AECOM

MELBURY ABBAS AND CANN Design Guidelines

locality



December 2019

Quality information

Project role	Name	Position	Action summary	Signature	Date
Qualifying body	William Kenealy	Melbury Abbas and Cann Parish Council	Review	William Kenealy	01-11-2019
Director / QA	Ben Castell	Technical Director	Revision and approval of Final Report	Ben Castell	18-10-2019
Researcher	Hoorieh Morshedi	Graduate Urban Designer	Research, site visit, drawings	Hoorieh Morshedi	03-12-2019
Researcher	Jimmy Lu	Urban Designer	Research, site visit, drawings	Jimmy Lu	03-12-2019
Project Coordinator	Annabel Osborne	Project Coordinator	Review	Annabel Osborne	09-12-2019

This document has been prepared by AECOM Limited ("AECOM") in accordance with its contract with Locality (the "Client") and in accordance with generally accepted consultancy principles, the budget for fees and the terms of reference agreed between AECOM and the Client. Any information provided by third parties and referred to herein has not been checked or verified by AECOM, unless otherwise expressly stated in the document. AECOM shall have no liability to any third party that makes use of or relies upon this document.

Contents

1. Introduction	
1.1. Introduction	
1.2. Objective	
1.3. Process	
1.4. Area of Study	
2. Local Character Area	
2.1. Introduction	
2.2. Local Character Analysis	
2.3. Architectural Details	
3. Design Code	
3.1. Design Code	
3.2. General questions to ask and issues to consider when presented with a development proposal41	
4. Delivery	



Introduction



1. Introduction

This section provides context and general information to introduce the project and its location.

1.1. Introduction

Through the Ministry of Housing, Communities and Local Government (MHCLG) Neighbourhood Planning Programme led by Locality, AECOM has been commissioned to provide design support to Melbury Abbas and Cann Parish Council.

The Parish Council is making good progress in the production of its Neighbourhood Plan, and has requested to access professional advice on design guidelines for any potential development within the parish. This document should support Neighbourhood Plan policies that guide the assessment of any future development proposals and encourage high quality design. It advises on physical development helping to create distinctive places integrated with the existing settlements.

1.2. Objective

The objectives of this report were agreed with Melbury Abbas and Cann Parish Council at the outset of the project.

This report provides design guidance that will influence the form of any development that comes forward in the Neighbourhood Plan area. The guidance is based upon observations of the Parish's rich historic character and unique settlement within the Cranborne Chase Area of Outstanding Natural Beauty. The design guidelines are intended to inform the design of any development proposals in the parish.

1.3. Process

Following an inception meeting and a site visit, AECOM and Melbury Abbas and Cann Parish Council members carried out a high level assessment of the parish. The following steps were agreed with the group to produce this report:

- Initial meeting and site visit;
- Urban design analysis;
- Preparation of design principles and guidelines to be used to assess future developments;
- Draft report with design guidelines; and
- Final report.

This work complements a Site Options Assessment (SOA) prepared by AECOM for Melbury Abbas and Cann Parish Council in June 2019. The findings of the SOA are summarised in a separate report and will not be the subject of this report.

1.4. Area of Study

The North Dorset parish of Melbury Abbas and Cann borders the south of Shaftesbury and lies about 8 km southeast of Gillingham, 25 km west of Salisbury, and about 30 km north of Poole. It includes the settlements of Melbury Abbas, West Melbury, Cann, and Cann Common. The parish shares a border with Wiltshire to the east. The settlements consist almost exclusively of detached and semi-detached residential properties, and is surrounded by arable farmland. The Grade II* listed Church of St Thomas serves as the parish church. Other community facilities include the Melbury Abbas and Cann Village Hall. The parish is also home to a prison, HMP Guys Marsh. The nearest train station is located in Gillingham to the north west. Bus stops are located along the A350 with infrequent services to Shaftesbury and Blandford. Compton Abbas Airfield straddles the southern boundary of the parish. The eastern half of the study area is located within the Cranborne Chase Area of Outstanding Natural Beauty (AONB). The parish straddles three main landscape areas defined by the Dorset Landscape Character Assessment:

- Clay vale (west);
- Rolling vales (centre); and
- Chalk ridge and escarpments (east).

At the 2011 census the population of the parish of Melbury Abbas and Cann was 1,127, a number that includes the prison population of HMP Guys Marsh.

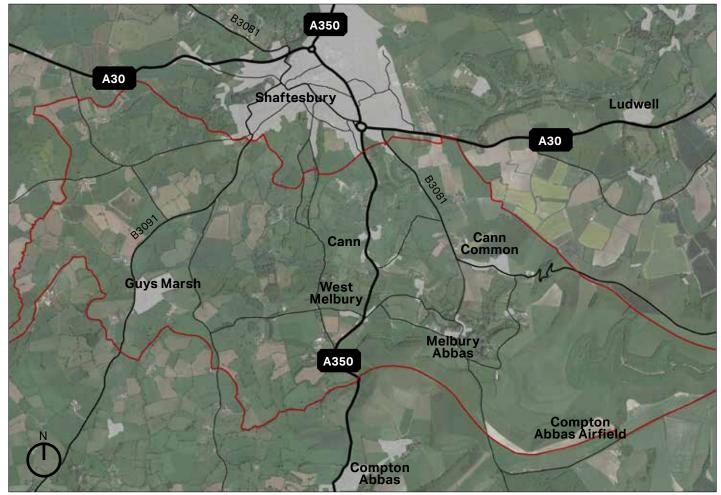


Figure 1: Melbury Abbas and Cann Parish area, with parish boundaries shown in red (source: Google Earth).



Local Character Analysis

2. Local Character Area

This section outlines the broad physical, historical and contextual characteristics of Melbury Abbas and Cann. It analyses the pattern and layout of buildings, hierarchy of movements, topography, building heights and roofline, and parking. Images in this section have been used to portray the built form of Melbury Abbas and Cann.

2.1. Introduction

The array of listed buildings reflects the architectural diversity and historic quality of Melbury Abbas and Cann. There are 25 listed buildings and scheduled monuments in Melbury Abbas and 23 in Cann. These include the Grade II* listed Church of St Thomas. The parish has one National Trust land at Fontnell and Melbury Downs. In addition, there are a number of noteworthy (unlisted) buildings that reflect the variety of the North Dorset vernacular.

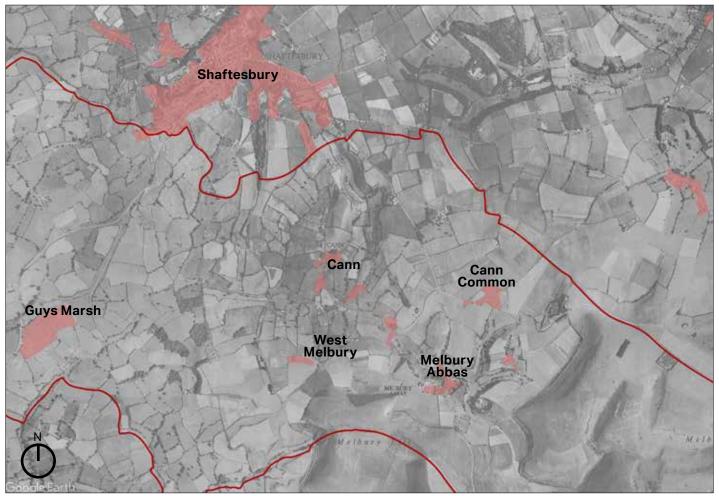


Figure 2: 1945 aerial photo of Melbury Abbas and Cann showing the historically dispersed settlement pattern of the parish, with 1945 extent of settlements shown in pink and current parish boundaries shown in red (source: Google Earth).

2.2. Local Character Analysis

2.2.1. Landscape & Open Space

The parish is set in an undulating landscape. It straddles three main landscape areas defined by the Dorset Landscape Character Assessment: clay vale, rolling vales, and chalk ridge/ escarpment. Most of the parish, including the main settlement clusters, is located in the rolling vales area, characterised by rolling and undulating farmland and scattered farmsteads typically located at the foot of escarpments or on elevated slopes overlooking the vale.

Due to the dispersed settlement pattern, most properties adjoin open fields with long views towards the countryside. The streets also feature tall hedges and a large number of mature trees. The topography, vegetation, and low building density enable the settlements to blend into the landscape with little obtrusion.

2.2.2. Streets and Public Realm

The main streets are organic in nature and seemingly evolved from historic routes, natural features, and topography. Streets are typically bordered with hedges, mature trees, and low stone walls. Most have no pavements, especially those that evolved from historic country lanes. There is no street lighting except along the sections of the A350 and B3083 contiguous with the Shaftesbury urban area. In Cann Common, Glyn Place stands out as a suburban cul-de-sac with little boundary delineations, pavements on both sides, and regular front yards dominated by driveways.

2.2.3. Pattern and Layout of Buildings

Settlements in the parish mainly consists of small clusters of houses dispersed across the countryside. The characteristics of the rolling vales landscape, in which the main settlements are located, explain their relatively secluded character of clusters such as Melbury Abbas and Cann; in contrast, Cann Common is set in a more open location. Most buildings are detached houses sited on wide plots, with a minority of semidetached houses. Recesses of varying depths in the building line enable the formation of large front gardens or yards. In a few locations the buildings directly abut narrow streets. Despite the undulating topography, there remains a high degree of openness to the open countryside and green spaces; most properties back onto or face open land, and long distance views into the vale are common.

Cann Common, mostly developed in the 20th century, has a more compact and linear settlement pattern, with buildings sited on smaller plots along the B3087, Ash Tree Lane, and Glyn Place. Glyn Place, especially, has most characteristics of suburban developments due to the repetition of similar bungalow types, uniform building orientations, and similar plot sizes.

The northern edge of the parish located within the Shaftesbury settlement boundary presents 20th century ribbon development patterns contiguous with the built up area of Shaftesbury. A limited amount of ribbon development is also visible along West Lane and Higher Barn Close.

The settlement pattern of Guys Marsh differs from the others in its high level of enclosure due to its function as a prison.

2.2.4. Building Height and Roofline

Building heights vary between one and two storeys. Typically the roofline is pitched and many buildings have prominent chimneys. There is a high diversity of roof and gable orientation, height, and materials - the most common being slate and clay plaintiles, as well as a minority of thatched roofs. Gabled, hip, and half hip roofs are the most common forms. Wall dormers are prevalent in the parish but roof dormers are uncommon.

2.2.5. Car Parking

The prevalence of large parcels enable either on plot front yard parking or garage parking adjacent to houses. Front yard parking is mostly screened by hedges and low stone walls, except in areas with more suburban characters where they are more open. Roads are usually too narrow to accommodate onstreet parking.

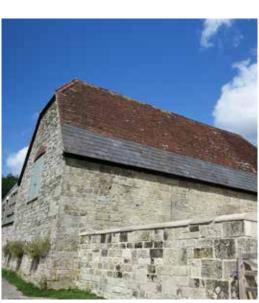
2.3. Architectural Details

The following section showcases a good amount of local building details which should be considered as positive examples and inform the design guidelines that follow.





Grade II* listed Church of St Thomas embattled tower and octagonal turret with short spire.



Manor Farmhouse barn: half hip roof with clay plaintile and slate cladding.



Sandstone boundary wall around the Grade II listed Schoolhouse.



Different types of sandstone treatments and cuts: ashlar quoins and lintels with rubble infill.



House with red brick quoins and window lintels and sandstone rubble infill.



Schoolhouse ashlar bell-cote and gabled dormer.



The Glyn Arms in Cann Common, a Grade II listed pair of thatched cottages and former pub converted into housing.





Garden boundary treatments - sandstone wall and low-level planting.

13



Design Guidelines

3. Design Code

This section outlines key design elements and principles to consider when assessing a design proposal.

3.1. Design Code

Pattern and Layout of Buildings

- The existing character of the parish must be appreciated when contemplating new development, whatever its size or purpose.
- Where an intrinsic part of local character, properties should be clustered in small pockets showing a variety of types. The use of a repeating type of dwelling along the entirety of the street must be avoided.
- Boundaries such as walls or hedgerows, whichever is appropriate to the street, should enclose and define each street along the back edge of the highway, adhering to a consistent property line for each development group.
- Properties should aim to provide rear and front gardens or at least a small buffer to the public sphere where the provision of a garden is not possible.
- The diagram on the opposite page apply relevant site and building layout principles to a hypothetical site in the neighbourhood plan area.



Figure 3: Aerial photo of Melbury Abbas showing an open and loose settlement pattern consisting in small clusters of buildings sited on large plots (source: Google Earth).



Figure 4: Example of loose settlement patterns on School Lane, Melbury Abbas.



Figure 5: Aerial photo of Cann Common showing more compact or linear settlement patterns with streets fronted with detached houses sited on narrower plots (source: Google Earth). Abbas.



Figure 6: Example of more compact settlement patterns on Glyn Place, Cann Common.

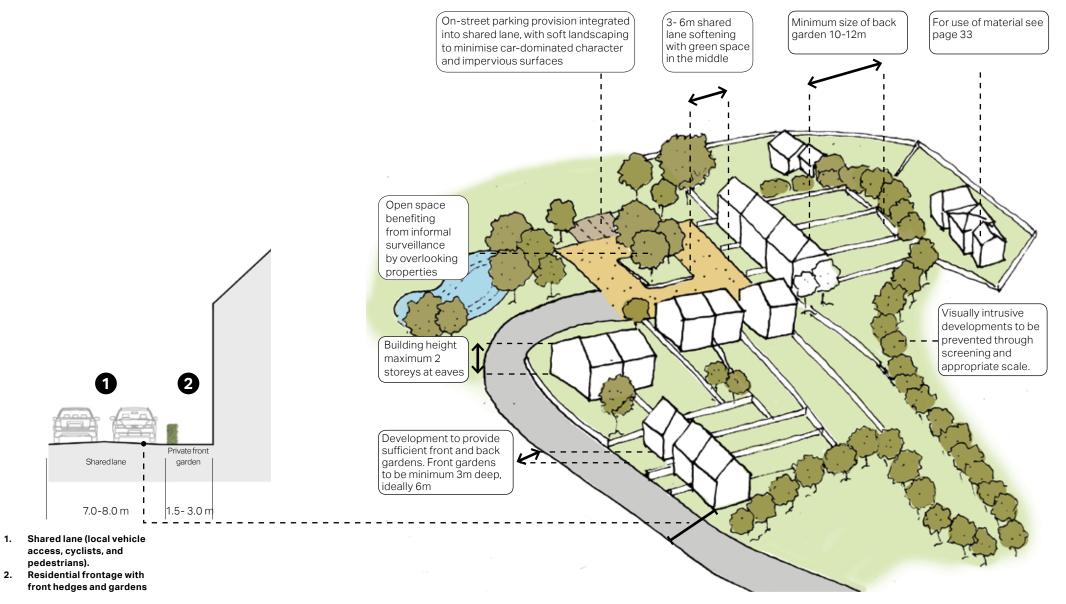


Figure 7: Illustrative plan for a small development highlighting many of the elements of the Melbury Abbas code where they relate to the pattern and layout of buildings.

1.

Street Layout and Connectivity

- Streets must meet the technical highways requirements as well as be considered a 'place' to be used by all, not just motor vehicles. Within settlement boundaries, streets must not be built to maximise vehicle speed or capacity.
 Streets and junctions must be built or retrofitted to ensure the safety and accessibility of vulnerable groups such as children and wheelchair users.
- Where permitted by the topography, new streets must be laid out to form a permeable and interconnected network. A permeable street network at all levels provides more: route choices, even traffic distribution across the network, direct pedestrian routes and viable public transport. As a result, permeable and interconnected street networks are key in encouraging walking and cycling as well as the use of public transport.
- New streets should tend to be linear with gentle meandering where the topography allows, providing sustained visual interest and evolving views. The combined layout of streets and buildings should encourage ease of navigation by articulating the environment in terms of memorable links, nodes, and landmarks.
- Pedestrian paths must be included in new developments and be integrated with the existing pedestrian routes. Any cul-de-sacs must be relatively short and include provision for onward pedestrian and cycle links.
- Design features such as gates to new developments and footpaths between high fences must be kept at a minimum, and the latter must be avoided.

Pedestrian and Cycle Connectivity

- All newly developed areas must provide direct and attractive footpaths between neighbouring streets and local facilities. Establishing a robust pedestrian network a) across any new development and b) among new and existing development is key in achieving good levels of permeability among any part of the parish.
- A permeable street network at all levels provides people with a choice of different routes and allows traffic to be distributed in general more evenly across the network rather than concentrated on to heavily trafficked roads.
- Design features such as barriers to vehicle movement, gates to new developments, or footpaths between high fences must be kept at a minimum and the latter must be avoided.
- On high-traffic and/or high-speed roads, cyclists must be kept away from moving traffic and parked vehicles as much as possible through the use of traffic calming, physical separation, and road markings and signage. On narrow streets with lower traffic and speed limits no higher than 20 mph, the road can be shared between different modes.
- Within residential areas, safe pedestrian crossing points must be provided at regular intervals to retain pedestrian connectivity.

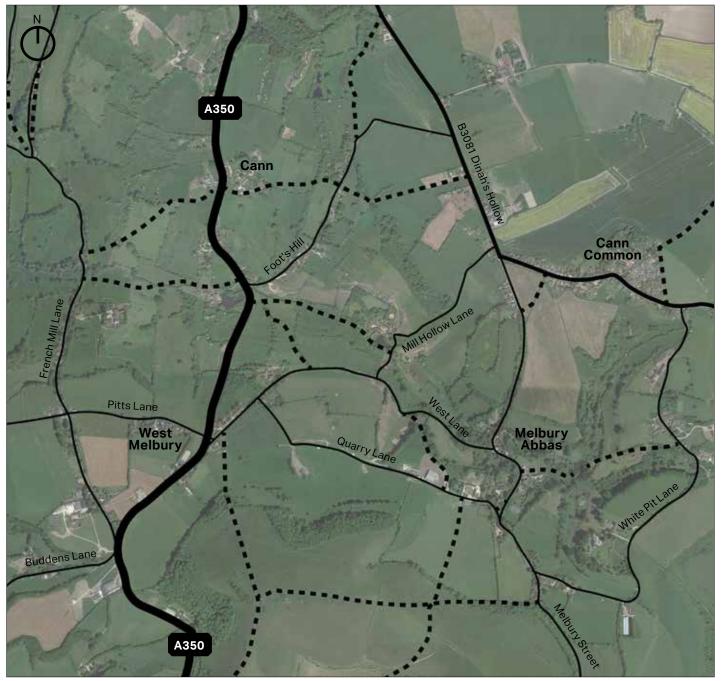


Figure 8: Aerial photo showing the limited road network (solid lines) and the more interconnected network of public rights of way (dotted lines) (source: Google Earth). AECOM

Views

- The spacing of developments must reflect the rural character of the parish and allow for long distance views of the countryside from the public realm. Existing trees and landscaping should be incorporated in the design.
- Green gaps between settlements and built up areas must be retained to avoid coalescence.
- Existing local views must be respected and enhanced by minimising street clutter and locating buildings in a way that they do not obstruct key views. Buildings must be oriented to maximise views.



Figure 9: Southward view of the Parish from Park Walk in Shaftesbury.



Figure 10: View of the open countryside towards Melbury Beacon showing the hilly setting of the Parish.

Local Green Spaces

- Development adjoining public open spaces and important gaps should enhance the character of these spaces by either providing a positive interface (i.e. properties facing onto them to improve natural surveillance) or a soft landscaped edge.
- Any trees or woodland lost to new development must be replaced. Native trees and shrubs should be used to reinforce the more rural character of the Parish.
- The existing quiet and peaceful atmosphere of the parish must be preserved through an appropriate use and design of green space.



Figure 11: Westward view towards Melbury Beacon from Quarry Lane.



Figure 13: Country lane characteristic of the rural character of the Parish.



Figure 12: Built-up edge of Shaftesbury seen from Higher Blandford Road (B3081) to the north of the Parish.



Figure 14: Church yard of the Grade II* listed Church of St Thomas

Vehicle Parking

- When needed, residential car parking can be a mix of onplot side, front, and garage parking, complemented by onstreet parking where appropriate.
- For family homes, cars should be placed at the side (preferably) or front of the property.
- Car parking design should be combined with landscaping to minimise the presence of vehicles.
- Parking areas and driveways must be designed to minimise impervious surfaces, for example through the use of permeable paving.
- When placing parking at the front, the area must be designed to minimise the visual impact of vehicles and to blend with the existing streetscape and materials. The aim is to keep a sense of enclosure at the street level and to break the potential of a continuous area of car parking in front of the dwellings. This can be achieved through high quality landscaping.
- Where provided, garages must not dominate the street scene and must not create long blank façades. Garages must be large enough to accommodate storing spaces to avoid the loss of the parking space to other uses.



Figure 15: Side parking partly concealed by boundary hedges.



Figure 16: House with side garage and front yard partly concealed by boundary hedges.



Figure 17: Disabled on-street parking bay in Cambridge with ramp for easy wheelchair access.



Figure 18: Courtyard parking with permeable gravel surfacing and soft landscaping.



Figure 19: Rear parking structure in Shaftesbury using a palette of materials similar to that of its historic setting.

Bicycle Parking

- A straightforward way to encourage cycling is to provide secured covered cycle parking within all new residential developments and publicly available cycle parking in the public realm.
- For residential units, where there is no garage on plot, covered and secured cycle parking must be provided within the domestic curtilage. The use of planting and smaller trees alongside cycle parking can be used to mitigate any visual impact on adjacent spaces or buildings.



Figure 20: Example of public cycle parking (left) and sheltered cycle parking garage (right) in Cambridge.



Figure 21: Example of kerbside on-street cycle stands.

Enclosure, Fronts and Backs

The sense of enclosure contributes significantly to an attractive environment. Clearly defined spaces help in achieving a cohesive and attractive physical environment, and help in creating an appropriate sense of enclosure.

In village and town centres, buildings and/or large trees should define and enclose spaces that lie in between them, with occasional focal points and well-proportioned public squares and spaces.

In smaller and more open settlements, a pleasant sense of enclosure can still be created through well-defined boundary treatments such as stone walls, high-quality landscaping, and trees.

The following principles serve as general guidelines that should be considered towards achieving a satisfactory sense of enclosure:

- Buildings must be designed to turn corners and terminate views.
- Building façades must front onto streets. Variation to the building line can be introduced to create an informal character.
- In very small and open settlements and where buildings are too far apart to create a coherent building line, streets should be enclosed by attractive landscaping, trees, and low stone walls that reflect the local vernacular.



Figure 22: Building in Shaftesbury with rounded corner and windows addressing both primary and secondary frontages.



Figure 23: Residential lane off Ash Tree Lane reflecting the more enclosed character of Cann Common.



Figure 24: School Lane, a narrow lane with a high sense of openness. Edges are defined by low stone walls, landscaping, and mature trees rather than building edges.

Building Line and Boundary Treatment

- Buildings must have their main façade and entrance facing the street where this is in keeping with local character.
- Buildings should be designed to ensure that streets and/ or public spaces have good levels of natural surveillance from buildings. This can be ensured by placing ground floor habitable rooms and upper floor windows facing the street.
- High quality boundary treatments should reinforce the continuity of the boundary line and help define the street, appropriate to the character of the area. Boundary treatments must be designed to strike a balance between privacy and natural surveillance.
- Front gardens should be included where this is characteristic of the area.
- If placed on the property boundary, waste storage should be integrated as part of the overall design of the property. Landscaping could also be used to minimise the visual impact of bins and recycling containers.



Figure 25: Local boundary treatment details - low ashlar wall.



Figure 27: A street edge in the historic centre of Shaftesbury defined by a continuous alignment on the property line with no building setbacks.



Figure 26: Houses with a large setback behind the property line marked by landscaped hedges rather than buildings.



Figure 28: Local boundary treatment details - low ashlar retaining wall and planting, with church yard porch in the background.

Building Scale and Massing

- Buildings must be sympathetic in scale to the surrounding context.
- Subtle variation in height is encouraged to add visual interest, such as altering eaves and ridge heights. Another way could be by variation of frontage widths and plan forms. The application of a uniform building type throughout a development must be avoided.
- The massing of new buildings must ensure adequate privacy and access to natural light for their occupants, and avoid over shadowing existing buildings. This is particularly important in areas of historic character.
- A variety of plot widths and façade depth should be considered to create an attractive townscape.







Figure 29: Examples of buildings in Melbury Abbas, Cann, and Shaftesbury demonstrating a variety of heights and plans.

Building Heights/ Roofline

Creating a good variety in the roof line is a significant element of designing attractive places. There are certain elements that serve as guidelines in achieving a good variety of roofs:

- The scale of the roof must always be in proportion with the dimensions of the building itself;
- Monotonous building elevations must be avoided, therefore subtle changes in roofline must be ensured during the design process. Roof shapes and pitches must however remain consistent for any given building; overly complex roofs must be avoided;
- Locally traditional roof detailing elements must be considered and implemented where possible in cases of new development; and
- Dormers can be used as a design element to add variety and interest to roofs. They must be proportional to the mass of the building roof, be vertically aligned to the windows, and be of consistent style across an elevation.



Figure 30: Manor Farmhouse: a dynamic roofline in a small cluster of buildings with different building heights and roof shapes.



Figure 31: Houses on Gold Hill in Shaftesbury displaying a dynamic roofline amplified by the steep gradient of the street.

Gateway and Access Features

- In the case of any future development, the design proposals should consider placing gateway elements to provide a sense of arrival to the new developed site.
- The gateway buildings or features must reflect the local character. This could mean larger houses in local materials with emphasis on the design of chimneys and fenestration, as attractive corners or endings of masonry walls.
- Besides building elements acting as gateways, high quality landscaping features could be considered appropriate to fulfil the same role.
- Gateways may also be accompanied by traffic calming features such as kerb buildouts and raised entry tables to encourage motorists to reduce speed.



Figure 32: Schoolhouse neo-Gothic gateway.



Figure 33: Church of St Thomas: covered church yard porch gateway.



Figure 34: Gateways created by a combination of low masonry walls, gates, and landscaping.

Fenestration

- Fenestration on public/private spaces increase the natural surveillance and enhance the attractiveness of the place.
 Long stretches of blank (windowless) walls must be avoided.
 Overall, considerations for natural surveillance, interaction, and privacy must be carefully balanced.
- Windows must be of sufficient size and number for abundant natural light.
- Site layout and building massing must ensure access to sunshine and avoid overshadowing neighbouring buildings. New developments should also maximise opportunities for long distance views.
- Consistent window styles and shapes must be used across a given façade to avoid visual clutter and dissonance.
- Fenestration must reflect an understanding of locally distinctive features such as scale, proportions, rhythm, materials, ornamentation, and articulation. This must however not result in pastiche replica.



Figure 35: House in Shaftesbury displaying consistent upper storey window styles and alignments.



Figure 36: Building displaying a regular pattern of windows across the main elevation.

Household Extensions

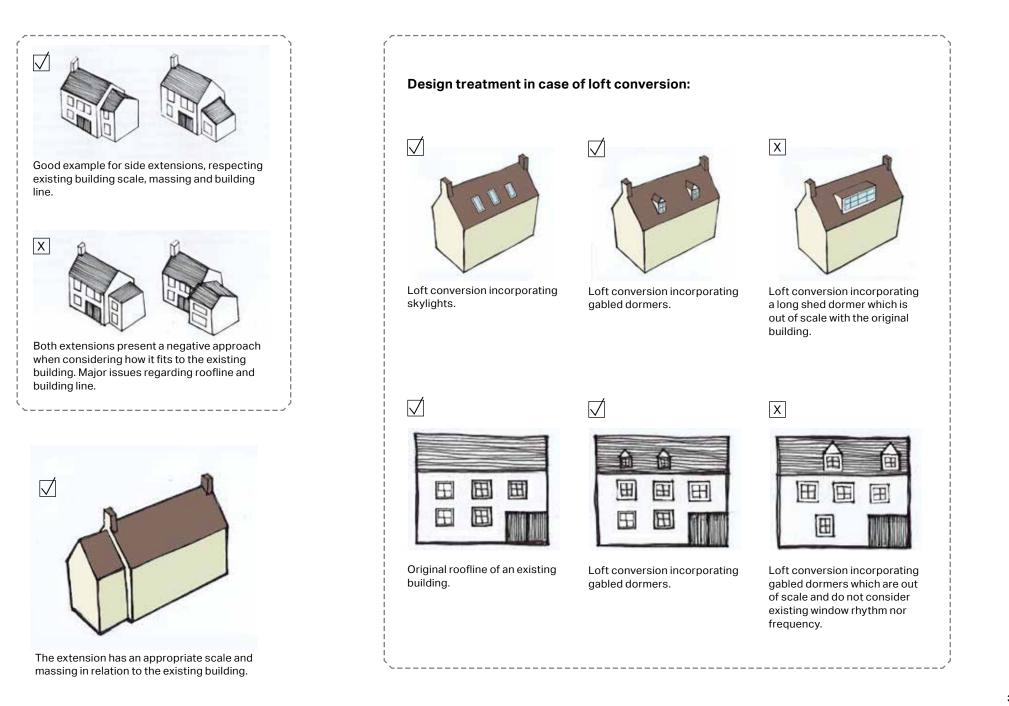
- The original building must remain the dominant element of the property. The newly built extension must not overwhelm the building from any given point.
- Extensions must not result in a significant loss to the private amenity area of the dwelling.
- Designs that wrap around the existing building and involve overly complicated roof forms must be avoided.
- Extensions must be compatible with the pitch and form of the roof to respect the existing building's character and dimensions.
- Extensions must demonstrate an intelligent understanding of the materials, architectural features, window sizes, and proportions of the existing building in order to match and complement the built environment.
- In the case of side extensions, the new part should be set back from the front of the main building and retain the proportions of the original building. This is in order to reduce any visual impact of the join between existing and new.
- In the case of rear extensions, the new part must not have a harmful effect on neighbouring properties in terms of overshadowing, overbearing, or privacy issues.



Figure 37: Side extension employing construction materials similar to the main mass.



Figure 38: Side extension forming a smaller secondary mass set back from the main building line.



Materials and Building Details

The materials and architectural detailing used throughout Melbury Abbas and Cann contribute to the historic character of the area and the local vernacular. It is therefore important that the materials used in proposed development are of a high quality and reinforce local distinctiveness. Any future development proposals must demonstrate that the palette of materials has been selected based on an understanding of the surrounding built environment.

This section includes examples of building material that contribute to the local vernacular of the area which could be used to inform future development.



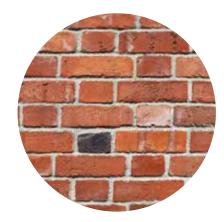
Melbury green sandstone ashlar



Melbury green sandstone rubble



White-rendered masonry



Red brick



Sandstone infill with red brick trim



Off-white render



Clay plaintile roof



Slate roof



Thatched roof



Sandstone boundary wall



Landscaped hedge



Sandstone retaining wall with soft landscaping



Half hip roof



Gabled wall dormer



Stone chimney



Multi-pane sash window



Multi-pane casement window



Gabled porch

North Dorset Traditional Architecture

The gradual evolution of the parish over the centuries has resulted in an organic character to development. Each building has its own individuality resulting in variations in construction materials, height, the pattern of openings, and detailing. Buildings are predominantly 1 or 2 storeys. Changes in roof heights and the presence of chimneys contribute to the visual interest of the historic settlements.



 $\label{eq:Figure 39: Examples of regional traditional architecture in Melbury Abbas and Cann.$

Contemporary Architecture

Within the neighbourhood plan area, there are a few examples of successful contemporary architecture that blend harmoniously with their physical context. It is suggested that this trend continues to further expand with additional eco design features incorporated in future developments. New buildings, when referencing traditional architecture, must however avoid combining elements from too many different architectural styles or employing low-quality imitations of traditional materials. A clear understanding of local and nonlocal styles and materials is also required.



Figure 40: Example of a successful historic building conversion (@ Amy Burnett/DinT).

Eco Design

Energy efficient or eco design combine all around energy efficient construction, appliances, and lighting with commercially available renewable energy systems, such as solar water heating and solar electricity.

Starting from the design stage there are strategies that can be incorporated towards passive solar heating, cooling and energy efficient landscaping which are determined by local climate and site conditions.

The aim of these interventions is to reduce overall home energy use as cost effectively as the circumstances allow for. Whereas, the final step towards a high performance building would consist of other on site measures towards renewable energy systems.



Figure 41: Contemporary houses in Cann Common built with local materials - Melbury stone, slate, and clay plaintiles.



Figure 43: Example of ecological housing using traditional and contemporary materials (© Studio Partington).

Rainwater Harvesting

Rainwater harvesting refers to the systems allowing to capture and store rainwater as well as those enabling the reuse in-situ of grey water. These systems involve pipes and storage devices that could be unsightly if added without an integral vision for design. Therefore some design recommendation would be to:

- Conceal tanks by cladding them in complementary materials;
- Use attractive materials or finishing for pipes;
- Combine landscape/planters with water capture systems;
- Underground tanks;
- Utilise water bodies for storage.







Solar Roof Panels

The aesthetics of solar panels over a rooftop can be a matter of concern for many homeowners. Some hesitate to incorporate them because they believe these diminish the home aesthetics in a context where looks are often a matter of pride among the owners. This is especially acute in the case of historic buildings and conservation areas, where there has been a lot of objection against setting up solar panels on visible roof areas. Thus some solutions are suggested as follows:

On new builds:

- Design solar panel features from the start, forming part of the design concept. Some attractive options are solar shingles and photovoltaic slates; and
- Use the solar panels as a material in their own right.

On retrofits:

- Analyse the proportions of the building and roof surface in order to identify the best location and sizing of panels;
- Aim to conceal wiring and other necessary installations;
- Consider introducing other tile or slate colours to create a composition with the solar panel materials; and
- Conversely, aim to introduce contrast and boldness with proportion. For example, there has been increased interest in black panels due to their more attractive appearance.
 Black solar panels with black mounting systems and frames can be an appealing alternative to blue panels.



Figure 45: New building with solar roof panels in Diss, Norfolk.



Figure 46: Existing building retrofitted with solar panels in Eye, Suffolk.

Servicing

With modern requirements for waste separation and recycling, the number of household bins and size have increased. This issue poses a problem in relation to the aesthetics of the property if bins are left without a design solution.

Waste and cycle storage, if placed on the property boundary, must be integrated with the overall design of the boundary design. A range of hard and soft landscaping treatments such as hedges, trees, flower beds, low walls, and high quality paving materials could be used to minimise the visual impact of bins and recycling containers.

Opportunities to integrate underground bin storage solutions into new developments must be considered. These solutions reduce the need for refuse vehicle trips as well as clutter in the public realm by consolidating waste collection points.



Figure 47: Example of bin storage solutions at the side of a property.



Figure 48: Combined bin storage in Cambridge.

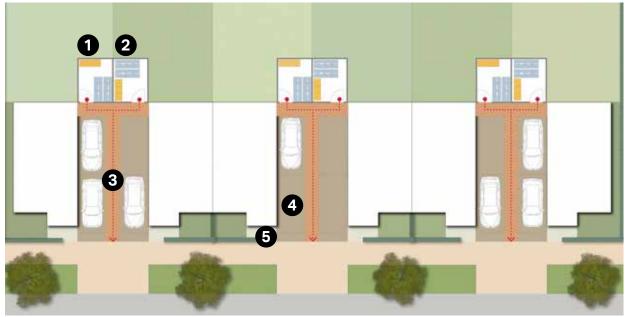


Figure 49: Indicative layout of a bicycle and bin storage areas at the back of properties.

- 1. Bin storage area.
- 2. Bicycle storage area.
- 3. Path for bins and bicycles to be kept clear.
- 4. Vehicle parking area set back from the main building line.
- 5. Boundary hedges to screen vehicles and parking spaces.

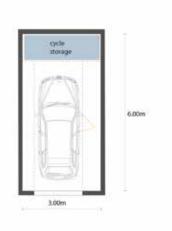


Figure 50: Indicative layout of a garage with a cycle storage area.

Permeable Paving

Paving adds to the composition of the building. Thus permeable paving should not only perform its primary function which is to let water filter through but also:

- Respect the material palette;
- Help to frame the building;
- Create an arrival statement;
- Be in harmony with the landscape treatment of the property;
- Help define the property boundary.







Figure 51: Examples of permeable paving (© Wikimedia Commons).

3.2. General questions to ask and issues to consider when presented with a development proposal

Because the design guidelines of this chapter cannot cover all design eventualities, this section provides a number of questions based on established good practice against which the design proposal should be evaluated. The aim is to assess all proposals by objectively answering the questions below. Not all the questions will apply to every development. The relevant ones, however, should provide an assessment as to whether the design proposal has taken into account the context and provided an adequate design solution.

As a first step there are a number of ideas or principles that should be present in the proposals. The proposals or design should:

- 1. Integrate with existing paths, streets, circulation networks and patterns of activity;
- 2. Reinforce or enhance the established parish or smaller settlement character of streets, greens, and other spaces;
- 3. Respect the rural character of views and gaps;
- 4. Harmonise and enhance existing settlement in terms of physical form, architecture and land use;
- 5. Relate well to local topography and landscape features, including prominent ridge lines and long distance views;

- 6. Reflect, respect, and reinforce local architecture and historic distinctiveness;
- 7. Retain and incorporate important existing features into the development;
- 8. Respect surrounding buildings in terms of scale, height, form and massing;
- 9. Adopt contextually appropriate materials and details;
- 10. Provide adequate open space for the development in terms of both quantity and quality;
- 11. Incorporate necessary services and drainage infrastructure without causing unacceptable harm to retained features;
- 12. Ensure all components e.g. buildings, landscapes, access routes, parking and open space are well related to each other;
- 13. Make sufficient provision for sustainable waste management (including facilities for kerbside collection, waste separation, and minimisation where appropriate) without adverse impact on the street scene, the local landscape or the amenities of neighbours; and
- 14. Positively integrate energy efficient technologies.

Following these ideas and principles, there are number of questions related to the design guidelines outlined earlier in the document.

Street Grid and Layout

- Does it favour accessibility and connectivity over cul-desac models? If not, why?
- Do the new points of access and street layout have regard for all users of the development; in particular pedestrians, cyclists, and those with disabilities?
- What are the essential characteristics of the existing street pattern? Are these reflected in the proposal?
- How will the new design or extension integrate with the existing street arrangement?
- Are the new points of access appropriate in terms of patterns of movement?
- Do the points of access conform to the statutory technical requirements?

Local Green Spaces, Views and Character

- What are the particular characteristics of this area which have been taken into account in the design; i.e. what are the landscape qualities of the area?
- Does the proposal maintain or enhance any identified views or views in general?
- How does the proposal affect the trees on or adjacent to the site?

- Has the proposal been considered in its widest context?
- Has the impact on the landscape quality of the area been taken into account?
- In rural locations, has the impact of the development on the tranquillity of the area been fully considered?
- How does the proposal affect the character of a rural location?
- How does the proposal impact on existing views which are important to the area and how are these views incorporated in the design?
- Can any new views be created?
- Is there adequate amenity space for the development?
- Does the new development respect and enhance existing amenity space?
- Have opportunities for enhancing existing amenity spaces been explored?
- Will any communal amenity spaces be created? If so, how will this be used by the new owners and how will it be managed?

Gateway and Access Features

- What is the arrival point, how is it designed?
- Does the proposal maintain or enhance the existing gaps between settlements?
- Does the proposal affect or change the setting of a listed building or listed landscape?
- Is the landscaping to be hard or soft?

Buildings Layout and Grouping

- What are the typical groupings of buildings?
- How have the existing groupings been reflected in the proposal?
- Are proposed groups of buildings offering variety and texture to the townscape?
- What effect would the proposal have on the streetscape?
- Does the proposal maintain the character of dwelling clusters stemming from the main road?
- Does the proposal overlook any adjacent properties or gardens? How is this mitigated?

Building Line and Boundary Treatment

- What are the characteristics of the building line?
- How has the building line been respected in the proposals?
- Have the appropriateness of the boundary treatments been considered in the context of the site?

Building Heights and Roofline

- What are the characteristics of the roofline?
- Have the proposals paid careful attention to height, form, massing, and scale?
- If a higher than average building is proposed, what would be the reason for making the development higher?

Household Extensions

- Does the proposed design respect the character of the area and the immediate neighbourhood, or does it have an adverse impact on neighbouring properties in relation to privacy, overbearing, or overshadowing impact?
- Is the roof form of the extension appropriate to the original dwelling (considering angle of pitch)?
- Do the proposed materials match those of the existing dwelling?
- In case of side extension, does it retain important gaps within the street scene and avoid a 'terracing effect'?
- Are there any proposed dormer roof extensions set within the roof slope?
- Does the proposed extension respond to the existing pattern of window and door openings?
- Is the side extension set back from the front of the house?

Building Materials and Surface Treatment

- What is the distinctive material in the area, if any?
- Does the proposed material harmonise with the local material?
- Does the proposal use high quality materials?
- Have the details of the windows, doors, eaves, and roof been addressed in the context of the overall design?
- Do the new proposed materials respect or enhance the existing area or adversely change its character?

Car Parking Solutions

- What parking solutions have been considered?
- Are the car spaces located and arranged in a way that is not dominant or detrimental to the sense of place?
- Has planting been considered to soften the presence of cars?
- Does the proposed car parking compromise the amenity of adjoining properties?
- Have the need of wheelchair users been considered?

Architectural Details and Contemporary Design

- If the proposal is within a conservation area, how are the characteristics reflected in the design?
- Does the proposal harmonise with the adjacent properties? This means that it follows the height, massing, and general proportions of adjacent buildings and how it takes cues from materials and other physical characteristics.
- Does the proposal maintain or enhance the existing landscape features?
- Has the local architectural character and precedent been demonstrated in the proposals?
- If the proposal is a contemporary design, are the details and materials of a sufficiently high enough quality and does it relate specifically to the architectural characteristics and scale of the site?





4. Delivery

The Design Guidelines will be a valuable tool in securing context-driven, high quality development on the sites in question. They will be used in different ways by different actors in the planning and development process, as summarised in the table.

Actors	How They Will Use the Design Guidelines
Applicants, developers, and landowners	As a guide to community and Local Planning Authority expectations on design, allowing a degree of certainty – they will be expected to follow the Guidelines as planning consent is sought.
Local Planning Authority	As a reference point, embedded in policy, against which to assess planning applications. The Design Guidelines should be discussed with applicants during any pre-application discussions.
Parish Council	As a guide when commenting on planning applications, ensuring that the Design Guidelines are complied with.
Statutory consultees	As a reference point when commenting on planning applications.



Figure 52: View towards Melbury Beacon from the centre of the Parish.

About AECOM

AECOM is built to deliver a better world. We design, build, finance and operate infrastructure assets for governments, businesses and organizations in more than 150 countries. As a fully integrated firm, we connect knowledge and experience across our global network of experts to help clients solve their most complex challenges. From high-performance buildings and infrastructure, to resilient communities and environments, to stable and secure nations, our work is transformative, differentiated and vital. A Fortune 500 firm, AECOM had revenue of approximately \$17.4 billion during fiscal year 2016. See how we deliver what others can only imagine at aecom.com and @AECOM.

Contact Ben Castell Technical Director

aecom.com