

design guidance

RESIDENTIAL EXTENSIONS, New Dwellings & Small Infill Developments

January 2000



BEDFORD BOROUGH COUNCIL



RESIDENTIAL EXTENSIONS, NEW DWELLINGS & SMALL INFILL DEVELOPMENTS

Residential Extensions, New Dwellings and Small Infill Developments has been prepared in the context of the emerging Bedford Borough Local Plan and is 'Supplementary Design Guidance'. It has been revised to take account of public consultation and was adopted by the Environment Committee on 26th January 2000 for the purposes of development control. This guidance supersedes the previous adopted guidance 'Space about Buildings (1979)'.

If you would like a copy of the text of this document in larger print please contact the Planning Division at the address below.

Copies of the document are available from the Planning Division, price £2.00 (£2.50 by post).

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The production of this Guide has been coordinated by the Borough's Chief Architect in conjunction with members of the Planning Division.

The assistance of colleagues in other sections of the Borough Council is also acknowledged.





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The Need for Planning Permission

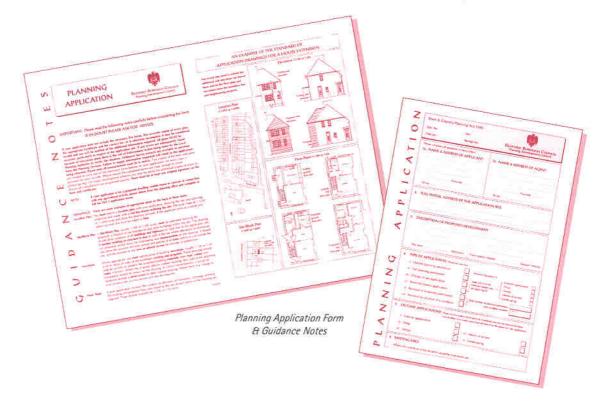
Always check with the planning department to see if you need planning permission for your proposal. This will generally be needed for new properties and all but the smallest extensions. In certain cases you will also need planning approval for alterations which change the external appearance of the property.

To ensure a good environment, high quality design standards are generally needed. Where Listed Buildings and/or Conservation Areas are affected by development, then the Council will be looking in detail for the highest design standards.

Under permitted development rights you may not need to apply for planning permission for many types of very minor alterations and extensions because of their small scale and limited impact. However even these works should be carried out so that they are sympathetic to their surroundings and neighbouring buildings. The cumulative effect of poorly designed, small-scale developments can have a serious and harmful effect on the character and amenity of an area. For example, poorly detailed replacement windows often fall into this category.

It is always best to seek up to date advice on the need for planning applications from the Planning Office as not all properties have the benefit of permitted development rights. Where your proposals do not need an application, it is always a good idea to get the Planning Office to write and confirm this before you go ahead with any work.

The following actions should help you through the planning system. Hopefully this will result in new development that will meet your needs and improve the appearance of the neighbourhood, the value of your property, and your neighbours will still be on friendly terms.



Things to Find Out Before You Start

WHAT ARE THE LEGAL IMPLICATIONS?

Check your legal deeds and any previous planning consents. Ensure boundaries are correctly shown on drawings and establish ownership, restrictive covenants, conditions or charges on the property that may affect what you want to do. Write to the Planning Office or have an early discussion with them about your proposal. They will be able to confirm if your property:

- is within a Conservation Area,
- is a Listed Building.
- is affected by any Tree Preservation Orders,
- is affected by an an Article 4 Direction or
- your proposal affects the setting of a Listed Building or Conservation Area.

WHAT IS A CONSERVATION AREA?

These are areas where groups of buildings, and sometimes external open spaces, have a special historic or architectural character that is worth preserving and enhancing. These areas are protected from harmful change by law. Proposals for new development, extensions and alterations within or close to a Conservation Area will need to prove that the character of these areas will be preserved or enhanced. Great care must be taken with:

the overall design approach,

- the detailed design,
- the quality and suitability of the materials and
- workmanship to be used in the construction.

Trees in Conservation Areas are also protected. It is essential to check with the Council before any tree surgery is done.

WHAT IS A LISTED BUILDING?

Listed buildings are buildings of architectural or historic merit and these are also protected by law. Most proposals for extensions and alterations to a listed building, including most building work to the interior, will require Listed Building Consent. The setting of a listed building is also important and any proposed development that might affect the setting needs to be designed carefully. In addition to Listed Building Consent, you may also need Planning Approval for any external works.

What is the Setting of a Conservation Area or a Listed Building?

This is the area next to
Conservation Areas or Listed
Buildings where poor development
would spoil the views in and out,
and would be harmful to the
area's special quality. A general
definition of setting is difficult,
as each case is different. If you
have any doubt check with the
Planning Office.

WHAT IS A TREE PRESERVATION ORDER?

Where existing trees make an attractive contribution to the appearance of an area, it is likely that Tree Preservation Orders will exist. This means that such trees cannot be felled or pruned without getting permission from the Planning Office first. Where any tree is affected by new development you should check with the Planning Office to see if the tree is subject to a Tree Preservation Order.

WHAT IS AN ARTICLE 4 DIRECTION?

This can take away specified Permitted Development Rights. Within the Borough this only currently applies to a limited and very specific area ie. within the Conservation Area in Stewartby.

How will my proposals affect others?

Ask yourself, if my neighbour was planning to do this, how would I react? It is a good idea to let your neighbours know of your intentions. It is best to hear any objections or concerns at an early stage and see how they can be resolved. Set out and peg out your proposal on the ground. This will help to show what effect your proposed development may have on neighbours.

WILL I NEED DRAWINGS?

You need drawings to make a planning application. However

there is much more to design than just producing drawings and it is best to seek professional advice from the outset. Design and technical skills, as well as professional fee levels vary widely and before engaging anyone, you could ask to see examples of previous work that has been granted planning permission. Look at the drawings and the resultant buildings. Remember that the lowest professional fees may not necessarily result in the best service or value.

How do I MAKE A PLANNING APPLICATION?

You should make an appointment with a planning officer who will discuss your proposal with you and advise you on how to make a planning application, and what the fees will be. The officer will offer helpful, informal advice that in many cases will lead to a positive decision, but an officer cannot guarantee that your application will be successful. The Members of the Planning Committee will make the decision on your application unless the proposals fall within the scheme of delegated decision's, in which case the Borough Planner will issue a decision.

Use the notes attached to the Application Forms to help you make your application. Submit

all the forms completed as necessary along with the drawings and make sure the correct fee is enclosed.

You should submit the following:

- Plans, sections and elevations of the existing property for extensions or replacement dwellings.
- Plans, sections and elevations of the property as proposed. Where the proposals relate to an attached property, the drawings should include details of this. Sometimes a street elevation may be necessary.
- Full details of external materials, both existing and proposed. These should include colour and type of wall and roof materials, windows (wooden, metal or uPVC) and other relevant information.
- An Ordnance Survey map based location plan to 1:2500 or 1:1250 scale, to show exactly where the site is.
- A block plan at a minimum scale of 1:500 scale to show the property and its neighbours.
- All drawings must be to a recognised metric scale and any dimensions must be in metric measurement.

If you have any doubts contact a planning officer to advise you.

A decision on your application will be made wherever possible within 8 weeks of receipt of a fully completed application together with the planning fee.

WHAT IS ENFORCEMENT ACTION?

If you carry out building work without permission you may be legally required to change it or remove it. This is likely if it is considered that the development has a damaging effect on the locality.

ARE THE BUILDING REGULATIONS THE SAME AS PLANNING REGULATIONS?

No, these are completely separate matters under different Acts of Parliament. The Building Regulations are about good constructional practice and health and safety. Unlike Planning they deal with detailed structural and technical aspects of construction work. Most domestic building work will normally need approval under the Building Regulations. For further information on Building Regulations contact:

Building Control Manager Riverside House Horne Lane Bedford MK40 1PY Tel: (01234) 221759

Fax: (01234) 221760

General Design Guidance

PLANNING POLICY BACKGROUND

Central Government planning policy guidance advises Local Authorities to reject poor designs, particularly where their decisions are supported by clear Local Plan policies or adopted Supplementary Design Guidance which has been subjected to public consultation. The Council has strong policies within the Deposit Draft Local Plan to promote good design, to reinforce local distinctiveness and to provide some mobility housing. This document has been amended following public consultation and reinforces these policies. It is now adopted Supplementary Design Guidance. It also forms part of an initiative created by the establishment of the 'Bedfordshire Local Authorities Design Forum'. The guidance given in Code N5 refines information given in other supplementary planning guidance 'Achieving Quality in Residential Layouts' and should be used as an addendum to this.

GENERAL DESIGN GUIDANCE

To fit into the local context and reflect local features, the architectural appearance of new development is important in terms of its shape, its scale and its detail. In dealing with applications the Council will consider how well the proposal

Good innovative design strengthens existing character



will fit into the character of the street or setting and whether it reinforces the existing sense of place. There is a strong need for building work to reflect local distinctiveness, not just in terms of buildings but also the existing patterns of external space and landscape.

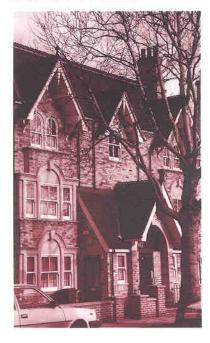
This guidance sets out what will be taken into account when the Council considers planning applications for development. It identifies solutions to some of the more common problems. You may find the following list of broad planning aims useful, but it does not cover everything.

- The Council expects all new development to be designed to the highest standards and to enhance existing local character and identity.
- Any building work should aim to reinforce and enhance the sense of place and harmonise with the setting. Existing trees and hedges should be integrated into new development wherever possible. A wide variety and rich mix of architectural styles exist within the Borough, depending on location. This ranges from the stone built villages in the north, through the mainly brick built urban areas of Bedford, to timber framed houses in Elstow to the south.

- A building style suited to one locality might not be right within another.
- There are urban, suburban, village and rural areas, each of which will require an individual design approach to sit comfortably with the surroundings.
- The guide is intended to help applicants meet their needs in a form that will be sympathetic to the character and appearance of the neighbouring buildings.
- Whilst an owner's main concern often is with the internal plan of the proposed works, the external appearance can affect the whole character of the street or setting. In particular the proposal may also affect other people's quality of life, and the amenity enjoyed by neighbours. The Council is primarily concerned with safeguarding the public interest. Through the planning system it has control over the appearance of proposed building works, how other people are affected, and other material planning considerations.
- Tables giving car parking standards are shown on pages 13 and 25. In some areas such as central urban

- areas with good public transport where street parking is deemed acceptable, or in design sensitive areas it may be possible to provide fewer parking spaces. Great care should be taken to ensure the sensitive design and location of car provision. This can be highly intrusive on the environment as it can take up significant areas of land.
- Every application will be dealt with on its own merits.
- This quide sets out various design codes with the site characteristics being the primary consideration. Dimensional criteria are also given but where it can be proved that strict use of these criteria will be out of character within an area, then it may be possible to interpret the codes more flexibly. In exceptional circumstances, an unusual site or an outstanding design also may justify departure from the codes. Encouragement will be given to good innovative designs that strengthen existing character, but high calibre design skills are needed to achieve such quality.

Good innovative design strengthens existing character



Approach to Design

This guidance is intended to help applicants meet their needs in a way that takes account of existing architectural and environmental character. Good design respects its setting and new development should reflect local distinctiveness. This does not mean that new development has to imitate existing buildings, but it should harmonise with them. New designs should incorporate some of the key elements that give a locality its character.

It is not possible for this guidance to illustrate every situation so the following sketches show some simple ways of reflecting existing character in a few particular circumstances. In reality there will be many locations different to those shown. These may need alternative design solutions, but whatever the local situation, a good starting point is always to get the basic building shapes and external spaces in harmony with the surroundings. More innovative designs have a major influence and can enhance or erode local distinctiveness. Encouragement will be given to good innovative designs that strengthen existing character, but high calibre design skills are needed to achieve this.

The photographs show high quality designs that harmonise with their particular individual settings. However even these high quality designs would not be appropriate in every locality within the Borough.

Spabhouse



An innovative and elegant prize winning extension and alterations to a 1950s speculative suburban house in a leafy, landscape dominated setting. (Holden + Partners, Architects)

A small semi rural development on a former farmyard next to a 'listed' farmhouse. The building form is low key and reflects simple barn like shapes and simple vernacular details have been used.



Keeley Farm



A large new house in an urban Conservation Area. The basic built form reflects the scale and massing of adjacent buildings. Some of the details are innovative but overall the design strengthens existing character.

The existing qualities of the locality should be reflected in the way that new development relates to existing buildings and to the external spaces around it. The spaces between existing buildings are key elements that give an area its character. Development should be in character with the street width, the pattern, spacing and size of other gardens nearby. The shape and relationship of external spaces created by any development is important.

Design of buildings is also important and will be assessed on two levels.

■ Firstly how the Basic Shape

AND Scale of the proposed

building relates to existing

buildings, to external spaces

and the setting generally in terms of massing and grouping. The overall building shape, including garages, is created by the building length, width, height, basic roof shape and any major projections or indentations.

CHARACTER given by smaller features, such as the number and proportion of windows, doors and walls, materials and texture, and roofscape. Other details such as the eaves, lintels, cills, depth of reveals at openings, plinths, canopies etc. can also have a significant effect on the character of a building. Where development is part of or is next to

Conservation Areas or Listed Buildings, affecting their setting, then there is even more need for development to be in context. In such situations some aspects of fine detail may also be involved. If so, the Council's Conservation Officer may also need to give specialised technical advice.

The guidance has been split into two sections for easy reference.

PART 1 EXTENSIONS

This provides advice and guidance to people who want to extend or change an existing house.

PART 2 NEWBUILD

This is for people who want to build their own new individual home or build a small infill development which can be served from existing roads and private drives. Normally this would cover schemes of up to five homes.

Part 1 Design Code for Extensions

This part of the guidance is for extensions to existing dwellings.

Extending a property can very often be a cost effective alternative to moving house, and if done sympathetically can improve the character, appearance and value of a home, whereas insensitive alterations can do the opposite. Therefore you should think about employing a competent professional designer.

It should be noted that the following design code amplifies the policies set out in the Housing and Built Environment Chapters of the Deposit Draft of the Local Plan. There are specific policies in the Local Plan to protect rural areas (ie. open countryside outside Settlement Policy Area Boundaries) and Policy H29 deals specifically with extensions. Large extensions can have a harmful effect on the character of a rural area by introducing a building that is almost a new dwelling, because of its size, or because the design is out of character. Proposals should take account of the size, scale and character of the original building and the need to protect rural character. This code gives some simple basic design quidelines appropriate to most situations.

You should consider how to complement the setting in terms of both external spaces and building form. Your extension design should be based on consideration of the basic building shape and how this relates to your existing property first and the detailed character second. It is impossible to show examples of every situation but the following sketches show some simple examples of poor designs and better designs in a few specific situations. There will be other solutions as well. There are also many other locations where the site characteristics will be completely different and will need a different approach to design.

Each application will be judged on its individual circumstances against the code. The Council will also take account of aspect, variation in surface levels, staggered building lines and any other matters relevant to the particular site. If your design does not satisfy the code it is unlikely to be approved unless you can fully justify exceptional circumstances. Where it can be demonstrated that strict use of the code will create development that is out of character with its setting, then a flexible interpretation of the criteria may be possible.

E1 Basic Shape and scale of your extension. In most situations it is appropriate for an extension to reflect the domestic appearance, basic shape, character and scale of the original building, and harmonise with the street or setting. Extensions which follow the exact shape of the existing building can often unbalance its appearance, so in most situations it is appropriate for an extension to 'step down and back' and appear as secondary to it.

In rural areas outside the villages it is particularly important that there should be no adverse effect on the rural character and appearance of the area. Such extensions should respect the architectural character, size, scale and siting of the original dwelling and high quality of design is essential to achieve this. Extensions to previously approved replacement dwellings in rural areas are likely to be unacceptable unless the size of the extended dwelling is similar to the original dwelling that was replaced.

E2 DETAILED CHARACTER You also need to consider the detailed character. In most situations an extension should reflect the detailed character of the existing building in terms of roofscape, window proportions, details and materials.

E3 SPACE AROUND BUILDING You will need to consider how your extension will affect the general character of the streetscene or setting to ensure this is not eroded. Existing trees and hedges should be retained and integrated with development where possible. In tightly developed areas with minimal gaps between the sides of houses, two storey extensions should be at least 1.5 metres away from any side boundary. Single storey extensions may sit on the boundary provided the criteria in E6 can be met and providing such extensions would not harm the character of the area. Single storey rear extensions should not normally extend more than 3 metres along any boundary that extends from the line of a party wall, nor have any openings on this wall, unless it can be demonstrated that the amenity of the adjoining property will not be affected. In some situations with existing rear projections an extension of 3 metres may be excessive.

In some areas extensions may be limited by the need to preserve the existing pattern and open quality of external spaces. In areas where existing properties are widely spaced the distance of extensions from the boundary should be increased appropriately to reflect the character of the area. Cramped, out of character extensions or over-development will not be approved. An extension should maintain adequate amenity space around the original building, including space for car parking/garaging. Many people are tempted to overdevelop the site. In most situations the total ground floor area of the extended house should be no more than one-third the size of the plot, with the remaining two-thirds being garden. Where rear garden depths are limited, rear extensions to a property are likely to prove difficult.

E4 CAR PARKING PROVISION Central government is currently reviewing car parking standards. Until the finalised version of its guidance becomes available the following standards should be used.

You may need to consider additional car parking/garaging. This will depend on the number of bedrooms in the extended dwelling. Car parking should be provided to meet the Council's current design guidance 'Parking Standards' (November 1996) which are shown in Table E4. These standards include 0.25 spaces per dwelling for visitors which may be allowed 'off plot'.

TABLE E4	No. of bedrooms	On 1

4 or more bedrooms4 car spaces (double garage)4 or more bedrooms3.25 car spaces (single garage)3 bedrooms2.25 car spaces

Plot Car Provision

2 bedrooms 1.75 car spaces

In some areas such as central urban areas with good public transport where street parking is deemed acceptable, or in design sensitive areas it may be possible to provide fewer parking spaces.

Note: Table E4 may need to be revised depending on the guidance contained in the final version of PPG13.

- E5 PRIVACY A primary window is the main window within a habitable room. The normal privacy distances required between primary windows is 18 metres unless the design avoids direct overlooking. This applies to bungalows or normal two and three storey houses. Where a primary window directly overlooks an adjacent house or garden the window should not be closer than 9 metres from the relevant boundary. Care needs to be taken to avoid problems of new side primary windows directly overlooking the gardens next door.
- the daylight and sunlight enjoyed in neighbours' homes. Daylight is important in habitable rooms and sunlight is needed in main living rooms. The Building Research Establishment has produced a guide to good practice called 'Site Layout Planning for Daylight and Sunlight'. The criteria which will be used for assessment purposes on both existing and new primary windows are taken from that document. Where light levels do not meet these standards your application is likely to be refused unless you can demonstrate there is no daylight or sunlight problem.

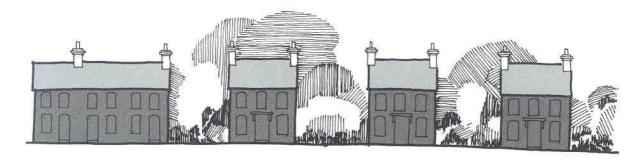
There are two methods of checking this. Method 1 applies where the window being checked may be affected by a projection. Method 2 applies where the window being checked may be affected by development facing it. If the window being checked is an existing window the check point is the centre point of the window. If the window being checked is a new window the check point is the centre point of the window on plan at a height 2 metres above floor level.

- effect on another property because of its scale, massing and proximity. Whilst Design Codes E5 and E6 above may give protection against this in most cases, each individual situation varies and will be looked at on its merits. If your design has an overbearing effect on other properties it will not be acceptable, even if it complies with the other criteria above.
- E8 SAFETY It is essential that clear visibility is maintained to allow safe pedestrian and vehicular access and that new walls, hedges etc. do not obstuct this.

Design Code E1 Basic Shape and Scale

EXISTING STREET SCENE

The massing (or block shape) of the existing buildings is very simple, with straightforward pitched roofs running parallel with the street. The space between buildings is repeated along the street to the right, and these spaces contribute much to the character of the general street scene and should be retained. The setting has a fairly open quality.



POOR DESIGN

This shows several extensions built on or in front of the original façade. The building massing created is poor. Individually each extension would spoil the street scene and added together they

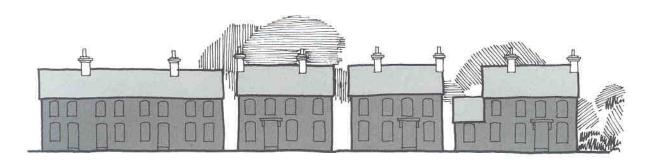
destroy it. These extensions are out of character with the building shapes:



- The flat roofed extension at A.
- The gable at B. (This also visually destroys the space that is an important element within the street scene).
- The bulky wide dormer extension at C is a primary element which dominates the original roof and would give the appearance of a three storey building.
- The porch at D is prominent, stuck on and an unrelated shape that destroys the simple unity of the original building, which has no porches.
- The existing gap between buildings is lost because the extension at E is too wide and high, virtually fills the space and results in a cramped appearance within the setting.

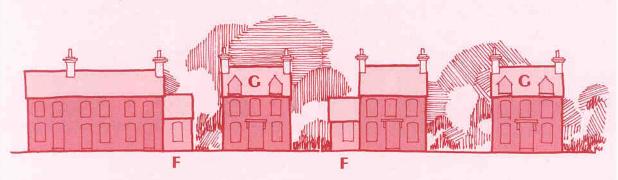
POOR DESIGN

This shows the drastic transformation of character that would occur if every house was extended along the same building line. The house frontages would become virtually continuous and the open effect of the external spaces between would be lost.



BETTER DESIGN

This shows extensions which maintain the existing pattern of open spaces and allow the original building to remain as the primary building shape, with the extensions being secondary. These extensions 'step back and step down' or are contained within the roof space.



- The set back and smaller bulk of the extensions at F are not intrusive on the street scene and maintains the character created by the existing important spaces between the 2 storey buildings. This extension is larger than it appears
- from the street because it also projects into the rear garden, making minimal visual impact on the street scene. (This example does indicate that the shape and sometimes the size of extensions may be influenced by factors outside the site).
- The two separate and more traditional style dormers at G will have an effect on the roofscape or skyline but this will be secondary. This approach is in scale with the building.

Poor DESIGN

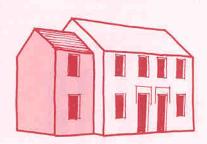
The large side extension unbalances the symmetry of the original pair of semidetached houses.



BETTER DESIGN

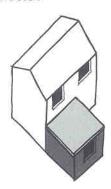
A 'step back/step down' extension would be better, with either a smaller two storey, or single storey extension. Either would retain the outline and character of the original houses, and also would

allow some tolerance where materials cannot be precisely matched.



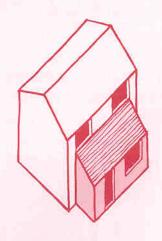
POOR DESIGN

The flat roofed extension is out of character.



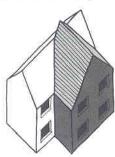
BETTER DESIGN

An extension with a pitched roof that does not obstruct the first floor windows would be better.



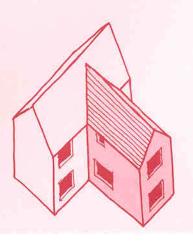
POOR DESIGN

The wide rear extension creates a high ridge line that would dominate the existing houses.



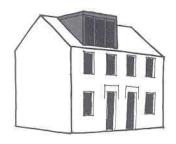
BETTER DESIGN

A narrower extension creates a lower ridge line which is less intrusive and is more in character.



POOR DESIGN

The wide roof extension virtually creates a flat roofed second storey and unsympathetic skyline.



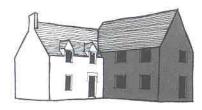
BETTER DESIGN

The use of small dormers is better in scale and maintains the existing eaves line. It should be noted that even the use of small dormers is not always appropriate.



POOR DESIGN

This very large extension overpowers the distinctive original building and destroys some of its features and its balance.



BETTER DESIGN

Often on spacious plots like this where the original building has distinctive character, large extensions are better handled as separated 'outbuildings' linked to the original. The extension is of very simple shape to avoid competing with the original building. This allows the original building to retain its character and presence.



Design Code E2

DETAILED CHARACTER

EXISTING STREET SCENE

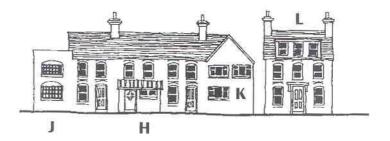
The architectural treatment is very simple with vertically proportioned windows and panelled doors. Materials are slate roofs and brickwork.



POOR DESIGN

The following shows why the extensions and also their materials would spoil the street-scene.

- The porch at H interrupts the rhythm of the existing doors and windows along the street,
- so do the windows at J and K which are all badly



proportioned and out of character. The rendered finish, heavy concrete tiles, window proportions and door design on the porch at H are all out of character.

■ The individual window shapes in the dormer at L do reflect existing window shapes, but their position and relationship is again 'foreign' to the street scene.

BETTER DESIGN

At detailed level the extensions reflect the existing architectural character of the existing buildings in both detail and materials.



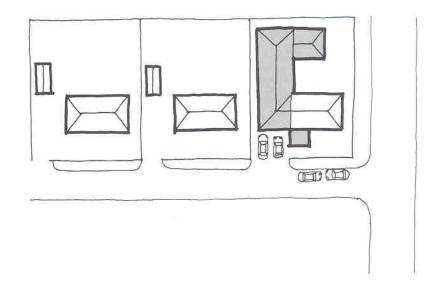
Design Codes E3 - E4 Space around Building & Car Parking Provision

POOR DESIGN

Many people are tempted to overdevelop the site. In most situations a good criterion is that the total built footprint on the ground floor is no more than one-third the size of the overall plot and the garden is at least two-thirds of this. Whilst each site will be judged on its merits any proposal that exceeds this will need proper justification.

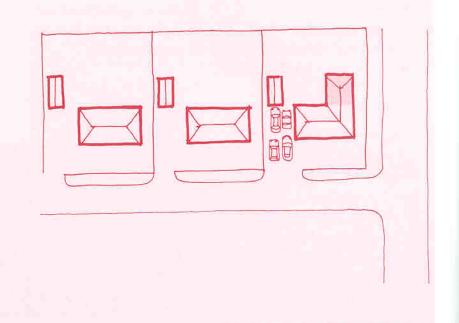
This example shows an extended footprint that overall is much more than one-third the size of the plot. The existing garage has

been removed and car parking would be pushed onto the street, into a location that would be unacceptably hazardous.



BETTER DESIGN

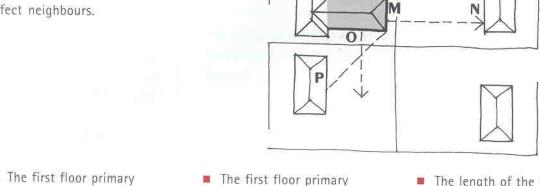
A more modest extension maintains garden amenity, and the space is in better proportion to the increased dwelling size and meets the criterion. This design also allows extra car parking on the plot to meet the increase in the number of actual bedrooms.



Design Code E5 Privacy

POOR DESIGN

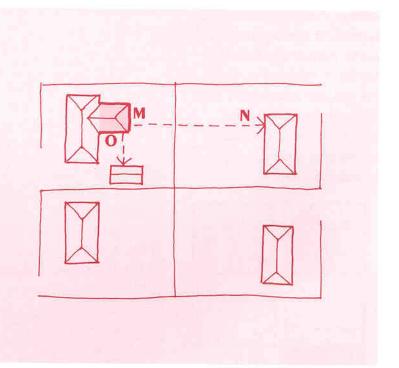
This shows unacceptable extensions that would adversely affect neighbours.



- The first floor primary window M overlooks the existing primary window N. The privacy distance should be 18 metres but is only 12 metres, making the scheme unacceptable.
- The first floor primary window O directly overlooks the garden next door from close range and should be at least 9 metres away.
- The length of the two storey extension combined with its height makes it highly unlikely that the proposal would pass the 45° daylight test on primary window P and this needs to be checked under Method 1 (see page 22).

BETTER DESIGN

- The first floor primary window M overlooks the existing primary window N but is 18 metres away.
- The first floor primary window O is screened from directly overlooking the garden next door by the pitched roof of the garage.



Design Code E6 Daylight and Sunlight

METHOD 1 EXISTING PRIMARY WINDOWS 45° DAYLIGHT CHECK

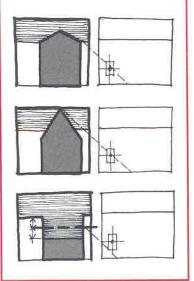
This check applies where an extension projects at 90° to the face of the wall in which the window is located.

on plan draw a line at 45° from the extremity of the extension to the existing building. If the centre point of an existing primary window is outside this line there is not likely to be a problem. If the centre point is 'within' this

line then a further check is needed on elevation.

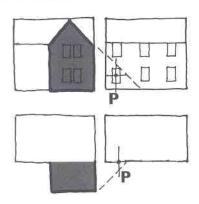
On elevation draw a line at 45° from the extremity of the extension down the existing elevation. If the centre point of the affected window is outside this line there is not likely to be a problem. If the centre point is 'within' this elevation line as well as the plan line, this window may suffer reduced daylight levels.

Note, where the extension roof slopes away from the main building, the slope of the 45° line on elevation should be taken from halfway down the roof slope, and in other cases the line will be taken from either the ridge or the eaves, whichever gives the higher pitch line.



Poor Design

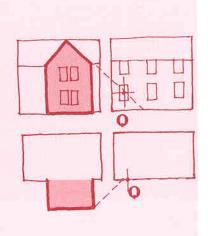
Window P demonstrates an example of unacceptability. The centre point of this primary window is 'enclosed' by both the plan and elevation 45° lines. The example shown would affect daylight to the existing ground floor window to an unacceptable level.



BETTER DESIGN

This shows an extension where the centre point of the primary window Q is 'enclosed' by only one of the 45° lines.

There should be no adverse daylight problems.



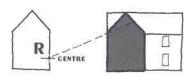
Daylight and Sunlight

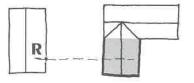
METHOD 2 EXISTING PRIMARY WINDOWS 25 DAYLIGHT AND SUNLIGHT CHECK

The check is done in a similar way for both daylight and sunlight. The daylight check applies to existing primary windows which directly face new development, and the sunlight check applies to the primary windows of living rooms which face within 90° of due south. From the centre point of each existing window likely to be affected, draw a line upwards at an angle of 25° directly towards the extension at right angles in plan to the window. The extension should not obstruct the area above the 25° line.

POOR DESIGN

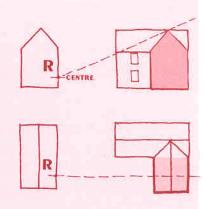
The area above the 25° is obstructed by the extension and would reduce daylight to the existing primary window R. Depending on which direction the window faces, sunlight to this window may also be affected.





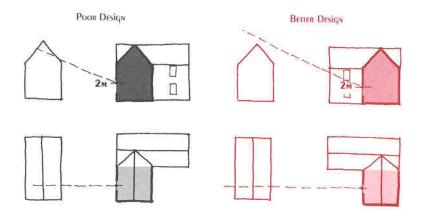
BETTER DESIGN

The area above the 25^o line is not obstructed by the extension so there should be no daylight (or sunlight) reduction to primary window R.



New Primary Windows 25° AND 45° DAYLIGHT AND SUNLIGHT CHECK

The check is done in a similar way to the above for both daylight and sunlight, the only difference being that the basic reference point is the centre point on plan of each window, tested at a height 2 metres above the floor.



Part 2

Design Code for New Dwellings & Infill Developments

This part of the guidance is for individual dwellings or infill schemes that do not need an adoptable roadway to be built (ie. up to 5 dwellings). Where proposals are for larger schemes, the Council's supplementary design guidance 'Achieving Quality in Residential Layouts' will apply. (Guidance on residential extensions is given in Part 1 of this document.) If you are considering new development, you should think about employing a competent professional designer.

It should be noted that the following design code amplifies the policies set out in the Housing and Built Environment Chapters of the Deposit Draft of the Local Plan. There are specific policies in the Local Plan to protect rural areas (ie. open countryside outside Settlement Policy Area Boundaries) and Policy H28 deals specifically with replacement dwellings. These can result in a loss of rural character and an imbalance in rural housing stock. It is important that a replacement dwelling is similar in size and scale to the original dwelling. This code gives some simple basic guidelines appropriate to most situations.

You should consider how to complement the setting in terms of both external spaces and building form. Your building design should be based on

consideration of the basic building shape first and the detailed character second. It is impossible to show examples of every situation but the following sketches show some simple examples of poor designs and better designs in a few specific situations. There will be other possible solutions as well. There are also many other locations where the site characteristics will be completely different and will need a different approach to design.

Each application will be judged on its individual circumstances

against the code. The Council will also take account of aspect, variation in surface levels, staggered building lines and any other matters relevant to the particular site.

If your design does not satisfy the code it is unlikely to be approved unless you can fully justify exceptional circumstances. Where it can be demonstrated that strict use of the code will create development that is out of character with its setting, then a flexible interpretation of the criteria may be possible.

N1 Basic Shape and Scale Your new development should be based on a design concept that harmonises with the street and setting in terms of basic shape, character and scale. Most traditional dwellings are of basic simple shape and designs for new homes in long established settlements should generally respect this. Typical modern suburban designs are seldom acceptable in such locations.

In rural areas outside the villages, it is particularly important that a replacement dwelling should be within the curtilage of the original dwelling and should respect its character, size and siting. There should be no adverse effect on the rural character and appearance of the area. Replacement dwellings that are approved may not get the benefit of permitted development rights, to prevent the possibility of a series of extensions over a period of time making the dwelling too large.

The grouping and relationship of new and existing dwellings and garages needs careful consideration. In many cases the simplest and best approach is to reflect existing buildings in terms of basic shape, character and scale. Use of traditional local details and materials is also important. Encouragement will be given to good innovative designs that strengthen local character, but high calibre design skills are needed to achieve this. Unsympathetic design concepts or inappropriate building shapes will not be accepted even if these incorporate traditional details and materials, unless there are exceptional circumstances.

N2 DETAILED CHARACTER In most situations new designs should incorporate some of the key characteristics that give a locality its character. Roofscape, wall and window proportions, details and materials are all matters that you need to consider carefully.

N3 SPACE AROUND BUILDING You will need to consider how your proposal will affect the general character of the streetscene or setting to ensure this is not eroded. Existing trees and hedges should be retained and integrated with development where possible. In existing tightly developed areas with minimal gaps between houses, new houses should be at least 1.5 metres away from one side boundary and 1 metre from the other. In some areas spacing of dwellings may be determined by the need to preserve the existing pattern and open quality of external spaces. In areas where existing properties are widely spaced the distance of dwellings from the boundary should be increased appropriately to reflect the character of the area. This may be a key factor in setting rear garden sizes. In new development areas where amenity standards are being created, individual rear garden depths should be at least 13 metres on average. This standard for external space allows scope for future growth of large scale planting, and can also accommodate future extensions with a reasonable degree of privacy. Proposals which appear cramped, out of character or over-developed will not be approved.

N4 CAR PARKING PROVISION Central government is currently reviewing car parking standards. Until the finalised version of its guidance becomes available the following standards should be used. Car parking should be provided to meet the Council's current design guidance 'Parking Standards' (November 1996), which are shown in Table N4. These standards include 0.25 spaces per dwelling for visitors, which may be allowed 'off plot'.

Single garages should have internal dimensions of at least 6×3 or 5×3.6 metres, double garages should be 6×5 metres.

TABLE N4 No. of bedrooms On Plot Car Provision

4 or more bedrooms
4 car spaces (double garage)
4 or more bedrooms
3.25 car spaces (single garage)
3 bedrooms
2.25 car spaces
1 or 2 bedrooms
1.75 car spaces

In some areas such as central urban areas with good public transport where street parking is deemed acceptable, or in design sensitive areas it may be possible to provide fewer parking spaces.

Note: Table N4 may need to be revised depending on the guidance contained in the final version of PPG13.

N5 Privacy A primary window is the main window within a habitable room. A minimum privacy distance of 18 metres is required between directly overlooking primary windows. Where a primary window of a habitable room directly overlooks another property or garden a privacy distance of 9 metres from the relevant boundary is required.

Care needs to be taken to avoid problems of new side windows overlooking the gardens next door.

N6 DAYLIGHT AND SUNLIGHT You will need to check whether your design will affect the daylight and sunlight enjoyed in neighbours' homes. Daylight is important in habitable rooms and sunlight is needed in main living rooms. The Building Research Establishment has produced a guide to good practice called 'Site Layout Planning for Daylight and Sunlight'. The criteria are taken from that document which will be used for assessment purposes on both existing and new primary windows. Where light levels do not meet these standards your application is likely to be refused unless you can demonstrate there is no daylight or sunlight problem.

There are two methods of checking this. Method 1 applies where the window being checked may be affected by a projection. Method 2 applies where the window being checked may be affected by development facing it. If the window being checked is an existing window the check point is the centre point of the window. If the window being checked is a new window the check point is the centre point of the window on plan at a height 2 metres above floor level.

N7 Overbearing You need to make sure that your design will not have an overbearing effect on another property because of its scale, massing and proximity. Whilst N5 & N6 above give protection against this in many cases, each individual situation varies and will be looked at on its merits. If your design has an overbearing effect on other properties it will not be acceptable, even if it complies with the criteria above.

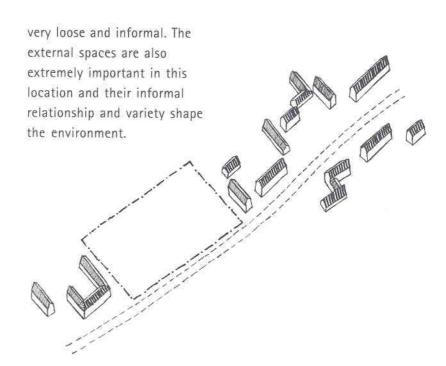
N8 SAFETY It is essential that clear visibility is maintained to allow safe pedestrian and vehicular access and that new walls, hedges etc. do not obstruct this.

NIO LAND USE You need to consider whether your proposal is compatible with the adjacent land use, and whether special designs are needed to give noise insulation for instance.

Design Code N1 Basic Shape and Scale

EXISTING STREET SCENE

This example shows a small infill site on the edge of a small village and gives an indication of the village character in terms of basic building shapes. Generally this is fairly simple, with plain wide fronted, narrow depth houses and straightforward pitched roofs. Some houses have gables facing on to the road. There are also a number of 'joined up' houses and long single storey outbuildings. The relationship of the buildings is



POOR DESIGN

This shows a small group of four dwellings laid out in normal suburban form. The two storey houses are all detached. they are 'squarish' in plan and also have complex projections in their basic shape. The garages are the only single storey elements and these are all the same size, but with an odd assortment of roof shapes. The relationship of buildings and external spaces is rigid and formal, with no meaningful variety in terms of 'basic shape'. The 'grain' of the scheme is completely out of character with its surroundings, in terms

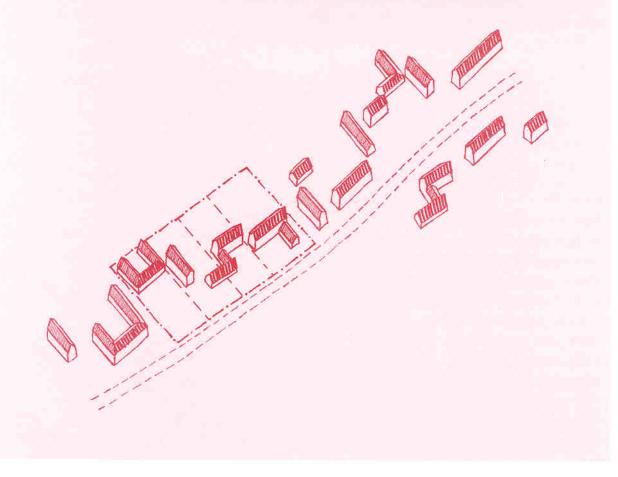
of Design Code N1. Therefore, irrespective of the detail and character referred to in Design Code N2, this scheme would be unacceptable because the basic layout and shape are alien.

BETTER DESIGN

This shows a different and more creative design approach, still using detached houses but reflecting the simple, existing building shapes better. The houses are wide fronted and of shallow depth. The use of a single storey patio bungalow and linking of

single storey elements
and large garages adds
variety in building shape
and height. The basic
building shapes reflect
the context. The layout is
very informal, and the
external spaces created
echo the existing pattern
of gardens and external
spaces in this village

setting. The 'grain' of the scheme is better, and this scheme would be acceptable provided it satisfied the criteria for the detail and character in Design Code N2. A scheme like this will require high calibre design skills.



EXISTING STREET SCENE

The shape or massing of the existing buildings is very simple. Straightforward terraced houses on the same building line create long simple building shapes. All roofs are pitched with some variation in the angle of slope.

There are no significant indents and the only projections are the ground floor bay windows on the left. The eaves of the houses on the right have slight height variations. There is little front garden space as the

building line is very close to the footpath and firmly defines the street. In this example the building shapes and the enclosure of the street are much more relevant than 'soft' external spaces.

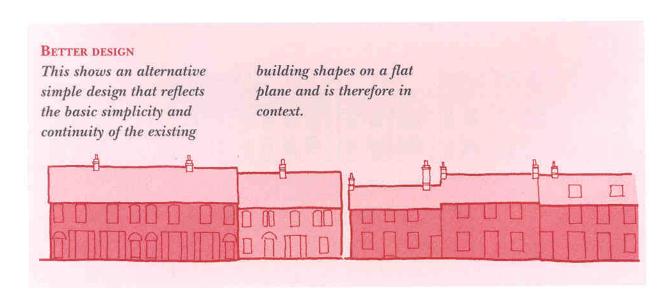


POOR DESIGN

This shows a proposed new infill dwelling that would not be approved because its complex shape or massing bears

no relationship to its neighbours. It is detached, and the large projecting gable further breaks down the shape of the building. Whilst the roof is pitched, it is far from simple, as it introduces hips and half hips into the street scene.





Design Code N2 Detailed Character

EXISTING STREET SCENE

The architecture of the existing street is very simple with vertically proportioned windows and panelled doors. There are two distinctly different architectural styles but all the existing houses have higher floor to ceiling heights than a

typical modern house, and the vertical window proportions reflect this larger scale. The houses on the right vary in height, and although the windows are large they have small panes. The existing entrance doors are panelled,

again in distinct styles, and materials to the left are slate roofs and brickwork and to the right, tile roofs and render. All the houses have chimneys and there are two small flat roofed dormers on one house.





POOR DESIGN

This shows how a new house that pays no architectural respect to its neighbours could spoil the character of the street. The use of minimal floor to ceiling heights results in a building that is out of scale

with its neighbours. The overall window shapes are out of context and scale with the existing. The small false dormer windows, the entrance porch canopy, the applied gable treatment, the stone window

surrounds and the five panelled glazed door are all totally out of character in this particular setting. The house does not reflect the pattern of existing chimneys.



DETAILED CHARACTER

BETTER DESIGN

This shows a more
acceptable proposal
although it is pure
'pastiche', and is a
straight copy of the design
style, proportion and
detail of the right hand

houses. The floor to ceiling heights are slightly higher than in the Poor Design example to give better scale and height. The first floor link is slightly set back from the main building line to give a small break between the differing architectural styles, but still maintain physical continuity of the street scene. The chimneys echo the existing.



BETTER DESIGN

This shows a proposal that fuses the basic shape of the right hand houses and the details of those on the left. These details have been reinterpreted rather than just copied. Particular

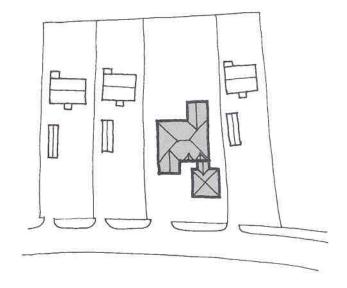
care has been taken to reflect the proportions of walls, windows and doors and particularly those of the existing bay windows. The floor to ceiling heights have again been raised higher than in the Poor Design example, to get better scale and height. The brickwork and slate roof materials and other details are in character. The chimneys echo the existing.



Design Code N1 & N3 Basic Shape and Scale & Space around Building

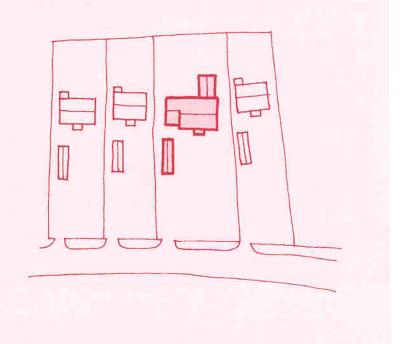
POOR DESIGN

This shows a new dwelling on a large plot. The existing houses are simple in shape and set far back from the road so that the front garden is the prominent feature. The square plan design of the new house with various attached elements does not harmonise with the street scene in terms of basic shape and scale. It is set well forward of the adjacent houses and would dominate the street scene. It is completely out of character.



BETTER DESIGN

This design is also a large house but it is of a simpler, more elongated shape than the above. The basic shape and scale reflects the character of the adjacent houses better. Its location on site is more appropriate as it allows the front garden to remain the dominant element in the street scene.



Design Code N5 Privacy

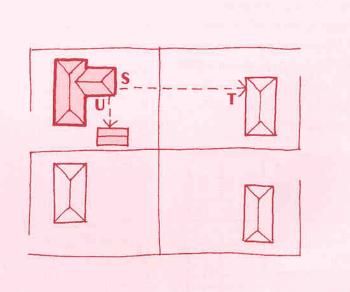
POOR DESIGN

This shows an unacceptable design that would adversely affect neighbours.

- The first floor primary windows S overlooks the existing primary windows T. The privacy distance should be 18 metres but is only 12 metres making the scheme unacceptable.
- S T
- The first floor primary window U directly overlooks the garden next door from close range and should be at least 9 metres away.
- The position on site makes it highly unlikely that the proposal would pass the 45° daylight test on primary window V and this needs to be checked under Method 1 (see page 34).

BETTER DESIGN

- The first floor
 primary window S
 overlooks the existing
 primary window T
 but is 18 metres away.
- The first floor primary window U is screened from directly overlooking the garden next door by the pitched roof of the garage.



Design Code N6 Daylight and Sunlight

METHOD 1 EXISTING PRIMARY WINDOWS 45° DAYLIGHT CHECK

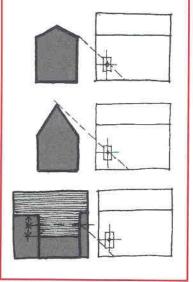
This check applies where new development projects at 90° to the face of the wall in which the window is located.

■ On plan draw a line at 45° from the extremity of the new dwelling to the existing building. If the centre point of an existing primary window is outside this line there is not likely to be a problem. If the centre point is 'within' this

line then a further check is need on elevation.

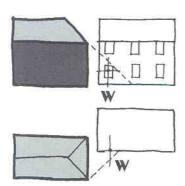
on elevation draw a line at 45° from the extremity of the new dwelling down the existing elevation. If the centre point of the affected window is outside this line there is not likely to be a problem. If the centre point is 'within' this elevation line as well as the plan line, this window may suffer reduced daylight levels.

Note, the 45° line will be taken from either the ridge or the eaves, whichever gives the higher pitch line. In other cases, where the new roof slopes away from the existing building, the slope of the shadow line on elevation should be taken from halfway down the projecting roof slope.



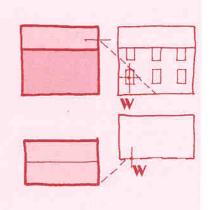
POOR DESIGN

Window W demonstrates an example of unacceptability. The centre point of this primary window is 'enclosed' by both the plan and elevation 45° lines. The example shown would affect daylight to the existing ground floor window to an unacceptable level.



BETTER DESIGN

This shows a design where the centre point of the primary window W is 'enclosed' by only one of the 45° lines. There should be no adverse daylight problems.



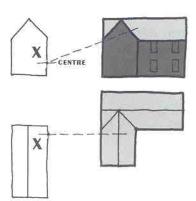
Daylight and Sunlight

METHOD 2 EXISTING PRIMARY WINDOWS 25 DAYLIGHT AND SUNLIGHT CHECK

The check is done in a similar way for both daylight and sunlight. The daylight check applies to existing primary windows which directly face new development, and the sunlight check applies to the primary windows of living rooms which face within 90° of due south. From the centre point of each existing window likely to be affected, draw a line upwards at an angle of 25° directly towards the new building at right angles in plan to the window, the new building should not obstruct the area above the 25° line.

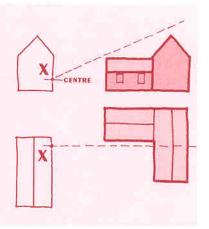
POOR DESIGN

The area above the 25° line is obstructed by the new dwelling and would reduce daylight to the existing primary window X. Depending on which direction the window faces, sunlight to this window may also be affected.



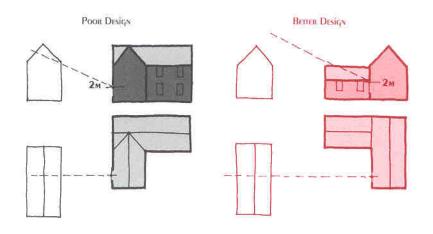
BETTER DESIGN

The area above the 25° line is not obstructed by the new dwelling so there should be no daylight (or sunlight) reduction to primary window X.



New Primary Windows 25° and 45° Daylight and Sunlight Check

The check is done in a similar way to the above for both daylight and sunlight, the only difference being that the basic reference point is the centre point on plan of each window, tested at a height 2 metres above the floor.



Appendices

EMERGING LOCAL PLAN

Cross reference should be made to various relevant policies in the emerging Bedford Borough Local Plan - Deposit Draft. The following policies relate specifically to the housing development and built environment but other policies may also be relevant.

Policies H1 - H39 Policies BE35 - BE48

OTHER DESIGN GUIDANCE

Other planning guidance documents that may be relevant are:

Accessible Housing (Consultation Draft)
Car Parking Standards
Landscape Design Guide
Traffic Calming - Streets for People

Countryside Character Map (Volume 6)

Bedford Borough Council Bedford Borough Council Bedford Borough Council Bedford Borough Council

Countryside Agency