Appendix B



Bracknell Forest Borough Local Development Framework

Streetscene Supplementary Planning Document

Bracknell Forest Council Date: April 2011

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1. Introduction

- 1.1 Bracknell Forest Council recognises that the design of spaces, streets and buildings, together with the Borough's natural environment, has a significant impact on the quality of life for our local community. We have produced this Streetscene Supplementary Planning Document (SPD) to assist in raising standards of design for all aspects of the public realm and streetscene across the Borough and to guide designers and developers in creating attractive and safe places which the whole community can enjoy.
- 1.2 The document focuses on the design of residential streets. However, many of the principles contained within the SPD can be applied to more major routes within the Borough.
- 1.3 Bracknell Forest Borough's Mission Statement.

Bracknell Forest Council is committed to achieving high quality development in the Borough. The "Bracknell Forest Partnership's Sustainable Community Strategy 2008 – 2014" states that:

"High quality design will make a positive contribution to the character of Bracknell Forest, ensure access for everyone and promote a sense of pride in the area."

1.4 It is recognised that the Council needs to work closely with all those involved in designing streetscenes, in new and existing locations, to ensure that clear, coherent design guidance is in place and that our procedures and processes are transparent for potential developers and all those who apply for planning permission. All those in the Council with a role in designing, planning, adopting and maintaining the streetscene have been involved in the production of this document. 1.5 This document will be used in both pre-application discussions and when a planning application is being prepared for submission. It will also be used by the Local Highway Authority when works are proposed on adoptable highways. It draws from Council planning policy and recent Government planning and highways guidance, including the Manual for Streets documents which are discussed in more detail in the Highways section. Annex 1 of this document is titled Highways Guide for Development and forms part of this SPD giving detailed technical advice on implementing many of the design principles set out here.

How to use this Supplementary Planning Document (SPD)

- 1.6 This SPD is one of a series of documents prepared by the Council as part of the Local Development Framework which establishes planning policy for the Borough. It provides design guidance, standards and potential solutions for all aspects of the streetscene and coordinates the work of the Council as both Local Highway Authority (LHA) and Local Planning Authority (LPA), with a set of standards which will be applied to all residential development and new residential highways in the Borough, maintainable at the public expense.
- 1.7 The Council is responsible for the regulation of development and highways provision in the Borough, in line with local, regional and national policy. The legislative and policy framework is described below.

Document Status

1.8 The Local Development Framework (LDF) is the Borough's spatial planning framework for development. The LDF comprises a number of individual documents, called Local Development Documents (LDDs), that together will guide the future development of the Borough. There are two types of LDD:

- Development Plan Documents (DPDs) which contain policies and proposals as part of the statutory development plan.
- Supplementary Planning Documents (SPDs) which contain the detail needed to implement the policies. SPDs are not part of the statutory development plan, but are subject to consultation and sustainability appraisal. Once adopted, they are a material consideration in the determination of planning applications.
- 1.9 The overarching document within the LDF is the Core Strategy Development Plan Document (DPD), which sets out a vision, objectives and policies for guiding development in the Borough between 2006-2026. This sets spatial objectives which all LDDs need to assist in achieving. Objective F promotes high quality well designed development and Objective I aims to maintain and improve the built and natural environment and to avoid or mitigate the effects of new development on the built and natural environment. Policy CS7 (Design) requires high quality design for all development which builds on the urban, suburban and rural local character, respecting local patterns of development and the historic environment.
- 1.10 The primary role of this document is to define what the Council considers to be well designed, durable and attractive streets and to provide an interpretation of policy within the Core Strategy DPD.
- 1.11 This SPD has been prepared in line with the Town and Country Planning (Local Development) (England) Regulations 2004 (as amended) and the adopted Bracknell Forest Borough Statement of Community Involvement (adopted July 2006).

Consultation

1.12 Extensive public consultation has been carried out on this document and Annex 1 titled Highways Guide for Development. All comments received have been considered

and, where appropriate, amendments made to this document. This document and Annex 1 are available online at <u>www.bracknell-forest.gov.uk/Streetlibrary</u>

Scope of the document

- 1.13 Streetscene may be described as the environment that you see and experience when travelling along streets and public spaces. These places can be both private and public. This guidance will apply to the following aspects of this environment, which comprises mainly, but not exclusively, of:
 - Character and context.
 - Street design and spaces.
 - Highway requirements.
 - Adoption issues.
 - Landscape design.
 - Boundary treatments.
 - Trees.
 - Sustainability issues.
 - Open spaces.
 - Parking.
 - Accessibility.
 - Materials.
 - Street furniture.
 - Utilities and services.
 - Refuse collection and storage.
 - Street cleansing.
 - Street lighting.
 - Emergency and safety issues.
 - Technical indices.
 - Commuted sums.

Further legislation and national guidance relevant to this SPD is detailed in Appendix H at the end of this document.

2. Context and Background

Role of the Council

2.1 As a unitary authority, Bracknell Forest Council is both the Local Planning Authority (LPA) and the Local Highway Authority (LHA). We are responsible for determining all planning applications in the Borough, and for all highways matters except for a small section of the M4 motorway which is the responsibility of the Highway Agency.

As the LPA, the Council is responsible for:

- developing strategies and policies to guide development in the Borough whilst respecting the natural and built environment;
- managing development by the determination of planning applications and planning enforcement; and,
- managing our historic environment of listed buildings and conservation areas.

As the LHA, the Council is responsible for:

- setting standards for the layout of development in relation to the parking and movement of motor vehicles and provision for pedestrians and cyclists;
- advising the LPA on highway aspects of planning applications;
- adopting new residential roads and footpaths; and,
- maintaining the existing highway and the provision of new highway.

The Manual for Streets documents

2.2 *Manual for Streets* (MfS1) is a joint publication produced by the Department for Transport (DfT) and Communities and

Local Government (CLG) relating to the provision and maintenance of streets. MfS1 replaces *Design Bulletin 32* (*DB32*) and its companion document *Places, Streets and Movement* and the document promotes a fundamental change in culture in the way streets are designed. It requires design professionals and other stakeholders to work collaboratively to create high quality residential streets that:

- build and strengthen communities;
- balance the needs of all users;
- form part of a well-connected network;
- create safe and attractive places which have their own identity; and
- are cost-effective to construct and maintain.
- 2.3 Manual for Streets 2 A Wider Application of the Principles (MfS2) has also been produced by the Chartered Institution of Highways and Transportation (CIHT). MfS2 builds on the philosophies set out in MfS1 and gives guidance beyond residential streets to encompass both urban and rural situations. MfS1 and MfS2 have been fully considered in producing this document and Annex 1 to this SPD. This document therefore provides local policies and standards to support the approach of the Manual for Streets documents and explains how they are applied in Bracknell Forest.

Development team approach

- 2.4 The Council has a small development team which works with applicants when development proposals are submitted. This team consists of:
 - Development Management Case Officer lead officer;
 - Urban Design Officer;
 - Development Management Highways Officer;
 - Highway Engineer (Adoptions);
 - Landscape Design Officer; and

- Waste and Recycling Officer.
- 2.5 On larger schemes, this development team meets regularly with the applicant to ensure that all issues, including streetscene topics, are considered fully from the outset and are incorporated into the design of any scheme. The development team will endeavour to ensure that issues are discussed and agreed within the team, ensuring that a consistent view is presented to applicants through the pre-application process. The Development Management Case Officer is responsible for recommending and reporting schemes for approval or refusal.

Pre-application discussions

- 2.6 Prior to planning applications being made, the Council encourages discussions with developers at the earliest appropriate stage. Discussions can be of benefit to both parties by:
 - identifying and discouraging development proposals which are unlikely ever to be recommended for approval;
 - improving the quality of proposals which are acceptable in principle but have shortcomings in terms of details such as design;
 - assessing layouts and highway requirements at the earliest stage to ensure proposals can meet LHA requirements; and
 - reducing the time taken by the Council to determine an application once it has been formally submitted.
- 2.7 Other officers, such as those involved in maintenance issues, are also consulted through the pre-application process as appropriate. The Council's procedure for dealing with pre-application enquires regarding planning applications can be viewed on the Council's web-site (www.bracknell-forest.gov.uk).

2.8 Input from a range of disciplines is often necessary at the preapplication stage, including views of the LHA, especially where a proposed development will result in a new access to the existing highway network, or amendments to the highway. Highway issues also need specific approval by the Council and, where approved, plans and calculations will form the basis of a legal agreement with the LHA whereby the junction works will be constructed at the developer's expense and, in due course, adopted and maintained by the Council.

3. Character and context

- 3.1 Bracknell Forest is a vibrant and varied Borough, made up of historic villages, semi rural communities, the larger settlements of Crowthorne and Sandhurst, together with Bracknell and its New Town Heritage. Bracknell Forest also has a strong green feel to its character with the built areas being an extension to the natural environment. The character and streetscenes of the Borough vary greatly.
- 3.2 Variety within streetscenes is encouraged within Bracknell Forest. Adoption standards can, without careful planning, create uniform streetscenes and this document should give developers some guidance as to how to achieve variety and character within a framework of safety, functionality, adoption and maintenance standards.
- 3.3 Character is informed by:
 - width of street;
 - boundary treatments;
 - the building line;
 - plot sizes;
 - building heights and sense of enclosure;
 - landscaping; and
 - parking solutions.
- 3.4 When designing new streetscenes, consideration needs to be given to the context and character that is to be created; a design rationale. This rationale will inform how a street is designed.
- 3.5 An urban streetscene will invariably include:
 - a residential building line close to the highway;
 - minimal private frontage;
 - hard boundary treatments with limited soft landscaping;



Winkfield Row



Terrace Road North (Binfield)

- building height to provide a sense of enclosure; and
- a variety of building uses maybe present, including business and commercial, with residential above or scattered in between.
- 3.6 A more suburban residential area will be designed differently. Development will invariably be a lower density and the streetscene will include:
 - narrow streets;
 - a building line set back from the street;
 - front gardens providing parking on plot; and
 - plenty of space for soft landscaping and trees.
- 3.7 A higher density residential development may require a design that falls between urban and suburban. These residential developments could include a distinct, informal, shared streetscene, with courtyards and parking courts. The character is established by:
 - a shared use streetscene where pedestrians and vehicles share the space;
 - large areas of hard landscaping;
 - single landscape features to create a visual focal point; and
 - flats over garages providing informal surveillance over courtyards.
- 3.8 Therefore, the character and context of a street must be decided upon and this will inform how the street is designed.
- 3.9 Streets are not only a place for vehicle movement but serve many purposes, including places where we walk, meet, exercise, observe, play and park. It is also where many essential utilities are located. Therefore, streets need be designed to accommodate their perceived and desired



Edgcombe Park, Crowthorne



The Parks, Bracknell

functions and will vary in design, dependent on location and use.

3.10 The built form and layout of streets should facilitate connectivity between existing and new development, open spaces, play areas, facilities and services. The design of a street will go a long way to informing the character, identity and sense of place of an area. Therefore, movement and access analysis of the site, proposed density and layout will all be fundamental to shaping and informing the character of a new street.

Design and Access Statements

- 3.11 The above should all form part of the Design and Access Statement which must accompany any application. This should be a living document that develops as the proposal takes shape.
- 3.12 Some questions to ask and answer within the Design and Access Statement are:
 - How does the street relate to the existing streets in the vicinity?
 - What uses/amenities will be accommodated within the streetscene?
 - What is the width of the street and how does this contribute to defining the use and character?
 - How will the buildings relate to the street is there a sense of enclosure, or space?
 - How high will the buildings be, will they be set back or against the plot boundary and what does this say about the character of the area?
 - Who has priority, where and how is this defined?
 - What materials are to be used what is the architectural style of the buildings and how does the design of the streetscene relate to this?

- How does choice of street furniture inform character?
- Does the design, layout and species choice for planting respect the local landscape character of the area and enhance local distinctiveness to help create a sense of place?
- Is there any flexibility in relation to future development or use – how robust is the proposal?
- Is the scheme fully accessible to all members of the community, including older people, parents with small children and people with disabilities.
- 3.13 The Commission for Architecture and the Built Environment (CABE) has produced comprehensive advice on Design and Access Statements and applicants are encouraged to follow the CABE guidance and format when putting together Design and Access Statements.

Character Area Assessments SPD

3.14 Bracknell Forest Council has adopted a Character Area Assessments SPD. This document does not cover the whole Borough but does cover specified areas within Bracknell, Binfield, Crowthorne and Sandhurst, including some of our villages in the north of the Borough. The reports identify the character of an area and make recommendations in relation to new development and creating new streetscenes. This document should therefore be fully considered when putting together development proposals.

Conservation Areas

3.15 Bracknell Forest has 5 conservation areas at the time of publication. Most of these areas were built prior to the age of mass car ownership and often modern highway requirements are incompatible with their layout and character. To retain the integrity and character of these

areas, it may be necessary to compromise normal highway standards for new development near or within conservation areas. Discussions should be commenced at an early stage with both the LPA and the LHA to agree appropriate design solutions.

Summary

- The design of a street should inform character.
- Streets should be designed to accommodate their perceived function.
- A design rationale should be established and set out in the Design and Access Statement.
- Reference to the Character Area Assessments SPD should be made where appropriate.

4. Streets and Spaces

- 4.1 A key component in establishing character, or enhancing existing areas of character, is to assess how spaces are to be enclosed, either by the built form or by the use of landscaping. Areas that are enclosed invariably create a sense of place more easily; areas that are open often lack definition.
- 4.2 The enclosure of streets provides visual clues as to a streets use. Streets that are wide and open with a built form in excess of 2 storeys, are often principal routes with higher quantities of movement. More enclosed spaces, such as mews areas, give a sense of more informal movement with the pedestrian having priority over vehicles. Therefore, the height of the built form and the widths of the streets are important to give a sense of hierarchy to spaces, to define use and assist in legibility throughout an area.
- 4.3 The following height to width ratios¹ should be used as a rule of thumb to guide the definition of spaces and streets, and should ultimately inform character and sense of place.

Mews	1:1
Residential street	1:1.5
Main street	1:3
High Street	1:4
Square	1:4 -1:6

4.4 Street sections should be provided with major new developments to illustrate how buildings, defensible space, landscaping, footways and carriageways function together within the streetscene.

Fig. 1 – Built form - height to width ratios



Mews – height to width ratio – 1:1



Residential Street – height to width ratio – 1:1.5



Square – height to width ratio – 1:4

¹ The height of the building is represented by 1 and the width of the street (from building to building) is a multiple of the height, e.g. for a high street it is 4 times the height.

- 4.5 Developers should undertake an initial analysis of context before starting to put proposals together for a street. This should assess:
 - existing routes and movement of people and vehicles in the area;
 - the pattern of blocks, plot sizes and buildings;
 - natural features and ecology of the area; and
 - the physical appearance.
- 4.6 Streets should be easy to navigate through and understand. Streets should also be interconnected to encourage residents to walk and cycle within their neighbourhoods and reduce dependency on the car.
- 4.7 Streets should be orientated to ensure that buildings can maximise solar gain and utilise solar energy technology.
- 4.8 Buildings should front onto streets creating active frontages. In locations where a street turns a corner, buildings should be designed to address both frontages to maintain surveillance and create an element of activity within the streetscene. Where the corner is a significant junction it may be appropriate to emphasise this location through the scale and/or design of the building to create an easily recognisable feature to aid navigation through the streets.



Dwelling designed to create a presence on the corner of the street

Summary

- A street should create a sense of enclosure.
- Street sections should be provided for larger developments.
- A context analysis exercise should be undertaken.
- Streets should be easy to navigate through and be well connected with the existing movement network.
- Street layouts should ensure that buildings can be orientated to maximise solar gain.
- Buildings should front onto streets to create activity within the streetscene.
- Buildings should be designed to respond to corner locations in terms of design, scale, surveillance and creating activity.

5. Highway principles

- 5.1 The LHA applies the Council's standards, as set out in this document, to all designs for new streets within the Borough where they are to be adopted and maintained at the public expense. This SPD incorporates these standards and further technical specifications can be found in the appendices and Annex 1 titled Highways Guide for Development.
- 5.2 The basic highway network and the underlying services and sewers remain in place, often for centuries. It is important that new streets are designed to a high standard, and the materials used for their construction are of a high quality as the Council is charged with maintaining the network in perpetuity.
- 5.3 MfS1 and MfS2 advises that highway design issues are dealt with in principle at the planning stage. The Council will encourage that these issues are actually dealt with fully at the pre-application stage. Considering matters at this early stage can ensure that design proposals are more likely to be acceptable when schemes are assessed at the technical approval stage, should planning permission be granted. The earlier the LHA are involved, the greater the potential to inform the design process as scope to influence design choices becomes more limited as a scheme progresses through the planning process.



Footway/cycleway links two developments



Shared footway/cycleway

Street design

- 5.4 The Council will generally follow the design guidance contained in MfS1 and MfS2 for all residential streets and appropriate wider applications.
- 5.5 The design of residential streets will depend on the nature of a development but generally the internal highway network should be designed to restrict speeds to 20 mph.
- 5.6 Streets less than 4.8m wide will not normally be acceptable, other than to create short pinch points to calm traffic or to create an area of enclosure or separation.
- 5.7 To ensure low vehicle speeds, a range of natural elements and features should be used, including:
 - physical features, e.g. kerb build outs, trees, bollards, gateway features, physically reducing road widths;
 - vertical features such as raised tables, ramps, etc²;
 - visual or textural contrast, e.g. change in road surfacing materials; and
 - clearly denoted shared surfaces.
- 5.8 For non-residential streets, including lightly-trafficked rural lanes, or streets carrying high volumes of traffic (over 10,000 vehicles a day), a number of criteria will be considered in determining the appropriate design requirements for a street. These will include speed, character, land uses and route status. Please see Annex 1 Highways Guide for Development for further information.
- 5.9 Guidance set out in MfS1 encourages the establishment of a Quality Audit (QA) process. It is envisaged that in time the QA process will include the issues considered by the current



Planters used as a traffic calming method, however, traffic signs are unnecessary in such a low trafficked area.

² Not considered appropriate for use on bus routes

Road Safety Audits (RSAs). Until national guidance sets out more detailed procedural advice on the requirements of QAs, we will continue to require proposals to be supported by RSAs where appropriate.

- 5.10 RSAs are required for all planning applications where proposals would;
 - alter existing highway;
 - intensify the use of an existing access;
 - provide a new access onto the highway; or
 - lead to the provision of new adoptable highway.
- 5.11 In some cases small scale development may, at the discretion of the LHA, require a RSA. This is likely to be necessary for proposals that depart significantly from recognised guidance.
- 5.12 A Stage One RSA should accompany any pre-application or full planning application/reserved matters application.
- 5.13 Proposals should demonstrate that street widths are adequate for the type and flow of traffic they would be expected to accommodate. In order for the Council to consider the acceptability of such proposals, both preliminary and detailed designs must include vehicle swept path analysis (i.e. the tracking path of the movement of the vehicle).

Fig. 2 – Indicative sections through standard streets



Standard urban street



Shared surface



Visibility

- 5.14 The Council generally follows MfS1 and MfS2 in relation to visibility for all new residential streets and appropriate wider applications. Where a development accesses onto the existing highway network, an automatic speed survey will be required to determine the appropriate sight lines. However, where it is envisaged that traffic levels on major roads are high (in excess of 10,000 vehicles per day), or access is gained onto an important distributor road³, the Council will require increased sight lines. Further advice and guidance is contained in Appendix C and Annex 1 Highways Guide for Development.
- 5.15 All proposals will be assessed on a scheme by scheme basis, however, the following may be acceptable:
 - some encroachment of parking within visibility splays where speeds are low;
 - occasional obstacles, such as trees, where whole vehicles, pedestrians, cyclists etc. are not totally obscured;
 - visibility to the left can be measured to the centre line of the main arm in some circumstances;
 - pedestrian visibility shall be provided where a footway, cycleway or accessway runs along the frontage of a development that proposes a new driveway or access; and/or
 - the LHA would expect the visibility requirements shown in 'Cycle Infrastructure Design'⁴ to be applied to cycleways in new residential development or for new offsite works.
- 5.16 The LHA will consider proposals on a scheme by scheme basis to assess all road safety relating to visibility design considerations.



An example of a visibility splay with low planting in verge

³ Classified A, B and some C roads

⁴ DfT Local Transport Note 2/08

Highway Adoption

- 5.17 Developers are encouraged to offer streets for adoption where there are six or more dwellings and the streets are designed to the standards contained in this document.
- 5.18 The Council does not normally adopt streets serving five or less dwellings, parking courts and accesses to blocks of flats. Whilst permeability and connectivity is welcomed, care needs to be taken not to encourage public routes through private areas, as this can add to the liabilities for the residents of private areas and create problems for the future management.
- 5.19 Additionally, the Council will not want to adopt or maintain small and scattered areas of landscaping or highway verge (other than the required maintenance strips).
- 5.20 All designs and materials used in the streetscene should demonstrate the following characteristics:
 - suitability for all potential users;
 - durability;
 - accessibility for maintenance; and
 - be locally sourced wherever possible.
- 5.21 Where land is expected to be offered for adoption by the Council, the developer should enter into a Section 38 Agreement prior to commencement of the development. Similarly, where a development requires a change to an existing highway, the developer must enter into a Section 278 Agreement, sometimes combined with a Section 38 Agreement, to include the onsite works. This is set out in the Highways Act 1980.



Blocks used on road surface to define a junction at The Parks



Concrete slabs used on a pavement in a Feature Square at Jennett's Park

Maintenance and materials

- 5.22 The future maintenance of the street needs to be considered early in the planning process and should be discussed with the LHA as well as planning officers. The Standard Details Materials List at Fig. 3 in Appendix A provides details of the surfaces that are acceptable to the LPA and LHA.
- 5.23 However, it is recognised that in urban design and place making terms, the use of alternative materials can create spaces with a specific identity, character and can even define a change of use within a space. Therefore, in certain circumstances where there is a desire to create a feature square or a specific place, alternative materials can be used over small defined areas which are to be public spaces. Where this is the case the materials in Fig 4 in Appendix A are also considered appropriate. However, detailed discussions will need to be held early in the design stage of a scheme with both the LPA and the LHA. A Commuted Sums payment will be required and negotiated for areas beyond the basic function of the highway. The sums required are set out at Appendix E.
- 5.24 A variation from the Standard Details Materials List may be appropriate within a conservation area. Appropriate materials, treatments and street furniture should be assessed and follow the Management Plan for the relevant conservation area. This would not incur a Commuted Sum payment.



Tegula paving used in a parking court

Reducing Clutter

- 5.25 It is the aim of the Council to reduce clutter in the streetscene. Physical or visual clues should be designed into the streetscene removing the need for numerous signs. Clear design solutions should always be sought before resorting to signs. Road signs should therefore primarily only be used when required by the DfT regulations and be reduced in line with the principles detailed in the MfS documents.
- 5.26 The design of new residential streets should achieve road speeds of 20 mph and road markings may not be necessary if the appropriate visual clues have been designed into the scheme and layout. On busier and higher speed roads, markings may be considered appropriate.



Signs can create a cluttered streetscene



Bollard signs are visually less intrusive

Street furniture

- 5.27 The design and finish of street furniture should inform character and contribute to creating a sense of identity and place.
- 5.28 Continuity and themes are welcomed and street furniture can, where agreed, be used to deliver public art provision.
- 5.29 Whilst the Council requires high quality streetscenes, the future maintenance of the street also needs to be considered early on in the planning process. Reference should be made to the Standard Details Materials List (Fig. 3 Appendix A) for street furniture appropriate for adoption. The Council does welcome alternative designs, however, where a developer wishes such items to be adopted by the Council, a Commuted Sums payment will be required in line with Appendix E of this document. Additionally, all items should be hard wearing and easily and locally sourced.
- 5.30 The use of barriers on footways and footway/cycleways should be kept to a minimum. It is recognised that there are some places where their use is needed, particularly on footway/cycleways or where access to motorcycles and vehicles needs to be restricted. However, the layout of such barriers needs to ensure access for disabled people and parents with pushchairs.
- 5.31 Street furniture can be a potential hazard to blind and partially sighted people if not located and specified correctly. Street furniture should be located away from pedestrian desire lines and be at a minimum height of 1m.



Street furniture adding to the character of an area

Accessibility

5.32 Streets should be accessible to all including parents with young children, older people and those with disabilities. Therefore, streets should be designed to be level, or with gentle gradients, with dropped kerbs placed in convenient locations. Following consultation with the local Access Advisory Panel, it has been agreed that tactile paving will be used on main routes within residential developments but may not always be necessary at minor junctions within a residential street. This will be assessed on a case by case basis. Where shared surfaces are provided, consideration needs to be given to blind and partially sighted people who need to be aware of the shared surface nature of the street. Surfaces should be firm as loose materials are difficult to walk or wheel on and cambers on footpaths should be minimised.

5.33 Further guidance is contained in the *Designing for* Accessibility in Bracknell Forest SPD and in national guidance documents such as *Inclusive Mobility; a Guide to Best* Practice on Access Pedestrian and Transport Infrastructure.

Public Art

5.34 It is acknowledged that public art can contribute to a better quality of environment and can add to a sense of place or identity for an area. In line with Council policy, public art provision will be sought where a net increase of 100 dwellings or more will be provided⁵. Further guidance on the provision of public art is in the *Limiting the Impact of Development* SPD. However, it should be noted that where public art is secured for a development site, a Commuted Sum for maintenance of the piece will be negotiated if the item sits within the adoptable highway or Council owned land.



John Ravera sculpture – London Road, Bracknell



Richard Woods at Mabley Court, Easthampstead, Bracknell

⁵ Further criteria for the requirement to provide public art is detailed in Limiting the Impact of Development Supplementary Planning Document

Summary

- The highway network in new developments could be in place for centuries and therefore it is vital to get them right.
- Highway design, adoption and servicing should all be considered at the planning stage.
- All streets should ideally be designed to our adoptable standards.
- Generally, residential roads should be designed to achieve speeds of 20mph.
- Streets should be designed to be a minimum of 4.8m wide apart from short lengths to create enclosure, a pinch point or to calm traffic.
- A Stage One Road Safety Audit will be required to inform all pre-application and full application planning negotiations.
- Vehicle tracking assessments will be required to inform pre-application and full application negotiations at the planning stage.
- Our visibility criteria should be complied with in all development.
- The Council will not normally adopt streets serving 5 dwellings or less or parking courts and communal accesses to flats and apartments.
- Small or scattered areas of landscaping is unlikely be adopted.
- All materials and street furniture should comply with figures 3 and 4 in Appendix A a Commuted Sums payment may be required.
- Developers should enter into a Section 38 Agreement where land is to be offered for adoption.
- Where the existing highway is to be altered a Section 278 Agreement will be sought.
- Street clutter and road markings should be minimised subject to safety and design requirements.
- Public art will be sought where there is a minimum net increase of 100 dwellings or more.
- All streets should be fully accessible to all members of society, including disabled people, older people and parents with children.

6. Parking

- 6.1 Parking provision has a significant impact on the streetscene. Bracknell Forest is an area with high car ownership and very few locations are considered fully sustainable and appropriate to have no, or limited, car parking provision. How we incorporate car parking into our streetscenes is therefore very important.
- 6.2 Parking provision can inform character. On street parking and mews provision gives a sense of an urban environment. On plot parking and garages create a sense of lower density and give a more suburban feel.
- 6.3 No one solution works best in all situations, therefore, care is needed to provide the right parking solution in the right place.
- 6.4 Often, varying the parking solutions used can help reduce the impact of the car within a streetscene. Large blocks of car parking together, even if practical, can be too visually dominant.
- 6.5 Where trying to integrate new development with older more established development, new parking areas should respect existing patterns of parking provision. Where direct access to a dwelling or dwellings is proposed directly from an important distributor road⁶, parking and turning for all vehicles associated to each dwelling will be required.
- 6.6 Areas of on street car parking need to be designed so that cars do not visually dominate the streetscene. Parking areas should incorporate landscaping to break up the visual impact of cars, however, these areas need to be significant enough for plants to mature and flourish. Therefore,



Parked cars on frontage create a weak streetscene



Car barns being used for parking

⁶ Classified A, B and some C roads

landscaping strips should be an absolute minimum of 1 metre wide and where trees are used these areas should be increased to at least 1.8 metres wide. Care needs to be taken to ensure the right choice of tree is made. On-street parking is not normally adopted by the Council and therefore maintenance arrangements for these private areas need to be considered.

- 6.7 Parking barns and car ports are an effective way of providing covered parking, off street and on plot, which are actually used by residents. Research shows that garages are increasingly used for storage leading to cars being parked on-street.
- MfS1 refers to studies into the use of garages. Observations 6.8 in Bracknell Forest indicate that garage use for vehicle parking is even less than reported in MfS1. The non-use of garages for vehicle parking often results in indiscriminate parking on footways and verges leading to damage to the highway and increased maintenance costs. Additionally, more highway space is needed to accommodate vehicles displaced from garages and allowing for passage by pedestrians, cyclists and other road users such as delivery vehicles and the emergency services. It is therefore in the interest of designers and developers to provide parking solutions that work for future residents and limit the need for valuable land to accommodate additional parking. Where garages are used they should provide some storage space as detailed in Fig. 5 or provide sufficient driveway parking on plot.
- 6.9 Where garages are proposed, the openings of garage doors should be a minimum of 2.4m wide and 2.1m high. This requirement is to ensure that the garage door openings are sufficient to accommodate most modern vehicles.



Car ports in use, however, the garages have cars parked to the front



Landscaping can be used to break up the visual impact of car parking

- 6.10 Areas of communal car parking need careful design. As stated above, landscaping can assist in breaking up the visual impact of parked cars. However, sufficient space for planting needs to be designed into a streetscene to ensure that the planting matures and flourishes over time.
- 6.11 Consideration needs to be given to the use of materials. In communal parking areas and parking courts, bays should be marked out using variations in materials and colours. White lines should be avoided as this wears and in time becomes patchy. Light colour materials show marks and oil and therefore darker palettes are considered more practical.
- 6.12 Car parking solutions and designs and treatments should therefore be maintained throughout a development.
- 6.13 Highway verges can be abused by car owners within the Borough and cars can often be seen parked partly, and sometimes wholly, on a verge. Planted verges can go some way to deterring this kind of parking. Planted verges must comply with the Council's guidance as detailed in Appendix B of this document. Where planting is not considered suitable, alternative measures to reduce parking on verges will be required. The use of double height kerbs is an option that may be suitable in some locations. Grassed verges are particularly vulnerable to parking and their use should be limited dependent on issues of character and design. The use of knee railing and bollards on grass verges can limit parking but this creates problems in terms of landscape maintenance where grass cutting around posts and bollards can be difficult, time consuming and therefore costly.
- 6.14 The Council has produced the Bracknell Forest Borough Parking Standards SPD which provides advice for developers/applicants. Further guidance on garage sizes, disabled persons parking and cycle parking are included in the *Parking Standards* SPD.

Fig. 5 – Plan of garage with storage – minimum dimensions



Summary

- Cars should not visually dominate the streetscene.
- Parking provision can inform character.
- No one solution fits all locations.
- Where existing development abuts new, the existing patterns of parking should be followed where possible and appropriate.
- Large blocks of car parking should be avoided.
- Landscaping can be effectively used to visually break up parking areas.
- Parking barns are preferred to garages.
- Garages should be designed to meet the needs of modern living.
- Parking courts should be easily accessible, pleasant places to park cars with buildings providing natural surveillance.

7. Street lighting

- 7.1 The design of street lighting should be considered from the outset and a street lighting design scheme needs to form part of negotiations at the pre–application planning stage.
- 7.2 As well as being functional, street lighting has a visual impact on the streetscene and its design can contribute to creating a sense of place.
- 7.3 A street lighting design needs to take into account:
 - the location of trees and soft landscaping;
 - public and private highway;
 - energy efficiency;
 - house types, including the location of windows and bedrooms;
 - control of light spillage;
 - future maintenance issues for the Council; and
 - visual amenity.
- 7.4 The Council has a *Sustainable Resource Management SPD* which discusses issues relevant to street lighting. With fast changing technologies regarding street lighting to consider, the Council will be flexible in its approach to street lighting.
- 7.5 Whilst street lighting is not a statutory requirement, for reasons of security and accessibility, private footpaths, car parking courts and garage areas should be lit.
- 7.6 Normally the Council requires street lights to be mounted on lamp columns. However, it is recognised that in some special circumstances, improved lighting design solutions may be provided by the use of non-standard apparatus e.g. bollard lights, wall brackets. The need to depart from more standard apparatus will be considered and each circumstance will be assessed on its overall benefit.



Standard lighting



Street lighting designed to inform character

- 7.7 The location of street lights and trees need to be carefully considered. Lighting designs must take account of all obstructions and trees need to be evaluated at a point of full maturity.
- 7.8 The Council supports the use of innovative lighting design solutions. Practical operation and maintenance of equipment must be considered to ensure that all apparatus can be maintained to appropriate standards, as scheduled in Appendix F. Non-standard lighting proposals will be considered, and their appropriateness will be assessed against future maintenance costs and the provision of a Commuted Sum to cover additional costs as detailed in Appendix E.

Summary

- Lighting plans should form part of the pre-application planning discussions.
- The location of lighting should be carefully considered alongside the issues of durability, maintenance, landscaping and trees and energy efficiency.
- Street lighting can have a significant visual impact on the streetscene and should not be considered in isolation.



Street lights and trees in conflict

8. Landscape design

- 8.1 The environmental, community and psychological benefits of the 'green environment' should not be underestimated, particularly in areas where higher density development is promoted. Landscape design is an important element of all new development proposals and should make a significant and positive contribution to the streetscene. Landscaping should be considered from the outset and should not be a secondary issue.
- 8.2 Landscaping performs a number of key functions within the streetscene, including:
 - informing character;
 - knit new development with existing development and natural landscapes;
 - counterbalance carbon emissions;
 - absorb rain water, avoiding flash flooding;
 - provide essential wildlife habitats;
 - provide shade in the hotter summer months;
 - define spaces;
 - provide privacy; and,
 - screen elements such as parking and bin areas.
- 8.3 Landscape design should link into the design rationale for the site and be relevant to the context. Visual clues can be given to inform character and sense of place. Formal designs tend to be used in more urban areas, informal planting lends itself to suburban areas. Planting can also be used to assist in re-enforcing the hierarchy of roads and spaces.
- 8.4 Consideration should also be given to the fact that new residential streets are invariably designed at higher densities than has previously been seen. Increasingly, new streets can not rely on planting within front gardens to visually soften an area. Where the design rationale is not to create a hard,



Landscaping and existing trees visually soften the streetscene



Lack of front gardens limits space for landscaping within streetscene

urban street developers and designers need to provide areas for structural planting which have a significant visual impact on the street scene.

- 8.5 Visual softening should include the consideration of factors such as texture and colour, seasonality, size and stature of planting in relation to the scale of buildings and hard surfaced areas. Consideration should also be given to where signs may be located in the streetscene so that planting does not cover signage in the future.
- 8.6 Experience shows that small strips of planting do little to visually soften the streetscene and more often than not these strips cannot adequately support plants and they fail to survive. Therefore, planting strips should be no less than 1 metre wide. Where this is hard to achieve, designers should consider combining together small planting areas to create fewer, larger planted borders, which will contribute to the streetscene and provide a rooting zone for long term growth.
- 8.7 The use of native species is encouraged as they have a recognised value for wildlife, being a source of pollen, berries, fruit, or cover for nesting birds. However, planting closer to buildings may include more ornamental planting.
- 8.8 The northern part of the Borough is characterised by an underlying slightly acidic, base rich clay and loam soils, seasonally wet, and a more traditional agricultural landscape of fields and woodland outside built-up areas. Typical tree species in the area include:
 - English Oak;
 - Ash;
 - Field Maple;
 - Hawthorn;
 - Hazel; and
 - the Wild Service Tree.



Good example of structural planting within the streetscene



This planting strip is too narrow to support any planting of substance

- 8.9 By contrast, the southern part of the Borough is characterised by wet lowland heath on acidic sandy and loamy soil, with distinctive trees and other flora. Typical species include:
 - Scots Pine;
 - Silver Birch;
 - Sweet Chestnut;
 - Holly;
 - Broom;
 - Gorse; and
 - Heather.

Trees

- 8.10 Trees within the streetscene are encouraged as they contribute to the character of the street and biodiversity. They can also serve as a landmark feature or focal point. Additionally, trees can add considerable aesthetic and monetary value to a development. However, the trees need to be of good quality, appropriate to the surroundings and correctly treated and protected during the development process.
- 8.11 Where areas of landscaping are hard to achieve due to limited space, the provision of a single tree with sufficient space to mature, can have a greater visual impact than lots of smaller planted areas.
- 8.12 Trees need appropriate space to flourish and survive. However, care is also needed to ensure that trees do not interfere with the essential services that run through streets.
- 8.13 Therefore, where a tree is proposed within a streetscene, the following must be provided:
 - appropriate space is provided for the tree a minimum of 1.8m x 1.8m is required dependent on the species;



Oak tree creates a landmark within the streetscene



Tree within front garden

- an appropriate species is chosen for the location;
- appropriate root barriers, container systems, tree pits or other appropriate measures are provided where a tree is near or in the adoptable highway, see Appendix G; and
- it is located a minimum of 3m from a sewer⁷.
- 8.14 Ideally, trees should be placed in the private ownership of residents within front gardens or communal areas maintained by a private management company. However, it is accepted that in higher density developments space becomes a premium and some trees may need to be located within the public realm and adopted highway. Trees will only be acceptable in the adopted highway where a Commuted Sums payment is provided in line with the guidance contained in Appendix E and where the LHA is completely satisfied that the above criteria have been met by the developer.

Planting for highway verges

- 8.15 Where the principle of planting has been agreed with the planning and highway authorities, developers should design planting schemes taking due account of soil type, drainage and micro-climate. Planting schemes can be proposed using a range of plant species that are already considered appropriate by Bracknell Forest Council and these are listed in detail in Appendix B.
- 8.16 General requirements are that:
 - plants should have a naturally low growing habit, below 600mm in visibility splays and close to carriageway, footpaths, signs, and access points to underground services;
 - planting should provide quick establishment of groundcover to minimise bare soil and therefore reduce maintenance;



Good example of planting in Feature Square 1 at Jennett's Park

- related to the above are planting density and size of nursery stock planted. Smaller plants should be planted at higher densities;
- planting should have year-round benefits. Generally plants should be evergreen or semi-evergreen, or at least with a persistent dense woody structure. Plants that die back to soil level in winter are not considered suitable;
- plants will be predominantly shrubby species and tough evergreen perennials that achieve good groundcover;

⁷ See "Sewers for Adoption" published by the Water Research Centre

- a proportion should have value to wildlife, such as sources of pollen, berries, cover, and a contribution to forming wildlife corridors. Plants do not have to be native, but of recognised value to wildlife;
- plant species should have longevity to minimise routine replacement costs;
- plants should be salt and drought tolerant;
- plants should be selected to meet landscape/ecology objectives for each particular location; soil conditions, local landscape character, and BFC landscape strategies;
- plants should be readily available nursery stock for initial planting and subsequent replacement if needed due to damage, disease, over-maturity, etc.; and
- plant species need to be tolerant of conventional (nonspecialised) pruning techniques, for economical maintenance.
- 8.17 Landscape designers can choose from the palette of species detailed in Appendix B which are all acceptable dependent on location.
- 8.18 Grass verges will apply where the land beyond the back edge of the adoptable verge is grass, and visually it doesn't make sense to have a strip of planting with grass behind.
- 8.19 Where a design requires a departure from the agreed palette, consideration will need to be given to the maintenance implications of a proposal and a Commuted Sum payment may well be required in line with the details provided in Appendix E.

Summary

- A landscaping strategy should form part of the design rationale for the street.
- Landscaping informs character, has significant environmental benefits and can assist with climate change.
- Where higher densities of housing are proposed, the need for areas of high quality landscaping and public realm increases.
- Planting strips should be no less than 1m in width.
- Native species should be used.
- Some areas may require more structural planting.
- Trees are encouraged but must be proposed in the right locations.
- Trees should be given space to grow and flourish an area of 1.8m by 1.8m minimum should provided and depending on the species, larger minimum areas maybe required.
- Verge planting should follow the guidance as detailed in Appendix B.

9. Waste management

Refuse collection

- 9.1 Streets should be designed for use by the Council's refuse vehicles.
- 9.2 Layouts should ensure easy, step free, access to and from back gardens to the kerbsides to encourage residents to remove their bins from the streetscene once collection is completed.
- 9.3 Where terraced elements of housing are proposed, consideration should be given to designing housing where refuse stores are incorporated into the frontage of the dwellings. Alternatively, terraces should be reduced in length, providing easily accessible paths between dwellings to aid moving bins to and from the streetscene.
- 9.4 Bin stores for flats need careful and sensitive design as they are often visible within the streetscene. The use of similar materials to the surrounding buildings is important, making the stores integral to the design of a scheme. Wherever possible, bin stores should subservient to the main building line and be set back from the street reducing the visual impact of the structure within the streetscene.
- 9.5 An area for bins to be placed for collection on collection day should be incorporated into the streetscene where private drives meet the public highway where carrying distances exceed 30m.
- 9.6 Recycling facilities for glass and textile banks will only be required for developments exceeding 100 dwellings and this should be discussed with the local authority.



Bin store designed in keeping with apartment block at The Parks development in Bracknell. The brick matches the buildings, the roof follows the asymmetric design seen throughout the development and an area of planting provides a buffer within the streetscene



The above bin storage area is visually dominant and poorly screens bins within the streetscene

Street sweeping and cleansing

- 9.7 Streets should be designed to ensure that adequate cleansing of litter and debris can be undertaken by mechanical road sweepers.
- 9.8 Where street furniture such as bollards and gates are required on streets and footpaths, these may need to be removable, retractable or lockable.
- 9.9 Streets to be adopted should be constructed to minimise weed growth and to ensure that there are no areas where debris can accumulate.
- 9.10 Traffic calming measures should be designed to facilitate effective cleansing and minimise accumulations of leaves and debris and not hinder access to cleansing operations.
- 9.11 Litter bins should be installed through agreement at the design stage, particularly with regard to the amenity land.

Summary

- Streets should be designed for use by refuse vehicles.
- Layouts should ensure easy, step free, access to and from back gardens to kerbsides for residents.
- Where terraced elements of housing are proposed, housing designs should incorporate bin stores at front of dwellings.
- Wherever possible, bin stores should be set back within a site to retain an active streetscene.
- Streets should be designed to ensure that adequate cleansing of litter and debris can be undertaken by mechanical road sweepers.



Acute angles of traffic calming design makes street cleansing difficult

10. Services

- 10.1 Some street proposals do not provide the usual 2m wide service margins on both sides of the carriageway. Developers are therefore referred to section 11.5 in MfS1. In particular, where it is proposed to depart from the National Joint Utilities Group (NJUG) standards, the developer should engage in early discussions with the service providers, and demonstrate that the routing of utilities and sewers in non-standard margins is acceptable both to the service providers and the LHA. The Council is investigating and will encourage, where appropriate, the provision of identifiers within services.
- 10.2 The depths for services shown in the NJUG standard crosssection should be considered a minimum to allow for installation of crossovers, overlaying materials and maintenance.
- 10.3 The sewerage undertaker, Thames Water Utilities Limited (TWUL) will require the provision of easements for any sewers proposed for adoption unless laid under highway. The details of easements required can be found within the current edition of "Sewers for Adoption" published by WRc (this is currently 1.5m separation between sewers with an additional 3m on either side of the sewers).
- 10.4 There is a presumption against the planting of trees and shrubs within the easement or within 3m of sewers laid under the highway (the minimum width of adoptable highway in section i.e. 8.8m). TWUL should be consulted, together with the LHA, if it is proposed to place services close to the proposed alignment of adoptable sewers.



Planning and installation of services

- 10.5 Whilst in most layouts the services and public sewers will be accommodated within the adoptable highway, in some circumstances, for example mews type development, services may not be able to be wholly located within the highway.
- 10.6 If wayleaves are required to lay services or easements are required to lay public sewers in private land, it is essential that developers take this into account at an early stage in any design so as not to compromise any landscaping provision, etc.. Further guidance can be found in MfS1 and Annex 1, Highways Guide for Development.

11. Highways Drainage

- 11.1 An adequate system of drains must be provided for the collection and disposal of surface water from the roads, footpaths and cycleways in the development areas. It is essential that the means of disposal of surface water be investigated with the LHA at the preliminary stage of any development scheme.
- 11.2 It is the responsibility of the Developer to make adequate outfall arrangements for his project, and it must not be assumed that permission will automatically be granted by the LHA to make connections to the existing highway drainage system in adjacent maintained roads, nor that TWUL will accept highway drainage into the public surface water sewer.
- 11.3 The LHA will not consider any road for adoption if an adequate highway drainage system to a suitable piped outfall or watercourse cannot be provided. Soak-ways will not normally be accepted as a suitable outfall for highway drainage.

Sustainable Drainage Systems (SuDS)

- 11.4 The Flood and Water Management Act (FWMA) 2010 changes the way in which the disposal of surface water will take place in future. Currently, surface water drainage from developments is generally piped into watercourses and rivers which can lead to runoff from developments quickly overwhelming them leading to localised flooding and water pollution. The FWMA envisages a new approach to drainage, keeping water on site longer, assisting in preventing pollution and allowing storage and use of water.
- 11.5 Sustainable Drainage Systems (SuDS) provide such an approach. These systems endeavour to mimic the natural movement of water from a development, reducing flood risk, improving water quality and often providing attractive features that can make development sites more desirable places to live in, enhancing the quality of life. In addition, the European Water Framework Directive requires us to manage water resources sustainably and to protect water quality.
- 11.6 The Council will become the SuDS Approving Body (SAB) under the FWMA. It will deal with drainage applications from individuals and developers, consulting with the LHA and Environmental Agency, before determining such applications. Large parts of the systems and structures will be the subject of legal agreements. They will require inspection and eventual adoption by the SAB.
- 11.7 The SAB process will run parallel with the planning system, but will be independent from it. Developers will need to consider surface water drainage early on in the planning process, making room for water and its disposal within the development site and design streets accordingly. Further advice should be sought from the SAB (when the approvals process has been implemented) and consideration given to national SuDS guidance when published by DEFRA.

12. Commuted Sums

- 12.1 The Council welcomes the provision of a quality streetscene, however, the future maintenance of streets should be considered as part of the planning process. Whilst a Commuted Sums payment can not be charged for the normal pallet of highways materials to adoptable standards, Commuted Sums will be required for certain materials, hard and soft landscaping and features of a higher quality or which do not serve a highways function. Further details are provided in Appendix E.
- 12.2 In general the Council follows guidance given in the County Surveyor's Society (CSS – now called ADVENT) document titled *Commuted Sums for Maintaining Infrastructure Assets.*
- 12.3 The LHA (adoption team) should be contacted at the earliest stage as part of the planning process if proposals vary from the guidance given in this document.

13. Abbreviations and acknowledgements

DPD	Development Plan Document		
FWMA	Flood Water Management Act 2010		
LDD	Local Development Document		
LDF	Local Development Framework		
LHA	Local Highway Authority		
LPA	Local Planning Authority		
MfS1	Manual for Streets		
MfS2	Manual for Streets 2 – A Wider Application of the		
	Principles		
NJUG	National Joint Utilities Group		
RSA	Road Safety Audit		
SAB	SuDS Approving Body		
SPD	Supplementary Planning Document		
SuDS	Sustainable Drainage Systems		
TWUL	Thames Water Utilities Limited		

All photos used in this document are owned by Bracknell Forest Council.

APPENDICES

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Appendix A – Standard Detail Materials

Standard materials adopted by the LHA

n.b. Materials shown in brackets will require prior approval

Fig.3 - BFC LHA Standard Adoptable Materials			
Location or Usage	Material	Location or Usage	Material
Footway, footpath, cycletrack surface	Asphalt concrete (Concrete block paving – grey, buff, brindle where carriageway is block paved)	Kerbing and edgings – Shared Surfaces	Pre Cast Concrete – BS 7263 Exposed aggregate finish (Block kerb or Granite)
Carriageway – Main road	Asphalt concrete	Bollards	Glasdon Neapolitan - Mini Ensign for cycletrack signage Woodscape timber bollards - Type SG 'R'
Carriageway – Shared surfaces	Concrete block paving – grey, buff, brindle (Red Asphaltic concrete)	Fencing	Timber fencing
Traffic calming features	Concrete block paving – grey, buff, brindle	Railings	Galvanised steel (Powder coated)
Verge	Groundcover planting (specified palette of plants) (Grass)	Headwalls	Brick Concrete bagwork
Kerbing – Main road	Pre Cast Concrete – BS 7263	Tactile paving	Concrete block Buff uncontrolled crossings Red controlled crossings

Fig. 4 - BFC Standard Details Materials Feature Square List		
Location or usage	Material	
Footway/footpath	Concrete blocks or slabs – grey, buff, brindle Individual bands of concrete setts Natural stone Flag paving stones No tarmac	
Carriageway	Co-ordinated surfaces with the above materials. Concrete blocks – colour co-ordinated - grey, buff, brindle	
Verge	Soft or hard landscaped	
Kerbing	As in Figure 3	
Street furniture	Co-ordinated schemes of furniture, railings and fencing which are easily sourced.	
Railings and fencing		

Appendix B – Verge planting specifications

The following are lists of appropriate species and planting for adoptable areas within the Borough. Different lists relate to different locations and uses.

List A Below 600mm high, informal, low level planted in large drifts of each species:

Name	Common Name/ Notes	Soil
Berberis media	Barberry	any
'Parkjuweel'		
Berberis thunbergii	Barberry	any
'Darts Red Lady		
Berberis thunbergii	Barberry	any
'Green Carpet'		
Bergenia cordifolia	Elephant's ears	any incl. chalk
(in moderation)		
Cotoneaster	Cotoneaster	any
<i>dammeri</i> and		
cultivars		
Cotoneaster	Cotoneaster	any
suecicus		
'Skogholm'		
Calluna vulgaris	Ling	acid heath areas
		only
		lime free
Erica cinerea	Heather	acid heath areas
		only
		lime free
Euonymus fortunei	evergreen Spindle,	any
and cultivars	numerous cvs	
Genista Lydia	Broom, low growing	any well drained
Hebe rakiensis,	Hebe, numerous	any
albicans, pinguifolia	low cultivars	

Hedera helix groundcover Ivy any 'Hibernica' Hypericum x St John's Wort any moserianum Hypericum Tutsan - native St any androsaemum John's Wort Lonicera nitida shrubby any 'Maygreen' honeysuckle Lonicera pileata shrubby any Honeysuckle Greater Woodrush Luzula sylvatica anv acid heath areas Pernettya only mucronata lime free Groundcover -Prunus any laurocerasus Cherry Laurel cvs 'Low 'n' Green' Rubus tricolor Creeping bramble any moist relative Stachys lanata Lambs Ears any 'Silver Carpet' Vinca minor and V. Periwinkle any major

List B

Low, formal planting, where intention is to prune to blocks. Use in moderation, for specific design features. Large scale use would create a maintenance burden in the medium to long term

Name	Common Name/ Notes	Soil
Lonicera pileata	Shrubby honeysuckle	
Buxus macrophylla	Box	
Buxus sempervirens	Box	
<i>Euonymus fortunei</i> cultivars	Evergreen spindle	
Hebe rakiensis	Hebe (syn subalpina)	

List C

Where height of planting in relation to visibility and safety is not a limiting factor: Tough low maintenance shrubs, not to be used in visibility splays or close to edge of carriageways:

Name	Common Name/	Soil
	Notes	
Cornus sanguinea	Common Dogwood	
Cornus stolonifera	Dogwood	
Corylus avellana	Hazel	
Cytisus scoparius	Common Broom	
llex aquifolium	Common Holly	
Ligustrum vulgare	native Privet	
Prunus	Gorse	Southern heathy
laurocerasus 'Otto		part of borough
Luyken'		
Ulex europaeus		
Viburnum opulus	Guelder Rose	

List D

Native hedge species for informal hedgerows to highway boundaries. Not to be used close to carriageways:

Name	Common Name/	Soil
	Notes	
Acer campestre	Field Maple	
Carpinus betulus	Hornbeam	
Corylus avellana	Hazel	
-		
Crataegus	Hawthorn	
monogyna		
Cornus sanguinea	Dogwood	
Fagus sylvatica	Beech	
llex aquifolium	Holly	
Rhamnus	Buckthorn	
catharticus		
Viburnum opulus	Guelder Rose	

List E

In some situations, it maybe appropriate to establish wildflower, clover and grass verges, mainly seeded, but these could include plug planting and bulb planting. These often look better managed if a 1m wide margin is kept mown alongside hard surfaces, the remaining 'meadow' or 'prairie' generally only requiring 2 cuts per annum.

Grass verges particularly apply where the land beyond the back edge of the adoptable verge is grass, and visually it doesn't make sense to have a strip of planting with grass behind.

The specification for works on highway verges to be adopted shall be: Manual of Contract Documents for Highway Works, Volume 1,

Specification for Highway Works. Series 3000 (05/01) Landscape and Ecology.

Particular reference should be made to the following sections/clauses:

3001 / 2, 3 -13; 3002 / 1&2, 4 -10; 3004 / 1 – 12; 3005 / 1 – 30 3006 / all; 3007 / all; 3008 / all; 3009 / all; 3010/ 1 – 16, 32 – 66.

Appendix C – visibility

MfS 1 suggests that in some situations, where "it is unlikely that vehicles approaching from the left on the main arm will cross the centreline of the main arm – opposing flows may be physically segregated at that point, for example. If so, the visibility to the left can be measured to the centre line of the main arm" (p.92). The LHA will consider proposals on a scheme by scheme basis to assess road safety considerations. It is likely that physical segregation will have to include features that physically prevent vehicles from crossing a centreline.

In terms of junctions and accesses, the appropriate level of visibility is assessed by measuring 'X' and 'Y' distances which together provide the visibility splays. The X distance is the distance measured back down the centre line of an access or junction arm, taken either from the kerb line of an access or the stop line of a junction. The Y distance is the level of forward visibility that that can be achieved and represents the minimum stopping site distance (SSD).

An X distance of 2.4m will usually be appropriate for new developments and in existing built up residential areas.

If the appropriate sight line requirements cannot be achieved but existing visibility from an access can be significantly improved, (either by increasing the sight lines or providing mitigation features, such as traffic calming, to reduce speeds to the appropriate level), a judgement will be made (possibly supported by a Safety Audit) as to whether the development provides a net safety benefit to both existing and development traffic.

Such an approach will only apply to small scale residential developments where the need for major alterations to the road network are not proposed and the need for access for larger vehicles is not required. Alterations to the existing highway network to aid in reducing speeds will not be applicable to important distributor roads⁸

Pedestrian visibility is beneficial where a footway is likely to run along the frontage of a development that proposes a new driveway or access, particularly where there is expected to be high levels of pedestrian movement. Ideally therefore, pedestrian visibility splays shall be incorporated by ensuring adjacent site boundaries remain free of obstructions in excess of 0.6 metres in height.

The guidance provided in MfS1 and 2 suggests that the principles for visibility requirements on residential roads can be extended to other streets such as important distributor roads ⁹(which may have speed limits over 30mph) and streets carrying high volumes of traffic (in excess of 10,000 vehicles per day).

Such streets are more likely to have greater levels of heavy goods vehicles and buses which require a greater distance in which to stop when braking.

If a development is proposed with direct access onto such a road then a speed survey for the road will be required and the appropriate stopping distance calculated using the parameters set out MfS2.

In the event that a speed survey is not provided then the table below provides a summary of typical visibility requirements for a highway priority junction onto a residential street, non residential street and streets carrying high volumes of traffic (in excess of 10,000 vehicles per day).

⁸ Classified A, B and some C roads

Speed Limit (m.p.h.)	'x' distance (m)	ʻy' distance (m)
30	2.4	90
40	2.4	120
50	2.4	160
60	2.4	215
70	2.4	295

It is important to demonstrate that visibility splays are achieved on either land over which highway status exists or land under the control of the applicant. All land required for sight lines will be adopted as part of the highway where deemed necessary during the planning process. Sight line areas along residential roads will not normally be adopted, but it will be a) a condition of planning consent that sight lines are not obstructed and, b) it will be a requirement of the Section 38 agreement that, where sight lines areas are to be sold or leased as part of adjacent property, they are to be protected by an appropriate covenant in the conveyance, transfer or lease. Possible features preventing vehicles from crossing centre line. Y Distance Y Distance Left-hand visibility splay.

Appendix D – Fire and emergency access

MfS says, "if an authority or developer wishes to reduce the running carriageway width to below 3.7 m, they should consult the local Fire Safety Officer" (p.75). Where running carriageway widths of less than 3.7m are proposed in private areas, scheme layout designs must ensure that, within the area of restriction, a minimum width of 3.1m is clear of permanent vertical obstructions to enable fire pump appliances to manoeuvre (e.g. gates, bollards or passage past existing buildings). Such an extent should be limited to direct access but should not form part of an operating area for fire appliances.

The requirement for vehicle access for a fire appliance within 45m of every dwelling relates to the distance measured from the fire appliance to the overall dwelling area and not between the fire appliance and the entrance of the dwelling. (Approved Document B (Fire Safety) 2006 Edition) or later updates where applicable. Where Residential Sprinkler Systems are proposed they will be a factor in determining what the reasonable overall level of access should be if increased distances between a fire appliance and a building are required.

A fire appliance should not need to reverse over distances greater than 20m. Therefore on no-through-vehicular routes over this distance, turning facilities should be provided. The design of turning areas can vary dependant on the nature of the scheme layout to accommodate the minimum requirements to be provided for the Fire and Rescue Service.

The LHA will provide comments that consider whether development proposals satisfy the access and turning requirements for fire appliances as part of the planning process, however, the developer/applicant should consult the Building Control Section of BFC for more detailed information.

Appendix E – Commuted Sums

In this Section we set out the basis of payment and how we calculate the commuted sum you must pay us towards the cost of maintaining certain adoptable highway infrastructure provided for new developments.

Background

Circular 1/97 Planning Obligations refers to the payment of commuted maintenance sums where specifically provided for in legislation (the Highways Act 1980). Section 38 of the Highways Act 1980 sub-section (6) provides for paying expenses to us for maintaining any highway, road, bridge or viaduct covered by an agreement made under that section. Section 278 of the Highways Act 1980 sub-section (3) provides for you (the other party to the agreement) making payments to us for maintaining the works the agreement relates too.

There is now a national guidance document on the subject published by CSS (latterly ADVENT) on this subject that Bracknell Council has followed in the production of this guidance. ("Commuted Sums For Maintaining Infrastructure Assets – Guidance Document", available from www.cssnet.org.uk)

Application

The need for paying commuted sums can be divided into four broad categories.

(a) The cost of maintaining areas and construction which, under our normal design guidance given in the Highways Guide for Development are not required for the safe and satisfactory functioning of the highway. Examples are additional areas of carriageway, such as a 'square' surrounding a turning head. Examples and diagrams of these circumstances are described in greater detail in the Guidance Document referred to above

Under this category you may need to pay commuted sums for:

- New adoptable highways generally constructed under S38 agreements, if any additional areas and construction which result from the overall development layout design, are over and above what we would normally require to satisfy safety and operational requirements; and
- alterations to existing highways, carried out under S278 agreements, which are required only to serve the development and provide no general benefits. We will consider individual cases on their merits where there is some general benefit. We will not normally require a commuted sum where the alterations have already been programmed for construction.

(b) The cost of maintaining some features of the adoptable works which can be considered as extra over. Examples include highway structures, public transport infrastructure, public seating, landscaping, trees, shrubs and so on, additional or non-standard street furniture and noise fencing.

These costs represent an increase in our future maintenance liability which will be more than the anticipated normal funding generated by the development.

- (c) The additional cost of maintaining permitted alternative materials and features which are extra over. Examples include surfacing materials and street lighting equipment.
- These additional costs are in excess of what we would have incurred if the materials and features used had been to the standard Specification.

(d) Sustainable drainage systems (SUDS), for example, flowattenuation devices, swales and storage areas.

Note: Where you are proposing SUDS, you must hold discussions with all relevant parties at an early stage (and certainly before any planning application) to agree ownership and responsibility for the facility.

This is not an exhaustive, detailed list. It is only intended to illustrate broad principles. Cases where commuted sums will normally be required are set out in other parts of this document. You should always discuss with us where commuted sums might be required at the earliest possible opportunity and certainly before any planning application.

Calculating commuted sums

We work out the cost your maintenance obligation using this formula:

Commuted sum = $\Sigma Mp/(1 + D/100)^T$

Mp = Estimated periodic maintenance cost

D = Discount rate (effective annual interest rate) (%)

T = Time period before expenditure will be incurred (years)

Maintenance unit costs (Mp)

Maintenance unit costs are based on contract rates current at the time of calculation and the frequency of treatment or intervals of replacement, based on planned frequencies or historic information. A sum of 10% of the works costs will be added to cover our design and supervision costs.

Discount rate (D)

The discount rate (effective annual interest rate) is worked out as follows:

D = (1.045/1.0225) - 1 = 2.2% where 1.045 is the interest rate (4.5% based on long-term neutral base rate) 1.0225 is the inflation rate (2.25% based on RPI-X that is RPI excluding mortgage payments)

Time period (T)

There is a case for using a time period equal to the expected life of the development in the case of development roads. However, for the time being, a time period of 60 years (maximum) will be used to calculate the commuted sums, with the exception of highway structures when a 120-year period will apply, in accordance with the standard design life requirement.

Schedules of commuted sums payable

You can find schedules of commuted sums for various additional areas, additional features, and alternative surfaces and specifications in below. We will add other commuted sums values and additional items as the need arises. The commuted sums in the schedules have been calculated at a particular date as indicated and will need to be index-linked to the date of the agreement. We will calculate some commuted sums specifically for certain sites.

Calculating the actual commuted sums to be paid

You will be required by the relevant agreement with us to pay us a commuted sum. However, we may not know the full cost implications of the site at that stage. So, we will calculate the final commuted sums value immediately before we adopt the development. This will be based on the 'provisional' commuted sums agreed when we complete the agreement. The agreement will contain provision for recalculating the 'provisional' commuted sums based on actual quantities and a price fluctuation factor specified in the agreement.

Bonding commuted sums

Any commuted sums you must pay will be included in the bond required under the Section 38 or Section 278 agreement. This will be based on the 'provisional' commuted sums that we calculate when we complete the agreement.

Timing of payments

The commuted sum will be payable before we issue the final certificate.

Schedules of commuted sums for maintenance of works under Section 38 and Section 278 agreements

All figures are subject to change. Please contact the Council for current rates of payment.

Where no figure is shown we will calculate as the need arises.

Schedule 1: Commuted Sums for additional areas and features, and non-standard features on new adoptable highways and alterations to existing highways (Section 38 and Section 278)

Material or feature		Units	Commuted Sum October 2010
Surface:			
Carriageway or shared- surface surfacing materials:			
Carriageway (standard bituminous materials)	Sq m		£13.74
Carriageway (stone mastic asphalt)	Sq m		£20.60
Carriageway (hot rolled asphalt)	Sq m		£15.12
Surface dressing	Sq m		£12.32
Stone mastic asphalt	Sq m		£20.60
Carriageway (200 x 100 x 80 concrete block paving)	Sq m		£15.03
Carriageway (Tegula blockwork or similar)	Sq m		£20.04
Footway and hard paving surfacing materials:			
Footway (standard bituminous materials)	Sq m		£13.74

Footway (200 x 100 x 60mm concrete block paving)	Sq m	£15.03
Footway (Tegula blockwork or similar)	Sq m	£20.04
Slurry sealing	Sq m	£11.64
Conservation Slabs (Marshalls) 450 x450 x 70	Sq m	£21.88
Fencing: Knee rail fencing	Linear metre	£83.78
Drainage: Sustainable urban drainage systems Hydrobrake Non-standard drainage system elements Culvert debris screen Petrol and oil interceptors	Site-specific calculation item Site-specific calculation Site-specific calculation Site-specific calculation	
Bollards:		
Glasdon Bollard	Item	£500.72
Concrete Bollard	Item	£199.03
Wooden Bollard	Item	£184.89
Cast II OII BOllaru	item	£209.00
Trees and planting: Small Tree – Size 8-10 Medium Tree – Size 12 - 14 Large Tree – Size 15 – 16	£70 dependent on species £85 dependent on species £105 dependent on species	

All trees above will incur an additional planting cost of	£105	
Existing Large Tree - cost will	be site specific and dependent	on species
Tree grills Planters and raised beds Plantation Screening	Site specific calculation Site-specific calculation Site specific calculation	
Shrub/Ground-cover planting	per 100 Sq m	£418.36
Speed restraint features:		
Overrun areas to roundabout (granite setts)	Sq m	£66.90
Overrun areas to speed contro bends (granite setts)	Sq m	£66.90
Mini roundabouts	Site specific calculation	
Bus shelters	Site specific calculation	
Bus gates	Site specific calculation	
Street Lighting:		
Standard 5m columns (on extra over areas)	Item	£738.28
Standard Raise and Lower 5m column	Item	£738.28
Standard 6m columns	Item	£841.04
Standard Raise and Lower 6m column	Item	£841.04
Standard 8m columns (on extra over areas)	Item	£943.80
Standard 10m columns (on extra over areas)	Item	£1048.61
Heritage 6m columns	Item	£1254.13
Heritage 8m columns	Item	£1356.89

Illuminated traffic signs:

Not exceeding 1m² sign face Item

Illuminated more than 1m² and not exceeding 3m2 sign face Illuminated more than 3m² sign face Site specific calculation

Traffic signals

Site specific calculation

Schedule 2: Commuted Sums for using alternative materials on new adoptable highways and alterations to existing highways (Section 38 and Section 278)

Unit	Commuted Sum October 2010
Sq m	£0
Sq m	£10.28
Sq m	£20.65
Sq m	£21.88
Sq m	£20.04
Sq m	£21.88
Sq m	£15.03
Sq m	£21.88
	Unit Sqm Sqm Sqm Sqm Sqm Sqm

Appendix F - Street Lighting Specification

The Council does not design lighting schemes. Developers therefore need to arrange for an adoptable street lighting scheme to be designed in accordance with the appropriate requirements of BS5489 and in accordance with "Well Lit Highways" – Code of Practice for Highway Lighting Management and the design principles as stated in this SPD.

BFC LHA Standard Adoptable Street Lighting

Residential street

- Column: 5m & 6m steel, hot dip galvanised, Corus 'Ash' or similar approved column to BS EN 40-5 2002. 5m & 6m aluminium, Aluminium Lighting Company or similar approved column to BS EN 40-6 2002.
- Lantern: To BS4533 with polycarbonate bowl, integral gear and NEMA socket (Philips Iridium SGS 252 or similar approved). Asymmetric lantern to be post top mounted with a 5 degree inclination to the horizontal.
- Lamp: 50 Watt SON-TPP.
- Lighting Control: Mayflower monitoring node with Nema plug/socket or Oasis 1000 photocell (as required).
- Isolation Unit: Charles Manufacturing Limited LSI 02 or similar approved.

Residential Areas – historical (Only to be used with specific prior approval of the LHA and LPA)

Bollard:	D. W. Windsor 'RIGA' with Anodised Louvre
	no backshield
Lamp:	42W PL-T
Lighting Control:	As determined by the LHA.
Isolation Unit:	Charles Manufacturing Limited LSI 02 or similar
	approved.
Colour:	PAN 7621
Reference: R	IB A 042P 81 N

Remote footpath/cycletrack

Column:	5m & 6m steel, hot dip galvanised, 'Abacus' folding/drop down or similar approved column to BS EN 40-5 2002.	
	5m & 6m aluminium, Aluminium Lighting	
	Company or similar approved folding column to	
	BS EN 40-6 2002.	
Lantern:	To BS4533 with polycarbonate bowl, integral gea and NEMA socket (Philips Iridium SGS 252 o similar approved). Asymmetric lantern to be pos top mounted with a 5 degree inclination to the	
	horizontal.	
Lamp:	50 Watt SON-TPP.	
Lighting Control:	Mayflower monitoring node with Nema plug/socket or Oasis 1000 photocell as required.	

Isolation Unit: Charles Manufacturing Limited LSI 02 or similar approved

Appendix G - Tree root system



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Appendix H - Legislative and Policy Framework

The key pieces of legislation relevant to improvement of the streetscene and public realm are:

- Planning and Compulsory Purchase Act 2004
- Town and Country Planning Act 1990
- Highways Act 1980

National planning policy

Planning Policy Guidance notes (PPGs) and their replacements Planning Policy Statements (PPSs), are prepared by the Government to explain statutory provisions and provide guidance to local authorities and others on planning policy and the operation of the planning system. Many PPGs and PPSs are relevant to streetscene issues and are reference sources for this SPD.

PPS 1 states:

"Planning shapes the places where people live and work and the country we live in. Good planning ensures that we get the right development, in the right place and at the right time. It makes a positive difference to people's lives and helps to deliver homes, jobs, and better opportunities for all, whilst protecting and enhancing the natural and historic environment, and conserving the countryside and open spaces that are vital resources for everyone."

To achieve the above, PPS1 gives design and character much weight within the document stating that:-

"Planning authorities should plan positively for the achievement of high quality and inclusive design for all development, including individual buildings, public and private spaces and wider area development schemes. Good design should contribute positively to making places better for people. Design which is inappropriate in its context, or which fails to take the opportunities available for improving the character and quality of an area and the way it functions, should not be accepted."

PPS 3 Housing states that local planning authorities should consider if a development

"...takes a design led approach to the provision of car parking space, that is well integrated with a high quality public realm [...and are] pedestrian, cycle and vehicle friendly.."

PPG13 - Transport

The aim of PPG13 is to set out how to achieve a safe, efficient and integrated transport system to support a strong and prosperous economy. The objectives are set out as guidance to integrate planning and transport at the national, regional, strategic and local level to:

- promote more sustainable transport choices for both people and for moving freight

 promote accessibility to jobs, shopping, leisure facilities and services by public transport, walking and cycling and
reduce the need to travel, especially by car

This SPD has considered fully circumstances where it is appropriate to change the emphasis and priorities in provision between different transport modes, in pursuit of wider the wider objectives and how this impacts on the design of the streetscene at a local level.

Bracknell Local Development Framework Core Strategy

The Bracknell Forest Borough Core Strategy sets out the strategic planning framework for guiding the location and level of development in the Borough up to 2026. The Core Strategy includes a number of detailed policies on development issues,

some which relate to streetscene issues. Policy CS7 is the main design policy within the Core Strategy, which states:

"The Council will require high quality design for all development in Bracknell Forest.

Development proposals will be permitted, which;

- i. build on the urban, suburban and rural local character, respecting local patterns of development and the historic environment;
- ii. provide safe communities;
- iii. enhance the landscape and promote biodiversity;
- iv. aid movement through accessibility, connectivity, permeability and legibility;
- v. enable a mix of uses;
- vi. provide high quality usable open spaces and public realm;
- vii. provide innovative architecture; and;
- viii. provide well designed and integrated public art.

Development proposals will be required to demonstrate how they have responded to the above criteria through the submission of Design and Access Statements, clear and informative plans, elevations and streetscenes and where required site Masterplans, Development Briefs, Concept Statements and Design Codes."

There are a number of saved policies within the Bracknell Forest Borough Local Plan which remain relevant to Streetscene issues. Saved policies of particular importance include the design policy, EN20, and policies from the Movement chapter including policies M1, M4, M5, M6, M7, M8. Local Transport Plan

The Local Transport Plan (LTP) sets the context for the development of, and the improvements to, transport in the Borough. Chapter 11 of the existing LTP2, identifies the following scope:

"Improve the visual environment in and around the Borough – transport infrastructure can have a detrimental effect on both the appearance and character of the local environment and can also lead to issues such as inappropriate parking and clutter dominating local environments. By careful planning of new infrastructure and treating roads and junctions as valuable spaces (considering them from an urban design perspective), these can start to improve the visual appearance of the local area and instill civic pride and ownership over key public areas. The investments proposed as part of the Town Centre regeneration and other housing development will make a significant contribution."

"Our approach will continue to provide a high quality environment for our residents engendering a feeling of civic pride."

The new LTP3 Core Strategy will be published in 2011. Much of the detail in the existing LTP2 will still be applicable including the above approach. Therefore applicants are advised to make reference to the relevant versions of the Local Transport Plan i.e. LTP3 Core Strategy and the detailed elements of LTP2 which have not been superseded by LTP3.