate some difficult conflicts. This is especially true with regard to the provision of gardens, garaging, access roads and parking.

4.116 If it all possible, existing courtyards should be carefully restored; original surface materials should be reinstated and adequate drainage provided. In general, most courtyards will be ‘hard’ areas with cobbled, setted or flagged surfaces. Where the courtyard was originally laid to earth, salvaged surface materials may become readily available from within the steading ranges. Failing this, a local river-washed, course mixed gravel is perfectly acceptable; the use of brightly coloured decorative aggregates or angular chips should be avoided.

4.117 Generally speaking, a courtyard should not be divided up. This is a particular temptation in multiple residential developments where small individual patio gardens are often proposed. Geometrically, this can be difficult to achieve, especially for the re-entrant corner houses, but more importantly it destroys the integrity of the yard. Instead, it should remain as a communal court, leading to the 'front doors' of individual dwellings and possibly given limited vehicular access depending on the size of the development. Simple entrance

gates to the courtyard can be reinstated if required, but ostentatious gateways should be eschewed. Original entrance pends and archways should be retained for access; the temptation to infill them with habitable accommodation should be resisted.

4.118 Despite the restrictions placed on courtyards, it must be recognised that the provision of private gardens in residential developments is an important factor. For a single house, this can more readily be accommodated by devoting the courtyard to private use, or by screening off a discreet part of land elsewhere. For multiple developments, the only practical, and marketable option, is to deploy the gardens around the outside of the steading. While this is geometrically far easier than subdividing the courtyard, and provides a certain degree of privacy in that overlooking is minimised, it obviously has an impact on the landscape setting of the steading. There is an inevitable 'trade-off' between upsetting the external landscape setting and compromising the integrity of the internal courtyard. Great care must therefore be taken over the design and layout of gardens. Their boundaries need to be sensitively defined to give security, shelter and privacy, using stone dykes or appropriate hedging, such as beech or hawthorn. Fast growing conifer hedges and suburban style ranch fencing will look entirely out of place. In addition, some control will need to be exercised over the design of other garden or landscape structures, such as huts, sunhouses, and greenhouses at one end of the scale through to tennis courts, swimming pools and helicopter landing pads at the other. This can be done either by way of strict sale or management agreements or by the withdrawal of Permitted Development rights by the planning authority.

4.119 In certain cases, where the external landscape setting is particularly important, the use of ha-ha's may be called upon to protect and delineate private ground. In such circumstances, the subdivision of the internal courtyard may have to be contemplated in order to provide gardens. Where the steading was designed as 'extrovert' structure, with an infilled or covered court - as in some of the Home Farms - there may be ample scope for development within the courtyard. If so, the disposition of corner units will help to create 'defensible space' associated with individual dwellings, whether defined by physical boundaries or the skillful deployment of surface materials.

4.120 Perhaps the most onerous and obvious consequence of converting a steading – especially into multiple residential use – and the one which is most often handled badly, is the provision of suitable vehicular access, together with its accompanying parking requirements. Pedestrian and disabled access can also have a significant impact. If the steading is to become a single dwelling there may be little or no change required. The existing access can probably remain untouched and parking can usually be readily accommodated, either externally or within an existing cartshed or outhouse. However, where two or more houses are created the Roads or Highways Department of the local authority will take a greater interest in the project, and a conflict often arises between their recommendations for a proper road access, entrance sight-lines, street lighting, and adequate parking, and the desire to minimise any impact on the landscape setting. In some cases the local authority may ask for the access to be upgraded to fully adoptable standards more applicable to a suburban housing estate than a discreet rural development. They may also demand that footpaths are constructed to the nearest settlement. Clearly, such requirements can be difficult, if not impossible, to accommodate and some compromise is usually reached. Even so, the design of access roads and lighting needs sensitive treatment. If the owners of the new development are prepared to accept responsibility for the upkeep of any new access, then the 'adoptable' standards and specifications can largely be disregarded. A simple well-drained track, with grass verges is all that is required in most cases. Provided the verges are

wide enough there should be no need for pavements. Lighting should be subtle and discreet, and just sufficient for safety and security purposes: widespread street lighting and floodlighting should be avoided. Small traditional swan neck lamp fittings or more contemporary security lights, fixed to the building itself are preferable to those mounted on standards or posts. The ubiquitous coach lamp should never be allowed to adorn any self-respecting steading development.

4.121 Parking requirements will generally be laid down by local authorities. For residential use, this may be as high as two car spaces per dwelling plus an allowance for visitors. Creating space for adequate and discreet parking can be a challenge. On larger developments, particularly those with two or more courtyards, it may be perfectly in order to allow vehicles into one of them, with parking arranged either in the open or within an existing range; it so happens that the depth of most ranges is ideally suited to garaging. Cartsheds, coachhouses, and implement sheds, with existing wide openings, may provide serendipitous garaging without much alteration. Where parking has to be provided around the perimeter of the steading, it may have to be located remotely and screened from view. In some cases, detached outbuildings can be readily converted to garaging. Alternatively, if the topography permits, simple garage ranges can sometimes be added without detracting from the appearance of the steading group. In some instances such a range may even enhance the composition, by infilling an open side of a courtyard for example.

4.122 The provision of new services needs to be carefully handled. The traditional steading may provide good opportunities for exploring less conventional means of energy supply, such as water, wind or solar power sources. It is significant that some steadings may well retain the means to produce this 'alternative' energy in the form of original waterwheels and windmills which could be repaired and re-used to generate power. Solar panels and voltaic cells may be more readily accommodated than on urban buildings, if carefully located as separate installations remote from the main steading. New or upgraded incoming services such as electrical mains or telephone and communications cabling should be routed underground if possible. For the majority of steading conversions it is unlikely that mains water, gas or drainage will be available.

4.123 Private water supplies will need to be analysed for potability and most probably upgraded by the installation of filters to control bacteria and sediment. The water courses and springs from which the supply is drawn should be checked for any possibility of contamination by livestock or chemicals. An underground water holding tank may have to be provided in the vicinity of the site, if there is a danger of the supply running dry.

4.124 Gas or oil tanks, for heating installations, need to be carefully sited. Modern proprietary tanks, which in the case of oil obviate the need to build protective bunds, are relatively discreet but will most probably still require sensitive screening. In some instances it may be possible to accommodate fuel tanks in part of the steading building itself, but this can have significant implications with regard to building and fire regulations. For larger developments involving multiple dwellings a district heating system should be considered, thereby avoiding a proliferation of individual fuel tanks.

4.125 Most conversions will require the installation of a new drainage system, complete with a septic tank or other sewage processing equipment, and outfall pipework. The use of alternative foul water disposal systems, such as reed beds, are worthy of consideration.

4.126 General site drainage, rainwater and surface water disposal, and local field drainage will all have to be properly assessed. In many cases, such drainage installations are non-existent or have fallen into such disrepair that they no longer serve any useful function. It is likely, therefore, that substantial new drainage work will be required. This may include the creation of french drains around the perimeter of the steading in order to direct moisture away from the newly habitable building fabric.

SPECIAL FEATURES

4.127 It should be borne in mind that even though traditional farm steadings throughout Scotland share many common characteristics, each one remains unique in some way on another, whether in its layout, its use of materials, its physical construction or its stylistic credentials. Many are adorned with very attractive idiosyncratic features which add to their uniqueness, and which should be retained at all costs. Such features can range from the smallest decorative cast iron vent grille embellishing a fresh air inlet to a humble cow-house, through to the grander belfry of the Home Farm which summoned workers to and from the surrounding fields. Clocktowers and doocots, owl holes and bee boles, decorative carvings and finials, metal fretted bargeboards and metal brattishing all contribute to the endearing and enduring appeal of the steading form, and deserve to be preserved for future generations to enjoy.

CHAPTER FIVE CONCLUSION

5.1 There are many detailed recommendations which can be given to inform and influence 'best practice' on the conversion of farm steadings to other uses. However, one of the overriding principles should always be to adapt the proposed new use of the steading to suit the physical and architectural constraints of the buildings itself, rather than vice-versa. Any conversion works should subscribe to the best principles and practice of conservation and ecological design. They should promote the use of traditional materials and building techniques, and be 'low-impact' in physical and environmental terms. The works should be of the highest quality in all respects, and be a fitting testament to our commitment to securing the long term survival of redundant steadings. Above all, they should seek to enhance and perpetuate the enduring quality of the traditional steading form.

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