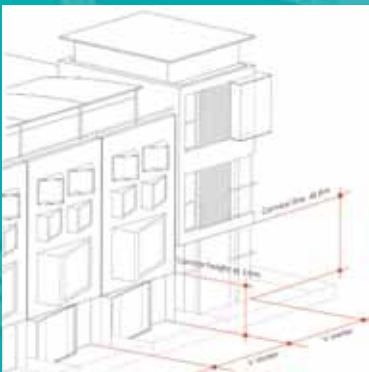


Preparing Design Codes

A Practice Manual



DROVERS
ROUNDAABOUT

TEMPLE WAY A28

BARROW HILL

Preparing Design Codes

A Practice Manual

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Foreword

Good quality, inclusive design is essential in creating and maintaining places where people want to live and work, now and in the future. Good design is not just about making places visually attractive. It has a fundamental role in achieving more sustainable development, helping to create flourishing economies and diverse, vibrant and attractive local communities. The hallmark of good design is a place that is designed around people, with its own identity, that functions well and that creates variety and choice. To achieve this requires the development of creative and innovative solutions that respond to the challenges of modern life, the requirements of a specific location and that help tackle climate change and create places suitable for the changes in climate now accepted as inevitable.

Planning has a critical role to play in the delivery of good design. The Government's recent reforms have ensured that good design and good planning are indivisible and have set a policy framework that facilitates the delivery of good quality places on the ground.

Design codes can play a significant part in implementing these reforms through helping achieve consistently better quality development. A three-year nationwide pilot research programme we have carried out with the Commission for Architecture and the Built Environment (CABE) and the subsequent report *"Design Coding in Practice: An Evaluation"* confirmed that, when used correctly, design coding is a very useful and exciting tool to help raise the design quality of new development.

Design codes are a particularly robust form of planning guidance. Developed and used effectively with the right skills and expertise, they will be key to delivering one of the central policy objectives for our new Planning Policy Statement on housing (PPS3) which is to ensure that all housing is well-designed and built to a high standard.



This guide, which we have produced jointly with CABE, is intended as a user friendly manual which provides helpful and practical advice to local authorities, developers and other key stakeholders on how design codes can be prepared and used effectively. It sets out good practice drawn from real examples of developing and implementing design codes across England, and from wider international experience.

Design Coding is one option open to local authorities and designers to achieve high quality, well designed places. Although it is not the only option, it is one which I believe, if used effectively, will present local authorities and designers with greater opportunities to achieve good quality design in a transparent, streamlined and collaborative way and which is tailored to reflect local needs and circumstances. I hope that over time, more and more development teams will adopt this new approach, and will contribute to developing a body of knowledge about how best to use this flexible tool to achieve the quality communities we all aspire to.

A handwritten signature in black ink that reads "Kay Andrews".

Baroness Andrews
House of Lords Minister
for Housing and Planning

This Guide – Purpose, Structure and How to use it

Purpose of the Guide

Planning Policy Statement 1: Delivering Sustainable Development (PPS1) makes it clear that good design is a key element in achieving sustainable development and that it is indivisible from good planning. Positive planning for the achievement of high quality and inclusive design is essential for all forms of development.

Design codes are a valuable tool which can help planners, designers and developers to respond to this policy context. The value of design codes to help improve the quality, value and delivery of residential development for example is expressly recognised in *Planning Policy Statement 3: Housing* (PPS3) and the Government's response to the Kate Barker Review¹.

The purpose of this guide is to show how **Design Codes** can help deliver good quality places, and to explain how **Design Coding** as a process can be integrated into the planning, design and development processes that shape the built environment. The guide complements good practice guidance which has been published to help encourage high quality development² and the delivery of good quality places. It directly supports the implementation of PPS3 but it is relevant to all aspects of the built environment and is not restricted to new residential development. The guide does not however set out new policy.

The use of design codes is not mandatory. The decision whether or when to use design codes will be a local decision made by those with a responsibility for a site or area, for example a local authority or a land owner seeking planning permission for the development of a site. The key for developers, local authorities and other interested parties is to understand when and why design codes may be the right tool to use and under which circumstances codes can streamline processes, add value and deliver better quality development.

This guide addresses these important issues. It forms the 'what', 'how' and 'who' guide to preparing and implementing design codes, by answering the following three key questions:

- **What** are design codes, and why and where are they useful?
- **How** can they be prepared and what represents an efficient and effective design coding process?
- **Who** is responsible, and what are the roles of all those involved through all stages of the process from preparation to implementation?

Structure of the Guide and How to use it

The guide is aimed at all those involved in the planning, design and development of the built environment. It is likely to be useful to practitioners of differing levels of interest and skills – ranging from those with a general interest and without a design or development background, to those considering, or actively involved in, the preparation and use of design codes. Its audience however is wider than the specialist professions, and it will also be of interest to local communities and local authority elected Members.

¹ *The Government's Response to Kate Barker's Review of Housing Supply* (HM Treasury & ODPM 2005)

² These include *By Design: Urban Design in the Planning System: Towards Better Practice* (DETR & CABE 2001); *Safer Places: The Planning System and Crime Prevention* (ODPM & Home Office 2006); *By Design: Better Places to Live* (DTLR 2001)

The guide has therefore not been written as a report to be read from cover to cover, but has been split into two parts. **Part A** is relevant to all readers, including non-specialists. It gives a broad understanding of design codes, setting out the background to the growing interest in design codes and where they are likely to be appropriate. Stakeholders who are involved in commissioning design codes but who will not be directly involved in their production will find Part A useful to inform their decision-making. Local politicians and managers (public and private) might fall into this category.

Part B is designed as a practice manual. It is consequently more technical in nature and is mainly intended as a practical guide which can be referred to throughout the design coding process. Part B sets out a recommended 'optimum' methodology for preparing a design code, although those involved in producing the design code may wish to adapt this methodology to take account of their own particular local circumstances. Those who are already experienced in the production and use of design codes will be able to critique their current approaches in the light of the wider experiences reflected in this guide.

Some of this guide is about **design codes – the product**. In particular Stages 3 and 4 of Part B advise on the scope and content of design codes and how they should be structured. However, much of this guide highlights the **processes and practice of design coding** – the steps that will need to be undertaken if codes are to be robust and properly implemented. Whatever approach is used to prepare a design code, it is essential that they reflect and seek to implement the central tenets of good urban design. Without this, design codes will fail to deliver high quality environments. Those preparing codes will therefore need to have careful regard to published good practice on design quality and place-making to which this guide refers.

LODGE WOOD

PART A

GODINTON
PARK

LOUDON
WOOD

LOUDON WAY



PART A: DESIGN CODES

A tool for delivering high quality environments

Part A of the guide introduces design coding as an approach to achieving improved quality development. It has three sections:

Section 1: Introducing design codes

- Introduces design codes and presents evidence for their use and value
- Explains a number of misconceptions about design coding.

Section 2: Factors to consider before selecting a design coding approach

- Discusses how design codes relate to other forms of detailed design guidance and allows the reader to decide when the use of design codes will be appropriate
- Presents an overview of how design coding as a process fits within the development process and recommends the stages that should be undertaken to achieve an 'optimum' design coding process.

Section 3: The basis for successful design coding

- Introduces the key stakeholders, their roles and relationships
- Sets out seven fundamental factors that characterise a successful design code preparation process.

1. Introducing design codes

- Design codes are a new approach to delivering improved quality development. They help to proactively plan for better design, investing resources upfront to help streamline later processes.
- Design codes are a distinct form of detailed design guidance comprising a set of written and graphic rules that establish with precision the two and three dimensional design elements of a particular development or area.
- The provisions within design codes are technical and precise. They instruct (and sometimes advise) the user upon the physical components of a place.
- Design Codes are delivery tools. To be effective they need to be based upon a specific design vision for a site or an area.
- Extensive evidence supports their potential to deliver improved design quality, and a more certain, streamlined and coordinated development process.
- Design codes support the culture change in planning and the transition to a spatial approach to planning.

Introduction

No one sets out to design and create poorly laid out, characterless places. Yet too much of what we build today continues to display these characteristics. Extensive testing recently undertaken in England has found that design codes have considerable potential to assist in overcoming these problems by helping to deliver better quality neighbourhoods in a more efficient and effective manner. Some of the potential benefits of design codes include:

- **Better designed development**, with less opposition locally and a more level playing field for developers.
- **Enhanced economic value** that a positive sense of place and better quality design can bring.

- A more certain planning process and linked to this, a more certain climate for investment.
- **Streamlined development control**, saving time and money for developers and local authorities alike.
- A more coordinated development process which is built on consensus instead of conflict.

What are design codes and where can they be applied?

Design codes are a distinct form of detailed design guidance. A design code is a set of written and graphic rules that establish with precision the two and three dimensional design elements of a particular development or area – and how these relate to one another without establishing the overall outcome.

A design code's aim is to provide clarity over what constitutes acceptable design quality for a particular site or area, and thereby provide a level of certainty for developers and the local community alike. Design codes set out design principles aimed at delivering better quality places, for example the requirements for streets, blocks, massing and so forth, or they may focus on landscape, architectural or building performance issues (for example, increasing energy efficiency). However, unlike many generic urban design guidelines or local development standards, design codes do not simply repeat policy or guidance found in other national or local policy or guidance documents. Instead, codes provide a positive statement about the particular qualities of a place. Codes are focussed around those design characteristics that are important to achieve, and they establish and firmly fix the 'must have' design elements. In so doing codes help to provide continuity in quality and consistency over time.

To achieve this aim, design codes often build upon a design vision in a masterplan, or other site or area-based vision. Sometimes they may evolve out of a design and development framework. In both circumstances the set of design instructions which make up the design codes will reflect the particular requirements of the place.

Design codes – a definition

A design code is a set of illustrated design rules and requirements which instruct and may advise on the physical development of a site or area. The graphic and written components of the code are detailed and precise, and build upon a design vision such as a masterplan or other design and development framework for a site or area.

Source: Annex B to Planning Policy Statement 3: Housing (DCLG, 2006)

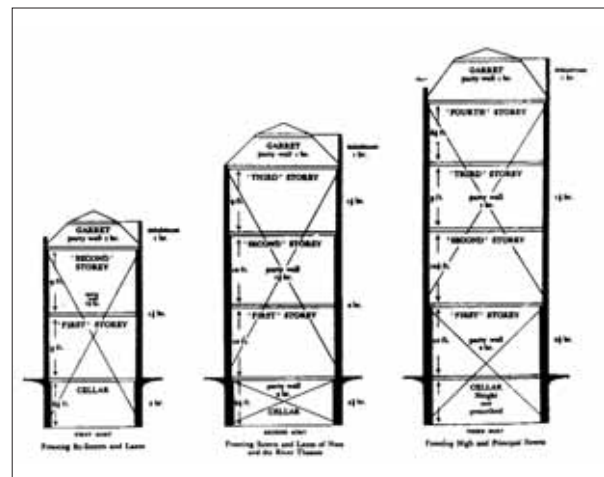
Design codes may be appropriate in other circumstances as well. They may, for example, be appropriate for thematic design coding to guide the design of repetitive minor householder planning applications such as house extensions, alterations, and the like in a particular locality. However, these forms of design coding are not the focus of this guide.

Many of the development standards used to guide the design of buildings and the urban environment could be described as having characteristics of design codes – of sorts. The building regulations, highways design standards, and the density and open space standards used by many local planning authorities in England fall into this category. Most of these are however limited in their scope and technical in their aspirations and are not generated out of a physical vision or understanding of a particular place. Instead, these types of guidance are about achieving minimum requirements across a wide area. In many cases, the slavish adherence to such development standards has led to the creation of bland and unattractive places.

Historical examples of the use of design coding

Design codes are not new. Research has shown that in the past forms of design coding have been used to set standards to improve safety, health or sanitation – such as the 1667 ‘Act for Rebuilding London’ following the Great Fire. Elsewhere they have also been used to ensure urban form reflected the

‘enlightened’ culture of the times – such as in Georgian Bath or New Town Edinburgh. Some of the world’s most beautiful cities, such as Siena in Italy, have used forms of design coding over many centuries to give them their distinct and unified form and appearance. Today, design codes in various forms are used internationally, for example in Germany, France, the Netherlands, Australia and the United States, as a means to focus on the delivery of high quality contemporary urbanism.



Coding through history

Codes were introduced into the 1667 Act for the Rebuilding of the City of London and, amongst other design requirements for new buildings, they related building types to street types.

Design codes and relationship to zoning

Design codes are different to conventional land use zoning regulations which underpin many planning systems in Europe, the United States and elsewhere. Zoning regulations, in their most basic form, are not informed by urban design considerations which relate to place-making. They typically relate to mapped land uses which are supported by formal site-specific written regulations relating to permissible uses and development densities, building heights, floorspace ratios, building lines, parking provision and the proportions of the types of space on a site. In many countries, zoning regulations are also linked to building regulations.



Coding in Europe today

In a number of European countries today, such as Germany and the Netherlands, codes form a key component in the control of development through the planning system.

Delivering sustainable communities – promoting a changing culture in planning

The principles of sustainable development as delivered through the new planning system are at the heart of the Government's vision for sustainable communities³. An important role of the Planning and Compulsory Purchase Act 2004 has been to make the planning system more proactive, transparent, and effective. As a result, a key change has been for planning to become more 'spatial' in nature⁴ – moving away from operating in a vacuum, divorced from notions of space and place. Local communities now have real opportunities to influence how they want their areas to develop. PPS1 requires that spatial planning should be used to embody a community's aspirations within local policy, setting out a vision for future patterns of development, with clear objectives for achieving that vision and strategies for delivery and implementation.

In this respect design codes are a key proactive tool. They can help embed the aspirations for a place, and assist in proactively taking forward and implementing local visions with greater consensus, transparency, speed, quality and certainty.

³ *Sustainable Communities: Building for the Future* (ODPM, 2003)

⁴ PPS1 advises that spatial planning goes beyond traditional land use planning to bring together and integrate policies for the development and use of land with other policies and programmes which influence the nature of places and how they can function.

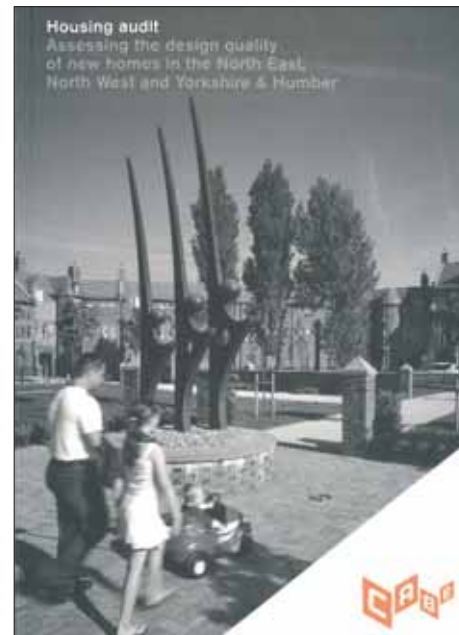
Planning Policy Statement 3 and design codes

To facilitate efficient delivery of high quality development, Local Planning Authorities should draw on relevant guidance and standards and promote the use of appropriate tools and techniques, such as Design Coding alongside urban design guidelines, detailed masterplans, village design statements, site briefs and community participation techniques.

Source: Planning Policy Statement 3:
Housing (DCLG, 2006)

Translating aspirations into delivery

Good design is about more than how buildings look – it is also about creating sustainable places that function well. Although national policy in PPS1 sets out a positive policy framework for improving the quality of new development, extensive audit work undertaken by CABI has demonstrated that there is a need to further improve the design quality of much of what is built, residential development in particular⁵. CABI's findings point to a number of failings, but in particular that, with respect to residential development, there is often a failure to translate aspirations for good urban design into implementation and delivery.



Research evidence on the use and application of design coding has shown that design codes can be a powerful tool to help overcome these design quality issues (see below). By understanding what the important design components for the development of a site or area are, design codes can set detailed and transparent requirements on delivery and help deliver a step change in the quality of both residential and non-residential development. In essence design codes are delivery tools that require an early investment of time and resources in the planning of a development or area in order to deliver an enhanced process and product: they 'operationalise' the vision for a site or area, securing higher quality outcomes for all.

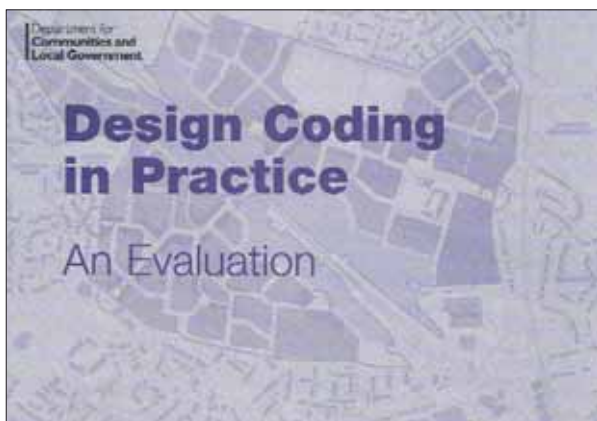


Delivering Design Quality

⁵ *Housing Audit, Assessing the Quality of New Homes, London, the South East and the East of England* (CABI, 2004); *Housing Audit, Assessing the Design Quality of New Homes in the North East, North West and Yorkshire and Humber* (CABI, 2005)

The evidence – adding value through design coding

Following the launch of the Sustainable Communities Plan, the Government, working in partnership with CABE and English Partnerships, instituted an action research programme that ran throughout 2004 and 2005 to allow design codes to be tested in practice in England. This work, which included a stocktake of the historic and current use of design codes, provided a sound basis upon which to understand how design codes operate in England. The findings from the programme are published in full in *Design Coding in Practice: An Evaluation* (DCLG, 2006).



The action research programme: building on an evidence base

The design codes action research programme encompassed the detailed monitoring and evaluation of nineteen development projects of three types:

- First, a series of Pilot projects were 'enabled' by CABE to produce design codes as an integral part of seven evolving development projects.
- Second, the retrospective evaluation of eight advanced design coded projects was undertaken, where design codes had already been prepared and used independently of the pilot programme. In these cases, design coded schemes had already been built.
- Third, four non-design code project comparators were evaluated which used other forms of detailed design guidance.

The projects were chosen to reflect a geographical spread, a range of different development and physical contexts, as well as variety in size, ownership and patterns of stakeholder engagement.

The research concluded that design codes are – in appropriate circumstances – valuable tools to deliver a range of more sustainable processes and outcomes from development. It confirmed that as a particularly robust form of design guidance, design codes can play a major role in delivering better quality development. They also have a significant role to play in delivering a more certain design and development process, and – if properly managed – can provide the focus around which stakeholders can integrate their activities, delivering in the process a more coordinated and consensus driven process.



Delivering quality and value

Development built according to design codes can create high quality places in terms of urban design, architectural design and/or the quality of details and materials.

To achieve this however, they require a significant early investment in time and resources from all stakeholders, although the evidence confirmed that for commercial interests, this is compensated by the enhanced economic value that better design and a stronger sense of place can deliver⁶. The process of applying for and obtaining planning permission is also likely, over time, to become more streamlined and predictable which will help to offset the front-loading of time and resources that design coding requires.

Delivering certainty and coordination

Design codes can help to provide landowners and developers with more certainty, as at West Silvertown where they also had a role in co-ordinating the development of private and affordable housing by different developers. Codes can also ensure that parcels built by different housebuilders are consistent, for instance at Fairford Leys.

Misconceptions and reality

Arguments against design codes focus on concerns that are based on a range of common misconceptions. Like other forms of detailed design guidance, if design codes are themselves poorly prepared, or inappropriately applied or implemented, then they may be part of the problem not the solution. However, international experience, and increasingly the evidence from the UK, suggests that these misconceptions have little basis in fact. Research evidence also demonstrates that when used correctly design codes can play a key role in helping to deliver design quality in contexts where it has typically been lacking in the recent past; particularly in large-scale predominantly residential developments.

⁶ This finding from the action research programme is supported by a body of research published by CABI: *The Value of Urban Design* (2001), *The Value of Good Design* (2002), *The Value of Public Space* (2004).

Myths and facts about design codes

The myths

The facts

Design codes suffocate the creativity of designers

Design codes focus creative input to making places

Codes identify the key design elements that will be vital to get right in a particular place. In this sense, they encourage the creative input of architects and urban designers to work positively to address those requirements identified as crucial to that place. They therefore focus creativity rather than stifling it, and may encourage more architects to become more involved in the design of certain types development, such as for example new housing development.

Design codes are excessively bureaucratic

Design codes clarify the regulatory process rather than complicate it

Design codes are primarily tools to convey the various design components of a particular development. By clarifying design requirements, design codes reduce uncertainty and the discretion available to regulators, and streamline regulatory processes.

Design codes are concerned with delivering traditional architectural solutions and stifle innovation

Design codes are style neutral. They can equally deliver innovative contemporary or traditional design solutions

Experience in places such as Greenwich Millennium Village, Hulme and Newhall in the UK, and in Germany and the Netherlands demonstrates that creativity and innovative design solutions need not be constrained by design codes.

Design codes are cost-cutting devices

Design codes need considerable up-front investment

Although design codes have the ability to streamline planning processes and lead to time savings during implementation, they cannot be prepared without a significant up-front investment in design time, skills and resources, and the positive engagement of key stakeholders.

Design codes are excessively prescriptive and restrictive

The relative prescription of design codes varies considerably

Local circumstances and the vision of those responsible for the code's design will determine the precise character of each design code. Each is different, but typically some aspects may be highly prescriptive e.g. building lines, whilst others will be more flexible e.g. architectural treatments.

Design codes give rise to formulaic design solutions

Design codes encourage a sense of place and variety

They seek to capture the specific requirements of a place and provide an opportunity to break away from developments typified by crude local development standards. Codes encourage stakeholders to think together about each development in its entirety as a unique place.



As used in this guide, the distinguishing features of design codes can be described as follows:

- They are set of graphic, and to a lesser extent, written, rules that are technical in nature.
- They establish with precision the design considerations of a development or area.
- They are based on a design vision such as a masterplan or other form of design framework for a site or area.
- They are three dimensional in scope, and focus primarily on urban design considerations.
- They focus on the essential and mandatory design characteristics of a particular development.
- They can also include provisions which are advisory or optional.

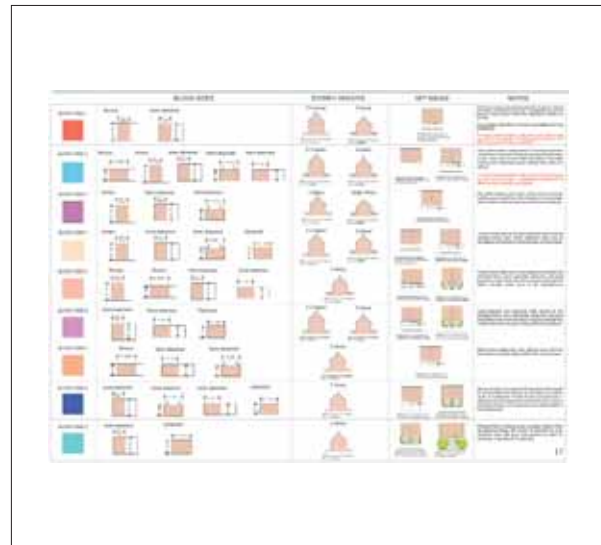
International experiences

Codes have been used in the Netherlands, in examples such as Borneo Eiland and Borneo Sporenburg in Amsterdam, to create a place with a contemporary urban form and character. In the USA, codes are generally associated with New Urbanism, which promotes a traditional neighbourhood form and character in reaction to the sprawl of low density suburbs, for example at Kentlands, in Maryland.

There are a wide variety of possible approaches to the content and presentation of design codes (see Part B, Stage 4).



Cirencester – code setting out architectural standards



Fairfield Park – coding for building types



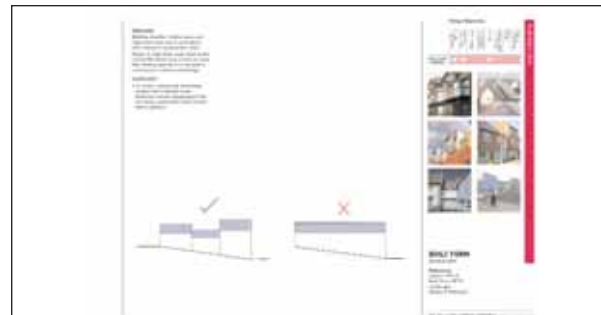
Hulme – coding for landmarks, vistas and focal points



Rotherham – code for specific street character



Ashford – coding for urban structure and massing



Hastings – coding for roofscape

2. Factors to consider before selecting a design coding approach

- Design codes are an 'operating system' for delivering development and provide a central coordinating tool for design, development, planning and adoption processes.
- Design codes coordinate design outcomes across large or complex sites to deliver a coherent design vision.
- They are most valuable when sites are large, in multiple ownership and where development is to be phased and where more than one developer is involved.
- Design codes are a versatile tool that can be appropriate for a wide range of development types and in a wide range of contexts.
- Design codes fit within a hierarchy of policy and guidance, and their role and relationships within this hierarchy need to be understood.

Why choose design codes?

PPS1 advises that planning authorities should plan positively for the achievement of high quality and inclusive design for all development and to have positive policies based on a good understanding of local circumstances and objectives. PPS1 asks decision-makers to apply a high policy test to the design quality of new development, namely that 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 accepted⁷. It also advises that in planning for the achievement of high quality and inclusive design, planning authorities should have regard to other published good practice.

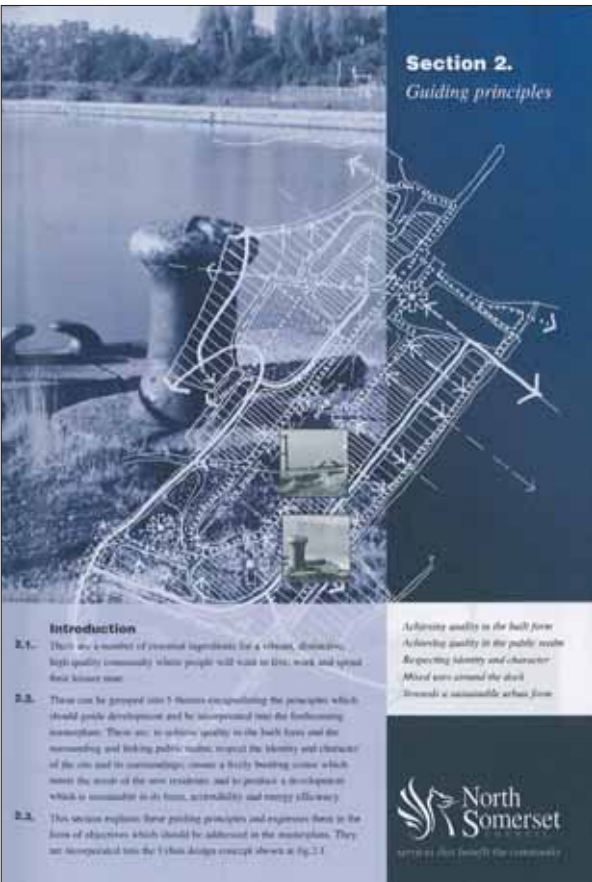
In the past some applicants for planning permission have taken an adversarial approach to presenting their proposals to local authorities for consideration, particularly on issues relating to the design of their developments. Based on mutual conflict and mistrust, this approach often ended up being resource intensive for both local authorities and applicants but was in part influenced by the national policy framework which limited the consideration of design issues in the planning process⁸.

There is now considerably more dialogue between applicants and local authority officers prior to planning applications being submitted and indeed during the consideration of such applications. Indeed the Government now actively promotes pre-application discussions because they benefit both developers and local planning authorities in ensuring a better mutual understanding of objectives and the constraints that exist in implementing a proposal. In such cases, when planning applications get submitted they can now be dealt with in a more certain and speedy manner and the quality of decisions can be better assured. This is particularly so in the case of large development schemes where local authorities and developers often look to jointly develop detailed design guidance to create the confidence that design quality, and therefore planning permission, will be forthcoming.

A number of forms of detailed design guidance are often considered appropriate in such circumstances – a detailed masterplan, character area statements, a development framework followed by a detailed development briefing process for each phase of development, or perhaps a combination of these. Although different, each form of guidance can have many of the same benefits as design coding – and also similar costs – namely the up-front investment in resources that is required to produce them.

⁷ Paragraph 34, *Planning Policy Statement 1 (PPS1): Delivering Sustainable Development*

⁸ See for example *Planning Policy Guidance Note 1: General Policy and Principles* (1988 and 1992) and DoE (1980), and *DoE Circular 22/80: General Policy and Principles*.



Other forms of detailed design guidance

Detailed design guidance and/or detailed masterplanning that is not coding has also been used successfully to achieve similar benefits, as for instance at Ingress Park, Greenhithe or Port Marine.

The final choice as to which form of design guidance to use will be dependant on local preference. However, research shows that design codes can be distinguished from other forms of detailed design guidance because of their particular ability to:

- Establish high quality design aspirations in a manner that allows their consistent application across a site or area.
- Provide a robust form of design guidance that can be more difficult to challenge (for example, at appeal).
- Establish the key development-wide design parameters around which individual development phases can be creatively designed and delivered.
- Test, develop, and deliver a design vision for a site or area.
- Establish a more certain and efficient planning process.
- Create a level playing field for development interests, based on their willingness and ability to deliver high quality design.

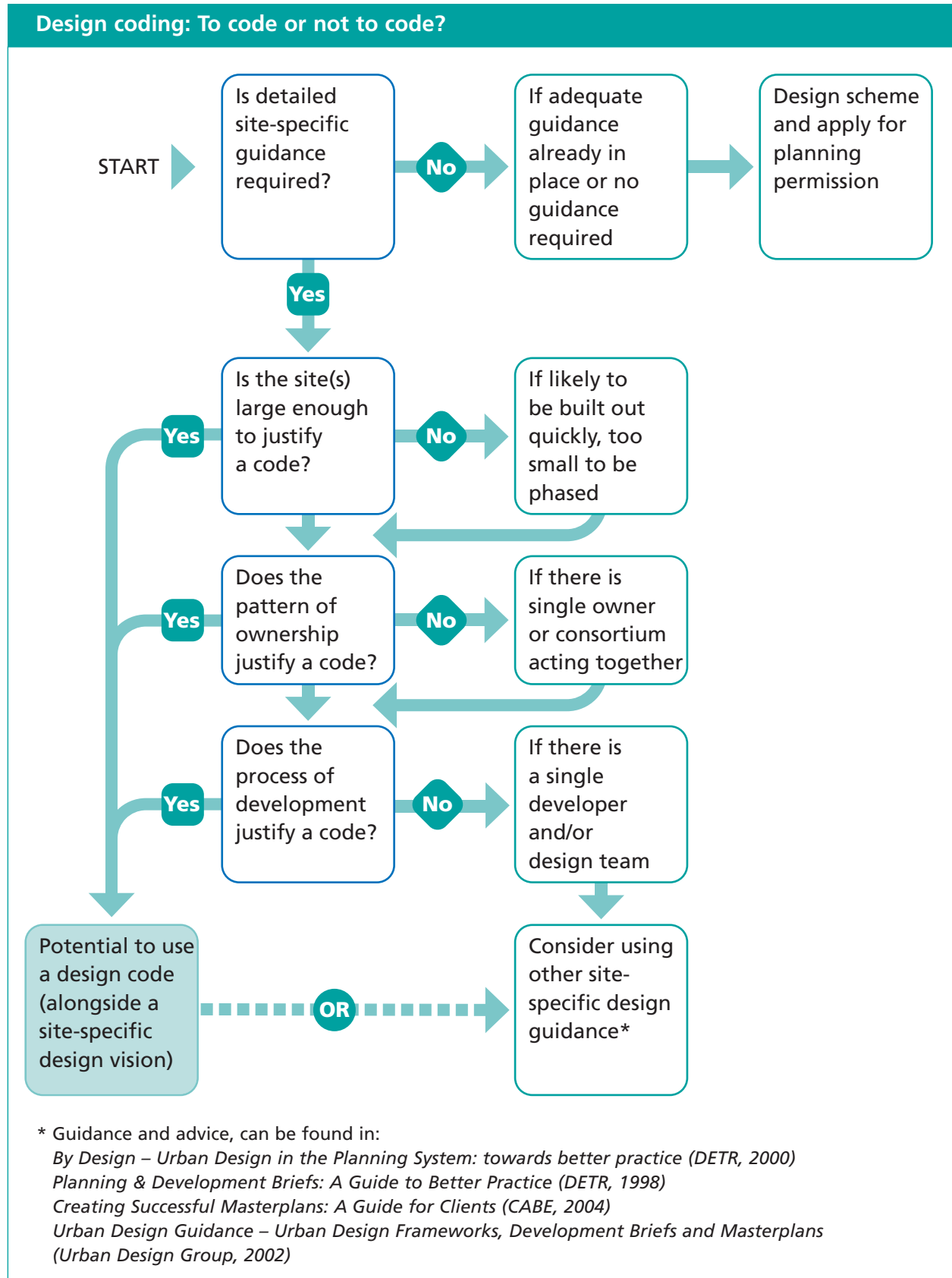
When is the use of a design code appropriate?

A key strength of design codes is their ability to coordinate design across the successive development phases of large sites in order to deliver a coherent design vision. Design codes are usually of less value for small sites where a single developer and design team is responsible for the whole development. Research shows that they are most valuable when sites possess one or more of the following characteristics:

- Large sites (or multiple smaller related sites) that will be built out in phases over a long period of time.
- Sites in multiple ownership, where co-ordination between the parties is desirable.
- Sites likely to be developed by several different developers and/or design teams.

The figure below sets out a simple decision-making path which code promoters can follow to determine whether design codes are appropriate in different circumstances. It also

acknowledges that where design codes are not appropriate, other forms of detailed design guidance should be considered.



What types of development would design codes apply to?

To date, design codes have largely been prepared for residential development. However, this does not preclude their application to other uses or types of development. International practice and limited UK experience indicates that design codes can be effectively applied to all types of development. Commercial and mixed use developments and the redevelopment of parts of town or city centres can, for example, be coded in the same way as residential developments. Indeed, given that residential developments often have important linkages to public spaces and other commercial areas and districts, design coding can provide an opportunity to consider the specific design requirements for the proper integration of different uses. Where such circumstances exist, it may be appropriate to establish a set of development-wide design codes or a ‘town code’ before breaking a code down to deal with the specific requirements of different land use combinations and mixes.

Other applications of design codes can include codes dealing solely with open space, landscape or public realm requirements of particular places. Design codes can also deal with design across the range of possible density profiles in urban, suburban and rural settings. In the United States, for example, design codes (or ‘smart codes’) are increasingly being used as a means to establish the character of development along a ‘transect’ or cross-section spanning from urban centres to rural outskirts. This experience illustrates the diversity and flexibility of design codes as a tool and their value as a means to guide development of all types.



Design codes and mixed use developments

The Rotherham Town Centre River Corridor pilot project shows that design codes can be applicable to mixed use developments in urban centres as well as to residential-led sites, where they have more generally been used until now.

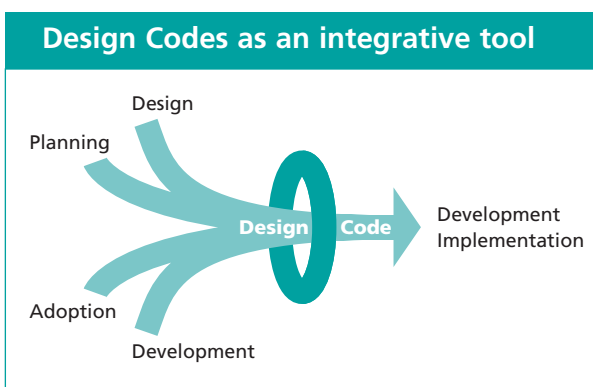
Where do design codes fit within development and planning processes?

Delivering new development entails a series of linked but often disparate processes.

- **Design processes** – design codes can set the detailed urban design parameters of projects across the different scales of design intervention, from street and block sizes and layouts to landscape and architectural concerns, in order to help achieve a co-ordinated vision for a place.
- **Development processes** – design codes provide a means through which stakeholders can explore and negotiate detailed design options, and allow these concerns to feed into costing models and development options from an early stage.
- **Planning processes** – design codes provide a ready means to consider, establish and formalise design parameters in a more objective manner, and then to regulate and monitor design solutions through the development control process.

- **Adoption processes** – design codes allow adoption considerations such as highways, open space and drainage, to be coordinated at an early stage with design, development and planning matters, and set out specific standards for rigorous enforcement, where necessary.

Design codes have a potential role to play in each of these processes. More importantly, they can bring these processes and those stakeholders involved in them together, requiring an early engagement in detailed discussions to resolve issues that may otherwise cause tensions.



The policy framework

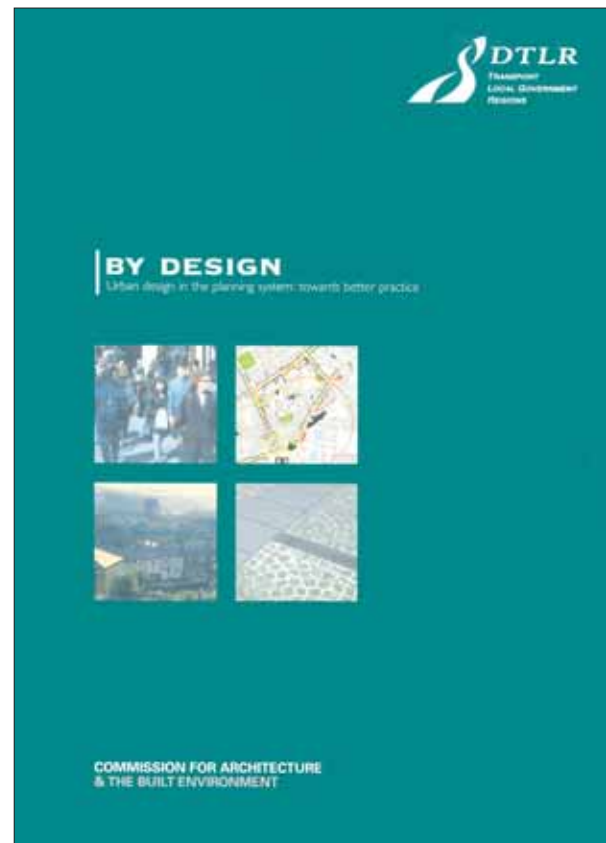
It is important when choosing a design coding approach to understand where codes fit within the wider hierarchy and framework of planning policy and the various forms of design guidance and information which exists.

At national level Government prepares national policy and issues guidance and advice to planning authorities within the context of primary and secondary legislation. At this level, PPS1 and accompanying practice guidance such as *By Design*⁹ and *Safer Places*¹⁰ are particularly relevant to the preparation of design codes.

At regional level, regional planning bodies prepare and produce regional spatial strategies (in London, the Mayor prepares a Spatial Development Strategy). Regional Spatial Strategies can include policies relating to the area, or part of an area, of more than one local

planning authority, allowing for sub-regional strategies, where appropriate. In many cases county level authorities prepare design guidance for local authorities at sub-regional level. A good example of this is the updated *Essex Design Guide*¹¹ and the *Urban Place Supplement*¹² published by Essex County Council.

At the local level, local authorities prepare local development frameworks¹³ which include local development documents comprising development plan documents (DPDs) and, where appropriate, supplementary planning documents (SPDs). These documents can apply at various different levels, from authority-wide policy and guidance (and, in the case of joint DPDs, between two or more local planning authorities) to area-specific policies and guidance, and to design visions and development briefs for specific sites. The design of individual proposals for sites and areas, and associated



¹¹ *Essex Design Guide* (Essex County Council, 2005)

¹² *Essex Design Guide: Urban Place Supplement* (Essex County Council, 2005). The Supplement is currently out for public consultation through Essex District Councils and is to be adopted in early 2007

¹³ Further detail is set out in *Planning Policy Statement 12: Local Development Frameworks* (PPS12).

¹⁴ *Circular 01/2006: Guidance on Changes to the Development Control System* (DCLG, 2006)

⁹ *By Design – Urban Design in the Planning System, Towards Better Practice* (DETR, 2000)

¹⁰ ODPM & Home Office 2006

Design and Access Statements as advised in *Circular 01/2006*¹⁴ – together with detailed plans and drawings – form the lower part of the hierarchy as they relate to specific proposals for development.

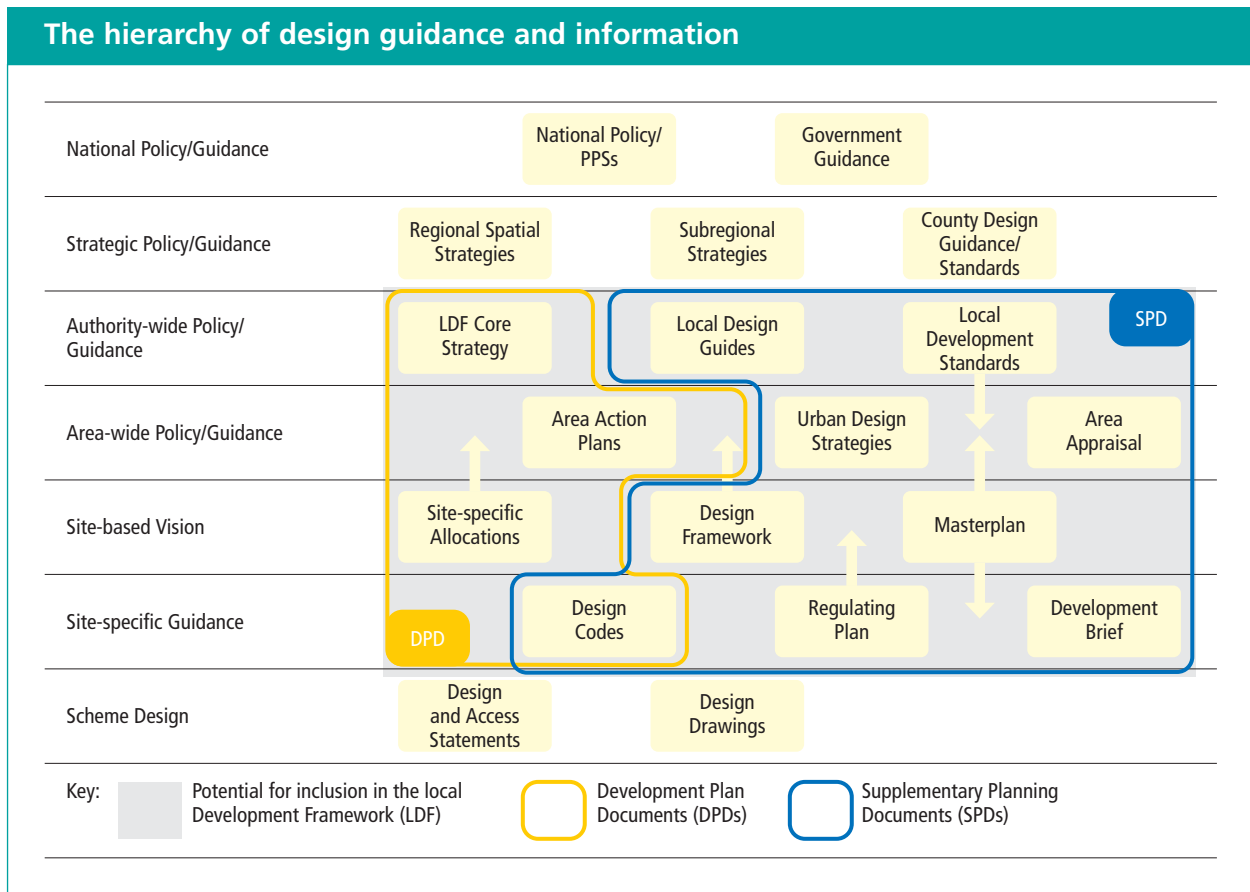
Typically proposals for development on specific sites will be subject to policy and guidance across a number (although not necessarily all) layers of the hierarchy, with the lower layers progressively setting out a more detailed policy and guidance framework which is set in the context of the overarching policy and guidance. DPDs typically comprise a Core Strategy, Site Specific Allocations of Land and, where needed, Area Action Plans. SPDs may cover a range of issues, both thematic and site specific, which may expand policy or provide further detail to policies in a DPD. SPDs may take the form of design guides, local development standards, urban design strategies, area appraisals, area or site-

specific development briefs and master or regulating plans. They may have area wide application or can be specific to individual sites.

Design codes are typically site or area-specific and build upon a vision such as a masterplan which is informed by the strategic policy and guidance context. Design codes can be adopted as part of a DPD or as a SPD by following the formal preparation procedures of these documents. Design codes can also form part of area or local authority-wide policy and guidance.

Given their detailed and advisory nature, other forms of design guidance are more appropriately adopted as SPDs but in some cases can form part of a DPD where more detailed guidance is needed¹⁵.

Part B, Stage 5, of the guide advises on how design codes can be successfully formalised.



¹⁵ See also paragraphs 2.19 and 2.43 of *Planning Policy Statement 12: Local Development Frameworks (PPS12)*

3. The basis for successful design coding

- Successful design coding is underpinned by a set of common stages which make up an 'optimum' design coding process.
- The process of preparing a design code is closely related to and positively influences the wider development process.
- Selecting the right team is an important pre-requisite for successful design coding.
- A network of stakeholders and organisations will be involved in design coding, and it is vital to understand their interests, roles and motivations.
- Design codes should be underpinned by a commitment to design quality and to setting appropriate design quality thresholds based on sound urban design principles which reflect the unifying elements of 'place'.
- Design codes require an up-front early investment of time and resources, a firm foundation in a robust design vision for a site or area, commitment to collaborative working between team members, strong leadership and a multi-disciplinary set of design skills throughout the process.

Planning for success

Design codes have several important benefits over other forms of guidance, including greater success at securing improved design quality, certainty of process, the coordination of stakeholder objectives and enhanced economic value. However, to be successful they need to be supported by a range of other important factors:

- Stakeholders with access to the right **design skills**.
- Developers who are committed to delivering **design quality**.
- Planning and highways authorities who are **committed to place-making**.
- A **consensus between key stakeholders** concerning the vision for the site or area and the strategy for its implementation.

Several pre-requisites are necessary for successful implementation of design codes. These relate to three factors that are discussed in this section of the guide:

1. Getting the process of design coding right.
2. Getting the right design code preparation team in place.
3. Understanding and acting upon a range of fundamental success factors.

Towards an 'optimum' design coding process

It is possible to identify a common set of stages that underpin successful design codes and to set out an 'optimum' design code preparation process. This forms the structure of the manual sections in **Part B** of this guide. In summary the key stages of the process are:

Stage 1: Initiating the design code – thinking through and defining an agreed process for preparing and operating the code, and establishing leadership arrangements.

Stage 2: Coordinating inputs into the design coding process – bringing together the skills, financial resources, and the roles and relationships that will create and implement the design code.

Stage 3: Appraising the local context for design coding – assessing the existing policy and guidance framework and any consents already covering the site or area, its character, and any existing physical vision such as a masterplan.

Stage 4: Designing and testing the design code – devising, structuring, writing and designing the content and expression of the design code, and then testing its robustness – including its market viability, likely capacity to deliver quality and its ease of use to all users.

Stage 5: Formalising the design code – giving the design code status by adopting it for planning, highways or other purposes, or by formalising it through other means such as through development control powers or control over freehold rights.

Stage 6: Implementing the design code – using the design code to select design and development teams for individual land parcels, to inform the parcel design process itself, and for the assessment and regulation of the proposals coming forward.

Stage 7: Managing design code compliance – monitoring and enforcing design code implementation; evaluating the success of the design code to refine it; and, using the design code for project aftercare.

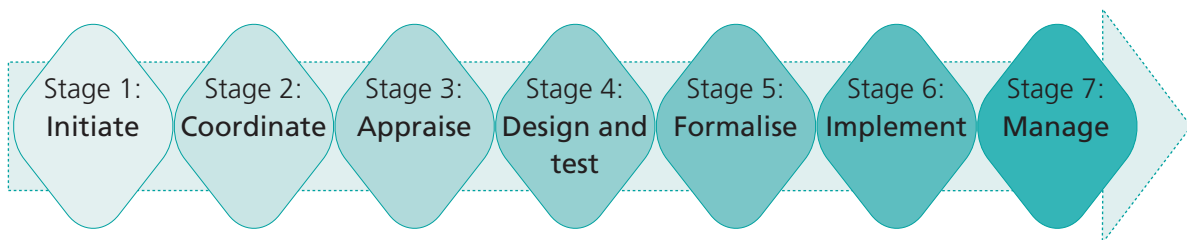
In essence the design coding process is linear in nature, although it may be necessary to return to and refine the design code once it has been prepared in the light of later negotiations and decisions.

The recommended ‘optimum’ process has emerged from analysis of a wide range of design coding case studies, but some aspects of the design coding process adopted locally may differ in the light of local circumstances. It will be based on a number of key issues that will need to be resolved early on, for

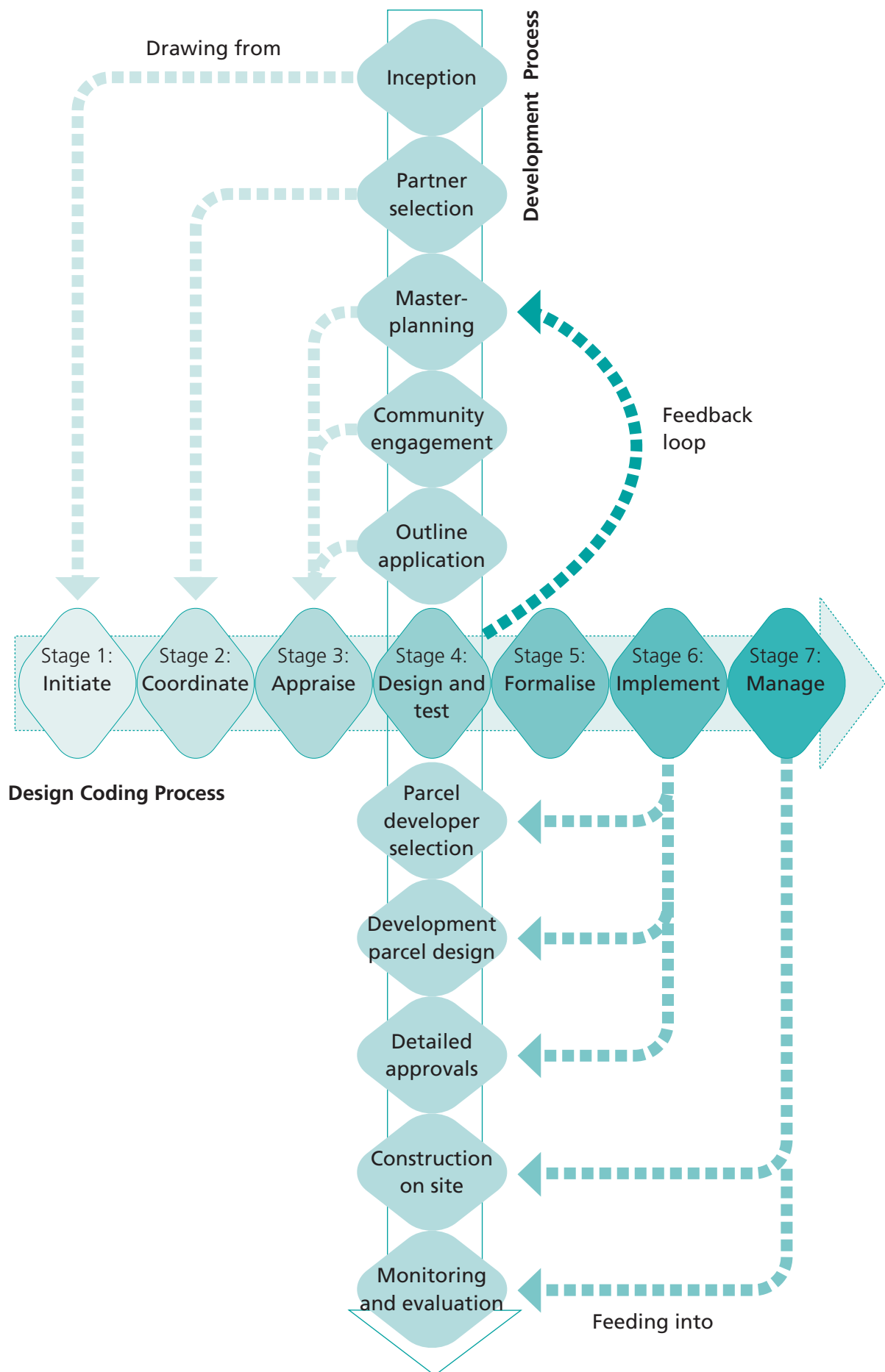
example, whether to prepare the design code before or after the design vision for the site, whether to use the design code as the basis for public consultation, whether to prepare the design code before or after any outline planning consent is obtained, and so forth.

The preparation and implementation of a design code cannot however be undertaken in isolation. It will need to inform and be informed by the development process to which it relates. For example the appraisal in Stage 3 of the design code process will need to be informed by the masterplanning and community engagement stage of the development process, where applicable. Similarly, once prepared, the design code will feed into and inform later development stages such as, for example, parcel design or detailed approvals. It should be noted however that in practice every development process is different and the stages do not always follow in a neat sequential manner. Some processes may not include every stage (for example partner selection or the selection of parcel developers), or might include others. Sometimes stages will also be reversed or need to be replicated during the course of a development. However it is recommended that the design coding and development processes are considered together to understand how the design code can potentially inform and be informed by the wider processes of development.

An ‘optimum’ design code process



Design coding and its links with the development process



The stakeholders and their roles

The preparation of a design code is a collaborative process that brings together a broad range of individuals and organisations which play a role in delivering development. These can be divided into two broad interest groups: the ‘**design coding team**’, which typically

comprises the full range of technical stakeholders (professionals) involved in preparing and using the design code, and ‘**wider interests**’, such as the local community. The key stakeholders, their roles and how they relate to the two interest groups are summarised in the Figure below. Further details are set out in Stage 5 of Part B of this guide.

The potential roles of key stakeholders in a typical design coding process			
Groups	Interests	Stakeholders	Potential key roles include
Design Coding Team	Land interests	Landowner	Establishing aspirations from the start for a high quality development, using freehold rights throughout to guarantee delivery against the design code
		Master-developer	Initiating the design vision for the site and code design process through appointment of experienced designers, and subsequently assessing parcel development proposals against the design code
		Funding agency	Using land ownership and funding powers to deliver the requisite skills, resources and know-how for a high quality design coding process, and effective assessment and enforcement
Design interests	Design interests	Masterplanner /design and development framework designer	Preparing the masterplan or development framework as a strong vision for the long-term development of a site(s), reflecting any existing policy and guidance, local consensus on the vision and the client’s brief
		Design code designer	Coordinating different interests as a basis to prepare the design code to implement the essential principles contained in the masterplan/vision
Development interests	Development interests	Parcel developers	Developing proposals and achieving consents to deliver on site a development parcel which is consistent with the masterplan/vision
		Registered social landlords (RSLs)	If involved, developing proposals and achieving consents for the delivery on site of a development parcel – or part thereof – which is consistent with the masterplan/vision
		Parcel designers	Creatively interpreting the design code and masterplan to prepare high quality designs for individual land parcels and their constituent buildings, spaces and areas

The potential roles of key stakeholders in a typical design coding process *continued*

Groups	Interests	Stakeholders	Potential key roles include	
	Public interests	Planning authority	Establishing aspirations from the start for a high quality development, initiating or playing a role in initiating the masterplan/vision and design code, and administering the development control and any enforcement processes on the basis of the design code	
		Highways authority	Playing a role in design code preparation, revising and updating existing highways standards as necessary, and assessing and adopting the infrastructure that results	
		Environment Agency	Approving discharge from drainage facilities (eg. SUDS), and advice on incorporation in the design code	
		Building control	Approving parcel proposals against the building regulations, and advice on incorporation and adaptation for the design code	
Wider interests	Private interests	Utilities providers (including water)	Adopting service infrastructure, and providing advice on incorporation of requirements in the design code	
		Community interests	Local councillors	Championing design quality locally and establishing design aspirations in advance of development interest, approving masterplan/vision and design code and delegating authority to officers to manage the delivery
			Existing community	Engaging in the masterplanning/vision making process through serious and significant involvement
		Future occupiers	Involvement through normal planning processes and engagement in long-term management and maintenance processes on the basis of the design code	

The design coding team

The design coding team can be broken down into four sets of stakeholder interests:

1. Land
2. Design
3. Development
4. Public

Understanding the overlapping roles and the main motivations of these interest groups is key to forging a successful design coding process and establishing successful working relationships. The key roles of each of these stakeholder interest groups is set out at the start of each of the seven stages of the coding process described in Part B of this guide.

Although the role and prime motivations of each group will vary, several collective motivations for preparing a design code can be identified:

- The delivery of high quality design to support the creation of better places – the primary objective.
- Optimising investment returns – a necessary pre-condition of development.
- Creating a certain and efficient development process – to facilitate the necessary investment and satisfy community expectations.
- Delivering planned development capacities in a sustainable way – e.g. numbers of housing units and associated uses.
- Fully meeting key technical design standards and parameters – whilst ensuring that they don't undermine the quality of place.
- Establishing consensus over design and development – by delivering on all of the above.

To succeed, design coding processes will need to address these collective motivations. However, not all identified stakeholders are likely to be involved from the outset in the design coding process. Although key land and public interests (eg. planning) will usually be involved in one way or another from the start of the process, others, such as parcel developers or highways authorities, are only likely to be involved later on in the process. It is therefore imperative that those stakeholders who are involved from the outset establish a firm basis upon which to work with other parties as they join the process of preparing the design code. This is best achieved if all parties involved collectively embrace the full range of motivations for preparing a design code from the start of the process.

The design coding team and their involvement in the key stages of a typical design coding process

Design Coding Team	Key stages in Design Coding Process						
	1 Initiate	2 Coordinate	3 Appraise	4 Design and test	5 Formalise	6 Implement	7 Manage
Land Interests	■	■	●	●	■	■	■
Design Interests	▼	■	■	■	●	▼	▼
Development Interests				▼		■	■
Public Interests	■	■	●	●	■	■	■

Core Role ■ Potential Role ▼ Support role ●

It is important to note that the roles of key stakeholders and the amount of input they provide will vary depending on the stages which a design code follows during its course of preparation. Not every scheme that is subject to a design code will follow the same process. For example, whether public or private sector stakeholders lead the process may determine who takes which role within the coding team. Certain roles can also be combined and applied to individual stakeholders. For instance, local authorities with appropriate in-house skills may wish to take on the role of design code designer. Similarly, landowners may act as the master-developer or, the master-developer may subsume the role of parcel developer. Various alternatives are discussed in Part B.

Design roles can also be combined. Provided the rights skills are on board, the designer of the design vision may also be the designer of the code creating efficiency and consistency in approach.

Selecting the right team

An early and vital role will be to put together the right design coding team with the right skills, resources and commitment to engage in a design coding process. The fundamental factors for the successful preparation of a design code which are set out below can be used as a simple checklist for gauging commitment to a design code approach, and can assist with the selection of potential team members. The effective use of design and development procurement processes to assist in choosing the right team is set out in further detail in Stage 6 of Part B of this guide.

Checklist for selecting design coding team members

Does the potential design coding team member have:

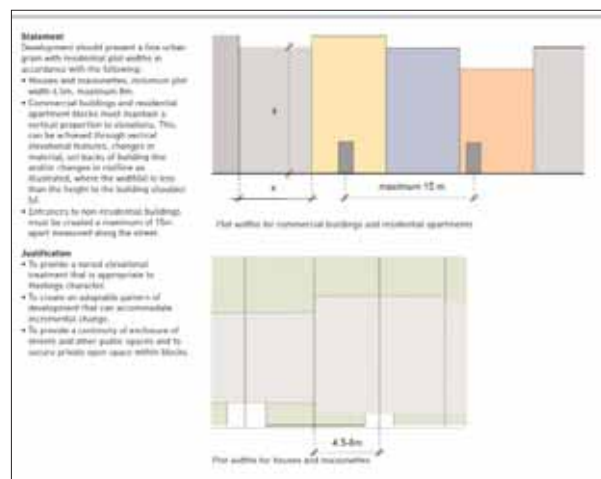
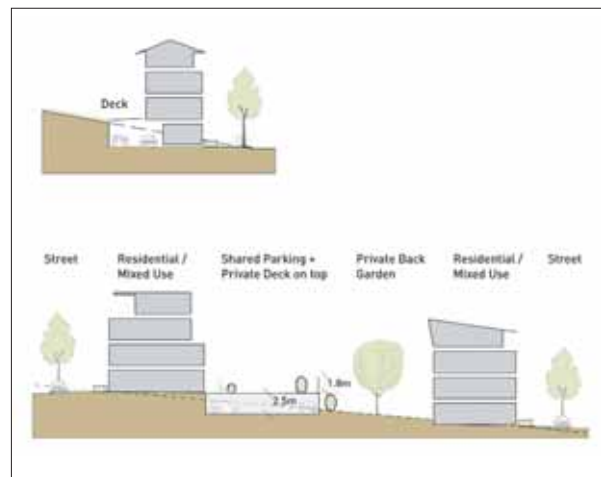
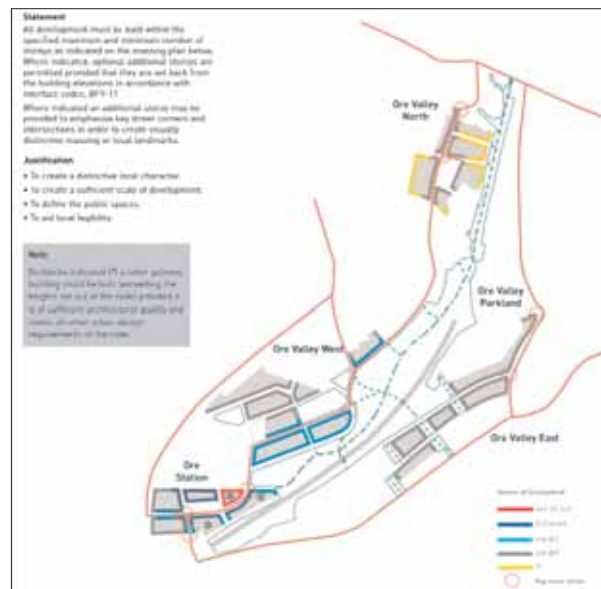
1. Commitment to an urban design-led approach to development?
2. A demonstrated positive approach to design quality and place-making?
3. Willingness to make the necessary investment to develop the design code?
4. Commitment to delivering the design vision that already exists?
5. Acceptance of a team-based approach to delivering development?
6. Leadership capability or the willingness to work positively within the existing project management structure and leadership arrangements?
7. Ability to bring the necessary design skills to the team?

The fundamental factors for the successful preparation of a design code

In addition to the need for the right design coding team, and the correct preparation process, seven factors can be identified which are fundamental to the success of design coding projects. All seven factors contribute significantly to success, and begin and end with a commitment to design quality. Although design coding can be undertaken even if these factors are not in place, without them the process is likely to be more resource-intensive, time-consuming and confrontational than it need be. In short, it will lead to a less than optimum process and is likely to affect the quality of the design code that results.

1. Urban design first

The achievement of sustainable development and good urban design are intimately bound together and their delivery should be the primary objective of all involved in the preparation and use of design codes. Increasingly national policy and guidance on design from Government¹⁶, CABE and others has advocated a compatible range of design principles. These look beyond narrow considerations relating to architectural aesthetics whilst rejecting purely technical design solutions. The goal of sustainability in particular needs to inform almost every aspect of design code production, from considerations of density and mixed-use through to the use of particular materials in building or the choice of species in landscape design. It also implies a concern for social and economic sustainability, where good quality urban design has an important role to play in promoting social inclusion and, where appropriate, lasting economic regeneration. These issues are further explored in Stage 4 of Part B of this guide.



Design coding for urban design

The design code for Ore Valley, Hastings, one of the government's Millennium Communities, concentrates on urban design and sustainable design principles, but does not define other architectural design principles.

16 See *Planning Policy Statement 1*, paragraph 33.

2. Setting quality thresholds

Design codes need to establish the essential unifying elements of ‘place’ and translate these into a set of precise design instructions. Design codes can influence design quality in two main ways. First, they provide a ‘safety net’ below which quality must not fall. They do this by providing the quality thresholds against which the quality of proposals can be judged. These should be comprehensive and provide a clarity for objective assessments to be made. Second, design codes can establish a ‘springboard to excellence’ by focussing creativity, and inspiring those who design against them to strive for better design than they would otherwise do. Just as the constraints and opportunities of the site or the clients’ brief provide a focus around which designers will creatively develop proposals, so should the content of the design code lead to the raising of design standards.

3. Investing up front

The preparation of design codes will involve a significant up-front commitment of time and resources by all stakeholders involved in the design coding process. Today, design code or no design code, such an up-front investment is to be expected for the types of major development proposals for which design codes are typically used. For developers and landowners, the enhanced sales values and increased land values that design coded schemes can deliver will more than compensate for the additional resources required during the design process. For the public sector, many potential ‘sticking-points’ can be satisfactorily resolved during the design coding process that would otherwise need to be tackled during the planning application process. Design codes simply redistribute the time and resources required from both the public and private sectors – effectively front loading them – rather than significantly adding to them. This investment in design is critical if the poor and mediocre design solutions of the recent past are to be avoided.



Variety within a theme – releasing creative endeavour

Vauban, the development of a former French Barracks in Freiburg, Germany, shows that design codes do not stifle design creativity or innovation. The local authority land owner wished to promote both a sustainable pattern of development and self-build, through the sales process for plots of land.

The code controls matters such as the building heights, the plot widths, the building line relative to the street, along with environmental requirements, such as the use of photovoltaics. Vauban today shows how architects have responded to the code to create an attractive place with a distinct character and a wide variety of architecture.

4. Rules for delivery that build upon a spatial vision

Design codes are delivery tools to help interpret, articulate and deliver the place-based vision expressed in sustainable community strategies and other plans, programmes and guidance. Design codes therefore need to be built upon the firm foundation of a robust design vision such as a masterplan or development framework that has been tested for its technical and financial feasibility. Usually such a vision will be prepared for a particular site, and therefore is usually referred to in this guide as the design vision, but it can equally apply to a wider area containing a number of development sites. Design codes are valuable delivery tools in both cases. Design codes can also vary considerably from those that significantly develop a set of core urban design principles of a conceptual vision for an area or site, to those that express (in a technical sense) the core principles already established in a detailed vision. Design codes are equally valid for a variety of other circumstances, although the level of design and technical detail is always a matter for local decision.

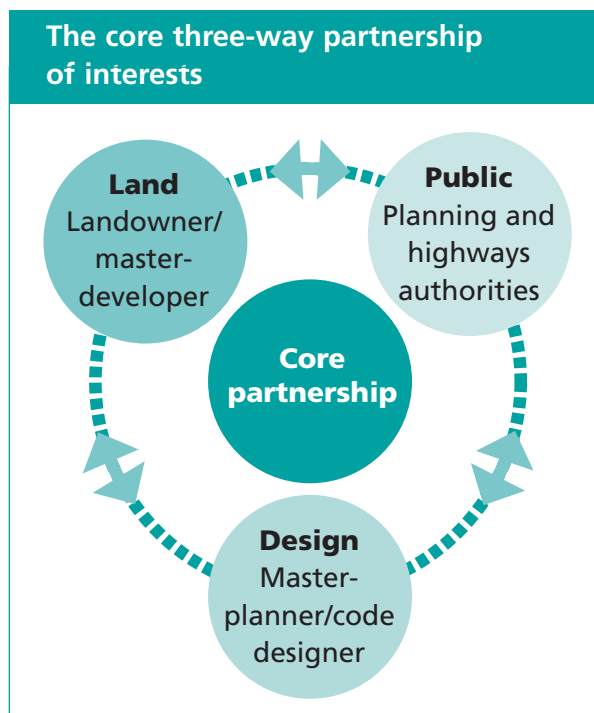


The continuum of design coding

Different codes may deal with similar urban design principles in different ways and with different levels of detail and prescription. Some codes focus on defining the urban design principles that development should follow, for instance in Hulme. Others, as at Swindon, set out in detail the technical design requirements and options available for achieving the masterplan vision.

5. A collaborative environment and a partnership of interests

A single design code for a site or area can produce designs of very different character and quality. Successful and efficient design coding therefore requires strong commitment and collaboration between all members of the design coding team (and their organisations). Critical to the success of such a partnership is a core three-way relationship between the key public sector interests (the planning and highways authorities), the main land interests (landowner/master-developer), and the design interests (masterplanner/design code designer). If a strong three-way relationship can be forged early on in the process, then a commitment to the design coding process can be developed and maintained across these stakeholders, helping to resist external pressures later in the process.



6. The importance of clear and effective leadership

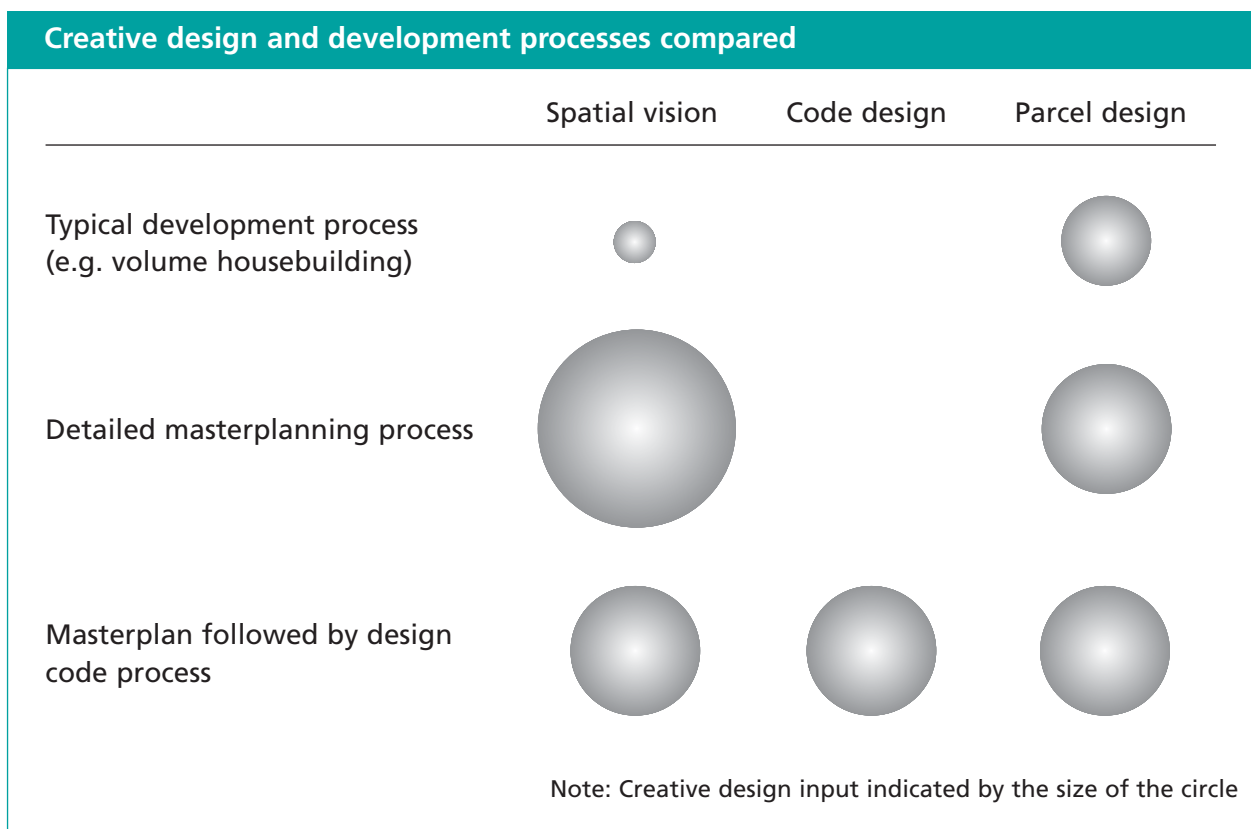
Clear leadership is also critical to effective design coding, for maintaining momentum and making decisions. More often than not successful examples of design coding are characterised by one party or another being strongly motivated to achieve quality, and acting in effect as a design champion. This leadership can come from landowners, master-developers, local authority officers, funding agencies or design code designers, or a combination of these.

Political leadership is also required. Involving local elected members early in the design coding process, for example, can help to gain political support and lead to a smoother planning process. Early involvement in the process will also enable elected members to delegate reserved matters decisions to officers who will need to determine proposals on the basis of design codes which elected members have signed up to. The delegation of decisions to officers where a design code has been prepared and formalised is strongly recommended as good practice to streamline the code implementation process and maximise time savings.

7. No substitute for skills – the need for a multi disciplinary approach

Design codes require the exercise of advanced design skills throughout the process of their preparation and implementation. Unlike other processes of development, design coding distributes the creative input across three phases of design. The quality of the development is dependent upon the quality of the design vision for a site or area (and the skills of the vision designer), the quality of the design code itself (and the skills of the code designer), and the quality of the parcel or scheme design (and the skills of the parcel designer). This compares favourably with

other design intensive approaches such as development based on a detailed masterplan where the design is typically split between two design phases. It also marks a major advance on what has in the past been the dominant approach for large-scale residential development for example, where applicants establish the basic design parameters to gain outline planning permission after which a specialist layout designer prepares an application for approval of reserved matters based on standard units and technical development standards. Used correctly, design codes also have the added benefit of engaging highways authorities directly in the design process.



LODGE WOOD

PART B

GODINTON
PARK

LOUDON
WOOD

LOUDON WAY

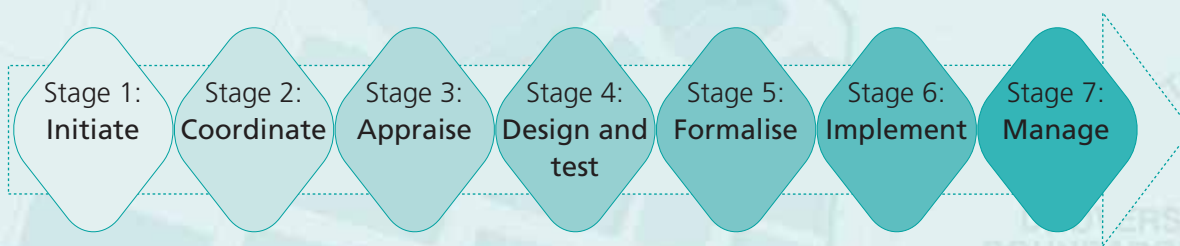


PART B: DESIGN CODES

The process, a practice manual

Part B of this guide comprises a technical reference manual for those who are undertaking the process of design coding. It also provides an overview for the whole design coding team of what is expected of whom, and when.

The manual breaks the process down into the seven stages which together form an 'optimum' design coding process as identified in Part A of the guide:



For easy reference, each stage of the design coding process is discussed following the same structure. Each begins by briefly introducing the Who, What and How of the stage:

- **WHO is responsible?** – which of the stakeholders from the four main interests in the design coding team will be active at this stage and whether they are likely to play a core role or whether the role is more peripheral.

Land – Landowner, Master-developer, Funding Agency

Design – Masterplanner, Design and Development Framework Designer, Design Code Designer

Development – Parcel Developers, Registered Social Landlords, Parcel Designers

Public – Planning Authority, Highways Authority, Environment Agency, Building Control

- **WHAT does this stage entail?** – a brief outline of the key objectives of the stage
- **HOW is it done?** – the key decisions and processes needed to successfully complete the stage.

The rest of each section then sets out these 'How' issues in greater detail in the form of **practice guidance**. This establishes how the stage can be delivered and how it contributes to delivering the design coding process as a whole. Where appropriate, practice-based examples are used to highlight key issues and decisions. Finally, **watch-points** are provided at the end of each Stage to assist the design coding team to create a more streamlined design coding process.

Stage 1: Initiating a design coding process

Who, what and how?

Who is responsible?

Land* – Landowner, Master-developer,
Funding Agency

Design[†] – Masterplanner/Framework Designer,
Design Code Designer

Public* – Planning Authority

*denotes core role [†]denotes potential role

Team members involved in initiating a design coding process will in the main be those with land interests – such as the landowner, master-developer or funding agency – and/or public interests, usually the planning authority. Where considered appropriate, consultant advisors may be commissioned at this early stage to advise on the potential for design coding to be of benefit in relation to a particular site, and to assist with the establishment of a project management plan to guide the process.

What does this stage entail

The first key decision to make will be whether, for a particular project, design coding is the right way forward. This should include an assessment about whether, given the circumstances of the project and stakeholder motivations, design codes are the right tool? In particular this will include an assessment of the scale, timeframes and anticipated delivery arrangements for the project. A positive decision to use design coding will require the team to establish a leadership structure for the project, and after thinking through the dynamics of the project from initiation to implementation, to start taking key decisions about the process to be adopted.



It will be particularly important that these early discussions set the right context for trustful and supportive relationships to develop between the key stakeholders. It may be worth considering a formal or informal partnership arrangement as early as possible. At the very least, discussions should help to establish consensus early on between public and private parties that a design coding approach is mutually agreeable and will be supported by all parties.

How is it done?

- Consider whether design coding is the appropriate tool for the project in question.
- Think through key design coding process options, including how it relates to the design vision, community engagement, planning consents, developer selection and available options for finalising a design code.
- Agree and fix the design coding process in a project plan.
- Prepare a commissioning brief.
- Set up leadership arrangements, reflecting public and private roles, resources and aspirations.
- Establish a design code champion.

Introduction

The first critical decision in adopting a design coding process will be for those stakeholders driving the project to satisfy themselves that design codes are suitable for what is being proposed. The factors that will affect this decision, including the types of development project suitable for design coding and the motivations of the key stakeholders, were set out in Section 2 of Part A of the guide. Team members should satisfy themselves that their objectives in embarking on design coding are consistent with the types of benefits of design coding outlined in Section 1.

If the answer is yes, and a design code is technically the appropriate tool for the project, the next task is to consider the process to be adopted in order to deliver it.

Thinking through the process – a project plan

The recommended ‘optimum’ design coding process introduced in Section 3 of this guide is explained in greater detail in the sections that follow. This process can readily be adopted for teams new to design coding, although local circumstances may dictate a variation on the approach. Whatever process is adopted, those responsible should:

- Identify clear aims and objectives, and how they will be achieved through design coding.
- Consider the collaborative working environment that needs to be created and sustained (see Stage 2).
- Determine how the code will fit with statutory processes – for example the preparation and review of the Local Development Framework.
- Decide on the nature of the design code: in particular this should include initial thinking on
 - the key design considerations – those key elements of the design vision that will be stipulated as rules or requirements within the design code.

- the level of prescription/flexibility within the code, which components and to what extent the code will be instructing upon precise solutions or advising upon a range of recommended options.
 - the time frame over which the design code will be applicable, and potential arrangements for its review.
- Determine how the design code will be formalised and then implemented – this will affect the type, structure and expression of the design code.
 - Secure agreement amongst key stakeholders concerning the process to be adopted.

By these means it should be possible to avoid misunderstandings caused by a lack of clarity at the start (and throughout) concerning what the sequence of design coding should be, how it relates to the broader development process, and who is responsible for deciding these matters in the first place.



Getting the process right

Lightmoor, on the edge of Telford, is a development promoted by English Partnerships and Bournville Village Trust, who established and agreed with their advisors, consultants, local authority and other stakeholders, a clear process for preparing and using the design codes from early on in the project.

Key decisions and the design coding process

Key decisions

Issues for consideration

Before or after the design vision?

To be effective design codes should be developed in response to an existing design vision. Although codes can be prepared prior to a design vision for a site or area, this can be problematic and should be avoided as it is difficult to design and agree the detail until the bigger picture (the vision) is fixed. If developed in isolation, design codes are more akin to other forms of generic local design guidance, tools that typically have an advisory role and concentrate on generic principles for large areas. It is however important that lessons from the design coding work inform and, where possible or appropriate, refine the design vision.

Masterplan or other design vision?

Design codes are typically used with a three dimensional masterplan, which provides a valuable combination of vision and detail¹⁷. For particularly large sites, or sites being developed over extended periods of time, a more strategic and flexible development framework may be more appropriate. These are typically two-dimensional tools, focusing on establishing the key strategic infrastructure, landscape structure, character areas and movement patterns, rather than on the detail of the built form and public realm, as is the case in a masterplan.

Before or after community engagement?

Community involvement in development projects provides a vital means to raise design quality and establish widespread local support for development (by fully reflecting local needs and aspirations). It will help establish the basis for streamlining planning processes later. Given that design codes are technical documents, it is unlikely that they will provide the best vehicle through which to engage communities in the design process. Community involvement is therefore best undertaken when the design vision is being developed, preferably involving the local community and other stakeholders in the design process itself, for example through a collaborative design exercise (see Stage 3). Engagement on the written and graphic components of the design code itself should be technical, involving the range of professional stakeholders with an interest in the content of the design code. If design codes are formalised through the planning policy framework the adoption process will provide a final means to elicit wider views (see Stage 5).

Before or after outline planning approval?

Design codes can be prepared at different stages in the planning process, although the timing will influence their content. If prepared prior to the grant of outline planning permission for example, design codes are likely to be more strategic and contain less technical detail. This will reflect the risk associated with undertaking very detailed design work prior to planning permissions being granted. Because they are less detailed, such design codes can, where appropriate, be supplemented by more detailed "mini codes" or other development briefs on a parcel by parcel basis or to deal specifically with particular topics such as detailed public realm design. If this is the case it is recommended that outline permission includes a planning condition requiring the submission of additional design codes at the reserved matters stage, and should clearly identify what additional information is required. If a code is produced after the grant of outline permission (which is likely to be the more conventional route) matters of technical detail should be included in the design code. The latter route may be a more streamlined process, and reduces the risk of abortive work as the key principles of development would have already been established.

¹⁷ See *Creating Successful Masterplans, A Guide for Clients* (CABE, 2004)

Key decisions and the design coding process *continued*

Key decisions

Issues for consideration

Before or after parcel developer selection?

Not all large developments involve the selection of parcel developers. For those that do, the decision whether to prepare a design code before or after the selection of the parcel developer will determine the stakeholders who need to be involved in the design coding process. Typically however large sites are broken down into manageable parcels of land on which developers tender for the right to develop. Selling the land too soon and then deciding to prepare a code can lead to conflict, as parcel developers may attempt to influence the content of the code in a manner that fits in with their own development preferences, rather than in a direction that is optimum for the site as a whole. Conversely, having a design code in place prior to developer selection and land disposal can greatly aid the delivery of a high quality development. In these circumstances the design code can be included in the land disposal and design procurement process (see Stage 6).

To adopt as planning/highways documents, or not?

Formal adoption of a code as part of the local planning and/or highways policy framework gives the code status which increases certainty in relation to future planning applications and highways approvals, reduces the likelihood of non-compliant schemes being successful if challenged on appeal, and has the benefit of tying a greater range of stakeholders – public and private, including local councillors – into the content of the design codes. It is therefore generally recommended that design codes are formally adopted. However, the decision also depends on how the design codes are to be used and what other means are being used to give them status. Therefore, in some circumstances, the decision may be not to formally adopt a code, for example if it is primarily to be implemented through a development agreement (see Stage 5).



Masterplans, design frameworks and regulating plans

Codes, or other detailed design guidance, should be based on a spatial vision, whether this is a development framework as at Aldershot, or a three dimensional masterplan, as at Cambourne. A code may include one or more regulating plans, which locate or define certain of the coded requirements, as at Fairfield Park.

Once the process to be followed in preparing the code has been agreed, alongside the key aims and objectives of the design coding process, these should be fixed within a project plan against key dates for each stage and intermediate milestones. In this way progress in producing the design code can be monitored, and the contributions of stakeholders can be held to account.

The commissioning brief

An early priority will be to produce a commissioning brief to appoint a code designer where no appropriate skills exist in house. For those writing the commissioning brief, the advice contained within CABE's *Creating Successful Masterplans: A Guide for Clients*, on commissioning a masterplanning team may prove valuable.



Where a design vision already exists, its content and status should be summarised as part of the commissioning brief for design coding, and copies of relevant documents setting out the detail of the vision should accompany the brief. If, on the other hand, a design coding team is to be commissioned at the same time as the team undertaking the masterplan or development framework, it may not be possible to define the commissioning brief for design coding in detail. Where this is the case, consultants should not be asked to provide a full fee proposal for design coding. However, an indication of the approach, scope of work and fee budget for design coding should be requested, to ensure that the division of work between the vision and design coding is reasonable.

Without a design vision in place, the commissioning brief for the design code should include assumptions about those key aspects of the design coding process that are not yet fully defined for consultants to comment upon and to allow them to provide an indicative fee budget. These initial assumptions about design coding should then be kept under review and the commissioning brief refined and then finalised to form the basis for a separate fee agreement.

Commissioning the design code

The commissioning brief for a design code should include the following information:

1. The aspiration to prepare a design code and objectives for the code
2. Relevant background and contextual information(see Stage 3)
3. Details of the management and organisational arrangements envisaged for design coding, and the role of and scope of work for members of the design team (see Stage 2)
4. Identification of the skills that the design team will be required to bring to the design coding process
5. Experience of collaborative working and preparing design codes that the team will be expected to have
6. Budget and programme for design code preparation, including key milestones
7. Output and presentational requirements for the design code
8. Criteria for selection
9. Programme for selection
10. Output and presentational requirements for the design code

It should be possible to specify the items listed above, although some clients may wish to request an initial stage of work to refine and agree in detail the brief for the design codes themselves.

Establishing leadership arrangements for the project

A key decision that will need to be made early on is who, or which organisation(s), will lead the process. The team member(s) taking on this role will need to provide clear strategic direction and focused decision-making, but must be sensitive to the partnership of interests in order to deliver a successful design coding process. One key decision is whether this role is undertaken by a public or private sector partner, and by an individual or consortium.

Public or private sector-led?

Both public and private sector-led approaches have been used successfully to deliver design codes. Roles will depend on a range of factors: whether the site is in private or public ownership, how early it is in the development process (i.e. whether developers are involved yet or not), the skills capacity of the local authority and other stakeholders, and resource availability.

Benefits of a **public sector-led** approach (most likely the local planning authority) can include:

- A closer relationship between design coding and regulatory processes.
- The building of long-term capacity and skills within the public sector.
- Potential for a streamlined adoption.
- Greater political buy-in and confidence to delegate detailed decision-making.
- Local knowledge.
- Possibility of extending the design code’s application beyond the confines of a particular site to a wider area.

Potential drawbacks include lack of skills, capacity and know-how and, sometimes, a lack of market awareness.

Benefits of a **private sector-led** approach might include:

- Increased resources to generate the desired skills capacity.
- Greater market awareness.
- Delivery know-how.
- Project management/design coordination skills.

Drawbacks might include a tendency to focus on generic development approaches rather than on the distinct qualities of particular sites and development opportunities, and a disconnection from local political, community and policy issues.



The leadership alternatives: public or private?

The Urban Design Strategy for Fairfield Park, near Letchworth, which included both masterplan and design code, was led by officers of the local planning authority who appointed a consultant and worked in

partnership with the landowner/developer. In contrast, the design code for Ashford Barracks was led by the consortium of housebuilders who were developing the site, again appointing a consultant to prepare the code.

Single organisation or consortium?

A **single organisation** or individual will bring a clear and focussed source for decision-making, communication and action, and a momentum generated by the presence of a dedicated ambassador for the design code. A danger however is that other stakeholders may feel marginalised and therefore lack commitment to the project.

By contrast, a **consortium** places leadership and responsibility in the hands of a number of key stakeholders working together as a steering group. This approach provides a valuable discussion and decision-making forum, and can help to deliver consensus and coordination across project partners. On the downside, decision-making can be slower

and lines of responsibility between meetings less clear-cut. The approach may also lack the momentum provided by a dedicated individual or organisation, and could lead to 'design by committee' if driven by the need to compromise, rather than by a desire to deliver a single strong vision.

Each approach brings potential benefits and drawbacks. The ideal will be to achieve the positives from each without the negatives. One answer may be a joint public/private consortia-led approach, with a clearly identified project manager empowered to make key decisions between meetings.



The leadership alternatives: individual or consortium?

In some cases an individual acts as code design champion. At Fairford Leys, this role was taken by the masterplanner and code designer, on behalf of the landowning trust (for whom the pursuit of quality was a priority).

In others, decisions are made by a group of representatives drawn from different interests or stakeholders – the consortium approach – as at Upton where English Partnerships established a Steering Group that brought together all the key stakeholders.

Appointing a champion

To oversee the design coding process, a project steering group with a project manager will need to be established (see Stage 2). To be effective it will be that the project manager has appropriate design skills, or a strong sensibility to the importance of design. This person can effectively act as the champion for the design code, driving the project forward, and enlisting the support of key individuals and organisations at every stage of the process. Experience shows that successful design code champions have included representatives from the planning authority, landowner, the masterplanner, or even professional project managers.

Watch points to achieve a streamlined process

- Do not use a design code unless the project justifies it.
- Start as you mean to go on, building constructive relationships between parties.
- Keep the design coding process simple.
- Write it down and agree it.
- Establish a timeline and key milestones early on and fix them in the project plan.
- Consider the leadership options and establish clear lines of authority.
- Consider using a professional project manager or design coordinator to act as champion for the design code.
- Fill knowledge-gaps with specialist advice as early as possible.



Stage 2: Coordinating inputs into the design coding process

Who, what and how?

Who is responsible?

Land* – Landowner, Master-developer, Funding Agency

Design* – Masterplanner/Framework Designer, Design Code Designer

Public* – Planning Authority, Highways Authority
*denotes core role

The responsibility for coordinating inputs largely falls on those stakeholders which were included in the core three-way partnership of interests, namely land, public and design interests (see Section 3 of Part A of the guide) who should prepare the design code together. Stakeholders that are prepared to invest resources in the process of preparing a design code will have the greatest say in how the process will be managed and by whom.

What does this stage entail?

Following the decision to prepare a design code, the next stage involves marshalling and coordinating a wide range of inputs to the process of preparing the design code. Key to this will be establishing the correct roles and relationships between stakeholders, and organising the necessary skills and resources to deliver the design code. A management structure will also be required, building on basic decisions already made about how the project will be led.

Because skills are rarely wholly vested in one stakeholder group or organisation, and because the power and means to implement design codes are spread across interests, it will be a mistake to adopt a process that fails

adequately to involve all key stakeholders. To a large degree, time spent getting the approach to design coding right at this stage will be rewarded in time saved later in the process.

How is it done?

- Establish a robust management structure, including a Design Code Working Group to focus on the day to day management of the process.
- Embed organisational arrangements within the project plan, including allocating key roles and working arrangements, and setting timelines and milestones.
- Reflect all key public and private interests at all levels in the management structure.
- Use a development team approach to coordinate public sector inputs.
- Develop a clear strategy for managing resources, be realistic, and plan to front load staff time.
- Consider using private sector resources to plug public sector time and skills gaps.
- Establish a team with the required multi-disciplinary skills, covering all key generic, disciplinary and specialist design coding skills within the design coding team.

Introduction

Underpinning this stage of the design coding process are the related issues of relationships and resources. Getting these right will to a large degree determine the success, or otherwise, of the design coding process.

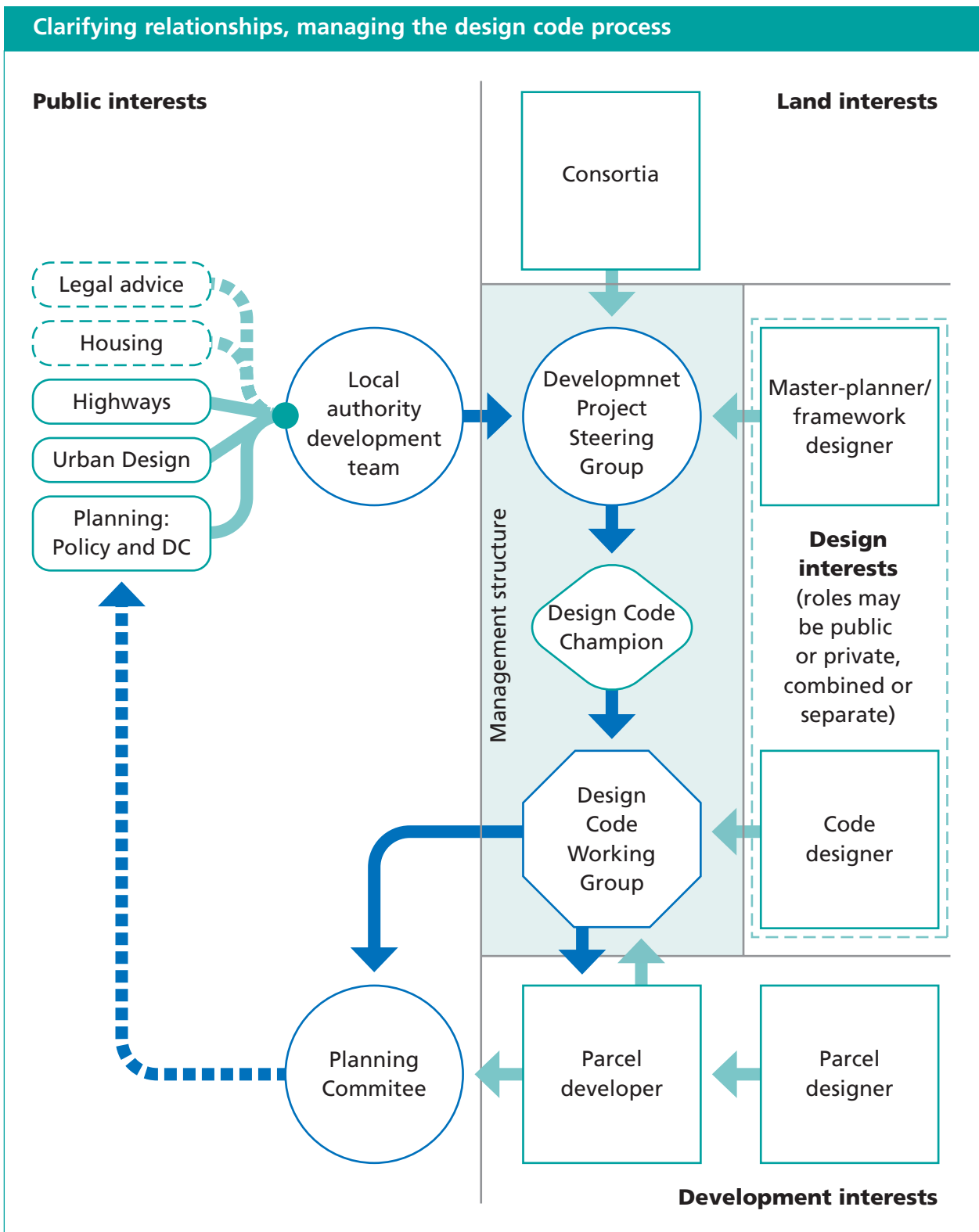
The question of relationships reinforces one of the fundamental themes discussed in Section 3, namely the need to build a strong commitment to partnership working as a means to encourage the full range of stakeholders to buy in to the design codes.

Establishing a robust management structure

Different layers of management will be required for development projects adopting a design coding process. As is common with large-scale development projects, a **Project Steering Group** will be concerned with key strategic decision-making for the development project as a whole. As part of this role this group will be responsible for checking that proper account is taken during the design coding process of the outputs from other stages of the development process, including from the stages of masterplanning, community engagement and land disposal. The **design code champion** should sit on the Project Steering Group as the overall co-ordinator of the design coding project. The Project Steering Group should include key representatives from the land, design and public authority interest groups.

It is recommended that a **Design Code Working Group (DCWG)** also be established to focus on the day-to-day production and implementation of the design code. The DCWG should consist of a focused team of technical experts able to give advice to the Project Steering Group. It is important that the working group includes a representative from the local planning authority's Development Control Division who can input into the code preparation process and who may be charged with administering the design code when it is formalised. Consideration should also be given at the outset about how the group will manage later parcel procurement arrangements and to what extent they might play a role in the administration of detailed design (see Stage 6).

Where possible, the DCWG should include representatives from key public/private sector interests and as a minimum should seek the views of such interests at key stages in the code preparation process. Such arrangements will allow for clear, efficient decision-making, and should aim to facilitate the process rather than complicating it.





Committed to partnership working

The redevelopment of the Hulme estate in Manchester involved rehousing a significant number of residents. The commitment to partnership working, with both the RSLs (who were to develop the new affordable housing) and with the existing community that was to be rehoused, contributed significantly to the success of the code.

Taking a Development Team approach

Local authorities should adopt a development team approach which encourages streamlined decision-making and supports collaborative working within and between the various public sector organisations and services involved in the design coding process. Such an approach enables key public sector representatives to come together in order to overcome ‘sectoral’ approaches to development projects. These regular meetings of suitably senior public sector decision-makers will enable a common line to be agreed as a feed into the DCWG, resulting in more efficient and effective communication between the public and private sector stakeholders involved in the preparation of the design code.

For design coding, a Development Team approach suggests including representatives from the local authority’s planning department (from both policy and development control, the latter to advise at the earliest opportunity on implementation and enforcement concerns), conservation and urban design (if separate), highways, landscape, parks and recreation, and, if appropriate, from the housing authority including the local authority’s estate management team. The inclusion of the local authority’s legal team as an occasional member in these arrangements may help to streamline processes when, for example, planning conditions or occasionally Section 106 planning agreements are being negotiated (see Stages 5 and 7). When large sites involve more than one local authority it is advisable that representatives from each authority are included in the Development Team.

A clear strategy for managing resources

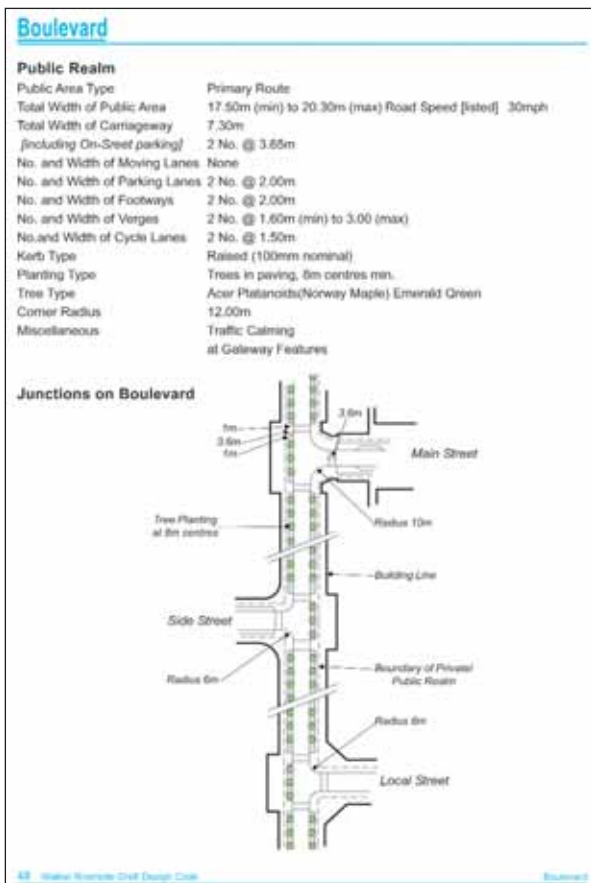
All design coding projects require the front-loading of resources with the aim of streamlining inputs later in the process. It will be vital therefore to marshal resources from the outset to ensure that this up-front investment happens, and the project plan should reflect both this and how resources can be redirected to streamline the process. Although a design coding process may vary according to local circumstances, it is important not to underestimate how much time will be necessary. It is important to be realistic at the project planning stage about the resources that design coding will entail, bearing in mind that all major projects, design coded or not, will require a similar investment. The key question is where do the resources come from?

The public sector contribution

Where local authorities are actively engaging in the delivery of positive planning services, a key requirement will be the re-distribution of resources. This will mean moving resources from reactive development control work to a proactive engagement in pre-application negotiation and the preparation of policy and guidance. Design codes fit well into this new mode of working as the up-front investment

will be re-paid by a reduction in time spent agreeing and processing planning applications further down the line.

For this to happen, dedicated officer time will need to be found so that these activities are not merely added to the range of responsibilities already carried by local authority officers. Substantial enthusiasm exists for this to happen in most local planning departments. A similar switch in emphasis and resources will also be necessary in highways authorities, where, instead of simply applying predetermined standards, engineers will have to find time to consider the innovations and departures from those standards that design coded schemes are likely to present. Such an open-minded and constructive approach will come if the process is adequately resourced. This represents a key challenge for local authority executives.

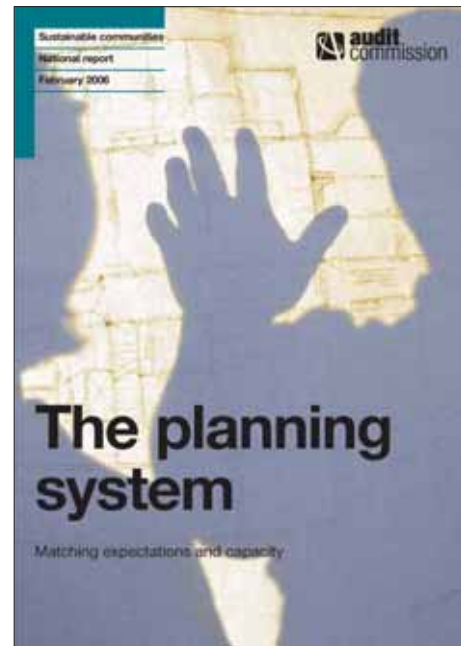


An up-front investment

Preparing the code for Newcastle Walker Riverside within the local authority has involved new ways of partnership working between planning and highways officers, which has brought benefits for those involved, despite a lack of resources overall.

The private sector contribution

Despite best endeavours, there will always be cases where the resources cannot be found for a positive engagement in design coding by the public sector. In such cases, and where trust and commitment exists, landowners/ master-developers can help to plug the gap by funding dedicated staff within local authorities or an external consultant. Audit Commission research explicitly recommends this form of cooperation¹⁸.



Whether funding gaps within local authorities, or directly financing the preparation and use of design codes themselves, private interests will provide the second key source of funding. These interests will only be prepared to make the necessary investment up-front if they are confident that such work will deliver the permissions that they seek. In such circumstances the continued involvement of the public sector directly in the code preparation process will be one means to increase certainty that planning permissions will be forthcoming. However, the fact that compliant schemes are likely to receive permissions without delay whilst non-compliant schemes will be held up and delayed, should itself provide a ready incentive for the private sector to invest in design coding.

¹⁸ *The Planning System, Matching Expectations and Capacity* (Audit Commission, 2006)

Occasionally funding may come in whole or in part from a further land-based interest, from a public sector funding agency. English Partnerships, for example, are committed to fund design coding in all their residential projects over four hundred units. Such involvement will tend to be limited to more challenging or strategically important developments, and will always be made on the basis of coordinating local interests and resources.

Establishing a team with the required range of multi-disciplinary skills

A clear priority will be for design coding teams to ensure they have at their disposal the right balance, quantity and quality of skilled personnel. Not all design coding processes will require the same profile of knowledge and skills.

In general an optimum process requires knowledge and skills across three key groups:

1. In the landowner/master-developer consortium, to raise aspirations and inspire quality-led procurement.
2. In the local authority, to establish the local aspiration for quality and to enable and enforce its delivery.
3. In the design teams, to deliver a creative and contextually appropriate design code and related material.

When considering the make up of a design coding team it may be appropriate to map the range of knowledge and skills available within the team, based on team members' previous experience of design coding or allied techniques. By this means, gaps in the team can be filled as the full team is put together.

The essential design coding skills and knowledge checklist				
Generic skills		Disciplinary skills and knowledge		Specialist knowledge
leadership	<input type="checkbox"/>	urban design	<input type="checkbox"/>	masterplanning <input type="checkbox"/>
creative vision	<input type="checkbox"/>	architectural design	<input type="checkbox"/>	sustainability <input type="checkbox"/>
consensus building	<input type="checkbox"/>	highways	<input type="checkbox"/>	local markets <input type="checkbox"/>
collaborative working	<input type="checkbox"/>	landscape design	<input type="checkbox"/>	place-making <input type="checkbox"/>
negotiation and diplomacy	<input type="checkbox"/>	planning	<input type="checkbox"/>	construction <input type="checkbox"/>
visualisation	<input type="checkbox"/>	development	<input type="checkbox"/>	consultation approaches <input type="checkbox"/>
communication	<input type="checkbox"/>	marketing	<input type="checkbox"/>	ecology and energy efficiency <input type="checkbox"/>
foresight for long-term projects	<input type="checkbox"/>	cost management	<input type="checkbox"/>	community engagement <input type="checkbox"/>
presentation	<input type="checkbox"/>	project management	<input type="checkbox"/>	enforcement <input type="checkbox"/>
		legal	<input type="checkbox"/>	building economics <input type="checkbox"/>

Addressing skills gaps

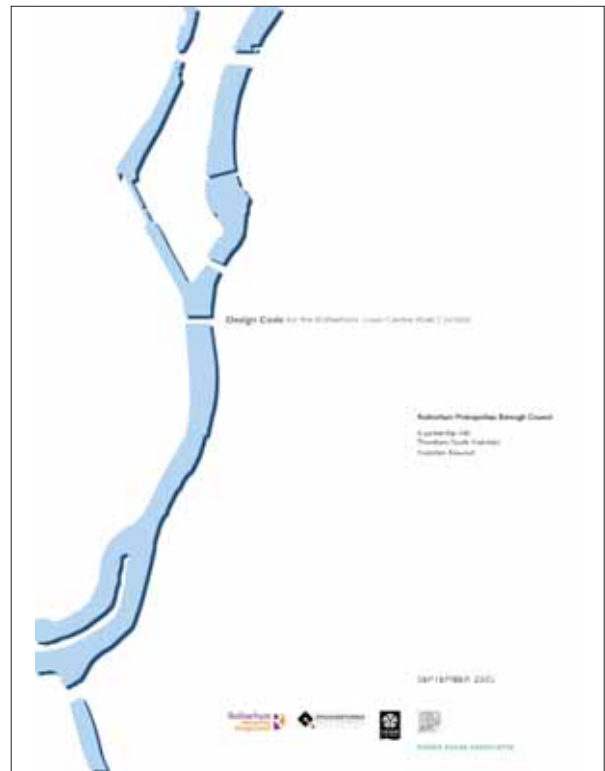
An ideal situation would be for a code promoter to have urban design skills on all sides of the development process. For a local authority, the benefits of possessing in-house design capacity include:

- A more proactive and central role in the development and design code production processes.
- Potential for closer working relationships between planning officers and highway engineers.
- Greater awareness of design.
- Greater commitment to the resulting design code.

However, for smaller authorities the task of producing a design code in-house may not be viable or worthwhile.

Those local authorities without the necessary urban design skills should look to engage external consultants to fill design skills gaps either by buying in or seconding a dedicated resource, or, commissioning a team of consultants. It may be that the landowner/master-developer can either assist with funding for this arrangement, or alternatively request that their urban design team work closely with the planning team. Inevitably such arrangements raise the issue of whether community interests are appropriately safeguarded, but if carefully managed by local authority officers, such arrangements can usefully address immediate skills deficits. Consultants can:

- Produce the design code.
- Provide pre-application advice.
- Advise on reserved matters applications by parcel developers.
- Negotiate with other statutory authorities (e.g. highways).
- Act as a design code champion.
- Monitor implementation and compliance (see Stages 3 and 7).



Filling the skills gap

Local authorities have filled the skills gap in a variety of ways. These include appointing consultants to prepare a code (sometimes together with a masterplan) with public or private sector funding. At Rotherham, the RDA, Yorkshire Forward, funded the appointment of consultants, whereas at Fairfield Park in Letchworth, funding was secured through a developer contribution.

Knowledge management

The collective knowledge built up by the design coding team over the course of the project will be invaluable. Any change in personnel during the lifetime of the design and implementation of the design code will require this knowledge to be transferred, and new players, whether individuals or organisational stakeholders, must be thoroughly appraised of the design coding process to date to ensure a continuity of interpretation and commitment. It may be that design coding teams will wish to establish formal procedures to ensure that this happens. Documents such as the Project Plan should be updated as the project progresses. The plan could detail the way in which collective knowledge and project information is to be captured and retained across the life of the project and beyond.

Watch points to achieve a streamlined process

- A strong partnership approach is the key to a streamlined design coding process.
- Take time to establish a robust management structure for the delivery of design codes.
- A development team approach amongst local authority partners ensures an inclusive approach and efficient use of senior representation.
- Consider involving legal and housing officers in the development team.
- Establish clear lines of communication and decision-making.
- Be realistic from the start about the resource implications of design coding.
- Establish dedicated time for officers to engage in the design code production process.
- Map skills and knowledge within the design coding team to ensure all the key areas are covered.
- Ensure a thorough handover to new team members to ensure continuity of interpretation and commitment.
- Keep a minuted record of decisions taken and keep a file of key issues emerging as the process develops.

Stage 3: Appraising the local context for design coding

Who, what and how?

Who is responsible?

Land* – Landowner, Master-developer,
Funding Agency

Design* – Design Code Designer

Public† – Planning Authority, Highways Authority,
Environment Agency

*denotes core role †denotes support role

The responsibility for preparing suitable contextual information is wide ranging, although the responsibility for pulling it together and using it to inform the preparation of the design code falls largely to the code designer. Nevertheless, land and public interests will provide a supportive role, not least in appraising the code designer about decisions made up to this point, and in making available background source materials. Sometimes this information will pre-date the production of the design code, for example existing policy and guidance, but that should not undermine its value in setting the scene for design coding. Other contextual documents such as the masterplan or design and development framework, should, where possible, be updated to fully reflect market conditions and local aspirations.

What does this stage entail?

Inception of work on the actual design code will start by appraising the local contextual factors that should guide its preparation, and form the evidence for the code rationale. This will begin with an understanding of the existing physical factors relating to the site or area, to any existing local policy, and to any community engagement that has been undertaken regarding future development opportunities. It will include any current guidance that will need to be reflected within the design code, and, most importantly,



should take account of the developing (or developed) design vision for the site such as a masterplan or other vision document.

Where contextual information is out of date or incomplete, time should be allowed to up-date the work (e.g. by taking account of any changes to the national policy context), or to seek specialist advice in order to fill any gaps. Without an adequate contextual understanding and basis for design coding, the resultant design code will not be as robust as it could and should be and the process may be delayed later.

How is it done?

- Ensure adequate contextual analysis and availability of information on local character and physical factors across different scales: settlement pattern, urban form, urban space, block structure, built form, public realm, landscape and green space. Commission new detailed local character analysis to fill any gaps where necessary.
- Develop understanding of how contextual information will inform the various elements of the code.
- Have regard to existing national, regional and local policy and guidance.
- Have regard to community engagement and the local sustainable community strategy.
- Recognise the design and development framework or masterplan as the critical contextual factor for informing the preparation of the design code.
- Identify and resolve conflicts early, for example with existing highways standards.
- Consider how the code may impact for example on utilities provision, flood risk management, transport linkages and infrastructure requirements.

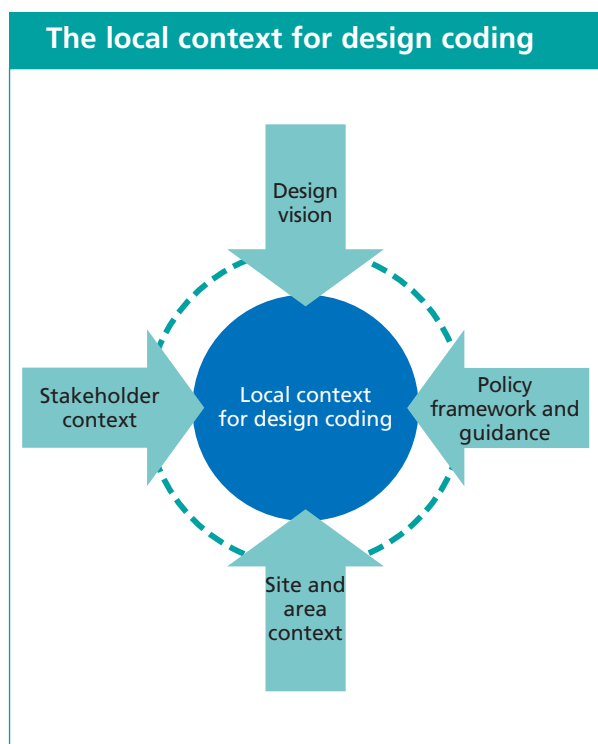
Introduction

Design code processes should be designed specifically to accommodate the particularities of local policy/guidance, the site and the stakeholder context in which they are to be used. They also need to build on and reflect the background assessments, and any principles enshrined in a design and development framework or masterplan.

Relating to policy framework and related guidance

Design codes will need to take account of the policy context and any relevant guidance and advice which exists for the site or area. Part A of the guide sets out the hierarchy of design guidance within which design codes are prepared. It is critical that full regard and reference is made to these sources when the design code is being prepared. This will be important for a number of reasons:

- Existing policies and guidance, authority-wide to site-specific, should provide an important statement about which design principles are important locally, and which consequently have local political and community backing. As such they provide the starting point for detailed design.
- Reference to government policy and/or to other relevant policy and guidance, as well as to relevant analytical or consultative work can help to legitimise particular design requirements, and thereby clarify the basis for their inclusion in a design code, and help justify when alternatives are acceptable.
- Early and proper regard to existing information can help to identify conflicts between design coding aspirations and existing policy/guidance approaches (e.g. between planning and highways guidance), as a means to seek solutions as early in the design coding process as possible.



Because the hierarchy of policy and guidance varies from place to place, it is important to be clear about the role and status of different forms of policy and guidance, and where design codes fit within the local hierarchy. It should be clear within the design codes when the code takes precedence, and in what circumstances other policies and guidance apply.

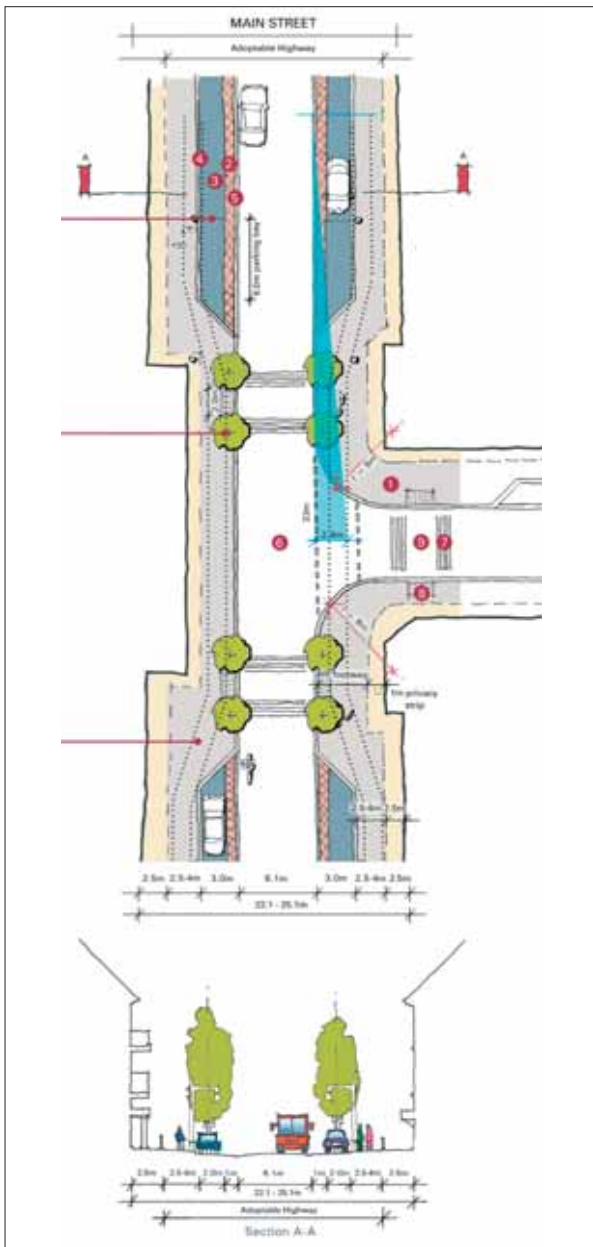
Highways policy and standards are decisive influences on design code preparation, and design codes provide a key opportunity to improve highways design that takes account of urban design considerations and helps create quality places. The preparation of a design code can provide a ready opportunity to work closely with highways authorities to review any outdated local highways standards. Further guidance on the use of design codes in the context of highways will be set out in the *Manual for Streets*¹⁹.

¹⁹ *Manual for Streets* (DfT and DCLG, forthcoming)

The site and stakeholder context

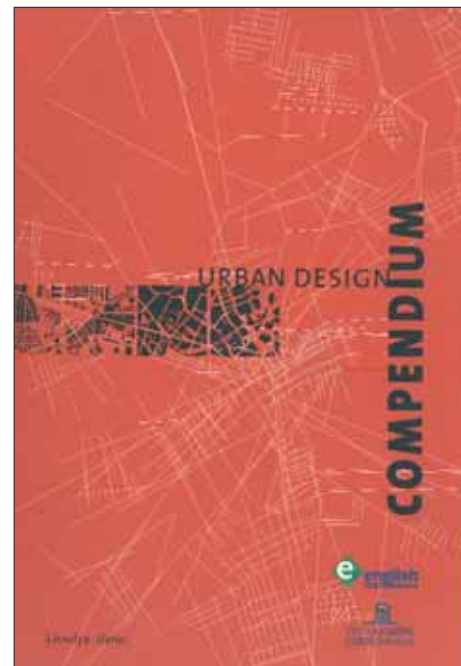
The stakeholder context will vary from development to development, and will affect decisions on leadership, management, and skills.

Prior to the preparation of the design code, analysis of the site and its immediate area will be vital. This will be supplementary local knowledge collated through community engagement. Together they will provide invaluable contextual information that will be an important feed into the design code preparation process. The local sustainable community strategy will be a key part of this. It is most likely that this information will be gathered during the process of preparing the design vision, but should also be made available to the code design team. The *Urban Design Compendium*²⁰ for example, provides guidance on character and environmental appraisal, whilst the Enquiry by Design²¹ process offers one option for a participatory design process to engage local communities. Others are discussed in *By Design* and elsewhere²². Questions of community engagement with regard to formal adoption processes are addressed in Stage 5.



Design codes, challenging the highways rulebook

At Upton the existing highway standards were out of date and have been superseded by the code. Highway officers now regularly apply the generic principles agreed for Upton to other sites.





Enquiry by design

An Enquiry by Design event was held for a large area of surplus MoD land in Aldershot. This 5 day interactive workshop, facilitated by the Prince's Foundation, raised aspirations and generated an initial vision for the development. Although this vision proved to be overly simplistic, the process successfully created an enthusiasm for co-operative working amongst those who took part. It formed the starting point for further masterplanning and coding.

Information from area and site-based character assessments will be particularly important in understanding how design codes should relate to existing local character. In such cases, if earlier character analysis is not sufficiently detailed or robust, it may be necessary to undertake new work. This will help to justify and underpin design coding that, for example, seeks to define built form, materials, colour palette, or the choice of species in planting.

From settlement pattern to urban form – Importance of character analysis for Design Codes

How a place will feel and look is determined by its underlying structure and form. An analysis of morphology and character at different scales – including landscape, settlement pattern, urban structure, urban spaces and built form – will help provide a clear understanding of a place. A strong comprehension of the components of the wider context within which the design code is to be prepared – including districts, streets, plots, built form and materials – allows for development of a robust rationale and design approach for the provisions expressed in the design code. Crucially, by clearly understanding the relationships between the different scales and components, the code writer will be clear about where in the code an emphasis on variety should be introduced. This need not tie the code down to a traditional pattern or vernacular, but instead can allow a better understanding of how to introduce variation and, where appropriate, a more contemporary pattern or built form.

20 *The Urban Design Compendium* (English Partnerships & The Housing Corporation, 2000). See also Section 2 of this guide.

21 *Sustainable Urban Extensions: Planned Through Design* (English Partnerships, 2000)

22 See for example *By Design, Urban Design in the Planning System, Towards Better Practice* (DETR and CABE, 2000) and relevant sections in this guide; see also *Community Consultation Handbook* (Nick Wates, 2000)



Underpinning design coding with analysis

At Newhall, Harlow, local distinctiveness was addressed through an analysis of the colours and minerals found in the locality. Based on this analysis, a series of colour palettes were defined as part of the design code for the new development.

The importance of the design vision

Reflecting the fundamental principle that design codes are tools for delivering the design vision (see Section 3 in Part A), the vision itself becomes a critical contextual factor informing the preparation of the code. It is therefore essential that the design code and vision work together. Whilst codes invariably contain detailed rules for delivering the vision, they should also develop the vision further by, for example, establishing principles concerning the form and character of various types of buildings, streets, blocks and open spaces.

The close relationship between masterplan and design code means that provided the team used to prepare the vision have the requisite skills for writing codes, there may be benefit in retaining the same team to ensure a coherent relationship between the two and avoid duplicated work. As a minimum, code designers need to work within the principles set out in the design vision as the basis for their design coding work.



Design coding, interpreting the vision

The code for Greenwich Millennium Village was prepared when a different architect was appointed by the developer consortium to design the second phase of the development. The code was intended to make sure that the principles of the masterplan vision would continue to be implemented in the future development.

The balance struck between what is in the vision document such as the masterplan or a design and development framework and what the design code contains will be a matter for local decision. Design codes are a flexible tool in this regard. Mapping the potential location of different design elements in, for example, a masterplan and its related design code, shows that each has a contribution to make across four scales of action – settlement pattern, urban form, urban space and built form. Design codes increasingly dominate towards the more detailed end of this continuum, and with regard to technical considerations.

Design objectives and their treatment in design codes, particularly as they relate to sustainability, are discussed in the following section.

Watch points to achieve a streamlined process

- Before coding, ensure that adequate contextual information exists, including a thorough morphological analysis, and have a sound understanding of key development constraints.
- Always base design coding on either a preprepared, tested and fully agreed design vision, or a design and development framework.
- Don't reinvent the wheel, use existing urban design appraisal and community engagement methodologies.
- Avoid abortive work by having full regard to the existing policy and guidance framework.
- Avoid over-complicating matters with overlapping and inconsistent policy and guidance.
- Consider using the same design team to prepare the design vision and code provided the right skills exist.

Masterplan and design codes compared: Possible design elements

Scales of action	Masterplan	Design code
Settlement pattern	Major infrastructure	Major roads, bridges, public transport network, design principles for waste recycling facilities or, for example, combined heat and power systems
	Structure planting	Continuity, species, relation to topography
	Water management	Drainage, recycling, reed beds, water features
	Road and cycle network	Road types, hierarchies, dimensions, capacities and characters, cycle network continuity
	Open space network	Standards, open space typology and features, connectivity
	Character areas	Centres and sub-centres, neighbourhoods, walkable catchments, parcel size and sub-divisions
Urban form	Connections	Edge treatments, boundaries
	Street network	Urban grain, grid types, connectivity
	Block pattern	Block form, privacy distances
	Building lines	Frontage continuity, set backs
	Plot form	Plot size, width, adaptability
	Building location	Orientation, position on plot, overlooking and overshadowing, natural surveillance
	Density contours	Dwellings per hectare, plot ratios, intensification nodes
	Views and vistas	Relation to topography, corridors, backgrounds
Urban space	Open space	Standards, types, forms, layout, access, landscape, planting, management
	Public space	Patterns, types, enclosure ratios, forms, layout, connection, uses, management
	Carriageways	Junctions, road specifications, traffic calming, services routing, servicing
	Cycle and footpaths	Footpath specifications and cycle path specifications, paving, kerbs, gutters, road markings, other details
	Public/private space	Principles for courtyards, mews, cul-de-sacs, covered streets, arcades, colonnades
	Private gardens	Standards, back gardens, front gardens, roof gardens, landscaping
	Play spaces	Standards, types, equipment, management
	Parking	Standards, car parks, parking courts, on-street types and treatments, overlooking, lighting, landscaping
Built Form	Building forms	Bulk, massing, heights, storey heights, building envelopes, adaptability
	Building types	For residential development detached, semi-detached, terraced / town house, flats, fronts and backs
	Building frontage	Active frontage, entrance frequency, architectural styles, features, proportions, rhythms, expression, window / wall ratios, materials, colours, balconies, porches, signage, shopfront design
	Mix of uses	Distribution, proportions, mixing – vertical and horizontal
	Townscape features	Eave lines, rooflines, chimneys, corner treatments, landmark / background treatments, focal points, advertising
	Heritage assets	Integration, preservation, management
	Street trees	Species, numbers, placements
	Soft landscape	Standards, planting species, biodiversity, lawns and verges, planting beds and areas, planters
	Public realm	Street furniture, bollards, boundary treatments / materials, public art, fountains, paving materials, colours, utilities equipment, street lighting, amenity lighting, bus shelters, CCTV, public toilets, cycle storage and parking
Technical considerations		Environmental standards and energy efficiency
		Access standards and disabled parking
		Refuse storage and recycling
		Tenure mixing (eg. affordable housing)
		Management and maintenance issues

Note: It will not always be necessary to include all these elements in a particular masterplan or design code. It should also be noted that a design and development framework will have less detail than a masterplan

Stage 4: Designing and testing the design code



Who, what and how?

Who is responsible?

Land‡ – Landowner, Master-developer, Funding Agency

Design* – Design Code Designer

Development† – Parcel Developer, Property Agents

Public‡ – Planning Authority, Highways Authority, Environment Agency, Building Control

*denotes core role †denotes potential role

‡denotes support role

Responsibility for writing the code will fall to the code designer, who will need to pursue the design through a collaborative approach that engages key team members, including the land and public interests who will sign-off the final design code. At this point it is vital the design team acquire and take advantage of commercial expertise relating to the local market, for example by obtaining market intelligence information from local property agents about what is likely to be economically feasible. For these reasons, it may be valuable to involve potential parcel developers at this stage.

What does this stage entail?

An understanding of the overall design vision and context for design coding, together with any assumptions and objectives, will be an important pre-requisite for embarking on the design of a code. This stage of the code preparation process involves the design of the actual content of the design code (in other words, the design aspirations being coded for), how it is structured, expressed and illustrated to make the code fit for purpose for its users. Importantly this stage will also entail the thorough design and market testing of the code.

Although the code design phase can be time consuming, when undertaken by a skilled design team and based on a clear design vision and partnership approach, it need not be. Draft design codes can be designed and agreed in as little as two to three months. If, however, the conditions are not correct, the process can take far longer.

How is it done?

- Establish the core design objectives to underpin the design code's content.
- Decide on the scales and the elements the code needs to cover for any specific situation.
- Decide which elements of the code will be mandatory or discretionary, but seek to balance prescription with flexibility across the design code and for each element within it.
- Base any detailed provisions of the code on an in-depth understanding of local character and context.
- Consider the limitations imposed by the different regulatory regimes that impact on design, as well as the skills and resources available for implementation, and express the design code accordingly.
- Structure, express and present the code so that it maximises understanding, accessibility and the use of illustrations.
- Test the design code to assess its viability and (where necessary) refine its content.

Introduction

Just as the design vision will vary between places, so should the content of design codes. This is both desirable and appropriate as no two contexts will be the same, and that the site and local socio-economic environment, as well as the aspirations of those involved, are likely to differ from place to place. Although each design code, just like each design vision, needs to be prepared individually, if prepared and implemented properly, the process offers the opportunity for higher quality more sustainable places to emerge.

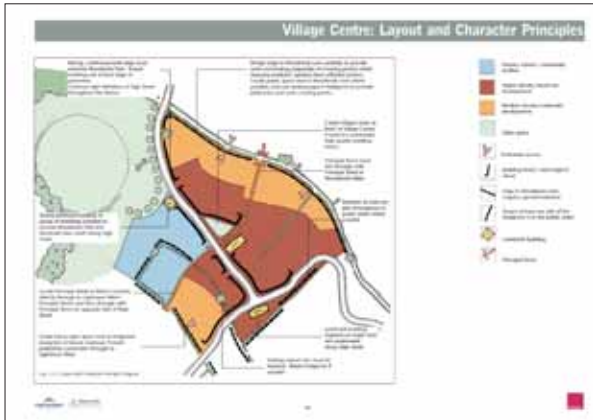
The content of design codes

Guidance on good urban design can be found in a range of practice guides, some of which have already been referred to in this guide²³. It is however possible to identify five common design objectives that design codes are particularly suited to help deliver, and which should be reflected in the content of all design codes: place creation, continuity and coordination, public realm quality, creative interpretation and sustainable design.

Common design objectives and their treatment in design codes

Design objectives	Treatment in design codes
Distinctive places	One attribute of design codes is they can help create places with a distinctive identity that can respond positively to a particular context. This can be done through a combination of design coding at each of the four scales of action identified in Stage 3 – settlement pattern, urban form, urban space and built form – each making a contribution to the creation of an identifiable sense of place.
Continuity and coordination	The ability of design codes to provide continuity and coordination between areas (new and existing) is one of the key benefits. Design codes can help to tackle issues of how development can be successfully integrated with the immediate surroundings such as any historic buildings and built form, and the creation of good linkages through and beyond sites.
Public realm quality	By focusing first and foremost on urban design concerns (see Part A), design codes should have as a critical concern the delivery of a high quality public realm. The public realm provides the common thread that knits together the development, and it is here that a continuity of quality is most required. Critical in all design codes, therefore, is the need to establish clear quality thresholds for the design of the public realm.
Creative interpretation	Whilst being clear about levels of quality across the four scales of action (see Stage 3), design codes should always encourage the creative interpretation of their design principles by experienced designers. Again, this should be reflected both in how the settlement and urban form are laid out, as well as in the way individual spaces and buildings are designed.
Sustainable design	Rather than being dealt with as an added extra, or necessarily as a dimension to be coded in isolation separate to other factors, sustainability should be treated as an integral overarching theme running through the design coding process, across the different scales of action. Sustainable design implies both a broad agenda, beyond simple energy and resource efficiency issues and is based on a clear agenda which extends beyond generalised policy aspirations.

High quality design is a key element in the delivery of sustainable communities, and design codes can play a full role in determining the physical, social, economic and environmental well being of places. Alongside the design vision, codes can help embed requirements for factors as diverse as affordable housing (provision and location), land use mix, environmental resources, the provision of social infrastructure and so on.



Sustainability and design codes

The Lightmoor code requires that all dwellings should meet the 'Excellent' energy efficiency rating, as does Upton. Upton also codes for the provision of SUDS, which has been implemented by English Partnerships, who are providing infrastructure in the role of a master developer.

Lightmoor also coded for the provision of a mix of house types in all development parcels, and a mix of uses in the Village Centre. Affordable housing is required in each parcel, at a rate of 25%, to reflect the overall mix of that parcel, and to be pepperpotted.

Sustainability and the consideration of climate change should be reflected in the overarching objectives of the design code, informing all aspects of design. Although it is not expected that design codes will necessarily cover every aspect of this increasingly wide agenda, it is nevertheless possible to map a number of overarching sustainable design objectives against the four scales of action set out in Stage 3, namely settlement pattern, urban form, urban space and built form. In reality, many of these issues will be addressed and delivered through a combination of the design code, the design vision and through detailed scheme design in the context of several regulatory regimes such as planning, highways and transport and the building regulations.

Sustainable design – issues mapped by spatial scale²⁴

Spatial scale →	Settlement pattern	Urban form	Urban space	Built form
↓ Sustainability objective				
Resource Efficiency	Invest in public transport infrastructure Utilise existing infrastructure efficiently before extending it Consider sustainable urban drainage (SUDs) Consider combined heat and power (CHP) systems	Revised parking standards Urban block depths that allow sun and natural light penetration and natural ventilation Provide local access to public transport	Design spaces appropriate to regulated vehicle speeds and circulation Design spaces that reduce wind speeds and enhance microclimate Use local, natural materials Provide bicycle parking and storage facilities	Use passive (and active) solar gain technologies Design for energy retention Reduce embodied energy – local materials and low energy materials Use recycled and renewable materials
Diversity and Choice	Integrate travel modes Connect route networks Promote a centre hierarchy to boost choice Offer variety in services and facilities between centres Overcome 'edge' barriers to accessibility	Mix uses within neighbourhoods Design a fine grained street and space network Support diversity in neighbourhood character Localise facilities and services	Mix uses along streets and in blocks Design for walking and cycling Resist privatisation of the public realm Remove barriers to local accessibility	Provide opportunity to mix uses within buildings Mix building types, ages and tenures Build accessible, lifetime homes and buildings Mix home sizes Mix home specifications
Human Needs	Enhance legibility through neighbourhood identity and organisation Promote equitable access through land use arrangement Build settlement image to foster sense of belonging	Design visually interesting networks of open space Enhance legibility through landmark and space disposition Encourage social mix within communities Traffic calm via urban form	Provide quality, human scale public space Combat crime through space design and management Enhance safety by reducing pedestrian / vehicle conflict Design for social contact and for safe play Allow personalisation of space	Support innovation and artistic expression in design Design to human scale Design visually interesting buildings Support active frontages and entrances on to streets Design for natural surveillance
Resilience	Build a robust web of infrastructure to last and enable the integration of new technologies over time Recognise changing patterns of living and work and provide accordingly	Design to allow fine grained changes of use across districts Design robust urban block layouts Design for revitalisation of existing areas and heritage assets	Design robust spaces, usable for many functions Design spaces able to accommodate above and below ground infrastructure requirements Design serviceable space	Design for easy maintenance Build extendible buildings Build adaptable buildings Build to last Use resilient materials and fully test new building technologies before use
Pollution Reduction	Question 'end-of-pipe' solutions to water / sewerage disposal Provide for on-site foul water treatment	Match projected CO ₂ emissions with tree planting Clean and maintain the place Tackle light pollution Give public transport priority	Reduce hard surfaces and water run-off Design-in recycling facilities Design well ventilated space to prevent pollution build-up	Reuse and recycle waste water Insulate for reduced noise transmission - vertically and horizontally

²⁴ Adapted from inset 25 in *From Design Policy to Design Quality* (Thomas Telford Publishing, 2002)

Sustainable design – issues mapped by spatial scale *continued*

Spatial scale →	Settlement pattern	Urban form	Urban space	Built form
↓ Sustainability objective Concentration	Where possible encourage urban containment and reduce green field use Intensify along transport corridors Link centres of high activity	Intensify around transport nodes Where appropriate, raise density thresholds and avoid low density building Build at densities able to support a viable range of uses and facilities	Reduce space designated for roads and parking Increase vitality through activity concentration Actively design for privacy needs rather than relying on distance criteria	Design compact building forms to reduce heat loss eg. terraces Bring derelict buildings back into use Consider high buildings where appropriate
Distinctiveness	Protect any positive regional identity and landscape character Positively utilise topography Preserve archaeological inheritance	Reflect distinctive morphological patterns Identify and reflect significant public associations Consider neighbourhood identity and qualities	Reflect local townscape and site character in design Retain distinctive site features Design for sense of place Retain important building groups and spaces	Where appropriate, respond to surrounding architectural character in design Enhance locally distinctive buildings and their settings
Biotic Support	Link public (and private) open space into a network Green urban fringe locations Integrate town and country through landscape treatments	Set generous public open space standards Provide private open space such as gardens Create new and enhance existing habitats Respect natural features and resources	Design in robust soft landscaping Plant and renew street trees Encourage greening and display in private gardens Encourage local food production i.e. allotments	Provide opportunities for greening buildings Consider buildings as habitats Support indigenous species and habitats

Climate change is the greatest long-term challenge facing the world today. Design codes can play a key role in addressing the impact of climate change. It is very important therefore that design codes are formulated to reflect Government's expectations on climate change as set out in PPS1 and the forthcoming Planning Policy Statement on climate change. Wherever possible, consideration should be given during the development of design codes to reducing emissions and stabilising climate change (mitigation) and to taking into account the unavoidable consequences (adaptation), and they should be continually monitored to ensure that they respond to this agenda.

Code designers should ensure that, where the content of design codes cuts across different regulatory regimes, codes avoid setting standards which exceed the provisions of other statutory regimes such as the Building Regulations unless there are clear policies in the development

plan document to which a code relates and only where there are demonstrable locally specific reasons for doing so. These could include, for example, where there is significant local opportunity for major development to be delivered at higher levels of the forthcoming Code for Sustainable Homes.

On the question of architectural design, it should be noted that design coding for architectural issues is possible and has to date been popular. However, care should be taken not to impose architectural styles or the particular tastes of the design coding team without good reason. Doing otherwise runs the risk of stifling innovation, originality and initiative. Therefore, where particular development styles are pursued they should be fully substantiated by robust analysis and understanding of local character and context and be informed by appropriate design skills.

How are elements typically design coded?

Elements at the four scales are coded in a variety of ways, using drawings, diagrams and tables, often in combination.

Settlement pattern

Key Elements	Scale	Form	Material	Location	Location/Scale
Apartment	2.5-3 stories	High	Medium density	Midtown	70' - 80'
Rowhouse	2.5-3 stories	High	Medium density	Center	70' - 80'
Rowhouse	2.5-3 stories	High	Medium density	Center	70' - 80'
Rowhouse	2.5-3 stories	High	Medium density	Center	70' - 80'
Rowhouse	2.5-3 stories	High	Medium density	Center	70' - 80'
Rowhouse	2.5-3 stories	High	Medium density	Center	70' - 80'
Rowhouse	2.5-3 stories	High	Medium density	Center	70' - 80'
Rowhouse	2.5-3 stories	High	Medium density	Center	70' - 80'
Rowhouse	2.5-3 stories	High	Medium density	Center	70' - 80'
Rowhouse	2.5-3 stories	High	Medium density	Center	70' - 80'

Table of appropriate building types, density and locations



Code for office block: height, materials and form, parking and use



Street hierarchy



Regulating plan for building lines

Urban form



Detailed requirement for 'key grouping'



Illustrative parcel layout and street hierarchy



Code for parking courts

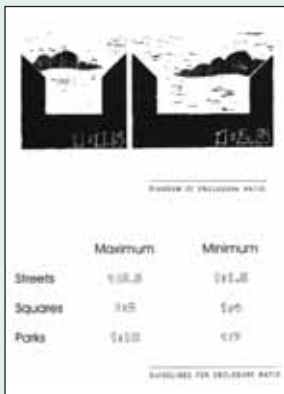


Code for linking elements: garages and boundary treatment

Urban space



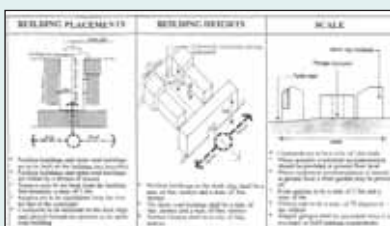
Code for street character and on-street parking



Code for proportioning the public realm



Open space requirements

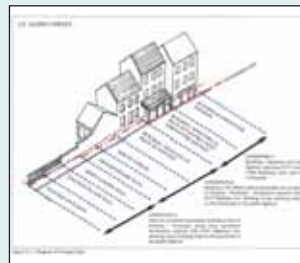


Code for building massing

Built form



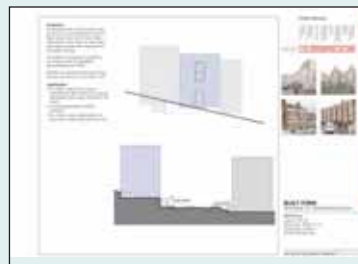
Coding for local character using examples from the area



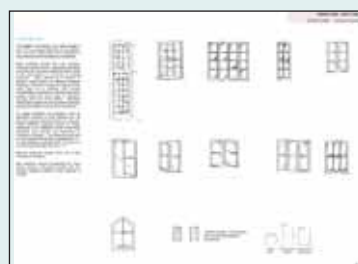
Coding for boundary treatment



Coding for boundary treatment



Coding for building on slopes



Coding for window types

Expression and presentation

Most design codes will be robust working documents, primarily written for a professional audience of parcel developers, designers and development control officers. However, if well written and presented, design codes can also be used as promotional tools to help market the developments to which they relate.

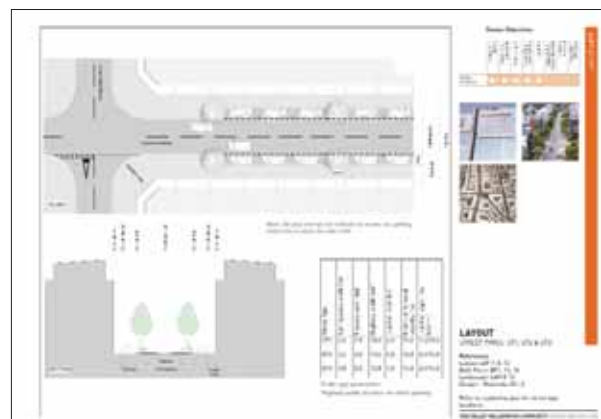
A key lesson is that design codes need to be conceived and expressed in the light of the skills and resources available to those who will be charged with implementing them. Consequently, this guide does not set out a recommended format for design codes although they should be structured to be appropriate to local circumstances, taking account of the recommendations set out below.

Structuring design codes:

Presentation issues begin by getting the structure of the design code right:

- Begin with a succinct guide to the use and status of the code.
- Include an explanation of how the design code relates to the design vision for the site or area.
- Develop a straightforward document structure.
- Gradually break down elements of the built environment for users.
- Move from strategic to detailed concerns across the scales of action.
- Deal systematically with different design elements and/or topics at each scale.
- Adopt consistent page layouts and formats.
- Ensure thorough cross-referencing between different sections.
- Include clear numbering of pages and sections.

This image shows a detailed table of contents for a design code document. It is organized into several main sections, each with a color-coded header: 'Introduction' (blue), 'Design Vision' (green), 'Design Objectives' (green), and 'Design Standards' (pink). Each section contains a list of sub-sections and their respective page numbers, providing a clear overview of the document's structure.



Adopting clear structure, layout and cross-referencing

Code documents should have a simple structure that leads in a systematic way from strategic design issues down to matters of detail. They should be presented as reference manuals, with concise text, clear illustrations and cross referencing where appropriate, and with graphic design to support ease of reference.

These factors will be determined to some extent by whether the design code is embedded in another document (such as for example a Development Plan Document), or whether a freestanding design code is produced. Stage 5 sets out more detailed considerations on how design codes can be formalised.

Expressing design codes

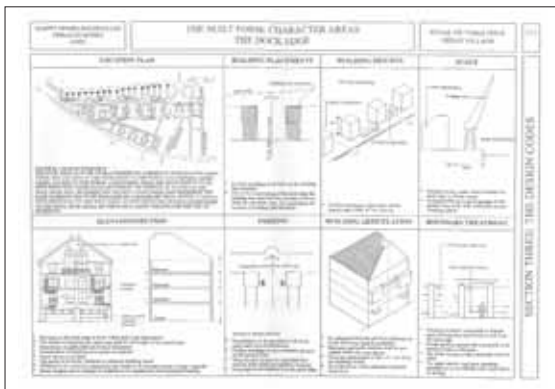
Rather than repeating information already expressed in the design vision, a design code should shape and develop the vision by adding a further layer of detail that sets out how it is to be realised. Of critical importance will be the manner in which design codes are expressed.

Mandatory requirements are generally characterised by the verbs 'to', 'will', 'shall' or 'must'. Discretionary requirements are generally characterised by "should", "may" or "can". Requirements may either be without options (if there is no choice as to how they are met) or with options (if there is a choice as to how they are met).

To ensure that a design code is as accessible to the code users as possible, it is recommended that the following six practical pointers are followed:

- Carefully distinguish mandatory from discretionary components (design codes should always include mandatory elements to ensure they are followed and provide continuity across the development).
- Avoid ambiguous aspirational statements, excessive description and analysis.
- Write clearly, concisely and precisely.
- Avoid unnecessary jargon and define key technical terms.
- Justify all design codes against their role in delivering the vision.
- Never use words when an illustration will do.

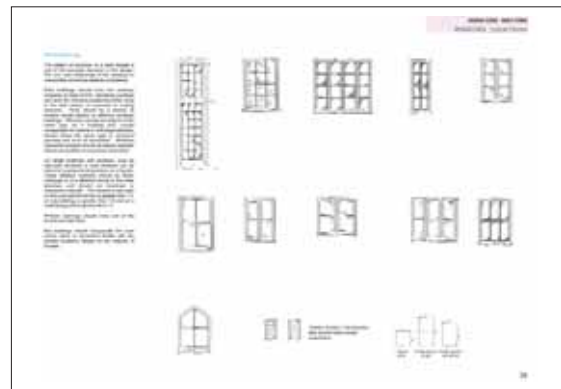
Mandatory and Discretionary components compared



Mandatory

With options "Top storey **to be** brick, rendered or coloured cladding board"

Without options "Windows **to be** vertical in proportion and windows of principal rooms to align vertically."



Mandatory

With options "Window openings **should have** one of the treatments indicated."

Without options "Brick buildings **should have** the windows recessed at least 85mm."



Mandatory

With options "It is **required** that houses be linked by walls hedges, gates, garages or other devices to maintain continuity of the street line. Examples are given."

Without options –



Mandatory

With options –

Without options "Where indicated an additional storey **may be provided** to emphasise key street corners and intersections in order to create visually distinctive massing or local landmarks"

The importance of illustration

Design codes are design rather than policy documents, (although they may form part of a policy document) and where possible diagrams, tables of requirements, detailed plans, sketches and precedent illustrations will be more appropriate than written text. Collectively these should deal with projects in three dimensions, providing design codes for the key elements that make up the whole. However this need not imply complex three-dimensional images. Depending on the project, it may be that a series of two-dimensional illustrations combining annotated plans and sections (especially sections of street types), can achieve the same ends.

Any photographs of precedents should be clearly marked as illustrative in order to avoid the impression that slavish repetition is being advocated, particularly with regard to architectural style.

The importance of the Regulating Plan

Although design codes guide the development of a site or area in three dimensions, it is important that they include a two dimensional Regulating Plan. The Regulating Plan enables code users to locate where the provisions of the code will apply. The Regulating Plan will express how the code relates to plots, land parcels or different character areas. The Regulating Plan will have a fundamental influence on the design of the street scene and its character.

Plot Passports – the importance of thinking through procurement as part of the code writing process (also see Stage 6)

Design codes offer considerable scope for stakeholders to look at new ways of delivering development. An example would be to take a plot-based approach to delivery such as is common in some countries abroad – for example in Germany or to a lesser extent in Holland. One possibility will be to use the code to operate a system where the aim will be to dispose of the plot and then encourage the owner to commission an architect or to procure his own building for the plot. In Germany this approach is common in the context of residential development. A system of 'plot passports' may be used which, for example, create a framework within which to design a house for the plot.



A common language of design coding in Germany

In Germany a legally binding development plan, the Bebauungsplan (B-Plan) is prepared for development sites, generally by the local authority or by a developer on behalf of the local authority.

A B-Plan is a form of coding and comprises a regulating plan setting out mandatory requirements in plan and text, supported by a written justification. 3-d drawings may accompany a B-Plan but they do not form part of the legal document.

The form and content of a B-Plan is regulated by law although the degree of control and detail can be varied from case to case. A common notation is prescribed in terms of scale and symbols, for example particular colours and hatchings for certain land uses and particular line types for where buildings lines must or may be located. The advantage of this approach is that B-Plans are easily understood.

Experiments have been conducted with web-based design codes that allow users to interact with the different combinations of elements included in a design code, and this may be the future of design coding tools.

‘Process’ issues can also be included in a design code, for example guidance on submission requirements for reserved matters applications, establishing roles and responsibilities within the design coding team, laying out evaluation or stakeholder engagement procedures, identifying relationships to other design policy/guidance and so on. These elements can also often be expressed diagrammatically, in flowcharts, tables and relationship diagrams.

Flexibility and prescription – getting the balance right

The balance between flexibility and prescription is a difficult one to strike. The complexity of some design codes, for example, can mean that they are very difficult to update over time, particularly if the original design coding team is no longer involved. Very prescriptive design codes can also be very inflexible during design code implementation (see Stage 6). Conversely, design codes that are too succinct tend to be open to greater interpretation. In general, design codes are chosen because of their robustness as tools for delivering high quality design and where significant flexibility is required other forms of detailed design guidance, such as design briefs, may be more appropriate.

Skills of a code writer

It is not necessarily the case that a good masterplanner will translate his skills into an effective writer of codes, and the project team should be clear about the distinctive set of skills that will be needed to write a code. The key difference is that where a masterplanner might put together a three dimensional vision for a project, the code writer will be responsible for translating that vision. This is a skill in its own right. In particular the writer will need to understand the dynamics of how the code works as a delivery tool – ensuring the instructions deliver the right results, both in terms of instructing a parcel designer on design and allowing smooth and easy administration through the planning process.

Enough detail is required to give the desired level of clarity and certainty and to protect the delivery of a coherent and coordinated design solution. However, precision to legal standards is unlikely to be necessary. To balance the levels of prescription, a degree of flexibility can be provided within design codes in a number of ways:

- Including a menu of alternative design coding solutions for particular elements.
- Focussing on performance-based design coding, rather than highly specified outcomes.
- Identifying clearly which elements of the design code are mandatory and which are discretionary, with flexibility built in to illustrate how the latter can be interpreted.
- Paring down the design code to its essential requirements on which there is no negotiation, and then simply design coding for those elements (e.g. building line and setbacks). In this solution, other elements are left entirely open for interpretation, or subject to other forms of guidance.

Not only will the relative balance between prescription and flexibility need consideration for the design code as a whole, but also for each individual design coded element. A simple four quadrant framework can be used to help decide whether a design coded element should be discretionary or mandatory detailed or not detailed.

Positioning design coded elements – prescription vs. flexibility

	Discretionary	Mandatory
Detailed	Elements such as building colour, requiring careful justification but not critical to delivering the overall design vision.	Complex yet critical elements for which a range of alternative solutions are possible, such as the position and type of active frontage.
Not detailed	Aspirational elements such as 'lifetime homes' standards for which other sources of guidance are the primary sources of advice.	Critical elements that are nevertheless straightforward to prescribe, such as building line on a plan.

Unpicking some key terms – uniformity, innovation, flexibility and prescription

As indicated in Part A of this guide, a number of myths have grown around the use of design codes – often relating to the terms above. It is vital to unpick some of the meanings and implications behind the use of such terms in order to ensure that provisions of the code effectively direct the desired outcomes in relation to these attributes:

- **Uniformity** – often mistakenly understood as synonymous with being dull or bland, in many circumstances the aspiration for design to have a uniform character will be highly desirable.
- **Innovation** – almost always taken to be a positive aspiration, innovation for its own sake can be mindless, and destructive to a coherent outcome. In particular, it is often taken as a green light to reject standard house types which are often economic and efficient ways of building, and provided plans can be translated properly into built form they can deliver high quality solutions.
- **Flexibility** – while it is often interpreted as crucial to leave an element of flexibility within the code, this may not necessarily be appropriate – especially where the code is trying to direct a specific response that is important to the urban outcome. The code writer must understand where flexibility is desirable – perhaps creating the potential for market viability over the life of the code perhaps, and where it is not so – where it invites an incoherent response.
- **Prescription** – often assumed to mean inflexible, but may be better understood as directing the appropriate solution for the place.

In particular the idea that prescription is the enemy of creativity can be wide of the mark. In this respect it is essential that a code writer understands how to translate vision for a place into instructions for delivery. For example, where a design vision demands a highly variable streetscape, it might be assumed that the code should be written with high levels of flexibility to achieve this. In fact this can often give scope for a respondent to default to a bland, one dimensional response. The way to achieve highly variable responses may be to specify precisely how to achieve the variation – for example how plots are to be varied, where the variation in setback or frontage is to occur. This will leave a respondent to be creative about those elements that can add value to the streetscape rather than undermine the intention to create variety.

Process-based solutions

It is possible to build flexibility into the design code, something that is critical for a tool that is likely to be used over long-term project horizons. Two process-based solutions provide alternative means of ensuring flexibility. First, agreeing procedures at the start of the design coding processes through which departures from the design code's provisions will be allowed. Second, building in formal opportunities to review the content of design codes into the agreed design coding process. Stages 6 and 7 provide further advice in this regard.

Testing the design code

After the code has been designed, a key step before the completion of this stage will be to test the code's viability and to examine if it will operate in the manner that the coding team set out to achieve. A testing exercise is strongly recommended as this will help refine the content and the expression of design codes and ensure that jargon does not undermine clarity.

Design teams can be commissioned for a short period of time (perhaps a day or two) to design hypothetical sketch proposals using the design code. The solutions might then be fed to the local authority's development control team so that they can test the efficiency of the assessment process through relating the design proposal back to the code. An action plan should then be created to ensure all lessons are fed into the design code preparation process to further refine the design code's content and expression before any formal design procurement processes begin.

There are number different tests which can be applied to determine whether a code is fit-for-purpose. For example its ease of use to all users, its market viability, likely capacity to deliver quality and its efficiency as an administrative tool that can help streamline the planning process.

Some key tests

1. Operability – is the code usable and readable?

- Is there an introduction that makes the purpose of the code clear and instructs upon how to use it.
- Is the structure of the code clear, and is the content easily navigable for each user?
- Does the code contain a Regulating Plan, and is the plan easily relatable to the detailed provisions of the code?
- Are the instructions clear (both written and graphic), and can they be related to justifications where necessary?
- If discretionary elements are specified, is it clear what the range of options are?
- Where the user can stray from the instructions, is it clear how this should be done, and the level of explanation required?

2. Outcome – will the code provisions deliver what the team want?

- Does the code have gaps which would enable inappropriate development to come forward?
- Will the levels of prescription and degrees of flexibility deliver the required outcomes?
- Does the code have the right balance of strategic to detailed content, taking account of how the code may be formalised in the planning system?
- Does the code convince the different stakeholders and secure appropriate buy in?



Cracking the code

Code testing can take the form of an in-house design exercise using a team who are not familiar with the code to interpret it in use.

Particularly where a code is intended to be prescriptive, as at Swindon, code testing may be extended to include 3rd parties being commissioned to test a code, and to make sure that its requirements are internally consistent. Those testing codes may include local architects, urban design consultants, or the regional arm of a housebuilder.

Watch points to achieve a streamlined process

- Start with the structure and broad aspirations, get that fixed and prepare the code from there.
- Prioritise – the design code cannot address every eventuality.
- Don't repeat information already adequately dealt with elsewhere, in the masterplan for example.
- Integrate sustainability into the broader design objectives, it should not be an add-on.
- Covering 'process' issues within the design code can help to clarify requirements and therefore speed up the process.
- Develop a protocol for non-design interests to feed into the code preparation process.
- A testing exercise during the preparation of the code will save time in unnecessary code revisions later.
- Get the pre-conditions for successful design coding right first, and then start to design the code.

Stage 5: Formalising the design code

Who, what and how?

Who is responsible?

Land* – Landowner, Master-developer

Design‡ – Design Code Designer

Development† – Parcel Developer

Public* – Planning Authority, Highways Authority

*denotes core role †denotes potential role

‡denotes support role

Public and land interests will have the primary responsibilities for leading on the formalisation of the design code. It is likely that when a code is to be adopted within the Local Development Framework the process will be led by local planning and highways authorities, while the intention to formalise a code through the development control process may place more onus on land interests to lead the way. Either way necessitates close collaboration between the two interest groups, as well as a wider range of interested stakeholders (including the community). An alternative (or sometimes additional) method of giving the code status is to create a legal agreement which relates to land ownership – based on either publicly or privately owned freehold rights.

What does this stage entail?

The preparation of design codes and consultation with stakeholders requires early investment in time and resources. A key aim will be to ensure that early investments are reflected in streamlined processes later on in the process. Codes will need to be formalised and given status in a way that they can be effectively implemented. Options must be weighed up and the most appropriate route to formalise the code needs to be chosen. The most appropriate route will be one that gives certainty to all parties and that has the potential to offer efficiency savings for the local authority administering any resulting development.



Once formalised a design code can become an efficient and robust decision-making tool.

Where the local planning authority is taking a central role in the design code preparation process, it is likely that such design codes will be formally adopted as part of a LDF. Where a local authority's role is more marginal, land interests may prefer to retain control of the design code implementation process using a development agreement instead. Ultimate involvement and control will come from combining formalisation processes.

How can design codes be formalised?

- The work entailed in formalising the code will depend on which route the coding team decide should be pursued.
- Consider the options for giving the design code formal status. Two main routes are to adopt the code within the LDF, or to formalise it through the planning application process in development control.
- Consider linking the code to a Local Development Order (LDO) to streamline subsequent decision making.
- Consider the merits of using a landowner or freehold agreement to give the code status.
- Be clear about formal requirements for appraising sustainability and environmental impact set out in the Environmental Impact Assessment Regulations and the Strategic Environmental Assessment Regulations and at what stage in the preparation process a formal assessment may be required.
- From the outset, aim to formally adopt the design code for both planning and highways purposes and consider carefully how it relates to the building regulations.
- Be mindful of the need to refine the code through technical engagement.
- When a draft of the final design code is available, conduct formal consultation as part of the adoption process.

Introduction

The use of design codes should be motivated by improving the quality of development, creating greater certainty for all about the outcomes, and importantly, the potential to streamline delivery processes for delivering new development more quickly. In this respect, it is vital to build upon the work that has gone into preparing the code through ensuring that it has the requisite status to operate as the stakeholders intended.

How the code will be formalised should have been a consideration from the outset of the design coding process, and the project plan should have been developed to secure the input of the various partners and stakeholders at the requisite points in the process. Actions undertaken in respect of code preparation, and any milestones set out in the project plan, must ensure a fit with the sometimes complex processes required to formalise codes within the planning system. In addition, the design coding team should be fully aware of all statutory processes with regard to environmental and sustainability appraisals and stakeholder engagement.

The choice of a particular approach depends on the particular circumstances in which a design code is prepared and the aims and aspirations of the promoter of the code in terms of how it should be implemented. The decision about how to adopt a design code rests with the code promoter – in discussion with the local planning authority if a code is promoted by a developer, landowner or another stakeholder. A key consideration in this choice is how it should relate to the planning process and how much weight the design code should have in the decision-making process.

There are broadly four main ways in which design codes can be formalised:

1. Formal adoption, principally through the LDF
2. Development control, as part of the planning application process
3. Local Development Orders
4. The exercise of freehold rights

Adopting within the Local Development Framework

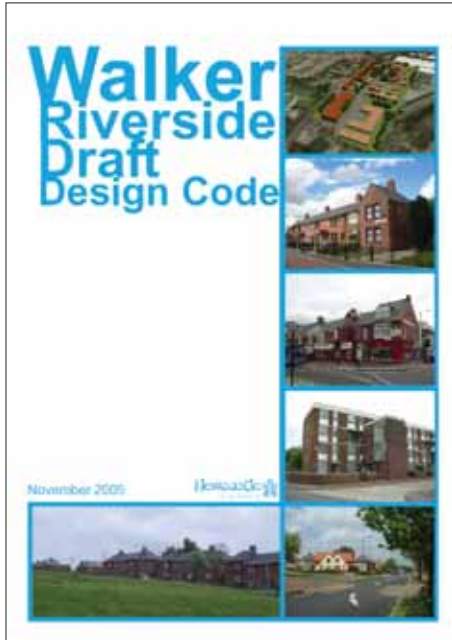
Where a design code is intended to be adopted as a public document that will, for example, be a material consideration in the determination of planning applications, then it is recommended that it should be formally adopted through incorporation as part of a Local Development Document (LDD) in a Local Development Framework. Experience on the adoption of design codes to date suggests that where local authorities have been closely involved in the code preparation process they are generally supportive of adopting design codes in this way in order to give them greater weight in the planning process. Design codes are also capable of being adopted for highways purposes in this way.

Where design codes are adopted as part of a LDF, it is recommended that when planning authorities determine planning applications against such codes that they use the opportunity to link the code to any planning permissions through a planning condition. Further consideration of the use of conditions is set out below.

Guidance on the processes related to the preparation of LDFs is set out in *Planning Policy Statement 12: Local Development Frameworks* (PPS12). Where design codes are formalised through a LDF the guidance in PPS12 will apply.

There are essentially four routes by which a design code may be formalised within the LDF:

1. Development Plan Document (DPD)
2. Supplementary Planning Document (SPD)
3. Development Control Guidelines
4. Highways Standards



Experiences of formal adoption

Currently some codes are intended to be adopted as SPD, with approval as Development Control Guidance in the meantime, as at Hastings. At Walker Riverside, the code will be adopted as SPD to accompany a masterplan which will be an Area Action Plan. In the past, where codes have been adopted, it has generally been as Council policy for development control purposes, as at Hulme.

1. Development Plan Documents

The DPD, together with the relevant Regional Spatial Strategy, provides the essential framework for planning decisions. DPDs comprise a *Core Strategy*, *Site Specific Allocations of land* and (where needed) *Area Action Plans*. A proposals map illustrating the spatial extent of policies must also be prepared and maintained to accompany all development plan documents.

DPD policies can be a valuable way to require that a code be prepared for sites or areas, for example by including a policy requirement to prepare a design code for a large site for which an Area Action Plan will need to be prepared. The adoption of a design code as part of a DPD will give the code primacy alongside other DPD policy in the determination of planning applications, affording it this weight by virtue of Section 38(6) of the Planning and Compulsory Purchase Act²⁵.

There are two key types of DPD identified in PPS12 which might be used to formalise a design code in the LDF. These are:

- Site specific allocations of land; or
- Area Action Plans.

A further DPD, the core strategy, is less suitable for the inclusion of a design code as it is more strategic in nature. However, there may be benefit in including policies in the core strategy which set out the approach to design coding that will be required for particular sites and/or areas.

²⁵ The statutory Development Plan is the starting point in the consideration of planning applications for the development or use of land, unless material considerations indicate otherwise.

Where it is decided to adopt a design code as part of a DPD, it should be consistent with the policies of the development plan as a whole. Design codes can be prepared and adopted for sites not allocated in a development plan, as long as the code is linked to a clear policy in the Plan. It is however not recommended that a design code be adopted as an amendment to a development plan, where the plan is out of date or requires comprehensive review. More information on the relationship between design generally and planning policies in LDDs is set out in *Making Design Policy Work*²⁶.



How to adopt a code in a DPD – some key considerations

- PPS12 sets out the adoption process that a design code would need to follow if it is decided to formalise the code through a DPD.
- The principle of 'soundness' will be an important consideration and there should be community consultation, involvement and participation in accordance with the local authority's Statement of Community Involvement.
- A key consideration in deciding whether to formalise a design code through the DPD route will be the time required to adopt the code or to amend it. This includes fulfilling the minimum requirements of sustainability appraisal²⁷.
- Although the time taken to formalise the design code through a DPD may take longer when compared to other potential adoption routes, this should be seen in the context of the increased certainty that a design code will provide for developers and landowners, and that it will give the planning authority a more certain basis against which to decide planning applications which are affected by the design code.
- The potential to speed up decision-making once the code is adopted will be a key consideration.
- The local community is likely to be fully engaged in the preparation of such design codes and the decision-making process will be more open and transparent.

²⁶ *Making Design Policy Work, How to Deliver Good Design Through Your Local Development Framework* (CABE, 2005)

²⁷ Although design codes which are formalised through a DPD would need to have undergone a sustainability appraisal, this would not exempt planning applications coming forward under such codes from needing to comply with the Town and Country Planning (Assessment of Environmental Effects) Regulations 1999.

2. Supplementary Planning Documents

SPDs expand upon or supplement the policies in DPDs. They must also conform to the relevant DPD. PPS12 advises that where the policy requirement is set out for land allocated in a DPD, greater policy detail may be included in a SPD, for example a development brief.

Given the detailed nature of design codes, they are suitable documents to include or adopt as SPDs as they help amplify and implement DPD policies. The formalisation of a design code through a SPD is a faster route to having a design code adopted as a DPD. It is important to recognise however that SPDs do not have the status of the development plan and therefore carry less weight in the process of determining planning applications. They are however a material consideration and can therefore form a reason for refusal should a development not comply with a design code adopted in this way.

There are two broad ways of including a design code as part of a SPD:

- The design code could be adopted as a SPD without any specific policies in the SPD, as long as it is linked to a policy in a DPD.
- The design code could form part of a SPD. For example, the SPD may contain policies to which a detailed design code is annexed or linked.

If the intention is to adopt as part of a SPD, it is not recommended that a design code is produced as a separate stand alone annex to the SPD as the code should be subject to the same consultation arrangements as the rest of the SPD. It is also not recommended that design codes are formulated as a SPD where a plan is out of date or where no DPD is in place.

How to adopt a code in a SPD – some key considerations

- There is no requirement for an independent examination or the preparation of options when preparing a design code through SPD.
- The principle of 'soundness' will be an important consideration and there should be community consultation, involvement and participation in accordance with the local authority's Statement of Community Involvement.
- The SPD route may be quicker and more flexible when compared to a DPD but any amendment of the code would have to be consulted upon again.
- A Sustainability Appraisal will usually be needed, although it is not mandatory if sufficiently covered by the Sustainability Appraisal for the DPD to which the SPD relates. The judgement as to whether a Sustainability Appraisal is needed will depend on whether the design code develops the DPD policy further or in greater detail.

3. Development Control Guidelines²⁸

Design codes are also capable of adoption as guidelines to assist in the development control process. However, unless adopted as SPD with an appropriate level of public consultation they are likely to carry limited weight in the determination of planning applications. This route is not recommended.

²⁸ Note, development control guidelines should not be confused with Generic Development Control Policies which can be adopted as a DPD – see PPS12.

Formalisation routes compared						
	Status and transparency	Responsibility for adoption	Pre-requisites	Ease of revision	Decision-making certainty vs. flexibility	Speed (of formal adoption phase)
Area Action Plan (AAP)	High and public – primacy given to policy within the development plan	Local planning authority	Many – requires a policy link in the Core Strategy of the LDF; a sustainability appraisal; needs to be subject to public consultation; and to examination in public	Low – requires formal DPD adoption process to be gone through and could lead to the need to review other parts of the AAP	High certainty, low flexibility, although discretion still available to consider plan departures	Slow – about two years, but can increase long-term speed of determining planning applications
Other Development Plan Document (DPD)	High and public – primacy given to policy within the development plan	Local planning authority	Many – requires a policy link in the Core Strategy of the LDF; a sustainability appraisal; needs to be subject to public consultation; and to examination in public	Low – requires formal DPD adoption process to be gone through. But if it is a free-standing code, it is unlikely to lead to the need to review other issues	High certainty, low flexibility, although discretion still available to consider plan departures	Slow – about two years, but can increase long-term speed of determining planning applications
Supplementary Planning Document (SPD)	Medium and public – a material consideration, and formally part of the LDF	Local planning authority	Some – requires policy link to DPD; requires public consultation and will usually require a sustainability appraisal	Medium – requires public consultation and formal council resolution	Medium certainty, medium flexibility	Medium – about one year
Development Control Guidelines	Low and semi-public – a material consideration	Local planning authority	None – may be a less open and transparent process if no consultation	High – simply requires a formal council resolution	Low certainty, high flexibility	Fast – can be one month, but low certainty may reduce long-term speed
Revised highways standards	High and semi-public – provides the basis for formal adoption of roads and footpaths	Highways authority	Significant – may require an adequate evidence base to overcome safety concerns relating to departures from tried and tested standards	Medium – may necessitate revisiting the full range of standards	High certainty, low flexibility	Medium – about 6 or more months (depending on the extent of revision)
Supplement to highways standards	High and semi-public – provides the basis for formal adoption of roads and footpaths	Highways authority	Significant – may require an adequate evidence base to overcome safety concerns relating to departures from tried and tested standards	High – simply requires a formal council resolution	High certainty, low flexibility	Fast – about one month

4. Highways standards

It is strongly recommended that design codes be adopted for highways purposes where a design code relates to a public highway. Formal recognition of design codes in this way can help to overcome highways and drainage adoption problems later on. Codes for specific sites and areas provide an opportunity to revise or supplement existing highways standards to, for example, include urban design considerations, reduce road widths, traffic speeds and promote safer and better designed environments for pedestrians and cyclists.

How to adopt a code for Highways Standards

Codes can be adopted by a local highway authority either as free-standing documents in their own right, superseding or supplementing existing highway design standards within the confines of the coded site or area, or can be adopted as a generic document to replace or supplement outdated highway standards for a wider area. The latter is likely to be a slower process but will have the added benefit that the revised standards will be available for use on other sites in a highway authority's area. Further guidance on the use of design codes in the context of highways will be set out in the *Manual for Streets*²⁹.

Formalising through development control

Design codes can also be formalised through the development control process and related legal powers to ensure a development is designed and built in accordance with a design code. To formalise the code in this way the design code must form part of a formal application for planning permission. This may mean the code being attached to an outline planning application, a reserved matters application or a full (detailed) application.

The mechanisms that might be used to formalise the code in this way are:

1. Planning conditions.

2. Approval as part of a planning application.
3. Planning obligation, where appropriate.



Experiences of development control approaches

The Swindon code has been prepared following the resolution to grant outline planning permission for the development. It is required to be approved by the Council to satisfy a planning condition.

At Lightmoor the code was submitted as the Design Statement in support of the outline planning application. Planning conditions required minor amendments to the code for its approval and that all development should be in accordance with the approved design code.

Design code attached to a planning condition

The use of planning conditions to formalise a design code may be a particularly attractive option for both applicants and local authorities. Two options exist:

1. To submit the design code as part of a planning application and condition its approval to require the development to comply with the code.
2. To issue a planning permission that requires the submission of a design code and which specifies the content of the code and the process by which it will need to be prepared.

Conditioning a code provides a considerable degree of certainty for applicants over the acceptability of proposals to the local planning authority. It also affords local planning authorities greater control by securing adherence of a proposal to the development plan's design policies and objectives and/or is capable of securing the preparation of a design code for a site by the applicant as part of a detailed permission.

²⁹ *Manual for Streets* (DfT and DCLG, forthcoming)

Using conditions to prepare a design code – some pointers

Local planning authorities may choose to add a condition to a planning permission for a site for which a design code already exists, which would typically require that developers comply with such a code. Such conditions require careful wording to provide the appropriate level of flexibility or firmness required in terms of compliance with such a design code.

A local authority could also condition an outline planning permission to require the applicant to prepare a design code for a site or particular phases of a development, depending on local circumstances. Research has shown that this is a particularly useful route available to local authorities where in-house resources are limited. This process would operate in the same way as current practice where conditions to a planning permission require the preparation of a masterplan or other form of detailed design guidance for a site. Such conditions should be specific about what the design code should contain and how it is to be prepared. If a condition is not specific, it is likely to be unlawful and unenforceable. In all cases it is important that any condition complies with the tests set out in Circular 11/95. Namely that a condition should be necessary, relevant to planning and to the development and be enforceable, precise and reasonable. It is however important to note that where a design code is part of a planning condition, the test in Circular 11/95 would not apply to the design code itself.

Further guidance on conditions is set out in Circular 11/95.

Design code as part of a planning application

Design codes are capable of being attached as a condition to both outline and detailed planning consents. Codes submitted as part of a reserved matters application are likely to be less strategic in nature when compared to codes which might accompany an outline

application. In some cases a ‘mini code’ may be prepared to support a less detailed pre-existing strategic design code which is part of a DPD, perhaps for a wider area, or related to an existing planning permission.

A design code which is related to a detailed application is likely to be more detailed in nature when compared to a code attached to an outline application and therefore increases the level of certainty for the applicant. A drawback of this option is that any proposed variation of the code to accommodate design changes is likely to need a new planning application as there is no related reserved matters application.

When design codes are intended to be formalised through a planning application, consideration should be given to how they relate to a Design and Access Statement. A design and access statement is a short report accompanying and supporting a planning application to illustrate the process that has led to the development proposal, and to explain and justify the proposal in a structured way. Circular 01/2006³⁰ sets out when Design and Access Statements will be required before they can be registered by the planning authority, and the detail they should contain³¹.

The inclusion of a design code as part of a Design and Access Statement, either as part of an outline or detailed planning application, increases the level of certainty about the design of the proposal for both the planning authority and applicants. By including the design code with the Design and Access Statement the planning authority is able to better understand the design principles and vision upon which it is based and how the plans will be translated into the proposed built form of the development. It also enables the planning authority to link any planning permission to the exact content and wording of the proposed code and consider whether the code is capable of being formalised by planning condition if the local planning authority is minded to grant permission for the proposal.

³⁰ See Paragraph 69 of *Circular 01/2006: Guidance on Changes to the Development Control System* (DCLG, 2006)

³¹ See also *Design and Access Statements, How to Write, Read and use Them* (CABE, 2006)

Approving a design code through a reserved matters planning application

Where it is intended that a design code be submitted as part of a reserved matters application it is recommended that, before such a code is prepared, discussions take place between the applicant and the local planning authority.

If the proposed design code supports a higher level design code or a code which has been adopted through the LDF, or responds to a planning condition to an outline permission, then all parties should ensure that the code is consistent with the higher level design code to which it relates, and that it fully meets the terms of any planning condition.

It is not recommended that local authorities require any statements of compliance of a development to a design code as part of any planning application. Code promoters, particularly a local authority, should avoid additional burdens on business, staff time and resources. Applicants should be able to secure planning permission if they build to the code or have a planning condition imposed which will be discharged by the local authority if a code is complied with. There should therefore be no need for any separate mechanism to seek compliance.

Note that design codes which are part of a planning application would not in themselves require an Environmental Impact Assessment under the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999 (as amended) (the EIA Regulations). This principle also applies to design codes which are formalised through planning conditions. This would not however exempt planning applications from needing an Environmental Impact Assessment (EIA)³², where required under the above relevant Regulations.

Design code attached to a Planning Obligation

Planning obligations are usually made in the form of negotiated agreements known

³² Generic term used to describe environmental assessment as applied to projects. In this Guide, 'EIA' is used to refer to the type of assessment required under European Directive 337/85/EEC.

³³ Paragraph B51 of *Circular 05/2005: Planning Obligations* (ODPM, 2005)

as Section 106 Agreements, usually in the context of planning applications, between local planning authorities and persons with an interest in a piece of land, and intended to make acceptable development which would otherwise be unacceptable in planning terms. Obligations can also be secured through unilateral undertakings by developers. Circular 05/2005 sets out further guidance on the use of planning obligations.

Although design codes which are formalised through planning obligations can provide considerable certainty in the planning process, Circular 05/2005 advises that where there is a choice between imposing conditions and entering into a planning obligation, the imposition of a condition is preferable³³.

Planning conditions afford greater flexibility when compared to planning obligations, given the right of appeal by applicants against conditions and when considering that the Courts would not need to be involved if a breach of condition needed to be enforced by a local planning authority.

Code promoters should therefore fully explore the opportunities to formalise a design code through conditions before considering tying a design code to a legally binding agreement under Section 106 of the Town and Country Planning Act 1990 (as amended). The use of Section 106 to formalise a design code should only be contemplated when planning conditions cannot be used. This is clarified in Paragraph B2 of Circular 5/2005.

Attaching a design code to a planning obligation – a caution

Where a planning obligation is used to formalise a code the obligation should include a specific clause which refers to the design code which should be annexed to the agreement.

However, it should be noted that planning obligations offer less flexibility to amend a design code unless specific provision is made within the agreement to amend the code. There is also no right of appeal to an obligation and this route provides a less open and transparent means to implement the code. The Courts would also need to be involved if a breach in the code needed to be enforced.

Development control approaches compared						
Option	Status and transparency	Responsibility for control	Pre-requisites	Ease of revision	Decision-making certainty vs. flexibility	Speed (of formal adoption phase)
Linked to Planning Condition	High and semi-public – compliance on basis of normal enforcement powers	Local planning authority	Typically an outline planning approval	Low – is likely to require a new planning application and permission with new conditions	Variable flexibility depending on wording of condition, medium certainty as still subject to appeal	Potentially fast – 13 weeks
Part of planning application	High and semi-public – compliance on basis of normal enforcement powers	Land/ development interests	Depending on type of application, may need reserved matters planning approval	Low – is likely to require new planning application and permission	Medium certainty and flexibility as subject to appeal and open to local planning authority discretion	Potentially fast – 13 weeks
Part of Design and Access Statement accompanying a planning application	High and semi-public – compliance on basis of normal enforcement powers	Land/ development interests	Depending on type of application, may need reserved matters planning approval	Medium – is likely to require revised or new statement, possibly with revised or new application	Medium certainty and flexibility as subject to appeal and open to local planning authority discretion	Potentially fast – 13 weeks
Linked to Planning Obligation	High and semi-private – compliance on basis of formal legal contract	Local planning authority and development/ land interests	Planning approval	Low – legal agreement	High certainty and low flexibility as a legal agreement with no right of appeal	Medium – varying timescales but can be more than 6 months

Local Development Orders

Local Development Orders were introduced though the recent changes to the development control system in England. They are a new discretionary planning tool available to local authorities and are intended to support a culture change in planning which seeks early proactive engagement to establish design quality and the parameters of development, and allow a streamlining of regulatory processes later on.

A Local Development Order (LDO) grants planning permission for the type of development specified in the LDO and removes the need for a planning application. A LDO can relate to all land in a local authority area or only part of it.

Certain types of development are already permitted without the need for planning permission, and these rights are set out in the Town and Country Planning (General Permitted Development) Order 1995 as amended (the GPDO). The GPDO grants a general permission for various types of relatively small-scale and normally uncontentious development without the need to make a planning application to the local planning authority. LDOs therefore effectively alter or extend on a localised basis the GPDO provisions.

Similar mechanisms have been used with success overseas – for example in Australia.



Extending permitted development rights

Queensland, in Australia, introduced a code based planning system in 1998 with a new set of approvals processes, including:

- development that does not require approval: broadly similar to permitted development.
- self assessable development, which an applicant must determine satisfies a code: broadly similar to the situation that would arise in England with an extension to permitted development rights where an LDO is in force.
- development requiring approval: broadly similar to applications for planning permission in England.

In effect, in different locations, there may be different approvals regimes in operation, depending upon whether there is a code in force or not.

Codes are generally based on performance criteria (the standard to be met) together with acceptable solutions that are deemed to satisfy those performance criteria. For self assessable development, the code must be clear and internally consistent, allowing at least one design solution to satisfy its requirements.

LDOs are not restricted to specific types of development and it will be for local planning authorities to decide on the extent to which they wish to use them. They are capable of being used for large scale development but also offer considerable potential to be used to permit small scale householder development. It is important to note however that LDOs do not need to be site-specific. A LDO with a code attached could be used for a site not yet allocated for development in the DPD although the LDO must relate to a policy in a development plan.

Where a design code is attached to an LDO, compliance with the code will effectively be granted rights to develop a site. This removes the need for a planning application to be made and for its administration in development control. To create proper safeguards, an LDO must implement policy

established within a DPD, and checking compliance is likely to be an important function of the local planning authority.

If used alongside design codes, LDOs offer considerable potential to deliver high quality development with considerable certainty to applicants and speedy implementation of development. When linked to a LDO, developments in accordance with the design code would effectively be permitted development for which no planning application would be required.

Given that LDOs amount to a form of planning permission, they are capable of being adopted subject to conditions. This includes the ability to link the LDO to an Area Action Plan or other form of DPD, as well as SPD, or indeed to other development control guidelines or highways standards. Annex 1 provides a summary of some practical pointers on how design codes can be used in conjunction with LDOs.

Benefits of using the LDO route to formalise a design code include:

- For local planning authorities:
 - Refocussing the staff time and resources by investing up-front in the preparation of the design code (perhaps overcoming design skills shortages by commissioning or seconding consultants to work for or in the authority).
 - A means to encourage development interests to fund the preparation of design codes.
 - Delivery of a proactive approach to secure more certain outcomes.
- For land and development interests:
 - A streamlined implementation process, with a clear and agreed framework for design quality, but avoiding the need for multiple planning applications or amendments.
 - A more certain context within which to plan and deliver development.
 - A guarantee that design quality standards will remain consistent throughout successive phases of development.
 - Less exposure to changing local authority priorities.

Further guidance on preparing and using LDOs is set out in Circular 01/2006.

Local Development Orders						
	Status and transparency	Responsibility for approach	Pre-requisites	Ease of revision	Decision-making certainty vs. flexibility	Speed
LDOs	High and public – introduce local permitted development rights	Local planning authority	A relevant adopted DPD and possibly an EIA	Low – requires re-adoption of LDO following consultation and publicity	Once in place, provides high certainty but potentially little flexibility unless built into the content of the design code itself	Mixed – likely to require a high front-end investment in preparing a detailed design code, but compensated for by a streamlined development implementation process

Using freehold rights

Design codes can also be formalised by other legal means outside of formal planning and regulatory processes. Experience to date in the use of design codes, both in the UK and USA, has shown that this may be another option available to code promoters, particularly private landowners. Landowners such as English Partnerships have used their position to more effectively implement design code in this way.

Two key mechanisms exist to formalise design codes by using freehold rights:

- Development agreements.
- Covenants.

Development agreements in particular have proven to be a highly effective means of ensuring that design codes are implemented. Through such means, parcel developers can be prevented from exercising their freehold rights and selling their developments on to potential purchasers if they are not compliant with the design code. In such cases the effectiveness of the approach relies on the willingness of landowners to take such action. In reality, the mere possibility of such action normally ensures that design codes have been implemented correctly.



Experiences of freehold rights

At West Silvertown, the code was tied to the development agreement between the LDDC as landowner (and planning authority at that time) and the developer. In the case of Fairford Leys it was a condition of sale that the development should be in accordance with the code. At Newcastle Great Park the potential of using covenants to control the use of front gardens/car parking spaces was considered, although this was not implemented.

Although covenants are capable of formalising design codes, experience of using them to implement design codes has been more restricted to date. Where covenants have been used in this way, they have so far been limited to implementing particular aspects of codes, for example helping to guarantee in perpetuity that off-street parking can, as an alternative, be used as garden space. It is clear however that covenants offer a possible means to implement other aspects of design coding, and, just as development agreements can be written to be binding on third parties. Covenants are binding on all future owners of a site.

A key drawback to using such mechanisms is that design codes that are formalised in this way effectively become a private tool which is removed from the public scrutiny process. Like planning obligations, these legal approaches offer considerable certainty to landowners and developers, but lack flexibility. Unlike planning conditions and obligations, their initiation and enforcement is entirely the responsibility of the landowner.

Freehold rights approaches compared						
	Status and transparency	Responsibility for approach	Pre-requisites	Ease of revision	Decision-making certainty vs. flexibility	Speed
Development agreement	High and private – compliance based on legal agreement and potentially tied to transfer of freehold rights	Landowner and parcel developer	Land ownership and an identified parcel developer	Low – requires new legal agreement	High certainty and low flexibility, especially if binding on third parties and based on landowners being willing to enforce	Fast – months, but little impact on long-term speed, and potentially drawn-out in the case of conflict
Covenants	High and private – compliance based on legal agreement	Landowner	Land ownership	Very low – once land transferred, requires application to the Lands Tribunal	High certainty and low flexibility, although based on willingness of landowner to enforce	Fast – one month

Comparing the approaches

Each approach described above has different characteristics and particular strengths and weaknesses, and when weighing up their merits, coding teams should fully consider these relative to one another. Importantly, individual approaches need not be used in isolation, and various combinations of approaches are possible.

Approaches and their characteristics																		
Key approaches									Checklist of questions (Key: ▲ applies fully ● partially applies)									
Local Development Order	Development Agreement	Planning application	Planning Obligation	Planning Condition	Revised highway standards	Development Control guidance	Supplementary Planning Document	Area Action Plan or other DPD										
YES									NO									
▲	▲	▲	▲	▲	▲		●	▲	Is high status required?		●	▲						
▲		●		●	●		▲	▲	Is transparency in process required?			▲	●	●	▲	●	▲	
▲			●	▲	▲	▲	▲	▲	Should responsibility be public?						●	▲	▲	
	▲	▲	●						Can responsibility be private?	▲	▲	▲	▲	▲	●			▲
					●	▲	●		Is ease of revision important?	▲	●		●	▲	▲	▲	▲	▲
		●		●		▲	●		Is flexibility important?	▲	●		▲	●	▲	●	▲	▲
▲	▲	●	▲	●	▲		●	▲	Is certainty important?		●	▲		●		●		
	▲	▲	●	▲	●		●		Is initial speed to adoption important?	▲	●	▲	●		●			▲
▲	●	▲	▲	▲	▲		●	▲	Is long-term speed important?		●	▲					●	

Approaches compared – some strengths and weaknesses

Key approaches to formalising a design code	Strengths	Weaknesses
Area Action Plan or other DPD	<ul style="list-style-type: none"> • Provides certainty for both local authorities and applicants • Code given primacy alongside other DPD policy in determination of planning applications • Full community engagement in preparation of codes 	<ul style="list-style-type: none"> • Not suitable if plan is out of date or requires comprehensive review • Longer time needed to formalise design code when compared to other options
Supplementary Planning Document	<ul style="list-style-type: none"> • Faster when compared to DPD process • Potential for detail in SPDs is well suited to detailed nature of design codes 	<ul style="list-style-type: none"> • Do not have status of development plan and therefore carry less weight in determining planning applications
Development Control guidelines	<ul style="list-style-type: none"> • Quick to prepare but not a recommended route 	<ul style="list-style-type: none"> • Unless adopted as SPD with an appropriate level of public consultation, they are likely to carry limited weight in determining planning applications
Revised highway standards	<ul style="list-style-type: none"> • Can help overcome highways and drainage adoption problems later in process • Provide opportunity to revise or supplement existing outdated highways standards to include urban design considerations 	<ul style="list-style-type: none"> • Engineers may be resistant to revise standards
Planning Condition	<ul style="list-style-type: none"> • Considerable degree of certainty for applicants • Greater control for local authorities to secure compliance to plan policies and achieve improved design quality • Provides flexibility to amend code and for applicants to challenge on appeal 	<ul style="list-style-type: none"> • If condition is not specific, it is unlikely to be lawful and enforceable
Planning obligation	<ul style="list-style-type: none"> • Provides certainty, although use of conditions is preferred 	<ul style="list-style-type: none"> • Less flexibility to amend code unless specific provision made within agreement to amend code • No right of appeal – less open and transparent means to implement code
Planning application	<ul style="list-style-type: none"> • Code capable of being attached to outline, reserved matters and detailed applications • Increased certainty for applicant if design code attached to detailed application 	<ul style="list-style-type: none"> • Any significant variation of code to accommodate design changes likely to need a new planning application
Development agreement	<ul style="list-style-type: none"> • High certainty and fast to implement • Provides another option to code promoters, particularly private landowners • No need for local authorities to be involved if landowners are private 	<ul style="list-style-type: none"> • Initiation and enforcement responsibility of landowner • Private tool which is removed from public scrutiny process • Lack flexibility
Local Development Order	<ul style="list-style-type: none"> • Speedier implementation of code-compliant development as no planning application required • Can save local authority resources when implemented • Considerable potential to deliver high quality development with considerable certainty • Guarantee that quality standards will remain consistent throughout successive phases of development 	<ul style="list-style-type: none"> • May require longer code preparation and testing processes to ensure that the development delivered is what is deemed acceptable

Stakeholder Engagement

A related issue to the formalisation of a design code is the question of engagement with stakeholders outside of the core coding team. Three types of engagement typically occur during the course of a large development project of the type that would normally justify a design code:

1. Community engagement.
2. Technical engagement.
3. Formal consultation.

Community engagement

The most appropriate time to engage the local community in the design coding process is prior to the preparation of a design code (during stage 3 of the process). This is when the physical vision for a site or area is being created or during the plan making process if the code is to be formalised through an LDF, when different design options are being appraised and before the overall shape and nature of the development has been fixed. This will ensure that the community's input is maximised and that the consultation exercise has the greatest impact. At this stage, community planning events with a focus on establishing a broad physical vision are valuable tools in helping to build a consensus around the idea of design coding and in establishing momentum towards the preparation of a specific design code.

Given the technical nature of design codes, community consultation on the technical aspects of a draft design code is both difficult and experience shows that consultation is often less productive, given that it can be difficult to convey technical planning and architectural concepts to a local community who may not be familiar with the issues. This does not mean however that there should be no contact with the community during the preparation of a design code. Where possible, code promoters should seek to keep communities informed during a design coding exercise, for example by email/website updates, publishing regular information leaflets or perhaps having a regular exhibition and by providing local people with an opportunity to contact the code promoter.

Although not recommended, design codes can be used to assist in engaging the community. In such circumstances it is important that the codes are presented in an accessible format with illustrations about the built form which is promoted and that they are not expressed in technical language. In such circumstances, the core principles of design codes can be consulted on as the critical ideas underpinning the physical vision of the place which is being created.

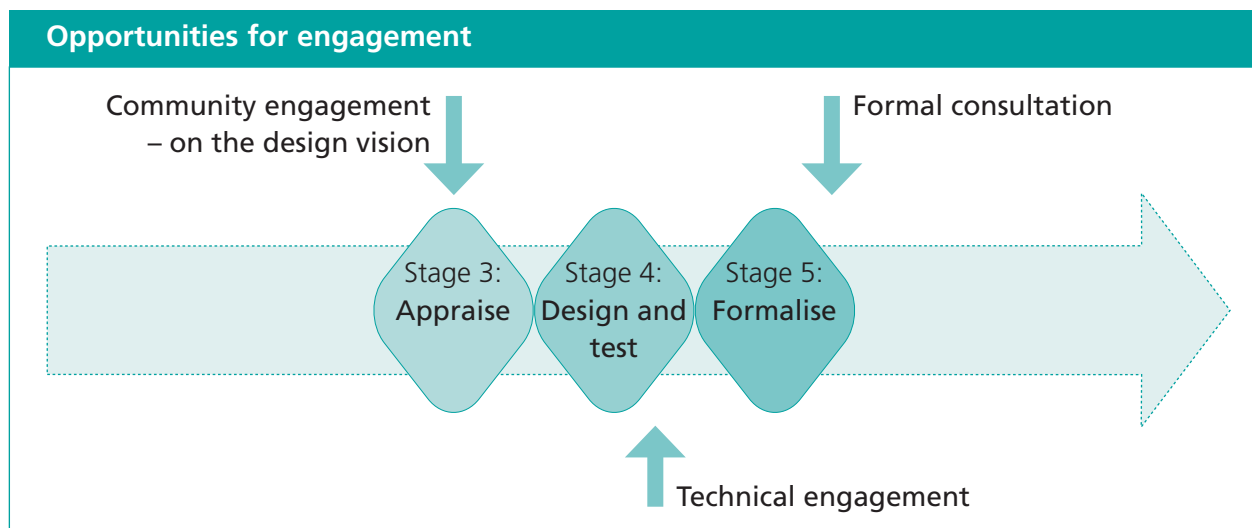


Consulting on the design code

The Hulme code is simple and concise, setting out in plain English the key aims and principles for the new development. The coding process took place in parallel with the proposals for the redevelopment of the area, consultation with tenants and the wider community and with the design of the first phases of replacement housing by the RSL partners of Hulme Regeneration.

Technical engagement

Engagement with technical stakeholders outside of the core design coding team will be essential during Stage 4 of the process when the design code is being prepared. Failure to engage all key technical stakeholders can quickly undermine trust in the work of design coding teams and in the design code itself. If not included within the core team then the highways authority in particular will need to



be a key technical stakeholder who should be involved throughout the design coding process to ensure that key layout and public realm specifications are acceptable. Other key technical stakeholders are likely to include:

- Building control.
- Police authority.
- Fire authority.
- Housing authority.
- Local town and parish councils.
- Local Strategic Partnerships.
- Key local amenity organisations.
- Neighbouring land interests.
- Neighbouring local authorities.
- Utilities providers (including water).
- Environment Agency.

It is recommended that these stakeholders and, where appropriate, other relevant technical stakeholders be provided with the opportunity to input once a full first draft has been prepared (if not before). This will provide an opportunity for meaningful engagement with these interests at a stage when the design code is still relatively malleable. It will also leave a further opportunity for input as part of the formal consultation processes as part of any formal adoption or development control processes.

Formal consultation

The majority of the approaches to formalising a design code will include an opportunity for formal consultation with stakeholders. Formal consultation will provide an important final opportunity to engage the interests of all stakeholders and enable, where necessary, its further refinement. However, it is important to note that by the time a design code reaches its formalisation stage the code will be fully formed and changes will be more costly and problematic. This emphasises the critical importance of securing stakeholder engagement as early as possible in the coding process to ensure that community and technical views have been fully considered and – if appropriate – reflected in the content of the design vision and design code.

Watch points to achieve a streamlined process

- Use the Local Development Scheme of the LDF as an opportunity to establish a strict timetable for design code adoption.
- Consider using a Planning Delivery Agreement (PDA)³⁴ to agree a timetable for formalising a design code.
- Get the highways authority to formally adopt the design code to avoid needless repetitive negotiations later.
- Investing time early on in the process should save time later.
- Formally adopting the design code in the LDF will save time when planning applications are considered.
- LDO processes can provide the surest route to a streamlined process over the long-run.
- Appropriate stakeholder and technical engagement at the right time should reduce public opposition and technical problems at the formal consultation stage.

³⁴ *Planning Delivery Agreements* (PDAs) are timetable agreements which commit local authorities and developers to an agreed set of milestones for the development of very large sites. PDAs can help a planning application progress smoothly and provide greater certainty and transparency to a complex development process. PDAs are ideally suited to managing the design code preparation process.

Stage 6: Implementing the design code

Who, what and how?

Who is responsible?

Land* – Landowner, Master-developer,
Funding Agency

Design† – Masterplanner/Framework Designer,
Design Code Designer

Development* – Parcel Developer, Parcel Designer

Public* – Planning Authority, Highways Authority,
Building Control

*denotes core role †denotes potential role

Responsibilities for the implementation of the design code will be shared across the full design coding team. At this stage, parcel development interests will become fully engaged with the project, with appropriate procurement processes helping to ensure that these players are both sympathetic to the approach and enthusiastic to help deliver the vision. The assessment processes that follow will be based on parcel designs produced by development interests, whilst the assessment itself should ideally rely on land and public interests working together to deliver their shared objectives.

What does this stage entail?

Delivery of actual development on the ground involves scheme design, development and other formal regulatory processes. These delivery processes will be intimately tied to, and are dependent for their success upon, the stages of code design and formalisation and the processes of stakeholder engagement earlier in the coding process.

When design coding reaches this stage in the process towards realisation of the project on site, the time, energy and resources expended



at the start of the process should begin to pay dividends in delivering a process based on partnership and trust rather than the disagreement and discord that has often been the case in the past. Moreover, as successive phases of development come forward through the design code the regulatory process will increasingly become more streamlined with associated benefits to all parties.

How is it done?

- Use the design code to guide design / development procurement, placing clear quality benchmarks at its core.
- Design / offer and conditional sale of the development can be a quality-led process if based on a design code.
- As alternatives, consider a design competition or a joint venture partnership based on the design code and vision.
- Encourage open dialogue and feedback from one tender process to the next, refining the process as successive parcels are brought forward for development.
- Integrate assessment processes for regulatory and other purposes, particularly highways and planning.
- Consider means to streamline assessment processes such as devolving responsibility, self assessment and delegation.
- Establish a clear process and criteria for departures from the design code.

Introduction

Perhaps even more critical than the way a design code is produced is the way it is implemented, as it is on this basis that real development on the ground will be delivered. Implementation of any design guidance can all too easily be undermined if processes are not in place consistently to focus on delivering high quality outcomes. This stage of the design coding process begins with selecting designers and parcel developers who will use the design code to develop and eventually deliver development. A second group of users will be those using the design code in a regulatory capacity; the development controllers and other regulators on whose decisions will hang the necessary development consents. These groups will be the key consumers of the design code.

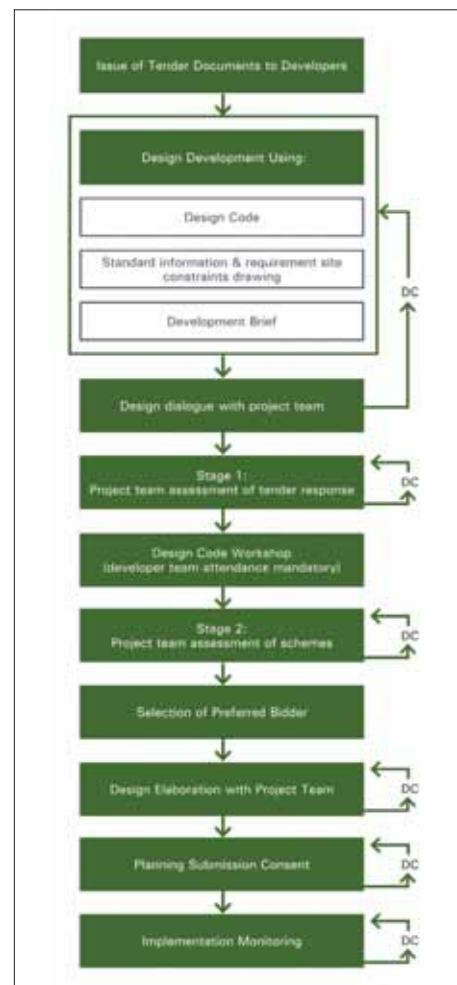
Design and development procurement – the alternatives

Where parcels of land are being marketed, generally by a public or private landowner, design codes help to set quality thresholds that not all parcel developers and their chosen designers will be able to meet. In so doing they will weed out underperforming players from the start. This is one of the key benefits of design codes and an important reason why the quality of design is enhanced by their use.

Design codes can establish the brief for parcel designers and developers to work to, and provide a measurable means against which to assess whether potential teams can meet the challenge. Used in this way, design codes can:

- Help to deliver a culture change in the importance attached to design by development interests.
- Assist developers to cost units (and thereby developments) with more certainty through the degree of standardisation that design codes imply.
- Provide greater certainty for developers when applying for planning permissions, as long as their schemes are design code compliant (while for non-compliant schemes the opposite is true).

- Reduce the time taken to obtain planning consents, saving resources for developers and local authorities alike.
- Reduce the likelihood that local planning authorities will change their view of the design of a scheme as development projects commence.
- Help to establish a level playing field for developers when tendering for projects, enabling an efficient tendering process based on clear quality benchmarks.



Establishing the procurement brief

The Upton code is included in the developer procurement brief for each parcel of land to be released. Initially, potential bidders submit an expression of interest. Shortlisted bidders then submit a design and financial offer, with the design submission being assessed against the code. In the overall tender assessment, the relative weightings for design: financial offer are 70:30.

Design competition

To optimise the use of design codes it is important to set the right procurement processes in place. One approach is to use the design code as part of the brief for a design competition, either as an open competition, or, following an initial pre-selection process (see below), for a limited competition. The benefits of such an approach is the immediate emphasis on outcomes that it generates.

Because competitions of this nature require an investment of considerable time by participants, it may be appropriate to limit the requirements by focusing on key design ideas, and on how the design code would be interpreted in sample areas rather than requiring a detailed and fully worked up set of proposals. More detailed proposals can then be worked up with the winning design team to form the basis for a parcel brief. This can then be used as the basis for a development tender process.



A competition approach

For the third phase at Newhall the landowner's team moved away from the conventional process of releasing parcels to housebuilders. Instead, the code was used as a brief for the selection of an architect through a mini-competition. A joint venture development partner was then selected on the basis of the landowner's concept design proposals. The joint venture retained the services of the architect through to completion.

Design, offer and conditional sale

A more conventional approach will be a design/offer and conditional sale of land, leading to the selection of a developer/designer combination, with the design code being used as the basis for the parcel briefing package. A number of variants can be used with this approach, including one-stage and two-stage tender approaches. An intermediate approach is recommended in this guide, with a pre-selection process followed by a full tender on the basis of design and financial proposals.

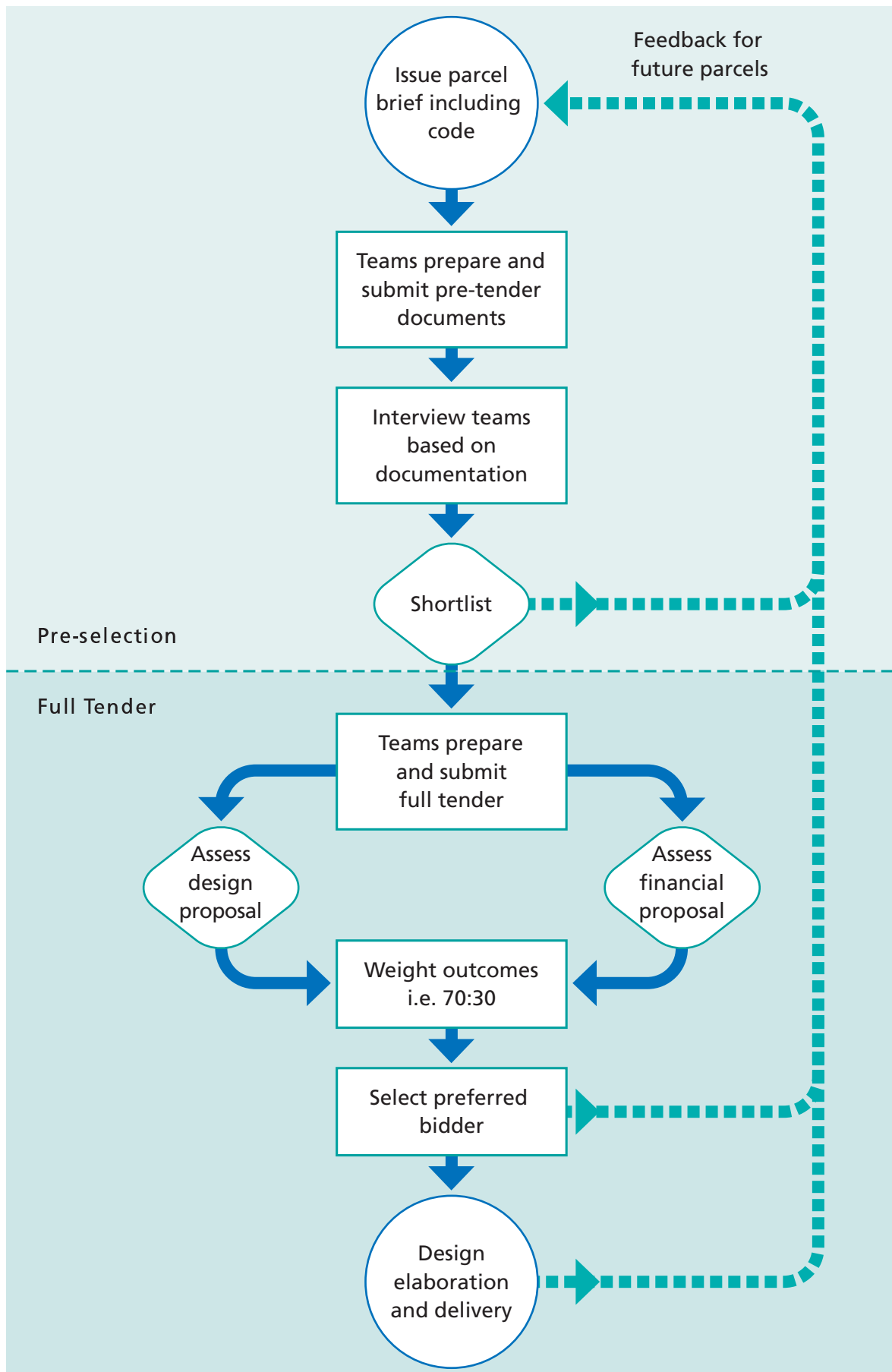
This approach is favoured because a pre-selection process prior to full tendering can help to cut down the significant resources developers are required to invest in preparing design code-compliant bids. Whilst not precluding the potential for variations, the initial stage can help to determine whether design and development teams are sympathetic with the content of the design code and design vision. At this stage potential tenderers might be asked to submit:

- Company profiles.
- Examples of work and previous projects they have successfully delivered.
- Proposed team and management arrangements.
- Answers to the checklist for selecting design coding team members (see Section 3).

A short list would be prepared based on the pre-selection submissions with short-listed teams asked to prepare full tenders in the normal way, including worked up design proposals and a financial bid. The outcomes of these processes should:

1. Be subjected to separate and independent assessments of the design and financial components.
2. Use a pre-determined design evaluation matrix derived from the design code to assess the design.
3. Be weighted in a pre-determined manner, for example 70:30 (design : financial bid).

Selecting the parcel design /development team – a possible approach



Joint-venture partnerships

Instead of selling the parcel outright, an alternative is the creation of a joint venture partnership, with the parcel developer becoming the partner of the landowner and/or master-developer for the purposes of developing the parcel. In such cases, care should be taken that any new partner is fully aware of, and signed-up to, the design principles contained in the design vision and design code. The potential benefits of such an approach are that the design code initiators – the landowner, master-developer or local authority – will remain partners throughout the development process, and in this position will be able to directly influence delivery against the design code.

Used in these various ways, design codes can aid the selection of development partners with greater certainty that aspirations will be compatible, and that subsequent negotiations will be smooth. As part of the process of procuring design and development partners, the design code will be tested and re-tested. The result may be that problems are raised with the design code, with the design vision, or with the process of procurement itself. Consequently it will be important to encourage open dialogue and feedback from one tender process to the next, refining the process as successive parcels are brought forward for development.

It will also be important to encourage dialogue throughout the processes of detailed parcel design that follows, with technical support provided from the Design Code Working Group (see Stage 2) to design/development teams on how they should interpret the design code. In this role, the clearer the design code, the less assistance will be required.

Assessment and regulation of development against design codes

As detailed proposals begin to come forward the next key test for the design code will be how they are assessed and regulated. Although formal regulatory roles will remain the responsibilities of the statutory authorities,

the assessment of schemes against the design code can be undertaken by others, for example if freehold rights are the prime means to formalise the design code (see Stage 5), or if skills are lacking in the public sector.

Practice to date has demonstrated that assessment of schemes against a design code can be undertaken by local planning authorities, landowner/master-developers, design code designers, and by other design advisors. Key issues will be the rigour, transparency and skill with which assessment occurs, and therefore that due process is built into the design code implementation stage to allow this to happen.

Assessment of schemes against design codes can occur in four ways:

1. **Separated assessment**, by each organisation with an interest in delivering the design code – the local planning authority, the highways authority, and the landowner/master-developer.
2. **Integrated assessment**, with each organisation coming together to jointly assess compliance with the design code (within the public sector only, or together with private sector design coding team members).
3. **Devolved assessment**, where assessment is entrusted to a third party – typically the design code designer – to assess compliance and to report back to the other interested parties.
4. **Self assessment**, with parcel developers assessing their own compliance with the design code; and, perhaps, submitting a Statement of Compliance along with their planning application (see below).

Each of these options has advantages and disadvantages and may be combined (e.g. integrated assessment, devolved to an external party). The decision regarding which to adopt will be a matter of local preference.

Assessment approaches compared		
	Strengths	Weaknesses
Separated assessment	<ul style="list-style-type: none"> • Efficient for parties involved in assessment • Ensures stakeholder priorities are uncompromised 	<ul style="list-style-type: none"> • Parcel developers can feel trapped in the middle of separate uncoordinated processes
Integrated assessment	<ul style="list-style-type: none"> • A one-stop-shop approvals process • One coordinated set of comments • Encourages on-going dialogue between key stakeholders 	<ul style="list-style-type: none"> • Can be time consuming and resource intensive for parties involved in the assessment
Devolved assessment	<ul style="list-style-type: none"> • Ensures consistency of assessment • Can overcome skills and knowledge gaps • Allows some on-going adaptation of the design code through the way it is interpreted 	<ul style="list-style-type: none"> • If funded by land-interests, danger that schemes may be sold on, leading to an absence of responsibility • May create a disconnection between stakeholders and the design code
Self assessment	<ul style="list-style-type: none"> • Encourages parcel developers to focus directly on the design code in order to determine their own compliance • Will be valuable when codes are formalised through a LDO 	<ul style="list-style-type: none"> • Danger of a less rigorous assessment • Some stakeholders will want an additional compliance check • Will focus on achieving minimum standards, not on higher objectives

The benefits of integrated assessment

Although the time commitment for parties involved in making the assessment can be significant, integrated assessment can help to create a streamlined single process for parcel developers. Although appropriate consents will in most cases still be necessary before a developer can proceed with a development, the design code can play a vital role in helping to bring these organisations together and in ensuring compatibility between the various responsibilities.

As a minimum, the integration of highways design and adoption considerations alongside planning considerations via a development team approach is strongly recommended (see Stage 2). If highways issues are considered separately to planning and other design coding issues, tensions can arise, for example over the adoption of higher specification public realm materials and features, including street trees and public art. Such factors are best considered and agreed during the design code design process, with agreement flowing through to inform the design code assessment.

Making assessment processes more effective

Requiring prior self assessment can be valuable as a means to focus minds and ensure that material is presented in a way that allows quick and efficient assessment. In such cases a standard Statement of Compliance can be provided for completion by parcel developers although these are not normally encouraged (see Stage 5). When used, it is important that Statements of Compliance are seen as ‘light-touch’ tools designed to build confidence, and not as an additional layer of regulation.

For development control staff, appropriate checklists within the design code, and adequate training in its use, can greatly facilitate their role, as can the automatic use of delegated powers.

Given the resources invested up-front in the preparation and agreement of design codes (by all stakeholders), and the level of design information required to comply with design codes, it is strongly recommended that the determination of planning applications against any design codes are delegated for decision by officers in the local planning authority and not referred to Council committees unless absolutely necessary. Although this is a matter for each local planning authority to decide, delegated decisions will assist in speeding up decision-making. A formalised design code is likely to have been previously agreed by elected members and therefore there should be no reason why a code compliant development should need to be referred to a Council committee. By these means, land and development interests can be encouraged to invest in the design code process, safe in the knowledge that a streamlined approvals process will result.

The process of land interests assessing the compliance of parcel designs with design codes prior to the formal planning process can also be very effective, as is the practice of devolving primary responsibility to a designated representative to make the assessment. As a means to ensure compliance and quality,

such a process requires significant trust between parties, but can be particularly valuable if skills and resources in local authorities are in short supply.



Assessment practices compared

For Upton, English Partnerships established an integrated process of assessment. A co-ordinated response is provided to tender design submissions and then to the preferred bidder's pre-application proposals. Each response is based on an assessment made by a group that includes representatives from English Partnerships, the code designer, the local planning and highway authorities.

At Fairford Leys, the masterplanner and code designer has vetted all proposals on behalf of the landowning trust, prior to planning applications being submitted. As neither the masterplan nor the code have formal planning status, there has been an informal reliance on the code designer's ‘policing’ of the vision.

Flexibility in assessment

The difficult question of flexibility and prescription has been addressed earlier in this guide (see Stage 4). Any design guidance that allows too much interpretation may simply encourage uncertainty and conflict that needs to be resolved through time-consuming negotiations. However, stakeholders should be willing to engage in discussions with developers to vary the design code if sound and reasoned justifications can be made. It may be, for example, that specific procedures are agreed in advance and written into the

design code to allow exemptions in certain circumstances. Legitimate reasons might include:

- Outstanding innovative design.
- Demonstrated changes to the local market.
- Changes to the policy framework (for example, national policy).
- Technical improvements.
- Experience in use (for example where known problems exist).
- Unforeseen factors for which the design code does not provide.

In such cases local elected members may wish to be involved in the decision-making process.

Prematurity

Local Planning Authorities are advised not to refuse planning applications simply on the grounds that the preparation or review of a design code will be prejudiced. Where there is a concern about prematurity, the nature of the design code and how it is to be formalised will be a key consideration. The Guidance in *The Planning System: General Principles*, which accompanies PPS1, sets out further considerations with regard to issues of prematurity. The imposition of a 'development freeze' on sites or areas where a design code is being prepared is not possible.

Watch points to achieve a streamlined process

- Use delegated powers when determining planning applications against a design code.
- Build in processes that identify and exclude unsympathetic development interests early in the process.
- Experienced designers can creatively interpret design codes and reduce the need for time consuming negotiations.
- Integrate assessment processes and provide a single informed point of contact for the developer.
- Agree highways adoption matters to avoid successive developers repeating the same discussions.
- Use a dedicated sub-committee where planning applications need elected member consent.
- Development interests should consider sponsoring dedicated planning officers to streamline assessment of proposals against a design code.

Stage 7: Managing design code compliance



Who, what and how?

Who is responsible?

Land* – Landowner, Master-developer

Design† – Design Code Designer

Development‡ – Parcel Developer

Public* – Planning Authority, Highways Authority, Building Control

*denotes core role †denotes potential role

‡denotes support role

This final stage of the design coding process will be the preserve of the various regulatory authorities, and those responsible for initiating and preparing the design code. This will include the local planning and highways authorities, and also the various land interests. Design interests may be involved if explicitly retained by either of these authorities to monitor the design code or to evaluate its success. Development interests will not have primary responsibility for this stage, but the design quality of the development will largely determine whether enforcement by the local planning authority is needed.

What does this stage entail?

As projects are built out, design codes can retain an important role in delivery processes through managing the delivery of high quality design during construction, and thereafter aiding management and maintenance processes. These roles represent a natural continuation of the procurement and regulatory processes. They include monitoring, enforcement (where necessary), design code evaluation and on-going aftercare.

Although this final stage in the design code delivery process may seem a long way off when starting out, like all the other parts of the process, this stage should be fully considered from the beginning to avoid problems later. Design coding is of little value if it cannot be delivered, and monitoring and enforcement, as well as a willingness to refine the design code over time, will be critical to its long-term success.

How is it done?

- For effective design code monitoring and enforcement, a proactive, adequately resourced, process is needed.
- Retaining the code designer to monitor compliance, or appointing a dedicated compliance officer, will provide the optimal solution.
- Private funding of monitoring compliance, either direct or indirect, can bring benefits to all stakeholders.
- Provision for regular code evaluation and amendment should be written into design codes, or incorporated in the design coding process e.g. the use of parcel-based supplementary or "mini" design codes.
- Consider options for design code-based aftercare of completed development projects.

Introduction

It is critical that sufficient attention is paid to the actual delivery of the design vision on site, as judged against the design code.

Monitoring and enforcement

Reflecting the alternative options to formalise design codes and of assessing the design of parcel proposals (see Stages 5 and 6), monitoring and enforcement can be undertaken by both local authorities and private stakeholders (or a combination of both). Monitoring and enforcement of design codes by private stakeholders has proven particularly effective in practice to date. However, as design coding becomes more widespread, local authorities are increasingly taking on this role, mainly through exercising normal planning control and highways adoption powers. The decision about which option to use should take account of the relative strengths and weaknesses.

Making the process more effective

Unless design codes are supported by appropriate enforcement, their effectiveness will be significantly undermined. To deliver a more effective local authority monitoring and enforcement service, a proactive, adequately resourced approach needs to be taken. A number of options should be considered:

- A dedicated officer can be appointed to monitor compliance against the design code.
- A tick-box approach to compliance can be devised, with elements design coded in a manner that facilitates their monitoring on-site.
- Training and additional resources can be targeted on the enforcement team to raise awareness of the design code and its use.
- The original code designer can be retained to ensure compliance with the design code.

Enforcement is a skilled and time-consuming activity, and unless problems are identified during construction and before the sale of any built elements of the scheme, then it is unlikely that breaches will be enforced. Where the original code designer is retained or a dedicated officer appointed for this function, it is recommended that frequent site inspections are undertaken (e.g. weekly or bi-weekly) to identify inconsistencies as they arise and to ensure that they can be efficiently rectified. However, this can be an expensive activity and may be beyond the resources of some local authorities.

In such cases, one option is for the landowner/master-developer to fund a compliance officer within the local authority, perhaps as part of a Section 106 planning obligation, or for parcel developers themselves to make a contribution. If a planning obligation is used

Monitoring and enforcement approaches compared

	Strengths	Weaknesses
Public	<ul style="list-style-type: none"> • Open and transparent • Encourages greater public sector interest in the preparation of the design code and its implementation • Non-adoption of street works is a highly effective sanction 	<ul style="list-style-type: none"> • Lack of resources in enforcement • Lack of commitment can fatally undermine the design code • Lack of skills for detailed monitoring
Private	<ul style="list-style-type: none"> • Greater access to resources Threat to withhold freehold rights is a powerful incentive for compliance • Possible on-going involvement of the original designer 	<ul style="list-style-type: none"> • Lacks transparency • Danger that schemes may be sold on, leading to a reduction in commitment and/or an absence of responsibility

for this purpose, it is important to note that local authorities cannot themselves require such a contribution, although, through negotiation, developers can offer to provide one. The benefits will be a smoother compliance checking process, and avoidance of the time and expense (for both parties) associated with retrospective enforcement.



Monitoring and enforcement – a public responsibility

At Ingress Park in Greenhithe, the local authority is responsible for formally monitoring compliance with the design guidance, through both its planning and highway roles. However, the developer checks the reserved matters applications prepared by consultants before submission to the planning authority. Any issues of non-compliance on site have generally been picked up through the highways adoption process and fed back to the planning department. These have generally been minor issues relating to materials.

The sanction held by highways authorities to refuse to adopt street works is extremely effective at ensuring code compliance, not least because monitoring of compliance is regular, rigorous and sustained. Because this activity already happens as a routine and on-going part of the highways adoption process, a further option may be for officers from the highways authority to feed back design compliance issues to the planning department. In such circumstances it will be important for a formal agreement to be reached between these two authorities (where they are not the same authority), and perhaps some cross-funding of the activity. This will ensure that the timetable and focus of the monitoring addresses the different requirements of both statutory functions.

Private approaches to enforcement

Where private sector arrangements are made for monitoring by landowners for example, enforcement will need to rely on the terms and conditions of a development agreement. In such cases, landowners or their agents need to monitor final completed schemes before signing over freehold rights, the ultimate sanction for non-compliance being the withholding of these rights from the parcel developer. In the interim, developers can be granted a licence to complete the development.



Monitoring and enforcement – a private responsibility

At Newhall, Harlow, the masterplanner and code designer monitors compliance with the code on behalf of the landowner. It is important to identify any non-compliance swiftly as, in practice, it is unlikely to be possible to enforce the condition of sale through the courts unless the breach is significant. Another reason for prompt action is the added complication once a dwelling has been sold to a third party householder.

This practice raises the question of when to sell the land, at parcel developer selection or after delivery on site. The latter requires that a development agreement be established, while the former will rely on other mechanisms for enforcement, such as planning enforcement, or the threat that parcel developers will not be considered for future parcel allocations.

A combination of both public and private sector monitoring and enforcement provides the surest means to accurately deliver the design vision.

Evaluating and amending design codes

Given that the circumstances in which codes are used change over time, they should be capable of evolving throughout their life. Most design codes tend to evolve throughout their use, being either formally or informally evaluated and revised. Reasons to review the content of design codes will vary, but will broadly reflect those in Stage 6 which sets out legitimate design code exemptions.

A willingness to update design codes is particularly important at an early stage in their use, as it is then that unexpected problems typically arise. Design coded principles should not be seen as set in stone but be capable of being reviewed. This is particularly true on large sites with long-term development aspirations. It is therefore recommended that provision for evaluation and amendment be written into design codes – initially following the experience of their use to deliver the first parcel/or phase of development.



Reviewing the design code

Provision was made for the code at Upton to be reviewed and the first review was carried out after the first phase of development. A review at this early stage has allowed the code to be refined in response to its use in practice. It is envisaged that the code will continue to be reviewed at periodic intervals.

Mini-design codes

The use of supplementary or “mini” design codes or design code “overlays” which add to the main/master design code can avoid the need for a complete review of the design code. Such supplements can address particular subjects such as public realm issues, or can be prepared for each parcel of land or phase of development as it comes forward for development. In such circumstances the master design code should reflect the broad strategic design principles that are unlikely to change (e.g. settlement pattern and built form issues), whilst the mini-design codes might focus on more detailed issues (e.g. architectural limitations and landscaping). These latter issues are more likely to change, and may benefit from variation in order to emphasise the distinctive qualities of different parcels (see Stage 4).

It may be appropriate for a local authority to place a maximum limit on the size of development for which single detailed design codes should be prepared and adopted. For example 1,200 housing units if the coded scheme involves a residential element. Such an approach would allow for strategic design codes to be prepared for a site as a whole and then detailed design codes to be prepared for respective parcels or phases. For very large sites, built out over extended timescales, this would ensure that the strategic design requirements are consistent across the entire site, whilst detailed code requirements are able to reflect changing circumstances.

Project aftercare

Design codes can have a role over the long-term in the on-going management and maintenance of completed developments. The advantages of this are two-fold. First, managing on the basis of a design code can help to ensure that the original vision continues to be respected over time as incremental ad hoc developments begin to have an impact (e.g. extensions, alterations and infill developments). Second, everyday maintenance responsibilities and routine street works can also be undertaken in a manner that preserves the qualities that the design code helped to deliver.

It is recommended that ongoing management and maintenance principles are built into a design code from the outset. Various mechanisms are possible:

1. Turning the design code into a management and maintenance guide for the control of minor works through development control.
2. Using the same guide or the original design code to guide the highways maintenance and urban management functions of local authorities.
3. Creating a local management company or tenants association to become the guardian of the design code, and to offer advice on rebuilding or replacing materials to match existing.
4. Introducing restrictions on new residents at the point of sale through covenants, to control, for example, alterations.
5. Introducing restrictions on the rights of occupiers built into leases, for example no satellite dishes, sheds, or the paving over of front gardens.
6. Removing permitted development rights, so that new minor development proposals are consistently judged against the principles contained in the design code.
7. Using an LDO and simplified design code to extend permitted development rights by prescribing what is, and is not, acceptable in a particular development.

Each of these will need careful thought prior to implementing as some may have undesirable unintended consequences. For example, removing permitted development rights may make it harder for “lifetime homes”³⁵ to adapt and change along with the life stage of their occupiers. Nevertheless, it is important that the initial investment in design quality that the use of a design code represents is adequately protected over the long-term.

Watch points to achieve a streamlined process

- Taking monitoring and enforcement seriously from the start will avoid delay and misunderstanding later on.
- Consider appointing a dedicated compliance officer.
- Design the code in a manner that facilitates monitoring on-site.
- Consider sharing the monitoring role across authorities – planning and highways.
- Use design code supplements such as “mini” design codes to cut down on initial design coding time and the need for early review.
- ‘Keep going’ – Increased familiarity of teams with design coding will increasingly streamline design code preparation.

³⁵ See www.buildingforlife.org

Annex 1: Using design codes in conjunction with LDOs

Using design codes in conjunction with LDOs – some practical pointers

Linking a code to a LDO

- **Process:** Where a design code is proposed to be formalised through a LDO, the code will need to follow the same preparation, approval and implementation process (including, if required, any Environmental Impact Assessment (EIA) and public consultation) as other typical LDOs. There is no difference to the preparation process if a design code is attached to a LDO.
- **Relationship to development plan:** LDOs have to be tied to a policy in a DPD. Although local authorities are encouraged to prepare LDOs in parallel with the preparation of a development plan, there is no absolute requirement for this and a local authority may introduce a LDO at any time after a development plan document has been adopted. However, it is recommended that the appropriate time for preparing the LDO is when the Design Code is at a final draft stage. This is to ensure that the local authority preparing the LDO thoroughly considers the extent of the provisions contained within the Code.
- **Environmental Assessments and Appraisals:** Although highly unlikely in practice, an LDO cannot be made for EIA development under Schedule 1 of the EIA Regulations. A code linked to a LDO for such development would therefore not be possible. If the LDO with a design code attached includes development listed under Schedule 2 of the EIA Regulations then local authorities must issue a screening opinion as to whether an EIA is required before the LDO is granted development consent. Where EIA is required this must be done before development consent is deemed to be granted through an LDO. The EIA Regulations set out the relevant procedures. Sustainability Appraisal or Strategic Environmental Appraisal regulations do not apply to LDOs because LDOs have to be tied to a DPD which would have already undergone such assessments.
- **Consultation:** Consultation arrangements would be the same as any other LDO although it is recommended that the local authority should consider carefully the scope for specific early consultation arrangements when developing the design principles and/or vision underpinning a code to be attached to a LDO. Consultation would also be necessary for a Code if it is attached to it via a condition.

Conditioning a LDO

- **Scope of condition:** A LDO can be made with conditions to ensure that it can deliver the objectives for which it is made. Conditions should set out clearly what development is permitted. Conditions could also require the developer to carry out an action in relation to the development, for example, notifying neighbours prior to commencement of works. When seeking to impose conditions in a LDO, a local authority should consider their suitability in the same way as they would for an ordinary planning permission. In other words any imposed conditions would need to comply with Circular 11/95 on Planning Conditions.
- **Condition linking a design code:** It is recommended that a design code which is proposed to be linked to a LDO is attached via a condition. This should make clear that code compliant development does not require planning permission if it is in accordance with the relevant Design Code. Any non-compliance or breach of the LDO would be subject to the normal enforcement powers for planning permissions, under a local authority's policies and procedures.

Using design codes in conjunction with LDOs – some practical pointers *continued*

Checking development is code compliant

- **Compliance checks:** Some local authorities may want to require as a condition of the LDO that there is some type of design code compliance/validation check carried out before development is deemed to be permitted. Local authorities may want to introduce such a process to remain informed about developments coming forward on a site or in an area. Such a process is not however encouraged. Any increased certainty this might potentially deliver for the local authority is likely to reduce the certainty and speed that a LDO is intended to deliver. Local authorities should instead consider whether closer in house working relationships between planning and building control services are possible, for example where building control applications are routinely copied to the planning service for monitoring the compliance of a development against a design code.

Where code compliance checks are used, it is recommended that local authorities do not require a scheme to be subject to such checks before permitted development rights take effect.

- **Requests for submission of further details:** Local authorities should avoid seeking further details to be submitted and approved by the local authority where a design code is attached to a LDO. Such an approach risks undermining the potential benefits of LDOs and is not recommended. Preference should be given to the full use of conditions linked to a LDO which specify what development is allowed and not allowed.
- **Monitoring LDO and code compliance:** Local planning authorities will wish to monitor on-going compliance with the LDO to ensure it is meeting its objectives and in order to notify the Secretary of State of its relative success as part of the Annual Monitoring Report process. This can be done through site visits, setting up notifications arrangements (see Stage 6), monitoring against building regulations submissions, or through consulting other bodies, such as town or parish councils. Whichever approach is used, this should be done with a light touch and not be used as a means to re-assert formal development controls retrospectively.
- **Other mechanisms:** Developers may seek a Lawful Development Certificate based on the LDO or for conditions to confirm that their development is lawful for planning control purposes.

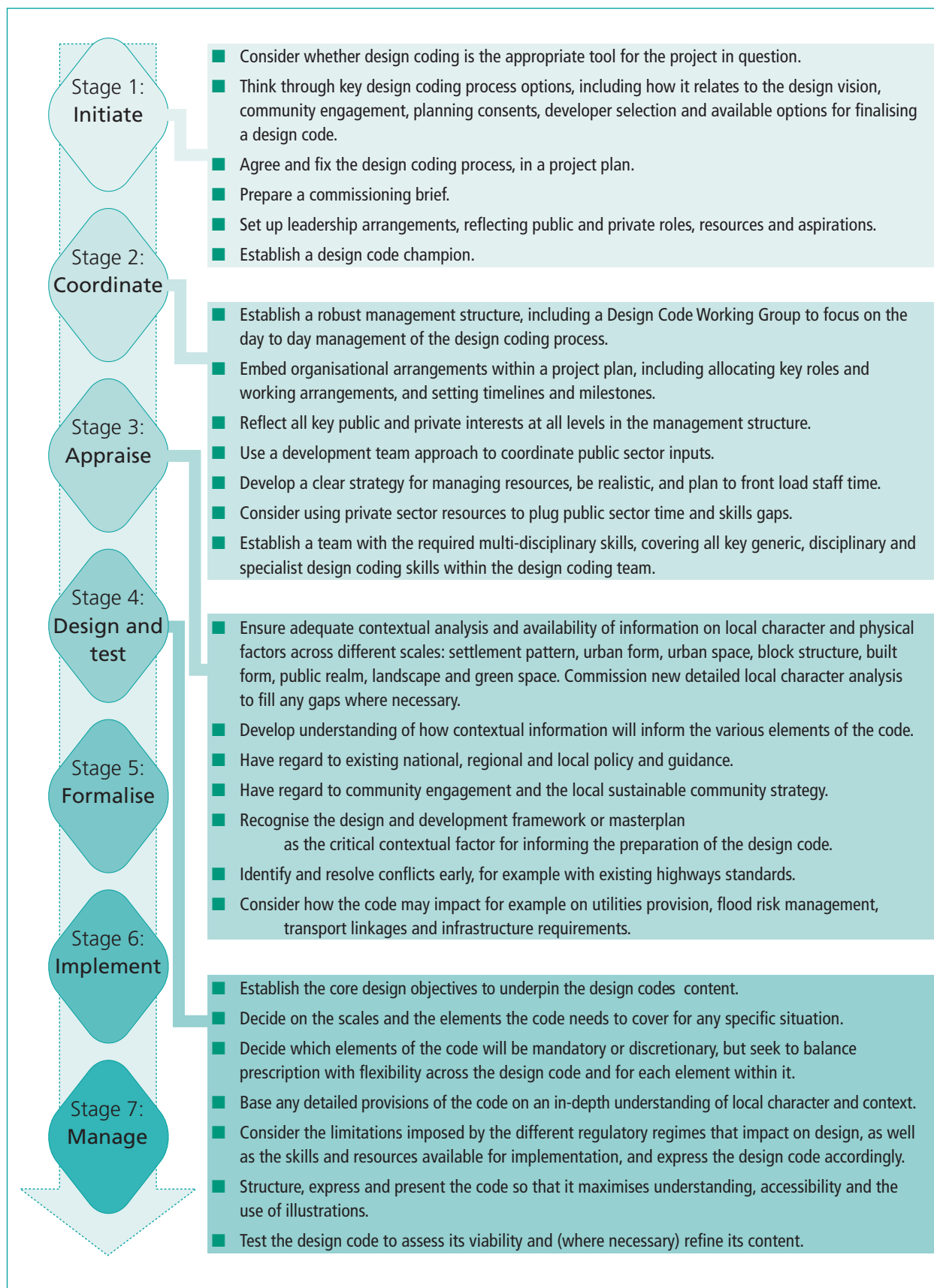
Level of detail

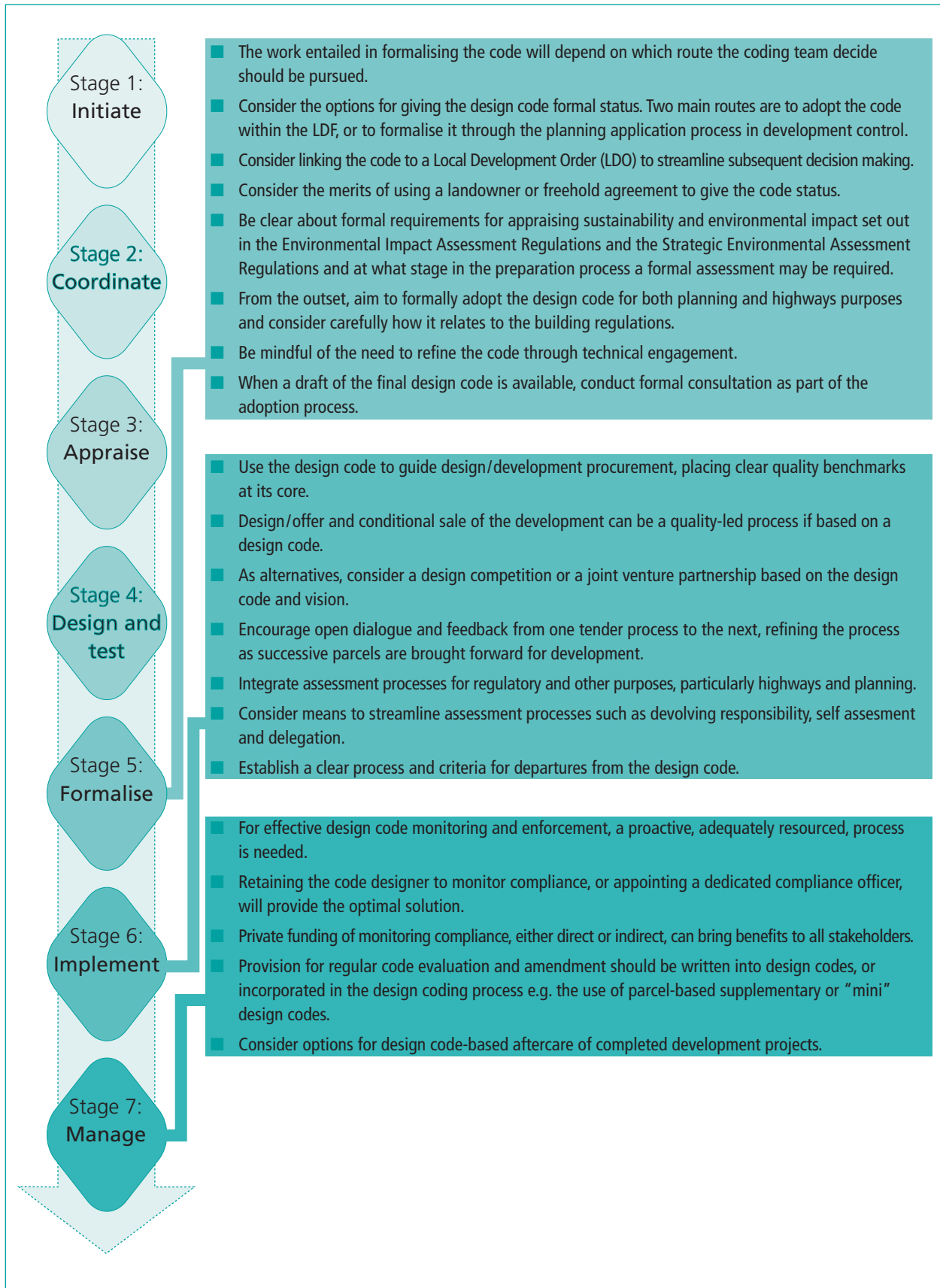
- **Flexibility or prescriptive:** It is for the local planning authority to decide how flexible or prescriptive a design code attached to a LDO should be. However, because a LDO effectively grants planning permission, a design code attached to a LDO needs to ensure that the code is clear about the design quality thresholds expected. Such codes, therefore, will need to be more prescriptive to ensure the development delivered is what is deemed acceptable. This may lead to a longer code preparation and testing process than might otherwise be expected but these initial investments will be offset when the LDO takes effect.
- **Small scale developments:** In principle, LDOs and any related design codes are ideally suited to regulate small scale householder development.

Amending an LDO

- **Timing:** If at any time the LDO is considered not to be working effectively the planning authority can amend or revoke it, although this should only be done if the LDO can be demonstrated to be working against the relevant DPD policies to which it is tied and meant to be delivering. Normal enforcement procedures would apply to LDOs, should the LPA consider a development to be in breach of the permission granted by a LDO.

Annex 2: The design coding process summarised





Annex 3: Glossary of terms

Term	Meanings
Area Action Plan	A Development Plan Document used to provide the planning framework for areas where significant change is anticipated or where conservation is needed.
Building envelope	Possible site and massing of a building.
Character areas	Areas of distinct and identifiable character within a larger development or area.
Planning Condition	A means of establishing a particular requirement (the planning condition) in relation to the decision granting planning permission.
Delegated Powers	Powers delegated from the formal planning committee to their officers, for example to determine certain types of permissions.
Design and Access Statement	A statement accompanying a planning application that sets out the design principles on which a development proposal is based.
Design Code	A set of illustrated design rules and requirements which instruct and may advise on the physical development of a site or area. The graphic and written components of the code are detailed and precise, and build upon a design vision such as a masterplan or other design and development framework for a site or area.
Design guidance	Guidance on how development can be carried out in accordance with the design policies of a local authority or other organisation.
Development agreements	Legal agreements between the landowner/master-developer and parcel developers laying out the terms under which a licence for development is being granted, and including – potentially – the principles on which freehold rights to develop will be granted.
Development brief	A document, prepared by a local planning authority, a developer, or jointly, providing guidance on how a site of significant size or sensitivity should be developed. Site-specific briefs are sometimes known as planning briefs, design briefs and development frameworks.
Development Plan Documents (DPDs)	Spatial planning documents that are subject to independent examination, and together with the relevant Regional Spatial Strategy, will form the <i>development plan</i> for a local authority area for the purposes of the Town and County Planning Act. They can include a <i>Core Strategy</i> , <i>Site Specific Allocations of land</i> , and <i>Area Action Plans</i> (where needed). Other Development Plan Documents, including generic Development Control Policies, can be produced. They will all be shown geographically on an <i>adopted proposals map</i> . Each authority must set out the programme for preparing its <i>Development Plan Documents</i> in the <i>Local Development Scheme</i> .

Term	Meanings
Design framework	Design guidance for large sites establishing the broad two/three-dimensional form of development, including all key structural elements.
Enquiry by Design	A methodology of collaborative design promoted by the Prince's Foundation.
Environmental Impact Assessment (EIA)	A procedure that must be followed for certain types of project before development consent can be granted, which assesses the likely significant impacts of a development on the environment and serves to inform both the public and decision maker.
Lifetime Homes	Homes that incorporate a series of key features that together ensure that housing is accessible and adaptable in any setting.
Local Development Framework (LDF)	The name for the portfolio of <i>Local Development Documents</i> . It consists of <i>Development Plan Documents</i> , <i>Supplementary Planning Documents</i> , a <i>Statement of Community Involvement</i> , the <i>Local Development Scheme</i> and <i>Annual Monitoring Reports</i> . Together these documents will provide the framework for delivering the spatial planning strategy for a local authority area.
Local Development Order (LDO)	An order made by a local planning authority granting automatic planning consent for the form of development specified in the order.
Masterplan	A three-dimensional spatial vision for a site establishing key urban design relationships but not necessarily the architecture.
Mini design codes	More detailed design codes for the different character areas of a site or area already covered by a design code.
Natural surveillance (or supervision)	The discouragement to wrong-doing by the presence of passers-by or the ability of people to be seen out of surrounding windows. Also known as passive surveillance (or supervision).
Parcel	A sub-area or phase of a larger site divided and sold off for development to a parcel developer, often chosen on the basis of a tender process.
Perimeter block	The traditional means of developing urban areas, with buildings surrounding urban blocks and protecting private space within the centre of the block and facing onto public streets and spaces around.
Procurement process	The process of procuring design or development services.
Outline planning consent	Planning permission given subject to reserved matters, e.g. detailed design.
Regulating plan	A two dimensional plan locating and setting out the design coded development parameters of a site – building lines, frontage widths, block and street dimensions, active frontages, etc.
Reserved matters	Matters held over for future consideration following the granting of an outline planning consent, and subject to a further reserved matters application.
Section 106 agreements	An agreement negotiated between the local planning authority and persons with an interest in a piece of land (or “developers”).

Term	Meanings
Statement of compliance	A statement submitted by a parcel developer to a landowner/master-developer or local authority, formally confirming compliance with the design code.
Strategic Environmental Assessment (SEA)	A generic term used to describe environmental assessment as applied to policies, plans and programmes. The European ‘SEA Directive’ (2001/42/EC) requires a formal ‘environmental assessment of certain plans and programmes, including those in the field of planning and land use’.
Street hierarchy	The hierarchy of street, road and footpath types used in an area
Supplementary Planning Document (SPD)	Guidance which is part of a Local Development Framework, produced to expand or supplement the policies set out in a Development Plan Document.
Sustainable Community Strategy	Local authorities are under a duty under the Local Government Act 2000 to prepare a Sustainable Community Strategy. The role of the Strategy is to set out the strategic vision for a place. It provides a vehicle for considering and deciding how to address difficult cross-cutting issues such as the economic future of an area, social exclusion and climate change. Building these issues into the community’s vision in an integrated way is at the heart of creating sustainable development at the local level.
Sustainable urban drainage (SUDS)	A form of drainage designed to collect and recycle water and drainage on-site.

Annex 4: Credits

Project Team

This document was commissioned from the Bartlett School of Planning, UCL (Matthew Carmona) and Tibbalds Planning and Urban Design (Jane Dann), and advised by Andy Karski and Quentin Stevens.

Steering Group

The project steering group included: Daniel Bridger, DCLG; Alastair Donald, CABE; Helen Eveleigh, English Partnerships; Lee Scott, CABE; Sylvia Short, English Partnerships; Patrick Wetter, DCLG; and, Mario Wolf, DCLG.

Pilot Projects

Documentary sources (including drafts and documents in progress):

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This manual has been specifically published to show how design codes can help deliver good quality places, and to convey the means by which design coding can be integrated into the planning, design and development processes that shape the built environment.

The use of design codes is not mandatory. The key for developers, local authorities and other interested parties is to understand when and why design codes may be the right tool to use, and under what circumstances design codes can streamline processes, add value and deliver better quality development.

This manual addresses these important issues. It forms the 'what', 'how' and 'who' guide to preparing and implementing design codes.

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