

**Exploring the effectiveness of  
Building for Life  
in improving suburban residential design quality**

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**Opening statement**

**a. Copyright statement**

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**b. Dedication**

I dedicate this thesis to my grandparents:

Stanisława Trojanowska  
Stanisław Trojanowski

Janina Kruczkowska  
Jan Kruczkowski

Forced out of their home at the dead of night and transported in cattle trucks for days into the depths of Siberia. Working and living in Africa. Fighting alongside the Allies at Monte Casino. Serving in the Royal Air Force. Becoming 'aliens' in England. Finding jobs in a foreign land. Building homes and families through years of hard work with nothing but their own, hard earned money. Cycling for miles and through all weathers to get to work. Working day after day in a draughty factory. Never claiming anything from the State to put food on the table, buy or furnish their homes. Thousands of miles from the places and people they loved and never asked to leave, never once complaining and always full of appreciation and kindness.

This thesis is the culmination of ten years of research. Yet, none of this would have been possible without the strength and determination of my grandparents. The submission of this thesis represents more than my work but the work, effort and sacrifices of grandparents and my parents without whom I would never had the opportunity to study at the University of Nottingham in 1997 and begin my urban design journey.

The true foundations of this thesis were therefore not laid by me, but by my grandparents who never gave up. I can only imagine that when compared to their life experiences, the challenges they faced and overcame, this thesis has not only been easy - but a privilege.

I cannot begin to comprehend how hard their lives were and from where they found such admirable strength and formidable spirit.

10 March 2016

San Diego, California.

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**Postscript (June 2018):**

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**External Examiner: Professor Tim Heath, University of Nottingham.**

**Internal Examiner: Professor Benachir Medjdoub, Nottingham Trent University.**

**Viva Voce Chair: Professor Michael White, Nottingham Trent University.**

**Director of Studies: Paul Collins, Nottingham Trent University.**

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**Postscript (October 2018):**

In the interests of completeness, the reader is advised that since the submission and examination of the thesis the government has sought to refocus efforts of the planning system back towards design quality.

On 25 April 2018, MHCLG hosted a design conference ahead of the revised NPPF being published. In July 2018, the government published a revised edition of the National Planning Policy Framework (MHCLG, 2018). Within the revised framework, a stronger emphasis was placed on design quality and Building for Life 12, “Local planning authorities should ensure that they... make appropriate use of, tools and processes for assessing and improving the design of development. These include... assessment frameworks such as Building for Life” (p.39). Furthermore, from January 2019, Homes England will seek Building for Life 12 qualities as part of its role in the sales of public land and the development of new homes.

#### d. Abstract

Over the last 20 years, efforts have been made to improve design quality in new suburban residential developments. Following the global credit crisis of 2008, political emphasis shifted away from design quality and more firmly towards increasing the level of house building.

With CABE dissolved in 2010 and funding across central and local government cut, the resources to challenge poor design are limited. Local authority urban designers and the number of urban design courses offered by English universities has fallen increasing the risk of a future skills shortage. Within this climate of austerity, deregulation and political impatience to get 'Britain building'<sup>1</sup>, how might design quality be improved?

The research is an insight into one local authority's efforts to improve residential design quality over a ten-year period. Empirical evidence challenges the dominant theory that robust local regulatory control is the principal means by which local authorities can secure well designed developments. As part of the research, a new version of Building for Life was created to align with the National Planning Policy Framework (DCLG, 2012a). The research also provides evidence that suggests that a different, more proactive approach to design regulation could emerge through the application of digital, mobile technologies as an integral part of the English planning system and an improved understanding of the interrelationship between product development and planning processes.

Key words: Building for Life. Suburban. Residential. Housing. CABE.

Abstract word count: 300.

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<sup>1</sup> Government and non-government campaigns and initiatives have emphasised the importance of house building as a driver of economic growth, job security and job creation in an economically volatile climate. See [getbritainbuilding.co.uk](http://getbritainbuilding.co.uk) – a film emphasises the economic benefits of housebuilding where for every £1 spent on housing, a further £3 is injected into the wider economy; [bbc.co.uk/uk-politics-1581096](http://bbc.co.uk/uk-politics-1581096) 'Housing: David Cameron vows to 'get Britain building' 21 November 2011; £500m Get Britain Building Fund [udc.homesandcommunities.co.uk/get-britain-building](http://udc.homesandcommunities.co.uk/get-britain-building). Websites accessed 9 January 2017.

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## Abbreviations and definitions

BfL	<b>The Building for Life initiative.</b> The initiative is led by the Building for Life partnership, an un-constituted group currently comprising of Design Council Cabe, Design for Homes and the Home Builders Federation. The partnership has overseen the two main versions of tool: the 20-point version (BfL20) and the more recent 12-point version (BfL12).
BfL20	<b>Building for Life 20-point version</b> – the national standard for well-designed homes and neighbourhoods (2001 – 2010).
BfL12	<b>Successor to BfL20. Building for Life 12, a condensed 12-point version</b> – the industry standard for well-designed homes and neighbourhoods endorsed by government (2012 to present at the time of publication).
CABE	<b>Commission for Architecture and the Built Environment</b> , the UK government's advisor on architecture, design and public space (1999-2011). As a quango, CABE was a non-departmental public body and successor to the Royal Fine Arts Commission established in 1924. As part of the 2010 Spending Review, CABE's funding was withdrawn and on 21 January 2012 the CABE (Dissolution) Order 2012 was passed (HM Government (2012) Memorandum to the Environment, Food and Rural Affairs Select Committee: Post-Legislative Assessment of the Clean Neighbourhoods and Environment Act 2005, p.14) <sup>2</sup> .
DCLG	<b>Department for Communities and Local Government</b> (renamed MHCLG in 2018).
DC-Cabe	In 2011, a small number of remaining <b>CABE staff were merged into the Design Council</b> . In contrast to CABE, the Cabe unit with the Design Council is not a government QUANGO. Its status as 'government advisor' has been diminished. The Design Council seeks to reinforce the distinction between both organisations using upper case letters for CABE (1999-2011) and lowercase letter for Cabe (2011-to present).
DETR	Department of the Environment, Transport and the Regions.
DoE	Department of the Environment.
GOEM	Government Office for the East Midlands.
HBF	<b>Home Builders Federation.</b> The industry body for the house building industry in England.
HCA	<b>Homes and Communities Agency</b> (renamed Homes England in 2018).
MHCLG	<b>Ministry of Housing, Communities and Local Government</b> (formerly DCLG).
NPPF	<b>National Planning Policy Framework.</b>
NPPG	<b>National Planning Practice Guidance.</b>
NWL	<b>North West Leicestershire.</b>

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<sup>2</sup> Gov.uk/government/uploads/system/uploads/attachment\_data/file/236039/8394.pdf. Date accessed 18/2/17.

**NWLDC**    **North West Leicestershire District Council**  
**PPG3**      **Planning Policy Guidance Note 3: Housing** (later replaced by Planning Policy Statement 3: Housing; PPS3).

## PART ONE: THESIS CONTEXT AND OVERVIEW

### 1. Introduction

This thesis contributes to the field of urban planning and design by offering new empirical evidence relating to the use of a design quality indicator called ‘Building for Life’ (BfL12 and BfL20). The subsequent analysis of this empirical data using a theoretical model forms the platform upon which new knowledge regarding the effectiveness of the tool in real life practice is created and presented. By proposing a new planning and design model that embraces the potential of new technology, replacing the current model of development management by changing the way (how and when) developers, local authorities, local communities and other stakeholders engage with and are enabled to exert influence over the nature of new development; the research offers a contribution to knowledge.

Primarily this research was grounded in practice, as opposed to one grounded within a purely theoretical framework. BfL was created in 2001 and evolved into a design quality indicator that has been more widely used by house builders and local planning authorities to consider and identify the qualities (or deficiencies) of new residential led development, particularly in suburban locations on larger scale development (ten or more homes) built by volume house builders.

During its existence, there have been two distinct versions of this design quality indicator: a 20-point version between 2001 and 2012 (BfL20, CABE, 2008) and a shorter 12-point version in use since 2012 (BfL12, Birkbeck and Kruczowski, 2014). Both versions of the tool have become widely used as development control or regulatory mechanisms by which well-designed schemes can be more readily identified and poorly designed schemes diagnosed and challenged. In contrast to the 20-point version, the 12-point version has been principally positioned as a *design* tool as opposed to an *assessment* tool.

This research aim was to develop an improved understanding of Building for Life in town planning and development practice; identifying barriers to the application of the principles embedded within it and to offer recommendations. This was primarily achieved by exploring the effectiveness of this tool through a 10-year investigation with the research working within the planning system at a local planning authority: North West Leicestershire District Council (NWLDC) where the author was

employed as a principal officer. This thesis is therefore a record and critical analysis of what was in effect an opportunistic study, primarily combining action research with observational methods.

Investigation of the tool is important on the basis that Building for Life has enjoyed considerable longevity within the planning system and is the only consistent form or methodology of structured dialogue (or definition of design) that exists and is widely used by developers and local planning authorities. Despite wider political and economic factors contributing towards an ‘ebb and flow’ in its usage, its existence and constant usage since 2001 is notable. Despite this, there has been a remarkable lack of research into the tool: its usage and effectiveness. We understand little about how it works, where it works and why it works (or does not). As the government begins to shift its focus back towards design quality as an important aspect of the state’s planning function following a sustained period of economic recovery and austerity; and has chosen to endorse BfL12 as a design tool (and a mechanism by which developments can demonstrate compliance with national design policies contained within the NPPF), the need for research to better understand the tool is ever pressing especially when considered within a wider context of the efforts to utilise digital technologies within the planning system, improve design quality and engage communities in shaping the built environment around them.

In 2007, the author was appointed to a newly created post of ‘Principal Urban Designer’ at NWLDC. At the time, the national design agenda was at the peak of its influence (Carmona et al. 2017). CABE was well established and financed by government. CABE influenced government policy with access to ministers and government departments in Whitehall whilst also being very influential in local authority thinking and practice. The author was subsequently offered the opportunity to undertake research from *within* as opposed to from outside a local government organisation as both an observer and a participant. This method of research enabled a deep understanding of the tool to be developed; testing and monitoring its impact.

The research was primarily based with a single local planning authority (the case study): one out of 326 authorities across England. As such, the benefits of the deep and rich practitioner insight create potential limitations for the wider applicability of the research however this has been countered by the testing and validating of research findings and recommendations beyond NWLDC. This process demonstrated that the insights afforded by the case study were neither isolated nor unique. Instead

they were representative of planning practice within local authorities where their administrative areas were more suburban and rural in character.



Figure 1: **A typical suburban street scene.** Despite a wealth of design guidance that has emphasised the importance of basic street to building relationships and the importance of the street environment, many new developments are poorly designed. Hilton, Derbyshire. 2017.

Research findings have exposed deeper structural issues that are intertwined within and across the house building industry and the planning system. It is these deeper structural issues that primarily give rise to below standard<sup>3</sup> developments and in turn create a strong undercurrent that makes it exceptionally difficult for the strongest<sup>4</sup> (and most tenacious) local planning authorities to secure BfL compliant<sup>5</sup> developments where developers place no commercial or social value on the principles it seeks to promote. These are discussed further in Part 3.

Based on the research findings this thesis proposes an alternative approach to improving suburban residential design quality. The alternative approach is a more proactive approach to design regulation that relates better to the product development process. The product development

<sup>3</sup> Throughout this thesis the term ‘below standard’ will be used. The definition of this being those developments that meet neither the requirements of BfL20 or BfL12.

<sup>4</sup> Local authorities with access to design skills, local design policies in place, high level support for design at Executive level (officer and political) and a track record demonstrating effectiveness in design regulation.

<sup>5</sup> ‘BfL compliant’ means schemes that meet the performance requirements of BfL20 or BfL12. In the case of BfL20 this equates to a minimum score of 14/20; whereas BfL12 requires compliant schemes to perform positively, this being defined as schemes with no ‘red’ indicators and where any ‘ambers’ are justified.

process is based on Pugh's Total Design Activity Model (1999) and the research represents the first known research to better understand and critique design suburban residential design quality through the application of the Total Design Activity Model; exploring the relationship between this model and the English planning system (its policies and operational processes).

This alternative approach challenges established academic thought (CABE 2007a, Carmona 2001, Carmona et al. 2017) that advocates a regulatory approach to improving design quality: the use and application of local and national policy (such as Design Codes) and the appointment of local authority design officers. As such, the research reinforces the limitations of policy and the extent of influence that can be exerted by urban designers within the planning process (McGlynn and Murrain, 1994). The research also illustrates how design quality might be improved within local authority administrative areas where planning officers have little or no access to dedicated design expertise.

The hypothesis of the research was based upon the theory of this established academic thought: that design quality is secured via robust local regulatory control mechanisms. However, the empirical findings and the subsequent analysis of these based upon an adapted theoretical model has led the research in a different and unexpected direction.

The application of an adapted theoretical model (the Total Design Model for BfL12; refer to Part Three) has also enabled a new insight into how emerging digital technologies might be employed to not only improve design quality but also the efficiency and effectiveness of the local planning system; thereby supporting the government's ambitions for the planning system to become more "creative" and "collaborative" (DCLG, 2012a, p.i).

In the past year, the government's ambitions for the planning system have broadened and it is increasingly keen to explore how a more responsive, streamlined and digitally based planning system might be created whilst also improving design quality.

At the time of thesis submission, the government had just closed an 'open call' seeking ideas and proposals for how this might be achieved with £11m allocated across three funding streams: Joint Working Fund, a Design Quality Fund and an Innovation Fund (DCLG, 2017a, p.4). This research is

therefore timely in that it considers whether digital systems should replace (or ‘overlay’) current processes or whether existing processes should be challenged and changed.

### **1.1 Research Overview**

*“No great town can long exist without great suburbs.”*

Frederick Law Olmsted, 1868.

England’s affection for suburban living dates to the Industrial Revolution when inspired philanthropists, from the well-known George Cadbury, to the lesser known Bolsover Mining Company created their own model villages. A model village by Jesse Boot (Boots the Chemists) was proposed but was never built. These model villages offered an alternative to England’s dirty and smoke filled industrial towns and cities.

Suburbia – its’ evolution, growth and deficiencies have been subject to extensive research with the vast numbers of homes built within the suburban model evidence of the public’s appetite for or willingness to accept a particular lifestyle (Barker, 2009; Booth et al, 2013; Brand, 2009; Darley, 2007; Duany et al. 2001; Dunham-Jones and Williamson, 2011; Edwards and Pigram, 1986; Gallagher, 2014; Girling, 2005; Greed, 1996; Hall, 1996 and 2014; Hardy, 2006; Herzog, 2014; Hubbard and Shippobottom, 2007; Jackson, 2006; Owens, 1999; Montgomery, 2013; Nicolaides and Wiese, 2016; NPCT, 2007; Stern et al, 2013; TCPA, 2013; Wedd, 2012; Wellings, 2006).

Garden Cities and Suburbs of the early 20<sup>th</sup> century established England as a global leader in suburban design (Crookston, 2014; Miller, 2010; Rutherford 2014; TCPA 2013 and 2014). Genteel homes were set into the landscape arranged around thoughtful streets and spaces; walkable and well located to employment, commerce and public transport. As the government seeks to revive these Garden ideals in a series of 14 showcase developments, a very different type of suburbia has been growing – an arguably much less palatable form of suburban growth far from picturesque idylls of yesteryear.



Figure 2: **Bournville Green: a model suburb.** Birmingham. 2017.

Seemingly immune to the influence of CABE in the early 2000s, these developments have continued to flourish since CABE's demise in 2011. Placeless, disconnected, road and car dominated, indifferent to the public realm, such developments are securing planning consent across the country. These developments are not an exclusive phenomenon of a post austerity world, with many of these developments designed and built in the housing market 'boom' years of the early 2000s.

Despite considerable investment in CABE over a twelve-year period, sixteen years of the BfL initiative, the introduction of Design and Access Statements and the publication of countless guidance documents (see Chapter 2.3) many new build , volume produced suburban residential developments share the same characteristics. Neither suburban nor urban in character and neither traditional nor contemporary in style; stripped of any meaningful landscape or architectural interest to minimise development costs, these developments are commonplace across the country. Typically, mono-functional, any non-residential uses are typically located alongside the primary vehicular access(es) into a development - eroding any opportunity to reflect the scales of density in built form and intensity of public life in the structure of new or expanded settlements.



Figure 3: **Indifferent to the streets and the wider public realm.** Smalley, Derbyshire (William Davis Homes). 2017.

### 1.1.1 Research focus

This research focuses on new build suburban residential developments that are typical of greenfield developments. Most of these types of developments are located along the open edges of existing settlements on previously undeveloped agricultural land. Due to resource limitations, the research has focused on the ‘three cities’ sub region within the East Midlands region of England. The three cities sub region comprises of the cities and county shires of Derbyshire, Leicestershire and Nottinghamshire.

The types of developments that are the focus of the research are those primarily built by large national house builders. Typically located in car dependent (or heavily car dependent) locations these developments are predominantly characterised by two storey built form: primarily detached single family buildings, with some use of terraced and single storey buildings. With layouts heavily influenced by highways designs standards that “*more often than not... have adhered to standardised layouts, with the road as the dominant feature*” (DETR, 1998, p.19), developments are often defined by a disorientating network of curvilinear street patterns.

It was design of these types of developments that the BfL initiative set out to improve when it was first established in 2001 and this remains the initiative’s principal focus: suburban residential

development. Therefore, the research does not explore higher density residential developments in more urban and brownfield locations. This higher density form of development operates within a different political, economic, social and environmental context and is typically not favoured by the volume house builders that dominate new suburban residential development. Instead, these development forms are delivered by more specialist builders such as Berkeley or distinct business units within volume house building companies, such as Barratt London.



Figure 4: **Anywhere**. Giltbrook, Nottinghamshire (Persimmon Homes). 2016.

### 1.1.2 Research gap

Despite the longevity of BfL20/12 as a tool that has been widely recognised within both the English planning system and the country's house building industry, there has been remarkably little research that has explored the use of the tool and effectiveness in town planning and development practice.

Existing research is concentrated on the extent to which completed developments meet its requirements, i.e. they are audit based pieces of research (CABE: 2004, 2005b, 2007a, 2010; HCA 2009 and 2010). Exceptions to this is research by RICS (2016) that explored design quality and value, a study into the political dynamics of design regulation (Choy, 2013) and a further detailed case study of a BfL20 compliant development in Melbourne, Derbyshire where the

relationship between the developer and the tool was explored (Knight, 2013). A study by Sanders (2014) explored the relationship between BfL12 and profitability. Further discussion can be found in Chapter 2.6.

No published research is known to exist that explores and critically analyses the effectiveness of BfL20/12 in town planning<sup>6</sup> and development practice. As such, there is no body of knowledge that enables policy makers and practitioners to more fully understand BfL20/12 in practice particularly its limitations, barriers to its use and its potential future role in a creative, collaborative, more responsive, streamlined and digitally based planning system (DCLG, 2012a and 2017a). Therefore, this body of evidence represents a contribution to knowledge whilst also uncovering areas for further research.

## **1.2 Personal motivations**

CABE's housing audits (2004, 2005b and 2007a) began to shed light on the design quality of England's growing suburbs. The audits reflected a broader design quality agenda led by government to improve the built environment following the publication of the Urban Task Force Report (1999).

In 2007, the author was appointed as South Derbyshire and North West Leicestershire District Council's first urban designer. The role was created following the publication of CABE's Housing Audit for the East Midlands (2007a) that identified widespread design quality issues in new build housing developments. With both Districts under pressure from the Regional Spatial Strategy (GOEM, 2009) to release land for new residential development and improve design quality, the two Councils jointly funded a new design officer post.

During the early years of the role the author became increasingly interested in the dynamic between house builders, the planning system and BfL20. Many of the design deficiencies identified by CABE (2007a) were not only commonplace with South Derbyshire and North West Leicestershire but across the three cities region (see Chapter 5). The author's freelance work

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<sup>6</sup> More commonly referred to as 'development control' or 'development management' practice within local planning authorities.

for CABE involved him travelling across England and seeing these same deficiencies across a broader geographical area.



**Figure 5: PPG3/PPS3 era housing.** The research began during the peak of the last housing 'boom' and at a time where government policy promoted land intensification. Known as 'PPG3' schemes by local planning authorities, many were poorly designed and have not aged well. Redrow's 'Debut' range. Such schemes forced house builders away from their established products and increased land owner expectations of land value. 2017. Deeside.

Alongside CABE, the HBF was (and remains) part of the BfL partnership. The HBF was supportive of the initiative promoting BfL20 "*as a sensible and flexible framework of principles to guide the development of best practice across the wide range of housing market requirements that exist*"<sup>7</sup>. However, the HBF countered CABE's criticisms of housing quality (2004, 2005b and 2007a) by evidencing high levels of customer satisfaction as part of their star rating scheme. In 2006, the HBF published the results of what were to become an annual survey of customer satisfaction in relation to their new home. Created in response to the Barker Review (2004) the 2006 survey results showed that 76% of purchasers were satisfied with the quality of their new home, and 75% would recommend their builder to a friend<sup>8</sup>. By 2016, satisfaction rates had increased further with 86% of purchasers satisfied with the quality of their new home, and 85%

<sup>7</sup> [www.hbf.co.uk/media-centre/news/view/hbf-response-to-cabes-audit-of-new-housing-in-the-north/](http://www.hbf.co.uk/media-centre/news/view/hbf-response-to-cabes-audit-of-new-housing-in-the-north/). Date accessed 19 November 2017.

<sup>8</sup> [www.hbf.co.uk/fileadmin/documents/research/13414\\_Satisfaction\\_aw2forweb.pdf](http://www.hbf.co.uk/fileadmin/documents/research/13414_Satisfaction_aw2forweb.pdf). Date accessed 18 November 2017.

willing to recommend their builder to a friend<sup>9</sup>. Whilst questions are focused on the home<sup>10</sup> as opposed to the quality of the street environment and a wider development, the annual surveys have often been used by the industry to deflect criticisms relating to the design quality of new homes<sup>11</sup>.



**Figure 6: The HBF 5\* house builder scheme** is widely used by the industry. 5\* ratings are reliant on high customer satisfaction levels. Coalville. 2017.

It is therefore curious why the basic design deficiencies that both BfL20 and BfL12 seek to ‘design out’ of new developments are so widespread, particularly since an extensive amount of design guidance has been published (see Chapter 2.3) and the industry body’s support for the initiative.

<sup>9</sup> [www.hbf.co.uk/fileadmin/documents/Customer\\_Satisfaction/2016/CSS\\_2016.pdf](http://www.hbf.co.uk/fileadmin/documents/Customer_Satisfaction/2016/CSS_2016.pdf). Date accessed 19 November 2017.

<sup>10</sup> Questions relate to: service during the buying process, whether their home was completed on time, condition of the home on completion, post completion service and ‘snagging’.

<sup>11</sup> A possible question that could be introduced might include, “How satisfied are you with the visual appearance of your street, thinking about the amount and location of car parking, lighting and landscaping?”.

### **1.3 Navigating the thesis**

The thesis is organised into three parts:

**Part 1 provides the context for the research and an overview of the area of study:**

Chapter 2 critically explores published literature and identifies the gaps in knowledge relating to the application and effectiveness of BfL.

Chapter 3 presents the research aims and objectives, the research methodology and the limitations of the research.

Chapter 4 explores the evolution of the BfL initiative and offers the reader a greater understanding of the tool, its use in practice and the changes made to the tool in 2012.

**Part 2 presents and analyses the evidence:**

Chapter 5 presents the findings of the Three Counties Audit: a review of suburban housing quality across Derbyshire, Leicestershire and Nottinghamshire.

Chapter 6 explores CABE's Accredited BfL Assessor Network and a review of the network conducted by the author.

Chapter 7 introduces the case study (NWLDC) and investigates developments that did not use Building for Life in either their creation or during the local authority's decision-making process.

Chapter 8 presents evidence and considers the effectiveness of BfL in practice. It provides a detailed insight into the effectiveness of the BfL in practice over a ten-year period across a series of major developments, smaller infill schemes and rural exception sites.

**Part 3 offers an evaluation and recommendations:**

Chapter 9 presents a critique of the planning and development systems; the application of the BfL methodology from a Total Design perspective.

Chapter 10 introduces the reader to a new Total Design Model BfL12 as a means by which to improve the effectiveness of the planning system whilst also offering local communities and stakeholders the opportunity to have a more creative and collaborative role in shaping the places where they live. This leads the reader onto **Part Four and the final chapter (11)** that draws together the research within a concise conclusion and recommendations for both policy makers and others seeking to undertake further research within the area of focus.

#### **1.4 Political context**

The Labour administrations of the late 1990s and first decade of the 21<sup>st</sup> century had a strong appetite for design quality (Carmona et al., 2017). Design was championed at a high political level within government, with former Deputy Prime Minister, John Prescott<sup>12</sup> actively involved. Growing public interest in residential design was evident through the airing of television programmes such as 'Grand Designs' (Kevin McCloud) and 'Streets Ahead' (Sarah Beeny).

Whilst no longer produced or aired, Streets Ahead (circa 2004) explored the potential to increase property values by residents working together to improve the aesthetic appearance of their street. Typically, improvements were concentrated on improvements to hard and soft landscaping, reinstating original boundary treatments and the upgrading of tired building facades.

Planning policy and associated government guidance in the early 2000s (DETR, 2000; DETR/CABE, 2000; DTLGR/CABE, 2001; ODPM, 2005 and 2005a) was evidence of the emphasis placed on design quality by government. The government's strongest commitment to improving design quality was most evident through the establishment and financial support of CABE. Largely government funded, the organisation comprised of 122 staff based in Holborn, London with a £3m income in 2009/10. Funding partly came from a range of government departments: Communities and Local Government, Culture, Media and Sport, Health, Home Office, HCA, National Audit Office, NHS (CABE, 2005c, p.31) representative of the government's recognition of the value of design on the cultural, physical and social wellbeing of the nation. Further funding came from consultancy

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<sup>12</sup> The Minister's interest in modern methods of construction and the environmental efficiency of new homes led to the introduction of BfL20 questions relating to these issues.

activities with CABE often involved in delivering training programmes to local authorities and private sector developers. A significant source of income came from its design review services.

Following the credit crisis of 2008, a major change in political control took place in 2010 following the defeat of Labour and the creation of a Conservative-Liberal coalition government. In contrast with the former Labour administrations, the focus on design quality waned considerably as efforts were concentrated on stimulating house building through major planning reforms and deregulation.

The research has therefore taken place within two very different political and economic climates.

### **1.5 Improving design quality in new suburban residential development**

One of CABE's priorities was to improve the quality of new build housing developments through the promotion of BfL20 (CABE: 2004, 2005b, 2005c, p.10, p.24, 2007a, 2010a). The government also introduced policy initiatives to encourage the increased 'take up' of BfL20 around the country through ambitions set within the Green Paper (DCLG, 2007) and the introduction of an optional key performance reporting indicators for local planning authorities<sup>13</sup>. At the time, there was a lack of interest from the RIBA, RTPI and Urban Design Group in the issues related to residential suburban development. For instance, the Urban Design Group was more engaged in issues relating to urban as opposed to suburban locations and developments - reflecting of a wider (and on-going) debate within the Group as to how it can resolve conflicts between what it promotes (high density, compact, mixed use development located in places well served by public transport infrastructure) and what the planning system facilitates: low to medium density, single land use development in more car dependent locations).

In 2007, CABE published recommendations on how issues relating to residential design quality could be resolved (p. 5). CABE's recommendations had not been tested, but nevertheless became the basis upon which local policy was constructed and applied. As such these were

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<sup>13</sup> As part of Local Development Frameworks ('LDF's), local planning authorities were required to prepare 'Annual Monitoring Returns' that captured performance data for central government. Data fields were either compulsory (for instance, house building rates) or optional. An example of an optional field was called H6: Housing Quality that offered local planning authorities the opportunity to declare how new developments performed against Building for Life. Despite requests to CLG, the author has been unable to obtain any nationwide 'H6' data.

recommendations that were not based on evidence, robust testing and critical analysis. In contrast, this research offers recommendations based on empirical evidence and analysis.

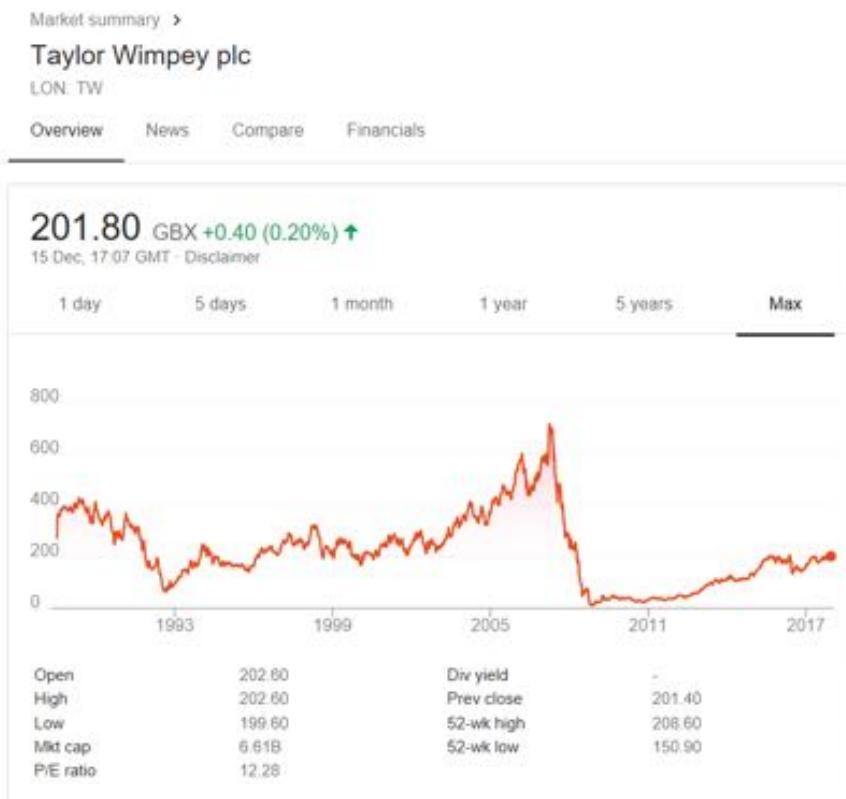


Figure 7: **Taylor Wimpey's share price** since the early 1990s. The company's share price collapsed to 11.03p on 21 November 2008 and has recovered to 194.40p (as of 1 December 2017). This is far from its peak of 705.11p on 20 April 2007<sup>14</sup>.

In 2008 the global credit and financial crisis hit. As with the Great Depression of the 1930s its repercussions were deeply felt, particularly within the house-building sector. In the year following the credit crisis, Barratt lost 40% of its sales, whilst Taylor Wimpey required a £2bn refinancing package<sup>15</sup>. Thousands of jobs created both directly and indirectly by the house building industry were lost. Within a ten-year period (2007-2017) the house building industry has experienced a 'boom', a 'bust' and what some commentators<sup>16</sup> believe to be the making of another boom. In recent years, house builders have experienced a dramatic upturn in their fortunes with share prices

<sup>14</sup> Source: [www.google.co.uk/search?tbm=fin&q=LON:+TW](http://www.google.co.uk/search?tbm=fin&q=LON:+TW). Date accessed 17 December 2017.

<sup>15</sup> 'Hot Property', Business Boomers, Episode 4, BBC2 Television, 17 July 2014.

<sup>16</sup> <https://www.theguardian.com/business/2017/oct/08/the-uk-housing-markets-perfect-storm-and-five-steps-to-avoid-it>. Date accessed 7 January 2018.

recovering. The recovery has been partly attributed to the government's Help to Buy programme<sup>17</sup> where home buyers can access a loan of up to 20% of the cost of a newly built home.

The speed of the industry's recovery from the 2008 crisis was highlighted in a 2014 BBC television programme which reported that Persimmon generated profits of £300m from the sales of 11,000 new homes in 2013, whilst Barratt profits "soared" by 160% during the same period<sup>18</sup>. The focus on design quality waned, particularly in the years immediately after the credit crisis as the government attempted to stabilise the economy and stimulate economic activity. Since the credit crisis, the government has supported the recovery and growth of the house building industry with a commitment to make it easier for the industry to build through: public land release, planning reforms and in the aftermath of the credit crisis - fiscal stimulus packages such as Kickstart, Get Britain Building and Help to Buy<sup>19</sup>. The depth of the financial strife in which the nation's house builders found themselves in was expressed by Ball as a, "*First World War in terms of the scale of loses.*"<sup>20</sup>

Despite the house building industry experiencing an upturn in its fortunes in the years following the credit crisis: sales revenues recovered as mortgage availability increased, demand continued to 'drive up' prices<sup>21</sup> and schemes such as the aforementioned Help to Buy programme offered consumers a means by which financial 'gaps' in affordability could be straddled. However, some within the industry are expressing concern at the wider industry's willingness to continue building "recessionary stock"<sup>22</sup> and cite poor standards of design becoming common features of new build residential developments.

Whilst in 2014 John Prescott had no hesitation in criticising the design quality within the industry<sup>23</sup> the current government has been less willing to criticise the industry. This lack of criticism is not unsurprising considering the economic benefits associated with house building in an increasingly uncertain economic climate. Firstly, because of the global credit crisis and more recently as a

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<sup>17</sup> [www.helptobuy.gov.uk/](http://www.helptobuy.gov.uk/). Date accessed 1 August 2016. <https://www.theguardian.com/business/2017/oct/02/may-help-to-buy-housebuilders-uk-housing-problem>. Date accessed 7 January 2018.

<sup>18</sup> 'Hot Property', Business Boomers, Episode 4, BBC2 Television, 17 July 2014.

<sup>19</sup> Kickstart was a financial stimulus package for the house building industry. Please see Chapter 3.

<sup>20</sup> 'Hot Property', Business Boomers, Episode 4, BBC2 Television, 17 July 2014. Date accessed 1 December 2016.

<sup>21</sup> Exacerbated by 'pent up' demand created by not only years on under supply, but an almost stall in house building rates in the immediate aftermath of the global credit crisis.

<sup>22</sup> Comments of industry insider. Author's notes.

<sup>23</sup> 'Hot Property', Business Boomers, Episode 4, BBC2 Television, 17 July 2014. Date accessed 1 December 2016.

consequent of the United Kingdom's departure from the European Union. Ball explains that house building "*is a small part of national income, but stimulates other demand... house building refreshes parts of the economy other industries can't reach*"<sup>24</sup>. Nonetheless, it is difficult to imagine that house builders would reduce their housing output and compromise their sales, volumes and profits if the government chose to express concerns about housing design quality.

This research has therefore straddled two radically different government positions towards the house building industry; whilst these positions can be partly attributed to wider economic conditions they are also reflective of political ideologies, with Labour administrations favouring greater regulation and control to further the collective, public interest and Conservative administrations supportive of deregulation and greater market autonomy.

In 2010, the research took an interesting turn. CABE had been dissolved following the new coalition government's 'bonfire of the QUANGO's'<sup>25</sup>. Whilst some parts of CABE were 'rescued' and merged into the Design Council, the new organisation had a fraction of its predecessor's budget and staffing. Its status as 'government advisor' was lost (as CABE was officially 'dissolved' by an Act of Parliament) thereby significantly diminishing its influence. The closure of CABE was part of wide reaching austerity measures implemented by the government to curtail public spending and as part of a longer-term strategy to clear the public debt. The 2016 Budget announced further policy initiatives such as "...unlocking more land for housing" releasing enough land for 160,000 homes, over 50% more than in the last Parliament", "...increasing densities on brownfield land" and, "...the construction of a new wave of garden towns and cities across the country" (HM Treasury, 2016, p.38). Council budgets were placed under further pressure as austerity measures continued, with the budget seeking, "a further £3.5billion of savings from public spending in 2019-20" (HM Treasury, 2016, p.23) placing non-statutory functions and roles such as those held by urban designers under increasing risk.

In the years immediately following the credit crisis, the planning system was overhauled, with the National Planning Policy Framework (DCLG, 2012a) and the Taylor Review (DCLG, 2012b) at the forefront of the government's efforts to reduce bureaucracy. Guidance documents such as By

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<sup>24</sup> 'Hot Property', Business Boomers, Episode 4, BBC2 Television, 17 July 2014. Date accessed 1 December 2016.

<sup>25</sup> 'Quango list shows 192 to be axed' (10 October 2010). [www.bbc.co.uk/news/uk-politics-11538534](http://www.bbc.co.uk/news/uk-politics-11538534). Date accessed 10 October 2010. A quango is a quasi-autonomous non-governmental organisation.

Design (DETR/CABE, 2000) and standards such as the Code for Sustainable Homes<sup>26</sup> were reviewed alongside other government published planning documents and subsequently ‘deleted’. The principal underlying political motivations were about stimulating economic growth - they were not about sustaining or improving design quality.

Standards that flourished under the Labour administrations and within a more buoyant economic climate were now longer held in high regard by government. As David Birkbeck of Design for Homes remarked, “*standards were most definitely a dirty word, the government wanted nothing to do with them*”<sup>27</sup>. BfL20 (CABE, 2008) was one such standard - yet an agreement with the HBF saw a new, rewritten version of BfL emerge in 2012 as ‘Building for Life 12’ (BfL12: Birkbeck and Kruczowski, 2014): an industry-led as opposed to government-led standard. Subsequently, BfL20 and in turn what was to become BfL12 avoided the Taylor Review.

A key distinction between the new version of BfL (BfL12) compared to the original (BfL20), was that the shift in focus away from matters relating to the design of internal spaces, construction methods and environmental performance (more private realm) and instead towards the quality of the street environment (more public realm). This structural change was critical in securing support from the HBF whilst also offering an opportunity to address some major issues key stakeholders had with BfL20: the inclusion of design considerations that went beyond national planning policy and Building Regulations. These structural changes attracted some criticism from professionals within the public sector as a ‘watering down’ of BfL, yet these structural changes were required to retain as much of the original ambitions of BfL as possible. Key stakeholders considered that BfL12 needed to *align with* rather than *exceed* national planning policy whilst also not duplicating considerations resolved by other forms of regulatory control, namely Building Regulations.

In 2007 John Stewart, Editor of the HBF’s Housebuilder magazine fiercely criticised BfL20’s scoring methodology (Stewart, 2007). Criticisms of the scoring methodology related to the threshold that had been set to achieve a ‘good’ rating BfL20 (that required 70% of the criterion to be met) and the ‘pick and mix’ approach which enabled any scheme that secured a minimum score of 14 out of 20 to be considered BfL20 compliant. The scoring methodology was increasingly causing concern

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<sup>26</sup> <https://www.gov.uk/government/publications/2010-to-2015-government-policy-energy-efficiency-in-buildings/2010-to-2015-government-policy-energy-efficiency-in-buildings>. Date accessed 19 January 2018.

<sup>27</sup> Author’s notes.

amongst some members of the BfL Partnership. Both Design for Homes and the HBF had informally observed that new developments with a poor street environment could still be considered to meet the BfL20 standard. This was achieved by compensating street environment design failures by boosting performance within another part of BfL20, for example by building some homes to Lifetime Homes standards and exceeding the requirements of the Building Regulations.

As previously discussed, since the global credit crisis house building all but stalled. Media and political attention has shifted towards house building yet the focus of this attention has been on where new housing is located, how much is built (and how fast) and on issues related to affordability. Former Prime Minister, David Cameron championed home ownership and the need to move ‘Generation Rent’ to ‘Generation Buy’ – a political message that has continued to gain momentum, particularly as political concern increases over the potential ramifications of a generation excluded from the housing market. In October 2015, David Cameron “*declared the Tories to be ‘the party of home ownership’*”<sup>28</sup>. This declaration reflected Margaret Thatcher’s Right to Buy initiative of the 1980s that brought equity wealth to a million households by 1987<sup>29</sup> through the introduction of legal freedoms that enabled Council house tenants to buy their rented accommodation at heavily discounted prices. The 2016 Budget highlighted the government’s commitment to drive up home ownership levels (HM Treasury, 2016, p.34), stating its continued commitment to initiatives such as Help to Buy, Help to Buy ISAs<sup>30</sup> and further reforms of the planning system focused on speeding up the process of securing planning permission. Proposals have also included a more zonal based system of planning (HM Treasury, 2016, p.38).

The historic undersupply of new build homes remains a stubborn and persistent problem, as have issues relating to affordability, the ever-increasing average age of first time buyers and more recently the government’s commitment to stimulating house building through the removal of barriers to ‘growth’<sup>31</sup>. News coverage regularly reports on the nation’s housing crisis, the lack of affordable homes, the failure of house building to keep pace with demand and the governments various initiatives to support increased rates of construction, most recently through a new

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<sup>28</sup> ‘Cameron: ‘Turn Generation Rent into Generation Buy’ (7 October 2015) [www.bbc.co.uk/news/uk-politics-34462077](http://www.bbc.co.uk/news/uk-politics-34462077). Date accessed 1 April 2016.

<sup>29</sup> [www.wikipedia.org/wiki/Right\\_to\\_buy](http://www.wikipedia.org/wiki/Right_to_buy). Date accessed 1 April 2016.

<sup>30</sup> Individual Savings Account - tax free savings products.

<sup>31</sup> Whether these are perceived or actual barriers to growth is a subject of debate.

generation of new settlements called Garden Towns (3 in total) and Villages – 14 in total<sup>32</sup> expected to collectively deliver 48,000 new homes at a cost of £7.4m to the government.

On 16 November 2017, Communities Secretary Sajid Javid MP highlighted the positive effects of the government's efforts to increase house building with net completions reaching 217,000 in 2016/17<sup>33</sup>. Javid stated,

*"We have reformed planning rules, leading to record levels of planning permissions being granted... We have fought bureaucratic inertia and vested interests and we have freed up unprecedented levels of public sector land... Our home is supposed to be our anchor, our little patch of certainty in an uncertain world... We risk creating a generation who, in maybe 40 or 50 years, reaches retirement with no property to call their own, and pension pots that have not been filled because so much of their income has gone on rent... A generation that, without any capital of its own, becomes resentful of capitalism and capitalists."*<sup>34</sup>

Within Javid's 3,581-word speech, the word 'design' was not mentioned once. 'Place' and 'quality' were afforded a single mention each, whilst 'build' was mentioned 25 times, 'more' 29 times and 'homes' 35 times. This has captured an interesting and challenging political dynamic to the research. How might residential suburban design quality be improved when the government's political priorities relating to house building are: 'build', 'more', 'homes'?

The issues with improving suburban housing design cannot be divorced from the wider political context of England's housing crisis. Therefore, for design quality considerations to exert any influence over policy it must negotiate a wider political context. Media coverage has brought issues related to where new homes should be built (including the proposed release of green belt land and green belt 'swaps'), housing affordability and housing supply increasingly into the public consciousness. The need to build more homes was highlighted in the 2016 Queen's Speech at the State Opening of Parliament<sup>35</sup>.

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<sup>32</sup> Garden Villages: Location of first 14 announced (5 January 2017) dated accessed 5 Jan 2017.

<sup>33</sup> [www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/659529/Housing\\_Supply\\_England\\_2016-17.pdf](http://www.gov.uk/government/uploads/system/uploads/attachment_data/file/659529/Housing_Supply_England_2016-17.pdf). Date accessed 19 November 2017.

<sup>34</sup> [www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/659529/Housing\\_Supply\\_England\\_2016-17.pdf](http://www.gov.uk/government/uploads/system/uploads/attachment_data/file/659529/Housing_Supply_England_2016-17.pdf). Date accessed 19 November 2017.

<sup>35</sup> "My government will support aspiration and promote home ownership through its commitment to build a million new homes" (HM The Queen, 18 May 2016) [www.gov.uk/government/speeches/queens-speech-2016](http://www.gov.uk/government/speeches/queens-speech-2016). Date accessed 5 March 2017.

Nevertheless, there are indications that the tide may be starting to turn. On 12 December 2017 Javid signalled that the government may be beginning to rebalance its focus from quantity and towards quality *and* quantity:

*"...we want to give communities a stronger voice in the design of new housing and drive up the quality and character of new development.*

*So that's why, along with industry and local councils, we'll be hosting a national housing design conference to raise design quality across the country.*

*"I'm clear we need to build homes that people not only want to live in, but live next door to as well. So working with experts, this will be a fantastic opportunity to show how the quality of new homes is as important as the quantity."*<sup>36</sup>

Whilst BfL has successfully ‘weathered’ a politically sensitive time for design and wider State regulation in the form of the planning system, the last decade has exposed the potential vulnerability of the design agenda when political ambitions shift, particularly when the design agenda is primarily led by government and its agencies.

## **1.6 The problem with suburban design quality**

*"As you creep along a highway... you pass that awful new billboard: COMING SOON: NEW HOMES!...It is not just sentimental attachment to an old sledding hill that has you upset. It is the expectation, based on decades of experience, that what will be built here you will detest. It will be sprawl: cookie-cutter houses, wide, treeless...mindlessly curving cul-de-sacs, a streetscape of garage doors..."* Duany, et al. (2001) p.ix-x.

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<sup>36</sup> [www.24housing.co.uk/news/government-to-host-conference-on-housing-design/](http://www.24housing.co.uk/news/government-to-host-conference-on-housing-design/). Date accessed 1 October 2017.

British house building has been the subject of research over the preceding two decades, particularly during the existence of CABE whose activities included undertaking, commissioning and publishing an extensive array of research relating to the design of the built environment<sup>37</sup>.

CABE was successful in raising design higher within the political agenda, securing an increased focus on design quality and a greater emphasis on design considerations within government planning policy and government endorsed publications. Prior to CABE's demise, it had successfully championed the publication of 'World Class Places: The Government's strategy for improving quality of place' (HM Government, 2009). The document was notable as it was badged not as a CABE or government department publication; but instead a 'HM Government' publication – affording the national design agenda its most high-profile platform outside of national planning policy.



Figure 8: **Not everything is like Accordia**, Cambridge (winner of the 2008 RIBA Stirling Prize). 2015.

Whilst publications provided recommendations as to how design quality could be improved, there was a fundamental gap in understanding the dynamic between the various actors in the development process<sup>38</sup> , particularly at the local level. CABE's efforts to improve housing quality ranged from research, guidance, local authority training, advocacy work and Building for Life

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<sup>37</sup> <http://webarchive.nationalarchives.gov.uk/20110118095540/http://www.cabe.org.uk/resources>. Date accessed 31 August 2017.

<sup>38</sup> Developers, local planning authorities, central government, community stakeholders and home buyers.

Awards<sup>39</sup>. Yet by 2010, CABE stated, “*The quality of housing has not improved and, while there are slightly more good schemes, there are many more poor schemes*” (2010, p.6).

Governments can influence design quality in a variety of ways: national design policy, directives and instructions to local planning authorities through Chief Planner Letters and/or Ministerial statements and through public sector land disposals. Currently, public land is being sold to volume house builders with no expectation or requirement for more innovative and creative ways of building homes and communities. The HCA’s 2017/18 Land Development and Disposal Strategy includes no reference to design quality within its “*land disposal principles*” (2017, p.7). Instead the strategy emphasises “*value for money considerations*” (2017, p.6). This contrasts with one of the HCA’s predecessors, the Housing Corporation where design and quality were primary considerations (Housing Corporation, 2007).



Figure 9: **More common than Accordia - homes that could be ‘anywhere’** (Persimmon Homes). Neither traditional nor contemporary, ‘tiled’ porch canopies (right side) are fabricated from moulded glass reinforced plastic and spray painted. The minimal landscaping provided in the form of turfed front gardens are less an attempt to create a pleasant landscaped environment or usable front gardens, but more the cheapest way to surface the left-over pieces of land between the back of the pavement and the face of buildings. Convenient and discreet waste storage has been overlooked in the design of this development. Derby. 2015.

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<sup>39</sup> In conjunction with the Building for Life Partners.

Whilst the economic, environmental and social deficiencies of – and alternatives to – suburban forms of development have been extensively discussed by Crosby (1965), DeBotton (2006), Duany et al. (2010), Essex County Council (1997), Gallagher (2014), Girling (2005), Hall (2014), Katz (1993) and the TCPA (2014) - the growth of suburbs and the construction of detached, two storey homes remains the dominant typology in the new build housing market within the Midlands and other regional towns and cities.

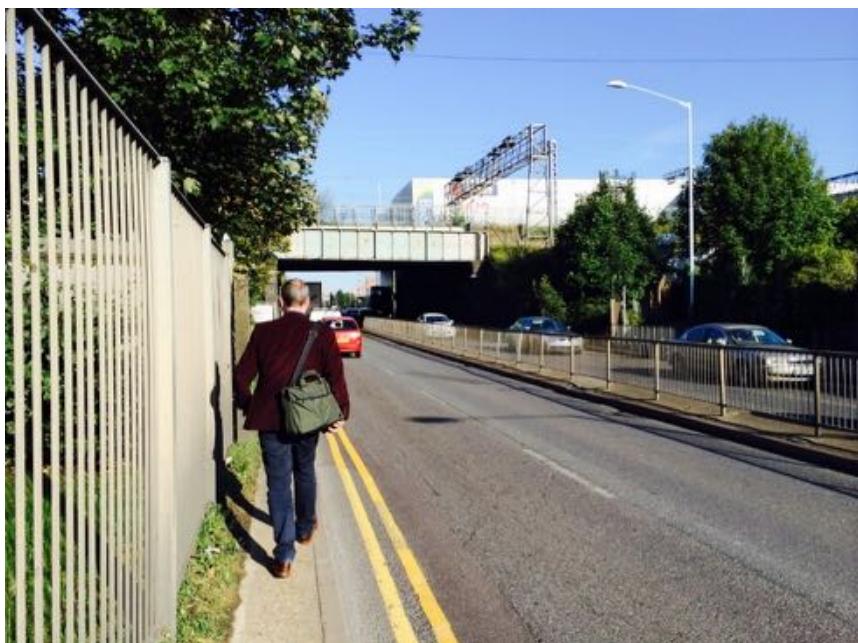


Figure 10: **Disconnecting people from places.** If the quality of the walking experience between people's homes and local destinations is poor, people will be more inclined to drive. Guard rails along the central reservation physically prevent people from crossing this busy thoroughfare if they decided to walk to the local supermarket (just beyond the bridge). In Romford, a five-minute walk between a new residential development and the nearest supermarket is an unpleasant and intimidating experience. 2016.

Exceptions to this are cities experiencing high levels of economic growth, prosperity and demand. London, Cambridge and Manchester where high land values, strong public transport infrastructure and limited land availability are witnessing the creation and construction of well-designed, high density and mixed-use developments. Cambridge is establishing a reputation as a showcase for innovative, residential design attracting premium developers and high-profile architects such as Alison Brooks. High land values and strong demand fuelled by the relocation of major employers such as Astra Zeneca<sup>40</sup> to the area require buyers to have at least £1m available to be able to buy

<sup>40</sup> [www.cambridgeindependent.co.uk/business/business-news/astrazeneca-s-move-to-cambridge-already-making-a-difference-1-4806152](http://www.cambridgeindependent.co.uk/business/business-news/astrazeneca-s-move-to-cambridge-already-making-a-difference-1-4806152). Date accessed 13 October 2017.

the ‘cheapest’ properties on offer (RICS, 2016). However, if we look beyond these higher market value areas and towards more ‘ordinary’ towns and villages – and a different story is taking shape.

Elsewhere, the English planning system facilitates sprawl as much as it facilitates more compact and sustainable forms of growth. Despite urban design promoting more compact forms of growth, strategically as opposed to politically located; close to existing or proposed transport infrastructure and employment centres, there is an important role for urban designers to contribute towards making suburban, low to mid density, car dependent developments as well designed as they can be within tight creative and commercial parameters.

As the government seeks to nurture and sustain economic recovery, increase house building rates and address issues relating to the affordability of new homes there is no political appetite to challenge the suburban model of development per se. These developments – as Duany et al. (2010) lament – typically comprise of ‘cookie cutter’ house types – both blind and indifferent to their locations, neither traditional nor contemporary; devoid of meaningful landscape features and with more parked cars than people ‘animating’ their lifeless streets (CABE 2004, 2005b, 2007a, 2010, HCA, 2009, 2010).

It is almost twenty years since the publication of the Urban Task Force report (1999) and what marked a shift in government attitudes to the role of the State and the design quality of the built environment. During the late 1990s and early 2000s an extensive amount of design guidance was published (see Chapter 2.3) to support government design policies and aspirations yet basic design deficiencies remain commonplace, such as the absence of good perimeter block structure.



Figure 11: **Fragmented or broken perimeter blocks** are a characteristic feature of many new build suburban typology developments. Ashby de la Zouch. 2010.

Within the context of this thesis, design quality relates less to the quality of individual dwellings and more to the collective qualities or deficiencies of the ‘place’ as a whole (i.e. urban or settlement design); with the ‘place’ comprised of streets, spaces and buildings – connected or disconnected from their wider context.

### 1.7 Measuring design quality in new suburban residential development

Design quality is considered and measured<sup>41</sup> within this thesis by way of a design quality indicator called ‘Building for Life’ (BfL) which has evolved from a 20-point version (BfL20: CABE, 2008) to a more concise 12-point version (BfL12: Birkbeck and Kruczowski, 2012, 2014, 2015). The initiative is discussed in greater detail within Chapter 4. The nearest comparable design quality indicator is ‘BREEAM Communities’<sup>42</sup> though BfL20 and BfL12 are the only design quality tools that have received government and industry support and endorsement.

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<sup>41</sup> Both within this thesis and by an increasing number of house builders and local planning authorities.

<sup>42</sup> [www.breeam.com/communities](http://www.breeam.com/communities). Date accessed 2 April 2017.



**Figure 12: BfL12 was designed to focus design attention back to street quality considerations following the government's retreat from wider design issues with new build homes. Milton Keynes. 2017.**

Originally launched in 2001 and comprising of twenty design considerations (CABE et al, 2001) despite the changes made in 2012, many of the design principles embedded within the original method remain:

- Physical connectivity (into, within and through a place) with an emphasis on pedestrian and cycle connections.
- Access to local facilities, services and public transport within a short walk or cycle from people's homes.
- Social diversity through a mix of housing tenures and types.
- Character and identity.
- Responsiveness to context: opportunities and constraints both on and off a development site (for instance, short to long distance views of natural or manmade features).
- Urban structure, principally the formation of robust perimeter blocks and a hierarchy of streets and spaces.
- Legibility (the ability of a person to create a mental map of a place; see Lynch, 1960).
- Inclusive street design and the integration of car parking.

Prior to the 2001 launch of BfL new build housing in suburban and rural locations was typified by tract style housing. In the absence of any design guidance or support, fields around the edges of

towns and villages were gradually consumed between the 1960 and early 2000s by what can be termed ‘reluctant growth’ patterns. This reluctant growth is characterised by ‘snakelike’ road patterns that contrast distinctively with the character and urban grain of older street patterns; roads lazily snake out into the countryside before turning back on themselves; creating disorientating and disconnected places. The subtle curvature of these roads creates environments where even the slightest sense of direction is quickly lost. With buildings and roads that look identical to one another a series of ‘non-places’ have been created around the edges of countless towns and villages across the country have been created.



Figure 13: **Tudorbethan homes, Assarts Farm, Nottingham.** Many new suburban estates around the edges of English towns and cities during the 1980s, 1990s and early 2000s were characterised by curvilinear road layouts around which new homes were placed, often in ‘Tudorbethan’ styling. 2017.

One such example of this reluctant growth is the village of Castle Donington located to the south of Derby. Castle Donington is typical of many settlements that have experienced post war suburban growth. This ‘reluctant growth’ ignores the inevitability of future development. With each individual development designed in isolation from the next, no apparent thought was afforded to how a series of connected developments (or a connected place) might be created<sup>43</sup> resulting in

<sup>43</sup> In the researcher’s experience, even where a developer might wish to safeguard a future connection by way of a ‘ransom strip’ to land they may or may not have a future option on; local political pressure can be exerted to remove

streets that seem to lead somewhere, but instead lead to a dead end. The absence of even the most basic regard for master planning is a key defining characteristic of these edge (or former edge) of settlement suburbs.



Figure 14: **The reluctant growth of Castle Donington.** The street patterns to the left of the white dashed line are those created once the local authority prioritised design quality. These street patterns are clearly more connected than those created in the preceding decade. Base map source: Google Maps.

The design of these sprawling, edge of settlement developments is partly a result of technical highways standards that require changes in horizontal road alignment as the principal method of speed control. These standards consistently override other design considerations, for instance walkability, wider connectivity, character and response to context<sup>44</sup>. The lack of potential future connections is often because of local political pressure with a perception that the provision of a future connection is an informal acceptance of development on adjacent undeveloped land.

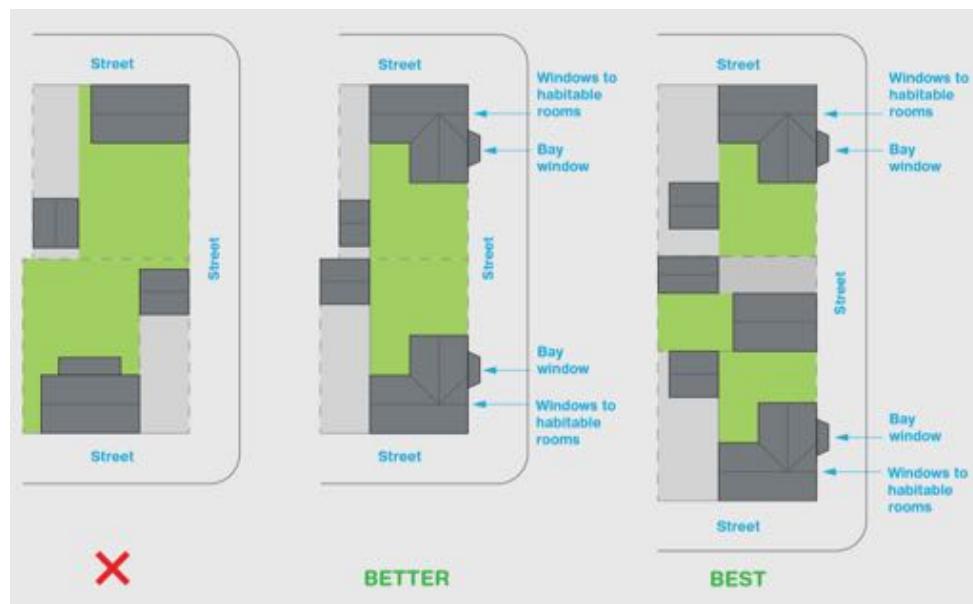
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potential future connections as a form of resistance (or blocking) to future development. Envisaged as a way to prevent or frustrate future growth, in practice land is accessed another way and a disconnected tangle of streets continues over time.

<sup>44</sup> For instance, it is not uncommon for such development to fail to take basic opportunities offered by existing landscape features, such as mature trees that could become memorable focal points within a development. Instead, trees were commonly either removed or retained between building plots or placed within private back gardens – almost forgotten.

In this absence of any other design regulation or requirements, highways regulations largely dictate the layout of these growing settlements. Basic plotting principles are employed, with building setbacks dictated by the parking arrangements afforded to each home as opposed to the creation of a cohesive street composition. Homes with side of plot parking are located closer to the street, whereas homes with integral garages are set back c.6m from the edge of the pavement. Building lines are staggered frustrating the ability to create even the most basic distinctions between street types such as wider avenues and narrower, more intimate lanes.

Standard building footprints - typically 8m x 8m and local authority 'back to back' distances (typically 21m) generally define garden depths of c.10m and the resultant space efficient, but undermined block structure. This block structure creates a two as opposed to a four-sided perimeter block.



**Figure 15: Basic design principles.** The graphical expression of design principles linked to BfL12 in local policy. NWLDC, 2017, p.18.

As land prices and development costs have continued to increase, house builders have sought to maximise the value extracted from developable land. Spaces between homes have been reduced with detached homes 'plotted' as close to each other as possible with minimum distances c.1.0m – the minimum space within which a bricklayer can work.

BfL12 seeks to address the worst excesses of suburban volume produced by residential developments by promoting more connected street patterns, encouraging the creation of more local and characterful places, better spatial definition, improved legibility alongside. It also seeks to address other considerations such as the enhanced integration of car parking within the street environment, delineation of public and private space and waste storage. As such, BfL12 is about improving the everyday, ordinary places where many people live. The questions reflect basic design considerations that need not necessarily preclude the use of standard house types.

## **2. Literature Review: Knowledge gap**

The following chapters explore the wider context of BfL to position this research within a body of published literature whilst identifying gaps in knowledge, providing a justification for the research that has been undertaken.

For the purposes of contextual completeness, the literature review is thematically based: Housing supply and reforming the planning system (Chapter 2.1), Innovation in planning and design (Chapter 2.2), Design regulation, standards and guidance (Chapter 2.3), Design quality and value (Chapter 2.4), Consumer behaviour and decision making (Chapter 2.5) and Building for Life (Chapter 2.6).

### **2.1 Housing supply and reforming the planning system**

A considerable amount of published research exists relating to housing supply and the planning system:

- Boosting housing supply, addressing affordability and developing a better understanding of the impact of market and regulatory forces.
- The emergence of the nation's major house builders.
- The nature of the house building industry.

#### Boosting housing supply

The challenges associated with increasing housing supply to both address shortfalls in provision and affordability have remained a stubborn problem over the last 20 years. Efforts to resolve these issues by various governments have regularly taken the form of specially commissioned reviews: Barker (2004), Calcutt (2007) and Lyons (2014). Others have also sought to address issues relating

the housing supply (BSHF, 2009, 2010, 2011; CPRE, 2005; RIBA, 2009, 2012; TCPA, 2015) with Sir Oliver Letwin leading the government's most recent review<sup>45</sup>.

Each review has provided recommendations to government, identifying - amongst other issues - deep rooted issues within the planning system, particularly with respect to the allocation of land for residential development; the speed and responsiveness of the planning system.

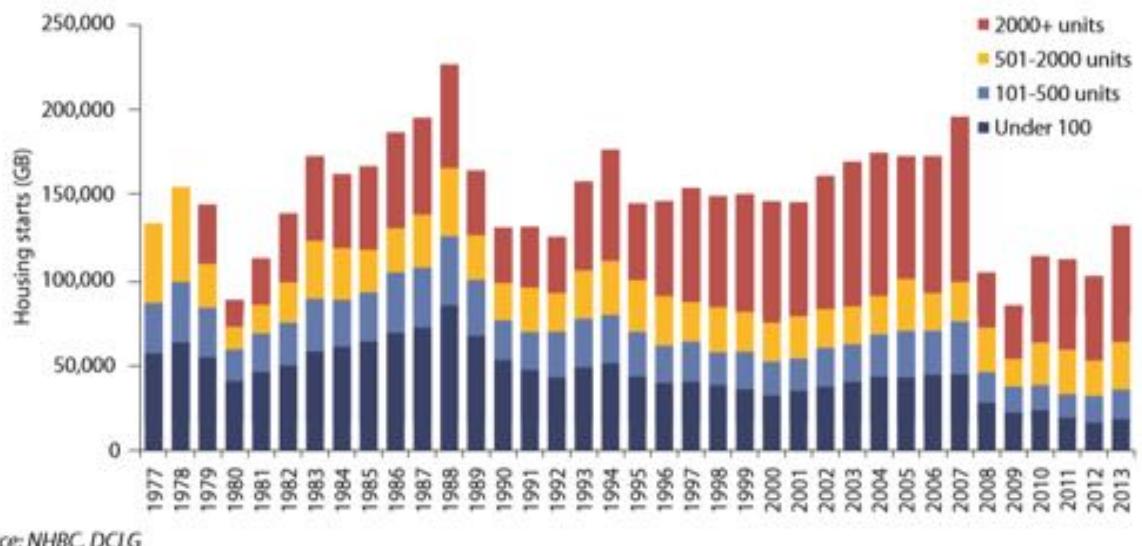


Figure 16: **The supply of new housing by type of developer** (source: Lyons, 2014, p.103). The impact of the global credit crisis on housing starts is evident by a rapid contraction in development activity by the largest house builders in response to a collapse in consumer confidence and mortgage lending.

Barker, for instance, called for “*a substantial streamlining of national policy*” (2004, p.12). Barker continued, “*A desirable goal would be to reduce over 800 pages of policy to fewer than 200 pages*” (2004, p.164). In contrast Calcutt claimed, “*Planning Policy Statement 3 (PPS3), published in late 2006, provides a sound policy framework for ensuring that an adequate supply of development land is available*” (2007, p.6). Barker advocated the need for a faster system of local plan making, better resourced planning departments and a more responsive development control system achieved by, “*reduc[ing] the amount of information required to support applications. Local planning authorities should operate on a more risk-based and proportionate system, to cut applicant costs and free up planning departments resources*” (2004, p.13). Calcutt remarked,

<sup>45</sup> <https://www.gov.uk/government/news/independent-review-to-tackle-barriers-to-building>. Date accessed 18 January 2018.

*"Our challenge is to deliver a supply of housing where it is needed, for those who need it, at a price which is affordable for the homebuyer, which is commercially viable and which contributes to our ambitious zero carbon targets. Land is key to housing delivery. Our Review has reached the conclusion that given sufficient land, and subject to our recommendations, the industry and its supply chain has the capacity to meet the Government's objectives on volume, quality, environmental performance and affordability" (2007, p.6).*

Barker and Calcutt highlighted significant issues in the release of land for development, with Calcutt stating,

*"There is much public debate about the supply of land. The development industry and its advocates complain that the planning system releases too little land, and that its release is slow and unpredictable. The industry's critics assert that developers do not take full advantage of the available land, preferring to profit from land value inflation with the minimum of effort given to actually building houses" (2007, p.32).*

Both Barker and Calcutt emphasised the importance of ensuring that land release was managed in a responsible way; guarding against the risk of unchecked urban sprawl (Barker, 2004, p.43; Calcutt, 2007, p.6). However, these issues remain stubbornly entrenched over a decade later. With the global credit crisis of 2007-2008 leading to a sharp reduction in new build rates, Lyons observed, *"the impact of the 2008 financial crisis on the house building industry was severe. Housing completions by private enterprises fell by 46% between 2007 and 2010"* (2014, p.102). Lyons continued,

*"We need to build at least 243,000 homes a year to keep up with the number of new households being formed, but last year we only built 109,000 homes. Indeed, we have only managed an average of 137,000 homes a year over the last ten years. Without a change of course, it is predicted that the country will be short of up to two million homes by 2020" (2014, p.6).*

Lyons cited two key sources of constrained supply: land supply and capacity, *"there has also been a change in the shape of the house building industry itself. During the 1980s there were on average 10,000 active SME builders (those building 500 units or less) delivering around 57 per cent of all output; last year there were only around 2,800 active small builders producing 27 per cent of all new homes"* (2014, p.6-7).

In 2017, the government's White Paper entitled, 'Fixing our broken housing market' placed considerable emphasis on the lack of new build housing. The government stated, "*we haven't built enough homes*" (DCLG, 2017, p.9); requiring annual build rates of up to 275,000 homes per annum. The government stated that the causes for the housing crisis were, "*threefold: not enough local authorities planning for the homes they need; house building that is simply too slow; and a construction industry that is too reliant on a small number of big players*" (2017b,p.9).

The relevance of the Barker, Calcutt and Lyons reviews of house building cannot be discounted within a thesis related to volume house building. In a market where supply is constrained for one or a variety of issues, it is inevitable that wider considerations such as those relating to design quality can be perceived as obstacles to boosting housing supply. Yet *design thinking* might offer the opportunity to improve design quality but also the speed and efficiency of the planning system.

None of the reviews discount the importance of retaining a focus on design quality as part of a wider agenda to boost housing supply and create a more responsive and efficient planning system. Each of the reviews advocated a universal approach or method whereby design considerations were given due regard in the determination of planning applications; addressed in an objective and justified manner, and not as the RIBA remarked, "*Developers and architects continue to find themselves at the sharp end of refusals on spurious design grounds while homebuyers also suffer as poorly-designed schemes are nodded through the planning process*" (Calcutt, 2007, p.66).

Barker advocated the use of design codes, pre-application discussions, design champions and design review as effective tools for raising standards and objectifying the process whilst increasing the design quality more broadly as opposed to a handful of "*prestige developments*" (2004, p.13), echoing the concerns that CABE had begun to voice with the first two of its housing quality audits published<sup>46</sup>. A sentiment reinforced by Lyons, "*good quality must therefore extend beyond exemplar developments and become a reality in all of our communities*" (2014, p. 119) and Calcutt, "*Future generations will not thank us if growth in housing supply is achieved only by delivering large numbers of poor quality homes. If the quality of new housing is poor, in design or construction, it will rapidly become a cause of fresh economic and social problems, expensive to resolve and with consequences well beyond the housing itself*" (2007, p.62).

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<sup>46</sup> Three audits were published by CABE, the third audit was published in 2007 after the Barker Review was published.

Calcutt advocated the use of design review but went beyond Barker's recommendations by setting out how a process might work: "*there should be a single design review process for housebuilding, arranged and available nationwide. The assessment might take Building for Life as a starting point... We also recommend that this process should allow for type approval of standardised designs*" (2007, p.68-69).

Whilst the Lyons Review broadly explored the same thematic areas and issues as Barker and Calcutt (land supply, increasing the number of housing providers and reforming the planning system) the review devoted considerable attention to the importance of design quality. Lyons emphasised, "*Good design goes beyond the individual building and encompasses the way a whole new development works within a place. This includes everything from how the development integrates into its surroundings, its connectivity to amenities and how much external storage space is provided. The Building for Life 12 tool has been developed to address these broader, place-shaping issues*" (2014, p.120). Lyons also considered the potential for design tools to reshape discussions on planning applications, whilst also encouraging consumers to consider design quality alongside location and price when buying new homes: "*Building for Life 12 standard should be referenced and encouraged by all Local Plans as a collaborative tool which helps create good places*" (2014, p.122).

Despite the attention afforded to design quality by Barker, Calcutt and Lyons; and their respective recognition of the value of BfL20/12 (Calcutt/Lyons), neither review explored the barriers to BfL20/12 compliance in new build developments and the deeper, underlying issues that lead to below standard schemes.

#### Exploring the origins of house builders

The origins of England's speculative house building industry can be traced back to the building boom of the 1930's, where easy access to mortgages and an absence of planning regulation made home ownership both affordable and achievable. Yet this interwar building boom with its plentiful supply of new homes - hailed by some politicians as a model for house building today - took place within a completely free market: there was no planning system. These free market conditions gave rise to unchecked growth (and the need for planning regulation) as ribbon developments snaked along

roads leading out from towns and cities<sup>47</sup>. Eventually the frenzy of speculative house building began to cool as house prices dampened as supply began to outpace demand.

Many of the country's largest house builders were established or can trace their current market domination back to the 1930s and the preceding decades: Wimpey (1880), Bovis (1885), Bryant (1885), Wilcon (1904), Taylor Woodrow (1921), Miller (1927)<sup>48</sup>.

	1995		2000		2006
Wimpey	7609	Wimpey	11437	Persimmon	16701
Beazer	6679	Barratt	10636	Barratt	14601
Barratt	6601	Beazer	8223	Wimpey	13616
McLean/Tarmac	6140	Persimmon	7035	Taylor Woodrow	8294
Wilcon	3873	Bellway	5714	Bellway	7117
Bellway	3813	Westbury	4435	Wilson Bowden	5628
Bryant	3733	Wilcon	4215	Redrow	4735
Persimmon	3593	McAlpine	4007	Miller	3960
Raine	3458	Bryant	3961	Gladedale	3854
Lovell	2943	David Wilson	3604	Bovis	3123
Top ten	48442	Top ten	63267	Top ten	81629

Figure 17: **The nation's largest house builders** (source: Calcutt 2007, p.12).

Wellings (2006) explored the evolution, growth and consolidation of the nation's house builders alongside the 'boom and bust' cycles associated with the housing market. Our understanding of the industry is further increased by works by Calcutt (2007) and Lyons (2014), with Calcutt (a former house building executive) providing a particularly insightful perspective into how housebuilders operate. During the 1990s, the era of the national house builder came into being, with a rapid acceleration in the percentage market share held by the top 10 house builders increasing from 27% in 1990 to a peak of 47% at the turn of the millennium (Wellings, 2006, p. 93-94). This consolidation has been accompanied by increased standardisation of designs with, "*organisational advantages in that work can be progressed more efficiently across a range of standardised housetypes and the costs involved in site management will be lower per unit*" (p.142).

<sup>47</sup> 'Hot Property', Business Boomers, Episode 4, BBC2 Television, 17 July 2014. Date accessed 1 December 2016.

<sup>48</sup> Wellings (2006), p.74 and p.77.

Wellings charted the increased dominance of the housing market by an increasingly smaller number of companies, through consecutive take overs and mergers accelerating production dominance. As Calcutt remarked, “*whilst there is a long ‘tail’ of small companies, the vast majority of which build fewer than 10 housing units a year, there is a much smaller number of companies, which produce several thousand new homes every year*” (2014, p.106) – a consequence of mergers - and mergers upon mergers. In 2007, Barratt Homes (with Ward Homes) bought Wilson Bowden and David Wilson Homes for £2.7bn, a move that subsequently saw Barratt’s southern brand: Ward Homes (a company dating back to 1937) disappear in 2017. Redrow plc. bought Derby based developer Radleigh Homes (2017). The Bovis Homes crisis of 2017<sup>49</sup> led to the prospect of the company being bought out with takeover bids from Galliford Try plc. and Redrow plc<sup>50</sup>. The ‘top ten’ house builders have subsequently increased their share of production by the following percentages over the course of the 20<sup>th</sup> and start of the 21<sup>st</sup> centuries:

Table 1: **Output of the nation’s largest house builders** by volume (adapted from Wellings (2006), p.105).

	<b>Top ten volume by units</b>	<b>Top ten %</b>
1930s	16-18,000	6-7
<b>1960</b>	<b>14-16,000</b>	<b>8-9</b>
1965	17-18,000	8-9
1973	32-33,000	17-18
<b>1980</b>	<b>36,000</b>	<b>28</b>
1988	51,000	27
1995	48,400	32
<b>2000</b>	<b>63,500</b>	<b>44</b>
2004	76,100	46

<sup>49</sup> ‘Bovis to pay £7m to compensate customers for poorly built homes’ [www.theguardian.com/business/2017/feb/20/bovis-to-pay-7m-to-compensate-customers-angry-at-poorly-built-homes](http://www.theguardian.com/business/2017/feb/20/bovis-to-pay-7m-to-compensate-customers-angry-at-poorly-built-homes). Date accessed 21 September 2017.

<sup>50</sup> [www.bovishomesgroup.co.uk/possible-offer-website-t-c/](http://www.bovishomesgroup.co.uk/possible-offer-website-t-c/). Date accessed 4 April 2017.

Lyons remarked that the process of consolidation has contributed to the contraction of housing supply<sup>51</sup> over the last 40 years, “*This contraction is underpinned by three factors: the house building industry is susceptible to recessionary forces and cyclical fluctuations in the housing market; the number of small and medium sized firms building new homes has decreased; and mergers designed to increase access to land have led to a reduction in the number of homes being built than would otherwise have been the case without the mergers*” (2014, p.102).

A substantial percentage of new build homes are now produced by a small number of house building companies, with three ‘super’ volume house builders dominating the market place; with the difference in housing output between the third and fourth largest house builders being over a two-fold increase. Increased consolidation has been accompanied by increased repetition and standardisation with the regional variation once offered by smaller, more local builders all but disappearing. Whilst design quality was not a focus of Wellings’ (2006) research, he noted that acquisitions typically involved keeping the offices, land and personnel of the former company but replacing the house types they built with their own.

#### The nature of the house building industry

A significant amount of research has been concentrated in exploring the nature of the speculative house building industry (Ball, 1999; Barlow, 1999; Golland and Blake, 2004; Hooper and Nicol, 1999, 2000; Leishman and Warren, 2006; Leopold and Bishop 1983, 1983b; and Wellings, 2006).

Wellings (2006) comprehensive review of the British house builders provides a thorough and detailed insight into the nature of industry, how it is structured and how it operates. Wellings explores the *speculative* nature of the house building industry – a term that has been often used to defend standardised housing designs. Wellings argued, “*a wide range of other industries supplying the retail customer are also speculative in that the goods are produced and made available in advance of the consumer’s decision to purchase, motor car and the retail industry being examples, yet references to the speculative car industry or the speculative clothing industry are never made*” (2006, p.9).

Hooper and Nicol (2000) explored change and concentration within the house building industry. Of those house builders interviewed, 61.25% employed standardised house types (p.67), with a

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<sup>51</sup> The withdrawal of the local authorities from house building has also been a major contributing factor.

general resistance by house builders to provide structural, façade or layout adaptations (p.71) with the most common reason cited for not allowing structural adaptations as company policy (p.72). Interestingly, of the reasons cited for not allowing adaptations to facades, of the larger house builders (2000+ units), whilst three out of five cited company policies. A greater number – 4 out of 5, cited planning controls. The research is of relevance in that it emphasises the importance attached by house builders to largely rigid standardisation that, “*could be seen to be potentially a problem in terms of urban design, if such standardised designs produce monotonous residential environments*” (2000, p.74). However, Hooper and Nicol remark that standardisation need not preclude “*successful urban designs*” from being produced, “*Certain housebuilding companies can utilise standard house types and still develop award-winning schemes. This can be achieved through an imaginative combination of house types, built forms, landscaping and estate layout. The differences between those companies which utilise standard house types less successfully, in terms of visual impact, and those that are able to use them in a sympathetic manner, is an area that requires further research*” (2000, p.74). The author’s research includes design quality audits where it is identified that design failures relating to standard house types are not necessarily due to standardisation per se, but instead the quality of the standard house types employed. For instance, a house builder with a good range of standard house types will have a wide range of building typologies to enable designers to respond to particular site and contextual conditions and features with ease.

Wellings research offers interesting sources of information including the “*origin of the dominant individual*” (2006, p.132) within the top 20 house builders during the late 1990s. Of these four came from the building trade, three were civil engineers, three were surveyors, three were accountants, two were estate agents, one was a lawyer, one a school leaver and the last an aristocrat. Wellings observations are a useful reminder that those leading house building organisations and are informing the way in which the built environment is shaped do not represent the architectural, urban design, planning or landscape professions. As such, they are likely to be more ‘scientific’ and less ‘artistic’ in their thinking – thereby creating the basis for a disconnect in thought processes and understanding where external bodies (say, from a local planning authority or other organisation with a design remit) seek to ideas and principles related to urban and settlement design.

An area of relevance to this research relates to a small yet particularly significant element of Wellings observations relating to the regional structure of one national house builder, whereby if

individual regions met their targets they could operate relatively autonomously (2006, p.162). This highlights an area that has not been researched relating to the extent to which individual regions of a house builder are held to account by their Head Offices and to what extent their activities are subject to internal scrutiny. The autonomy of individual regions has clear implications for design quality, whereby if there is no requirement to report to Head Office performance data relating to design quality, the acceptable of business operations and performance is limited to units built, profit made and average sales prices.

Wellings conclusions reinforce the importance of the role of the dominant individual and their role in raising design quality (2006, p.132). Quoting Hyde, Wellings emphasises that house builders are driven by the pursuit of profit, "*Hyde put the profit motive succinctly when asking why men pursue particularly lines of business activity: 'The answer is that, for the majority, they do what they do simply in order to make the greatest amount of money'*" (2006, p.250).

Golland and Blake (2004) explored the nature of housing policy, housing demand and emphasised the importance of a holistic approach when exploring problems with housing, arguing that the problems associated with house building are a consequence of interplay between various actors that involve more than just house builders themselves. Golland and Gillen argued that house builders work within a political and economic climate from which they cannot be divorced; warning that, "*without doing this, there is a danger of blaming those directly responsible for housing development for all of today's problems*" (2004, p.45).

## **2.2 Innovation in planning and design**

The planning system and the house building industry are not recognised for a high degree of innovation both in terms of working practices or the outcome (product) of these practices. A significant body of research reflects the lack of innovation within the house building industry most notably by Ball, Barlow and Hooper and Nicol; and more recently by Calcutt and Lyons.

### Innovation with the house building industry

Whilst innovation within house building is an area of interesting and engaging debate within the context of this research, the presence or indeed lack of innovation in terms of employing modern

methods of construction through either new material and/or processes does not necessarily preclude good design standards from being achieved as argued by Hooper and Nicol (2000, p.74). This is also evidenced by CABE's housing audits (2004, 2005b, 2007) and the Kickstart audits (HCA, 2009 and 2010) where the few schemes that were classified as meeting a 'good' standard under BfL20 were not innovative in their form of construction and instead created through more conventional practices and products.

Barlow argues that, "*house builders have been notoriously slow to innovate...firms will have to reassess their strategies to ensure future success*" (1999, p.1) though concedes that the nature of the house building market where supply has been limited has resulted in a situation where, "*many firms were virtually guaranteed high profits, and the housing product was of secondary importance...this meant that speculative house builders saw no need to change their traditional land-orientated competitive strategies*" (p.25).

Barlow also argued that house builders would be forced to change as there will be tighter controls over environmental standards, planning policy and rising construction costs. With respect to planning policy, Barlow's research coincided with the publication of the Urban Task Force's Report (1999). It was in this context that Barlow argued that increased emphasis on brownfield development rather than "*'easy to develop' greenfield land*" (1999, p.27) would stimulate change. Golland and Blake speculated that the shift to brownfield land, "*may assist the process of innovative thinking*" though conceded that, "*in the absence of subsidy or some other form of 'cushion' house-builders will continue to do things as they have always done: by building to the public's perception of 'speculative housing'*" (2004, p. 338).

Barlow promoted a vision of new housing supply based on the concept of lean or 'agile' production. Through such systems, "*the aim is to achieve a level of flexibility in production processes which allows 'mass customisation' the production of highly customised products at costs comparable with mass production*" (p.30). Barlow conveyed the relationship between craft production, mass production, lean production and agile production in the form of a schematic diagram (1996, p.30). Barlow positioned house building between craft production and mass production.

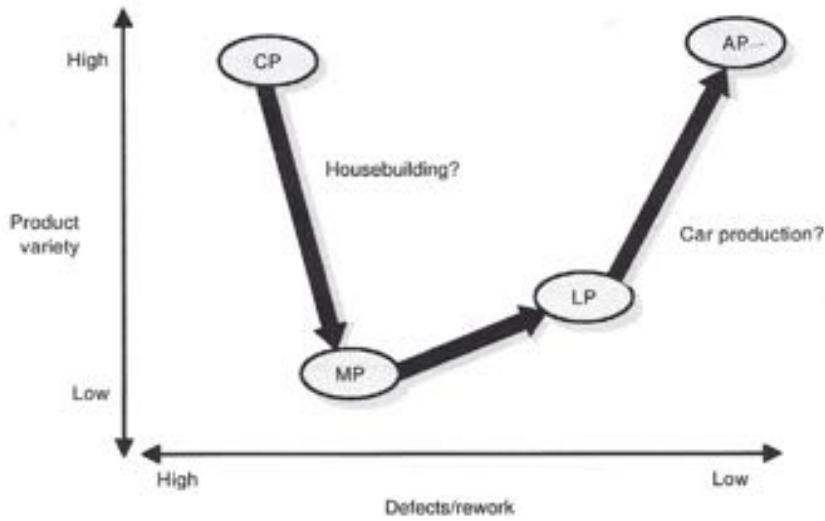


Figure 18: **From craft to agile production** Source: Barlow (1996, p.30)

Barlow considered that innovation was centred on: a) building processes and b) housing product innovations (1999, p.32-34) and argued that barriers to innovation related to: i. Structural features of housing production whereby house building is organised into sequential stages reliant on several different firms, heavily reliant on sub-contractors. Barlow argues that this results in an industry that operates "*disjointedly*" (1999, p.37) and a lack of organisational learning capacity; ii. lack of competition; iii. Previously successful behaviour and a lack of strategy with house builders focuses on short term survival; iv. fear of change (1999, p.37-38).

Calcutt (2007) highlighted the attitude of house builders to risk and suggested why the house building industry is resistant to innovation, particularly off-site modern methods of construction. Calcutt draws attention to the fact that off-site modern methods of construction involve a different model of business, with the process and activity of off-site manufacture "*very different*" to the current business model of house building (2007, p.29). Calcutt observed, "*at least two major housebuilders have recently closed their in-house divisions, which reinforces our view that the business models are distinct and not easily merged... as the MMC market matures, housebuilders [may] feel more confident about outsourcing production of MMC components from independent manufacturers*" (2007, p.30).

This lack of confidence is no doubt fuelled by the risk of “*generic product failure*” (Calcutt, 2007, p.181), a problem that has affected Taylor Wimpey’s venture into pre-fabricated homes at Oxley Woods, Milton Keynes where alleged failures in the off-site constructed homes have led to legal challenges<sup>52</sup>. Oxley Woods was created in response to the government’s ‘Design for Manufacture’ competition<sup>53</sup>. Problems cited by the Architects Journal included: detached cladding panels, wet and dry rot, water penetration, leaks and excessive condensation<sup>54</sup>.

#### Innovation within the planning system

Reform of the planning system including the improved involvement of communities in planning has been explored (Arnstein, 1969; Benwell, 1980; Brown et al., 2013; Conroy, 2011; Jones et al. 2016; Lane, 2005; Pidgley, 2015; Rydin et al., 2015; Tippett, 2013; Urban Design Group, 1998). Over the last decade, innovations to reform the planning system and community participation has broadened to explore the potential role of emerging and advancing technologies.

Kocaturk and Medjdoub (2011) observe that, “*emergent digital technologies have taken a significant role in how we create, collaborate, design and produce...innovative practices are not necessarily merely adopting design technologies but are finding innovative mechanisms to structure and coordinate multidisciplinary design intelligence*” (2011, p.xii – xiii). Merschbrock and Munkvold (2012) comment that, “*research interest in this topic area in terms of number of articles published has risen almost exponentially from 1996–2010, implying that BIM is a very timely topic. This observation aligns with the rapid development of BIM technology in recent year*” (p.214). This is a perspective reinforced by Catapult Future Cities: “*Innovations in digital planning and related areas can be innumerable depending on the scope defined. For instance, there is a large amount of research and development activity in the areas of urban data analytics or visualisation (e.g. 3D modelling and BIM) given recent technological advances and market trends*” (2016, p.4).

Merschbrock and Munkvold (2012) observe that the, “*traditional paper-based and two-dimensional Computer Aided Design (CAD) tools are gradually being replaced by three-dimensional technologies. These technologies, commonly referred to as Building Information Modelling (BIM), are emerging*

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<sup>52</sup> [www.theguardian.com/business/2014/oct/07/architect-richard-rogers-5m-legal-claim-leaky-houses-oxley-woods](http://www.theguardian.com/business/2014/oct/07/architect-richard-rogers-5m-legal-claim-leaky-houses-oxley-woods). Date accessed 30 March 2012.

<sup>53</sup> [webarchive.nationalarchives.gov.uk/20170201004354/https://udc.homesandcommunities.co.uk/design-manufacture-lessons-learnt-1](https://webarchive.nationalarchives.gov.uk/20170201004354/https://udc.homesandcommunities.co.uk/design-manufacture-lessons-learnt-1). Date accessed 30 March 2012.

<sup>54</sup> [www.architectsjournal.co.uk/news/what-went-wrong-at-oxley-woods/8662623.article](http://www.architectsjournal.co.uk/news/what-went-wrong-at-oxley-woods/8662623.article). Date accessed 30 March 2012.

*IT-based information systems which promote collaborative and integrated design, assembly, and operation of buildings*" (p.208) and "*effective collaboration and information sharing*" (p.210).

A review of literature within the field identifies a high number of journal articles that explore the potential for augmented reality within the built environment professions, for instance: Alpress (2011), Carozza et al. (2014), Dominguez (2017), Grohmann and Tessmann (2011), Hanna (2011), Kiviniemi (2011), Lawson (2011), Lim et al. (2015), Merschbrock and Munkvold (2012), Mueller (2011), Olatunji et al (2010), Redondoa et al. (2013), Shen et al (2001), Wang (2007). Published literature that is of relevance and interest to the research relates to how augmented reality might be applied to the field of urban planning with respect to improving the efficiency of the planning process and broadening public participation. Contributors to emerging thought include: Bizjak (2012), Brabham (2009), Brown et al. (2013), Cirulisa and Brigmanisb (2013), Conroy (2011), Gordon and Manosevitch (2010) (2011), Hanzl (2007), Lane (2005), Poplin (2012), Potts et al. (2017), Skelton (2013), St-Aubin et al. (2010), Twitchen and Adams (2012) and Wu et al (2010). The house building industry is also exploring the potential of digital technologies to "capture customer interest and secure sales" (Stanley, 2016, p.57). Shrahily et at. (2015) explore the use of technologies to improve on site construction monitoring, a matter of relevance to local planning authorities that are required to ensure developments are built in accordance with approved planning drawings.

Brabham (2009) explored the opportunities and challenges associated with crowdsourcing public participation in planning, calling for "*an embrace of technological solutions... The medium of the Web enables us to harness collective intellect among a population in ways face-to-face planning meetings cannot... the crowdsourcing model may prove itself as a superior method for designing real spaces, planning the built environment*" (p.243). Gordon and Manosevitch (2010) argue that, "*Deliberators need to be able to understand and visualize non-existent urban spaces*" (p.79) allowing "*lay participants to comprehend space*" (p.89). A view reinforced by Carozza et al. (2014) who explored the benefits of augmented reality in urban planning: "*[it] has at least one crucial advantage, namely that designs can be visualized directly within the real environment instead of within an entirely virtual world*" (2014, p.2).

Brabham explored how the use of technology could engage members of the public with differing appetites for participation,

*"The more involved citizens could upload one or more solutions, could engage in meaningful critique of others' plans on the Web site, and could be active voters on the best plans. Meanwhile, less*

*involved citizens might at least visit the site and cast a few votes for others' design proposals. Simply put, some people are more interested in generating ideas, while some are more interested in critiquing them. A crowdsourcing application could accommodate this range of involvement"* (p.254).

A perspective reinforced by Potts et al. (2017) who observed that, "*While the initial popularity of ARGs<sup>55</sup> such as Pokémon Go may be unsustainable, their effect on usage of public spaces is indicative of a broader shift towards a merging of physical and digital experiences of place. When urban designers design public spaces in the future they must be responsive to this shift to meet the needs of the community*" (p.878). Potts et al. explain that, "*There has been little exploration of the influence of personal mobile devices or augmented reality games (ARGs) and their influence on the use of public spaces, and their implications for urban planners and designers*" (p.866). Whilst their research focused on how AR may increase human interaction with public spaces and the wider public realm their research "*highlights how effective emerging technologies have been in capturing the public imagination and a willingness to interact with the world in different ways...suggest[ing] that technology and ARGs represent several opportunities for urban planners and designers*" (p.878). Brabham (2009) states, "*It is time for new citizen participation methods in public planning*" (p.257). Carozza et al (2014) highlight further benefits, "*public interests integration [sic] in discussion process can improve population satisfaction and share decision making process. Application City 3D-AR for urban planning, allowing to merge real city with virtual three-dimensional (3D) buildings*" (p.77).

Whilst there is broad consensus as to the value of emerging technologies and pilot studies demonstrating how these technologies might be used (for example, Gordon and Manosevitch advocate "*Augmented deliberation*" – a "*process whereby a group of people deliberates in a face-to-face setting while they are simultaneously immersed in a virtual environment*" (2010, p.80) – there is less consensus as to how these technologies might be applied.

Whilst a broader (global) perspective is inevitably valuable in understanding these emergent technologies, what is most relevant to the research is work that explores how these technologies might be applied to the English planning system. Catapult Future Cities state, "*the push for digital solutions in planning has intensified...With significant pressure on the planning system for reform and advances in technology, it is an opportune moment to contemplate systemic change, whether incremental or wholesale, and what the future of planning may look like*" (2016, p.2). Its research

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<sup>55</sup> Augmented Reality Games.

explores a range of software applications that utilise new technology in the planning process. Broadly grouped into two categories: plan and site making, the research identifies that,

*"Though not the most glamourous of the process, Development Decisions stage requires that members of the public, professionals, and planning officers interact extensively with the planning system and therefore has the potential to deliver significant efficiencies and value through innovations"* (2016, p.37). Examples of software applications related to what is generally termed 'development management' across local government (as opposed to the 'development decisions stage') are three and two-dimensional cities models (or maps) that allow information to be shared and a more interactive form of communication to take place between various participants: typically, local authorities, service providers, developers and local interest groups.

As the potential of new technology increases our need for knowledge grows and herein lies a gap in our knowledge. Whereas research exists into the nature of technologies, what they need to operate effectively (for instance, whether system can operate effectively with or without markers) and potential applications, no research has been identified that:

1. Explores the potential use of augmented reality in more suburban contexts.
2. Explores how augmented reality might operate within the legislative and procedural confines of the planning system.
3. Considers whether it is appropriate to 'overlay' or replace current paper based forms of communication with digital ones.

### **2.3 Design regulation, standards and guidance**

Adams and Tiesdell (2013), Carmona (2001), Carmona et al. (2014), Carmona et al. (2017) and Towers (2005) explore design quality within the context of the regulatory environment of the planning system and within which the house building industry is required to operate. Carmona (2001) focuses heavily on the role, mechanisms and effectiveness of development control as a means of securing good design through the establishment and application of local and national design policies. Design codes and review are strongly advocated by Carmona (2001, 2015a, 2015b, 2015c, 2016a, 2017) and others in the early 2000s (Carmona et al, 2002; English Partnerships, 2007). Carmona et al. (2014) observed that,

*"Although public intervention and regulation of development might seem an appropriate response to the dysfunction of (land and property) markets that results in poor quality design and development, this is to assume that the solution to imperfect markets is (perfect) government. However, just as markets fail, so do governments"* (p.238).

Carmona (2001) and Carmona et al. (2002) explore the opportunity to influence and improve quality through the process of development control exercised through the national and local planning system. Carmona highlights the relative youthfulness of urban design within the planning system in England only having appeared in planning guidance in 1996 stating, *"acceptance of this crucial role for urban design [in influencing the quality of new development] has come slowly"* (2001, p.49). In 1998, a key textbook for aspiring urban planners 'Town and Country Planning in Britain' by Cullingworth stated that good design, *"...is an elusive quality which cannot be easily defined. In the words of Sir William Holford, 'design cannot be taught be correspondence; words are inadequate, and being inadequate may then become misleading, or even dangerous. For the competent designer a handbook on design is unnecessary, and for the incompetent it is almost useless as a medium of instruction'"* (1989, p.208).

Carmona (2001, p.8) explored the potential of planning to intervene in the delivery of better quality residential design. Carmona (2001, p.8) highlights that residential design-based research has been *"noticeable by its absence"*, citing reasons that include *"the perceived free hand given to the house building industry in the 1980s [and] because the focus of much academic endeavour in recent years has switched to the problems and opportunities offered by design in town and city centres"* (Carmona, 2001, p.8).

Carmona (2001, p.56-68) argues that the design debate comprises the following (ten) 'sub-debates': i) product or process, ii) lack of design skills, iii) intervention versus undue intervention or interference, iv) objectivity versus subjectivity, v) innovation in design, vi) urban versus architectural design, vii) democracy versus individual rights, viii) established context, ix) interpreting 'design', and x) the multi-actor / professional nature of all design and development interventions. Of these design debates, those of most relevance to the research are those relating to:

### Product or process

In particular Carmona's observations relating to "*advocates of design control argu[ing] that prescribing the design process inevitably leads to [a] better design[ed] product and reduces the need for prescriptive guidance*". (2001, pp59-60). This area of discussion has been explored in significant depth by Carmona and Gallent (2003).



**Figure 19: Parking courtyards.** Removing cars from the street scene by setting courtyards within perimeter blocks was promoted in planning practice in the early 2000s. Whilst courtyards were inspired by the Poundbury model, they lacked particular design qualities of the 'Poundbury block'. Poundbury blocks comprise of open ended courtyard that are part of the wider street network. Courtyards are well overlooked with properties within and at the entrances, well-lit and afforded high cost specifications for boundaries, hard and soft landscaping. Oxley Woods. 2017.

### Lack of design skills

Beer argued "many new developments are going on the ground in England without anybody fully trained in design having been involved in their processing" (Beer, 1983 cited in Carmona, 2001, p.62). These observations were reinforced by CABE (2001) and Carmona (2001, p.298) who stated that, "*urgent investment in design skills by house builders is required*". The lack of design skills and the absence of opportunities for practitioners to develop and improve skills in urban design remains a significant barrier to improving place quality.

From 2014 the author designed and delivered a Post Graduate Certificate in Residential Design at Nottingham Trent University. The course was designed to address skills gaps within the house

building and its teaching format was tailored to suit professionals working full-time with a one-day a month attendance format. The course targeted a niche market and was well received by industry professionals. The course was closed in 2016 as part of a university course rationalisation programme. There is currently (as of 2018) no comparable course on the market with no educational institutions offering courses that develop the skills, knowledge and understanding required to use the tool competently.

Eighteen years later, the Urban Design Skills Working Group (CABE, 2001) reiterated concerns relating to the skills deficit, also highlighted by the Urban Task Force Report (1999). The report of the Urban Design Skills Working Group (commissioned by the then Department for Transport and the Regions) cited research conducted by Reading University and Arup. Reading University's research "*identif[ied] a number of gaps in urban design comprehension and skills*" (CABE, 2001, p.8) and Arup's research identified that less than half of non-county authorities employed in-house or external urban designers (CABE, 2001, p.8). However, the Working Group's remit did not extend beyond public sector professionals, with Carmona (2001, p.298) stating that "*urgent investment in design skills by house builders is required*". Issues relating to skills shortages across the industry, both the public and private sectors were also highlighted by Barker (2004), Calcutt (2007) and more recently Lyons (2014). In 2017, 34 years after Beer raised concerns about the lack of design skills, the Urban Design Group and the Place Alliance published a report that identified that urban design skills across English local planning authorities were, "*woefully low and declining... critical gaps now exist*" (Carmona and Giordano, 2017, p.1). The research was based on surveys returned by 204 local planning authorities, with key findings exposing the lack of in house design skills, declining urban design expertise within local authorities and the low usage of design review services offered by regional architecture centres.

#### The multi-actor / professional nature of all design and development interventions

Carmona (2001, p.67) states that "*the planning system is inevitably largely reactive, and dependent on the willingness of developers and investors to pay for quality design*"; arguing that, "*there will always be limitations to what any design control system can achieve. In the end, the system...is dependent on the developer/client and his/her aspirations, vision and resources to deliver quality.*" Carmona continues by citing Booth's observations (1982 cited in Carmona 2001, p.87) that house builders', "*concern for design stretches only so far as marketing strategies allow or as far as better*

*design either results in higher sales value for their products, or products which receive all the necessary approvals without delay.”*

Carmona (2001, p.280) suggests but stops short of providing specific recommendations, that local authorities need to, “possess an in-depth understanding of the processes that give rise to speculatively built residential environments”, suggesting positive interventions “designed to creat[e] a framework that actually rewards better design – more profitable development, better marketability, faster planning permission, better re-sale values, and so forth. By such means, a shared commitment to better design might be nurtured” (Carmona, 2001, p.281). However, this fails to consider how better design might be achieved in lower market areas where local ceiling prices and considerations relating to affordability might limit the effectiveness of these propositions.

There is no shortage of urban design research, guidance and advice available to house builders, their consultants, local authority planning and design officers: Alexander 1978; Alpha u.d.; Alcock et al. 1985; Biddulph:2001, 2003, 2006; Birkbeck and Kruczowski: 2012, 2014, 2015; Blake and Golland 2004; BRE: 1998, 1999; CABE: 2001, 2002, 2002a, 2002b, 2003, 2004, 2004a, 2004c, 2005, 2005a, 2005b, 2005d, 2006, 2007, 2007a, 2008, 2008a, 2008b, 2009, 2010c; CABE and The Housing Corporation 2008d; Carmona et al.: 2002, 2004; Coleman 1985; Cowan et al. 2010; Crouch et al. 1999; Cullen 1961; DoE 1994, DETR/CABE 2000; DETR: 1998, 2000, 2000a; DoT, LGR and CABE 2001a; DoT/DCLG: 2007, 2007a; DTLGR/CABE: 2001a, 2001b, Dunham-Jones and Williamson 2011, English Partnerships: 2006 and 2007; English Partnerships and The Housing Corporation 2000; Ely, 2004; Gehl: 1971, 2010; Lane, 2005a, Leicestershire Constabulary/LCC u.d; Levitt, 2010; Lynch 1960; McGlynn and Samuels 2000; Meeda et al., 2006; NHBC, 2015; ODPM, u.d.; ODPM/DoT, 2003; ODPM/Home Office 2004; Speck 2013; Stubbs, 2002; UDG, 2008. Yet despite this wealth of knowledge, poor design persists despite much of the guidance and advice relating to basic design principles that need not necessarily require a qualified urban design officer to achieve on new build developments. It is this phenomenon that current literature has not yet thoroughly explored.

## 2.4 Design quality and value

Efforts to progress a greater focus on design within the development industry and the planning system have at times attempted to demonstrate the value of good design, with value defined as

either economic, social/cultural or environmental. A large body of research has explored whether there is a positive correlation between design quality and value. Over its lifetime, CABE commissioned research to demonstrate the need for design intervention within the built environment whilst also demonstrating the economic, social and environmental value of these interventions. Within 'The Value of Good Design' CABE cited that 72% of people participating in a poll by MORI<sup>56</sup> said that they believed well designed houses would increase in value quicker than average (2002a, p.7). Yet, this research was not substantial enough to support the assertion that, "*investment in good design generates economic and social value*"<sup>57</sup>; resulting in CABE commissioning further research.

A particularly interesting piece of research commissioned by CABE and undertaken by University College London provides a comprehensive literature review relating to research that demonstrates a positive correlation between good design and value. The report draws attention to research that demonstrated positive social value achieved through good design in housing (Ambrose et al. 1996, Barrow and Bachan, 1997, Bowling et al. 2001) including the extent of place attachment experienced by occupants (Bonaiuto et al. 1996 and Cooper Marcus 1982), environmental performance (BRE 1998) in addition to financial value (Eppli and Tu 1999, Forrest et al., 1997 and the Urban Villages Forum (u.d)). Research conducted by the Urban Villages Forum (u.d) referred to the maturity value of well-designed schemes stating that whilst the developer might not necessarily achieve a premium for their product, better designed developments might appreciate in value faster and at higher rates than less well-designed schemes within the same market area. Citing the Urban Villages Forum research, CABE observed, "*conventional development by volume housebuilders may command a better short-term return on their investment, as their product is better understood at present. In the longer term, urban village advantages should lead to higher property values*" (2001, p.73). Post occupancy research by the Milton Keynes Development Corporation (n.d) and the Popular Housing Forum (1998) highlighted perhaps part of the wicked problem where, "*functionality of the home comes before its intrinsic design or the design of the surrounding environment... [residents are] largely concerned with the aesthetics of housing rather than its urban design*" (CABE, 2001, p.69-70).

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<sup>56</sup> Commissioned by CABE.

<sup>57</sup><http://webarchive.nationalarchives.gov.uk/20110118095356/http://www.cabe.org.uk/publications/the-value-of-good-design>. Date accessed 4 April 2017.

The proposition of a financial premium is reinforced by Forrest et al. who discovered that, *"undifferentiated housing estates exhibit more difficulties in selling and more negative equity in a poor market than more distinctive developments"* (CABE, 2001, p.66). More persuasive evidence was offered by Eppli and Tu. Their research demonstrated that developments built to New Urbanist principles commanded an 11% premium, though it was observed that, *"the findings did not test whether developers made more money developing new urbanist communities as information on the costs of developing such communities was not available"* (CABE, 2001, p.65). Research by The Prince's Foundation for the Built Environment (2007) discovered that the sustainable urbanism model of development, *"can enhance development value and may potentially enhance land value, and that while build costs need not necessarily be higher than for conventional developments, where they are they can in many cases be met out of enhanced revenues"* (2007, p.13). However, as CABE did not actively promote New Urbanism it needed comparable research to be produced based on developments in England that were not New Urbanist principles. CABE considered that, *"New Urbanism is not synonymous with the best practice, innovative design now advocated by CABE and other interested British bodies. Specifically, planned communities do not really fit the UK context, nor does the insistence on traditional architecture"* (2003, p.13).

Further insights into published work exploring the economic value, specifically uplifts in sales prices are provided in the CABE publication entitled, 'The Value of Housing Design and Layout' (2003a). CABE's own research concluded that despite, *"such a small sample, the headline results were inevitably inconclusive in as much as they neither prove nor disprove that innovative design and layout improve developer value"* (p.44).

Scheme	Location	Residual value per:		Difference to matched pair in same location
		Hectare	Acre	
A	Surbiton – exemplar	£12.4m	£5.0m	+15.3%
B	Surbiton – conventional	£10.7m	£4.3m	-13.3%
C	Bishop's Stortford – exemplar	£4.6m	£1.9m	+7.5%
D	Bishop's Stortford – conventional	£4.3m	£1.7m	-6.9%
E	Chelmsford – exemplar	£3.8m	£1.6m	+10.3%
F	Chelmsford – conventional	£3.5m	£1.4m	-9.3%
G	Aylesbury – exemplar	£3.5m	£1.4m	-4.7%
H	Aylesbury – conventional	£3.7m	£1.5m	+5.0%

Source: FPD/Savills

Figure 20: CABE's research compared an 'exemplar' and 'conventional' scheme within the same market area, identifying a positive correlation between quality and value on three of the four case study pairs (2003a, p. 36).

More recently Savills (2016) cited a positive relationship between design quality and sales values, stating "*investment in place pays off*" (p.4) based on three case studies in: Alconbury Weald, Heyford Park and Poundbury. Similar conclusions were reached by RICS (2016) discovered that,

*"placemaking does add commercial value. However, there is considerable disparity in the size of the premium, from between five per cent and 50 per cent. This also varies between different dwelling types. Greater premiums are achievable in areas that already have higher local embedded new-build values. Good placemaking techniques in high value areas can secure additional premiums of over 50 per cent. This can be sustained over the long term as the reputation gathers pace. This was evident in large schemes that continued to sell new-build accommodation at a significant premium over a ten-year build period, as well as on smaller completed schemes that saw above average growth in their re-sales market. Although placemaking was effective in lower-value areas, it was still evident, with the most successful scheme achieving close to 20 per cent uplift on local newbuild competition"* (2016, p.4).



Figure 21: Wayne Hemingway's article in The Independent (2001)<sup>58</sup>

RICS findings were based on five case studies: Newhall (Harlow), Upton, (Northampton), Hampton (Peterborough), Accordia (Cambridge), Kings Hill (West Malling). As with the Savills research, the case studies were not located within the Midlands region and instead within the more buoyant markets of the south of England.

The design quality of new homes has been subject of increased research over the preceding two decades, particularly during the existence of CABE (1999-2010). CABE's activities included undertaking, commissioning and publishing an extensive array of research relating to the design of the built environment whilst also campaigning for a greater focus on design quality through awareness raising initiatives, training, lobbying and outreach work. CABE attempted to evidence the value of good design particularly the economic value as it sought to influence the mindset of the development industry.

CABE's research criticised the types of places volume house builders were producing across the country arguing that poor design was failing to deliver better economic, social and environmental benefits. It lobbied government and challenged both the output and nature of the industry when the Office of Fair Trading undertook a study into the house building industry (CABE, u.d.).

<sup>58</sup><https://waynehemingway.files.wordpress.com/2013/05/the-staiths-southbank-gateshead-13-years-on-may-2013.jpg>.  
Date accessed 1 April 2016.

Whilst CABE's criticisms of the design of new settlements created by volume house builders failed to gain significant media coverage, the Chair of the BfL Partnership did successfully raise the profile of residential design. Fashion – turned urban – designer, Wayne Hemingway<sup>59</sup> was the industry's most high profile and vocal critic<sup>60</sup>. Hemingway, founder of the fashion house Red or Dead wrote an article for The Independent in 2001 entitled, 'Why I hate the creeping suburbs' that described the "*Wimpeyfication*" and "*Barrattification*" of Britain. The article resulted in an interesting reaction from one of the nation's largest builders - Taylor Wimpey, who subsequently commissioned Hemingway to design a new development in Gateshead. Referring to the article during a speech in 2008, Hemingway said, "*I wrote this article called the Wimpeyfication and Barrattification of Britain which was attacking crappy house builders for delivering crappy housing and saying that it was not just about being ugly, which is very important, but it was also doing very bad things socially for us.*"<sup>61</sup>

Eight years later Hemingway published another vocal article entitled, "*Do not help the house builders: they're still making rubbish*"<sup>62</sup> in response to the fiscal support house builders were securing through the government's Kickstart programme. Hemingway argued that, "*I accused them [the house builders] of building the pastiche identikit rabbit hutches that were blighting the nation*"<sup>63</sup>. Hemingway remained stoical in his argument claiming that the quality of new housing, "*is a real challenge*" and in response to whether the quality of mass housing produced by the private sector could be improved he claimed,

*"Well, you can change it, but the only way is by an alliance, by the public demanding more, by local planning authorities and planning committees demanding more, and by people actually starting to reconcile the cost of bad design. Because it's expensive to pull something down within twenty or thirty years, which we've done consistently now since the sixties; we've been building short-termism into our housing and it just makes no sense for anybody."*<sup>64</sup>

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<sup>59</sup> Hemingway was subsequently appointed as the Chairman of Building for Life.

<sup>60</sup> Wayne Hemingway, <http://waynehemingway.wordpress.com/2011/03/04/eight-years-on-its-still-work-in-progress-wayne%e2%80%99s-view-on-housing/#comment-222>. Date accessed 31 March 2012.

<sup>61</sup> Nalgaro conference, Blackpool Wednesday 8th October 2008, <http://artsdevelopmentuk.org/wp-content/uploads/2010/09/hemingwayspeech1a.pdf>. Date accessed 22 September 2016.

<sup>62</sup> [www.independent.co.uk/opinion/commentators/wayne-hemingway-dont-help-the-housebuilders-ndash-theyre-still-making-rubbish-1666147.html](http://www.independent.co.uk/opinion/commentators/wayne-hemingway-dont-help-the-housebuilders-ndash-theyre-still-making-rubbish-1666147.html). Date accessed 31 March 2012.

<sup>63</sup> Tom Dyckhoff made similar observation on 'The Secret Life of Buildings', Channel Four, 1 August 2011.

<sup>64</sup> [www.wantoday.com/inside\\_10\\_2\\_2011/snapshot.html](http://www.wantoday.com/inside_10_2_2011/snapshot.html). Date accessed 31 March 2012.

Jonathan Glancey's observations echoed Hemingway's when he commented on BBC Radio 2 that, "*under designed or half-baked housing estates have sprawled further out into the landscape and now the idea that we need to rediscover the art of designing places is pushing its way up the political agenda*"<sup>65</sup>.

## 2.5 Consumer behaviour and decision making

Research by the Joseph Rowntree Foundation (JRF) highlights the "*expectation-offer gap*" (2002, p.48) where simply because new homes sell, in a market where demand exceeds supply, this cannot be taken as a robust indication of consumer satisfaction. The JRF (2002) suggested that, "*the aim must be to create an 'intelligent client' not just a consumer of a product... they are not well equipped to act as 'intelligent clients'. Their vision needs to be expanded*" (2002, p. 99). A view reinforced by Barlow who argued that, "*changing customer attitudes is therefore critical...there may again be a role for government in stimulating interest*" (1999, p.40). A view reinforced by Lyons recommendations that included introducing kite marks for quality places (2014, p.122). Carmona alludes to the "*increasingly powerful effect*" of the public in stimulating change within the industry (2001, p.4) whilst Franklin (2006) noted that, "*the actions of private house builders are dominated not by regulators or designers but the pursuit of profit and appeal to the market*" (2006, p.98). Despite criticism of many new build housing developments and whatever external market (supply/demand) influences are at play, these are not significant enough to deter consumers from rejecting what is being offered.

The JRF also argued that better product choice needed to be complemented by a better-informed consumer concluding, "*it needs a rethink of both the industry and the attitudes of the house-buying consumer*" (2002, p. 99). This view is reinforced by Barlow who argues that "*changing customer attitudes is therefore critical...there may again be a role for government in stimulating interest*" (1999, p.40). Whilst Barlow's comments are rooted in stimulating consumer demand for more energy efficient and low maintenance housing, they reinforce the idea of stimulating change and securing better design through mechanisms other than regulation. Consumers are afforded more advice on household products, rather than the home itself. For instance, consumers are now well

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<sup>65</sup> 'The Politics of Architecture' (Episode 2), BBC Radio 2, broadcast 26 November 2013.

accustomed to seeing energy efficiency rating bars on home appliances such as fridge freezers and washing machines with the intention of assisting them in making a more informed choice.

Our Test Labs compare features and prices on a range of products. Try Which? to unlock our reviews. You'll instantly be able to compare our test scores, so you can make sure you don't get stuck with a Don't Buy.



Figure 22: **Which?** Provides consumers with a wealth of product knowledge. Yet consumers have limited access to independent guidance on the new homes they consider purchasing<sup>66</sup>.

Hedges and Clements argued that, “*public attitudes are too conditioned by the characteristics of the actual housing market for people to stand back and separate out the intrinsic desirability of ownership as such from the desirability conferred on it by circumstances*” (1994 cited in JRF, 2002, p.103).

Hedges and Clements continued to suggest that, “*a change in the context might lead to a different balance of preferences*” (1994 cited in JRF 2002, p.103) although they stopped short of suggesting how this context could be changed. As Hedges and Clements (1994 cited in JRF 2002, p.104) highlight, during the post-war period home ownership has been more than securing a place to live; it is about securing a property that promises a healthy prospect of financial gain. This, therefore, raises the question whether the ‘expectation-offer gap’ is overcome by the national preference for home ownership and compensated by the prospect of both ownership and the promise of financial gain. It is interesting to note that a CABE commissioned Ipsos-MORI survey ‘Attitudes to the built environment’ discovered that 26% of people are not interested in the way places look and feel (CABE, 2010a, p.12). It is therefore conceivable that the current trend of demand outstripping supply results in consumers purchasing homes that require compromise, in order to secure a property. The cycle of residential design quality is therefore repeated by the success of the house building industry – success determined not by quality of place but by units sold and business turnover. The challenge is therefore to secure change where demand exceeds supply and where product and brand differentiation can often be limited to sales promotions, such as:

<sup>66</sup> [www.which.co.uk/reviews/kettles](http://www.which.co.uk/reviews/kettles). Date accessed 5 April 2016.

- ‘Free plasma TV worth £750 if you reserve this weekend’ (Sundial View, Sutton in Ashfield, Nottinghamshire, Taylor Wimpey).
- Furniture packages (Camelot Gardens, Ruddington, Nottinghamshire, Crest Nicolson).
- Luxury flooring package (Bestwood Village, Nottinghamshire, David Wilson Homes).
- ‘£15,000 to spend on “Select” extras and Executive Removals Service’ (Merryweathers, Southwell, Nottinghamshire, Charles Church).

These observations are reinforced by Collins and Blake who explored the marketing of housing – a *“fascinating and under-researched subject”* (2004, p.236). Research by Collins and Blake concluded that marketing of new homes is limited to sales incentives and subtle marketing terminology that reinforce certain environmental or social settings. However, it is also usually the case that those developments that do exhibit a good standard of design do not seek to sell homes in ways other than those that are conventional (Melbourne, Derbyshire, Davidsons Group and Freemans Meadow, Leicester, Barratt Homes).

## 2.6 Building for Life

Beyond CABE’s housing audits (2004, 2005b, 2007a, 2010) and those associated with Kickstart (HCA: 2009, 2010) there has been a remarkable absence of research into BfL considering its longevity within the context of the planning system<sup>67</sup>.

Knight remarks, *“there has been less academic analysis of the design quality of suburbs and housing estates... it is surprising that little recent urban design research has addressed place making in new residential development... there is little evidence base [sic] concerning its [Building for Life] utilisation, value or effectiveness within development management practice”* (2013, p.14).

BfL20 emerged under a Labour administration and has since gained support under the Coalition (Conservative/Liberal) and more recently Conservative administrations. This is quite remarkable particularly during the years following the global credit crisis where, *“anything that put quality pressures on the planning system now became unwelcome to the government’s leadership. The*

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<sup>67</sup> At the time of publication, the initiative has existed for 16 years.

*Prime Minister's Office and Treasury were demanding that obstacles to house building should be swept aside" (Simmons, 2015, p.6). Yet research exists that reflects a growing academic interest in the initiative.*

DCLG collected housing quality data as part of Annual Monitoring Reports that local planning authorities were required to submit. Called, 'H6: Housing Quality', local planning authorities were invited - though not required as they were for other indicators - to offer data on housing quality, auditing schemes against BfL20. Potentially this data offers a wealth of information for analysis, however this data has not been made publicly available by DCLG. As such, there remains a considerable gap in knowledge relating to how representative CABE's audit findings were within certain geographical areas and whether standards were beginning to improve. The need for further research was highlighted by CABE as prior to its demise preparations were underway for a second round of national housing audits.

Development address, Developer, and Net dwellings	N/A	Red	Amber	Green
Land at junction of Forest Road and Foxley Lane, Binfield (The Orchard). Linden Homes (Chiltern) Ltd. 13 dwellings.	0	0	0	12
Land Parcel H20 Peacock Lane. Redrow Homes (Southern) Ltd and Persimmon Homes Ltd. 43 dwellings.	0	0	0	12
Land Parcel H22a Peacock Lane. Persimmon Homes Ltd. 55 dwellings.	0	0	0	12
Gowring House, Market Street, Bracknell. Campmoss Property Co. Ltd. 18 dwellings.	4	0	2	6
Auto Cross, London Road, Binfield. Thames Valley Housing Association. 21 dwellings.	0	0	0	12
Beneficial House, Easthampstead Road, Bracknell. TA Fisher Developments Ltd & The Gym Group. 17 dwellings.	4	0	0	8
Land at Broadmoor Hospital Training & Education Centre, School Hill (Wildmoor Copse). Pye Homes Ltd. 18 dwellings.	0	0	0	12
Land at 127a, 129 & 131 Fernbank Road, (Quadrella Gardens). Kebbell Developements Ltd. 14 dwellings.	0	0	0	12
Total	8	0	2	86
	N/A	0%	2%	98%

Figure 23: BfL12 auditing by Bracknell Forest Council (2015, p.36).

Knight (2013) explored the degree to which BfL12 was being pursued by local planning authorities to raise residential design quality and the effectiveness of BfL12 guidance for improving design quality. Knight's research focused on local authorities within the three cities region, with 17% of participating authorities citing that they always used BfL12, with 75% using it sometimes – despite 67% stating that local policies contained an explicit reference to it (either in adopted policies or emerging policies). 75% local authorities do not review quality post completion whilst only 58% have access to full or part time urban designers. Despite authorities considering that BfL12 supports better decision making, usage was lower and confidence in the value of BfL12 at appeal was split with Knight concluding that, "*active implementation of BfL within development management practice is mixed*" (2013, p.50) and critically, "[*there is*] little need or requirement [for housebuilders] to use BfL to gain planning permission or sell new homes" (p.51).

Knight offered three recommendations: first to better integrate BfL12 into the planning process, second to make BfL12 a statutory requirement through national planning policy and third, to strengthen design expertise within individual local planning authorities (p.68).

There has been very limited research into the relationship between BfL20/12 and first hand and second-hand property valuations. Kruczowski and Martinelli encouraged professional debate as to whether BfL12 qualities and deficiencies should be attributed a financial value in property valuations (2015). Where research has been conducted, samples are small and have taken place in south of England market areas. One notable exception is a small-scale but nevertheless insightful piece of research conducted by Sanders (2014). With unique access to data as an employee within a regional house builder, Sanders explored the relationship between design quality, build costs, sales values and gross profit on a major development at Church Gresley in South Derbyshire. Sanders compared the sales performance of two developments: one built by Davidsons and another by Bellway. Both were located on the same development and with sales activity taking place at the same time. Despite the limited sample base, Sanders research is particularly interesting in that challenges other research (CABE, 2003a; RICS, 2016; Savills, 2016) that suggests a positive relationship between design quality and value. In contrast, Sanders discovered that a development of a *lower design quality* (as measured by BfL12) achieved a *higher profit margin* compared to the (Davidsons) development designed to a higher design standard (2014, p.38). Whilst the better designed development commanded a higher sales price per square foot that partly offset higher

build costs (and a longer build period) the differential was not markedly different to secure a higher profit margin than the lower quality scheme.

This seeming indifference to design quality in new build valuations has been informally cited by others working within the industry as major barrier to achieving BfL12 more widely. Some describe a ‘parasitic’ effect whereby developers building to a markedly lower standard will ‘follow’ a competing developer that is building to a higher standard into the same market area, for example onto an adjacent site.

In these circumstances, the developer building to a higher standard will raise embedded local new build values; values that will then be used by the ‘parasite’ developer to enhance their margins over and above what they would otherwise have been. Regardless of whether these conditions are ‘fair’, symptomatic of a properly functioning free market or otherwise justified is less important than in these circumstances, the developer building to a higher standard is generating a lower profit margin than a competitor building to a lower standard; a situation that could undermine efforts to improve design quality.

As previously noted, RICS (2016) “*found that placemaking does add commercial value. However, there is considerable disparity in the size of the premium, from between five per cent and 50 per cent... Greater premiums are achievable in areas that already have higher local embedded new-build values*” (p.4). Across five case studies (comprising of 9,378 homes in total), each case study exceeded average new-build values ranging from +5% in Hampton, Peterborough to +56% at Accordia, Cambridge. Yet, as with previous research by CABE (2003a) these positive correlations are based on small samples sizes and located in the south of England. Yet, valuers are guided by RICS Valuation Standards (2008), more commonly known as, ‘The Red Book’ where the valuation of a property is defined as, “*the estimated amount for which a property is expected to exchange... between a willing buyer and a willing seller*” (2008, p.195) with the wider setting of a property (i.e. street or place quality) not considered a relevant factor within valuation considerations (2008, p.207-217). Whilst valuations are based on future market value, and in the event of a mortgage default a lender would be seeking to sell a property for the maximum price in the shortest possible timeframe, one industry professional commented that better design might help mitigate the lenders exposure to risk as a repossessed property within a well-designed environment may well

sell faster and a higher price than a comparably sized home within the same market area – but in a less well designed environment.

The applicability of these findings is therefore questioned further in the north and within less buoyant market areas. Therefore, there remains a considerable gap in knowledge with respect to the relationship between design quality and value, both in terms of new build valuation and second-hand valuations.

Choy (2013) explored the political dynamics involved in the evolution of BfL, reflecting the work of McGlynn and Murrain (1994). McGlynn and Murrain's research is pertinent in that it highlights the inherent challenges associated with improving design quality from within a local authority: urban designers can only influence thinking and decision making – they are ultimately not the decision makers (1994).

## **2.7 Critical review of literature**

The literature review demonstrates that research has been primarily concentrated in areas relating more to housing supply, the house building industry and the effectiveness and efficiency of the planning system. Where research exists relating to design quality this is largely concentrated towards design regulation with gaps in knowledge relating to consumer behaviour, design quality and value; with the most prevalent gap being within the thematic area of BfL.

Research into the design quality of suburban developments, particularly with reference to place quality as opposed to considerations relating to the build quality of individual dwellings, was largely noticeable by its absence until CABE's housing audits were published. Beyond CABE's housing audits, BfL20 performance data released by the HCA following a Freedom of Information Act request and the audits completed by some individual local planning authorities (as part of H6 monitoring), there is no research that has been conducted since that seeks to discover whether the issues highlighted by CABE relating to residential suburban design quality remain. No published research exists relating to the effectiveness of CABE's Accredited Building for Life Assessor Network and no published research exists relating to the effectiveness of BfL12 in practice.

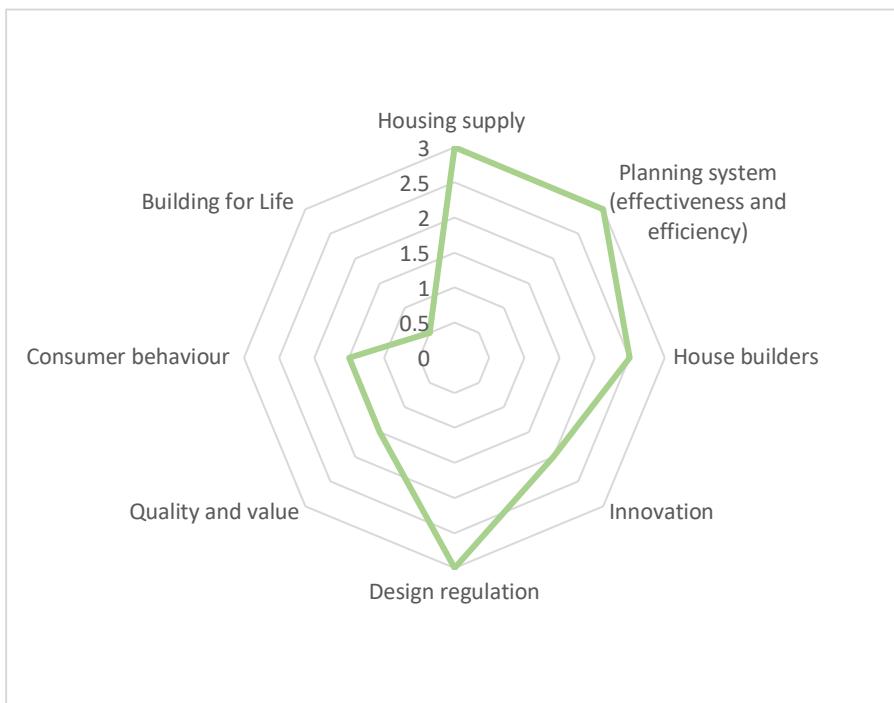


Figure 24: A thematic based approach to the literature review has enabled greatest gaps in knowledge to be identified.  
(0= No research; 3= Extensive research)

Research and knowledge that exists within the subject area is concentrated around issues relating to housing supply, the effectiveness and efficiency of the planning system, housing affordability and innovations - specifically improving the environmental performance of new homes and exploring the benefits of modern methods of construction. Where research exists relating to design quality it is not exclusively focused not on BfL but instead the formulation of national and local design policies, their application, effectiveness; the use of Design Codes.

Whilst Calcutt, Lyons, Bishop and more recently the government through its consultative White Paper 'Fixing the broken housing market' (DCLG, 2017b) have encouraged the use of BfL12 as a means by which to define and measure design quality, none of these have considered what beyond national and local policy aspirations prevents – or facilitates – the extent to which BfL12 standards are achieved. Will embedding BfL12 into the NPPF alone (as proposed by the White Paper (DCLG, 2017b)) be sufficient to improve design quality in new build residential developments?

There is a considerable gap in knowledge relating to BfL12, particularly how it works in practice. For instance, CABE's housing audit for the East Midlands (2007a) promoted the value of BfL20 as a tool by which design quality could be improved. Within this publication, CABE made recommendations to local authorities and developers that would improve design quality (and the degree to which new developments would meet BfL20 standards).

These recommendations had not been robustly tested in practice though many local planning authorities - North West Leicestershire included - heeded these recommendations expecting their housing quality problems to be solved. This is where this research really began to gain traction: the testing of CABE's recommendations, exploring their effectiveness; using this understanding to develop more robust recommendations for how BfL12 might be more effective and more deeply embedded into the day to day work of local planning authorities and house builders.

### 3. Research overview

This section describes the aims and objectives of the thesis, the methodology adopted to achieve these objectives and consideration of the limitations of the research.

#### 3.1 Research aims and objectives

Table 2 below summarises the research aims and objectives.

Table 2: Research aim and objectives.

<b>Research aims:</b>		
	<b>Objective</b>	<b>Chapter</b>
1	To develop an improved understanding of Building for Life in town planning and development practice; identifying barriers to the application of the principles embedded within it and to offer recommendations.	Part 2: Chapter 5.
2	To critically evaluate the effectiveness of CABE's Accredited BfL20 Assessor Network.	Part 2: Chapter 6.
3	To assess the effectiveness of BfL as a form of regulatory design control; critically evaluating the validity of CABE's housing quality recommendations for the East Midlands and by creating and testing a new version of BfL.	Part 2: Chapters 7 and 8;
4	To propose a new Total Design Model of BfL12 that utilises digital technology that will offer local planning authorities, developers, local communities and other stakeholders a more creative and collaborative way of working.	Part 3: Chapters 9 and 10.

### **3.2 Methodology**

The following chapters present the methodologies associated with each of the four thesis objectives. The chapter also details how a theoretical framework developed to promote integrated methods for product engineering has been used to: a) better understand the dynamic between house builders, local planning authorities, BfL12 and the wider market; b) create an adapted model that resolves conflicts between these participants, factors and considerations.

#### **3.2.1 Three Counties Audit**

The purpose of the three counties audit was to assess to what extent new residential suburban development across the ‘3Cs region’ (Derbyshire, Leicestershire and Nottinghamshire) are compliant with BfL12 - a particularly relevant research question following the government’s review planning practice guidance in 2012 undertaken by Lord Taylor (DCLG, 2012b).

The review led to the ‘cancellation’ of two cornerstone urban design documents: Better Places to Live By Design: A Companion Guide to PPG3 (DTLGR/CABE, 2001b) and By Design (DETR/CABE, 2000). The Review concluded that these two documents could be cancelled on the basis that,

*“The guidance contains principles of good urban design, but these aspects are considered to be well understood and mainstreamed in planning work. Key aspects should form part of a shortened guidance suite”* (DCLG, 2012b).

It is unclear what evidence the Taylor Review used to reach its conclusion that the principles of good urban design were well understood and mainstreamed into planning work.

With the exception of a few local authorities publishing their own housing quality data, the only published data on housing design quality was that by CABE (2004, 2005b, 2007a and 2010) and the HCA following the publication of Building for Life scores achieved by schemes that secured Kickstart funding (2009, 2010). None of these sources support an assertion that the principles of good design were well understood and mainstream.

The purpose of the audit was to undertake a more extensive investigation into suburban residential development quality within the study area. CABE’s housing audit for the region (2007a) identified widespread deficiencies in housing quality, yet the geographic breadth of the study meant that out

of a sample base of 100 only 34 were drawn from within the study area of Derbyshire, Leicestershire, Nottinghamshire and their respective cities. A substantial gap in knowledge therefore existed. What were the design qualities and deficiencies across new build, suburban residential developments? Had design quality markedly improved since CABE's audit?

The methodological approach involved the identification of a sample of new build suburban residential developments across Derbyshire, Leicestershire and Nottinghamshire. The sample base was drawn from the geographical area of study and from the largest three house builders in England: Barratt Developments Plc. (trading under the brands Barratt Homes and David Wilson Homes), Persimmon Plc. (trading under the brands Persimmon Homes and Charles Church) and Taylor Wimpey Plc.

Table 3: Distribution of the sample base by developer and county.

Developer	Derbyshire	Leicestershire	Nottinghamshire	Total
Barratt/David Wilson	50%	74%	54%	60%
Persimmon/Charles Church	20%	16%	27%	22%
Taylor Wimpey	30%	11%	19%	18%

All those developments listed as being 'live' sales outlets on the respective developer's web sites (as of 9 July 2013) were shortlisted for review. Any schemes designed to a more urban scale and therefore less suburban in layout, density and form were discounted. The resultant sample base comprised of 54 schemes following the exclusion of one scheme. The scheme was excluded on the basis that the development was at too early a stage of construction for any meaningful auditing exercise to take place.

Consistent with the market share of these three developers, the sample base was dominated by Barratt (60% of the sample size), followed by Persimmon (22%) and Taylor Wimpey (18%). This pattern was also broadly reflected in the distribution of schemes on a county basis, thereby the sample base reflected the respective market shares of these developers nationally.

Each scheme was visited during daylight hours and its design quality assessed against nine of the twelve Building for Life questions, i.e. the questions that could be visually assessed on site. As a result, the questions that related less to site specific design responses namely those relating to facilities and services (Question 2), public transport (Question 3) and housing mix (Question 4) were discounted from the assessment process.

Site name/location				Site number			
County	Derbys / Notts / Leics			Site visit day/date/time			
Developer	DWH / BDEV / PSM / CC / TW			Construction stage	Early / Mid / Nr cmp / Recent cmp		
Postcode				Overall score / 9 {percentage}	/ %		
		Red {0}	Amber {0.5}	Green {1}	Justification		
Connections					<p>1.1.a Connectivity well resolved          1.1.b Connectivity – some issues          1.1.c Connectivity not well resolved</p> <p>1.2.a Ped/cycle only routes well overlooked          1.2.b Ped/cycle only routes – some issues          1.2.c Ped/cycle only routes not well overlooked</p>		
Character					<p>2.1.a Distinctive character – architecture led OR 2.1.a.2 Distinctive character – landscape led          2.1.c Lack of distinctive character</p> <p>2.2.a Bespoke house types          2.2.b Standard house types – tailored {elevations/materials}          2.2.c Standard house types – no obvious local influence</p>		
Site and context					<p>6.1.a Views in well resolved          6.1.b Views in – some issues          6.1.c Views in not well resolved</p> <p>6.2.a Edge relationship well resolved          6.2.b Edge relationship – some issues          6.2.c Edge relationship not well resolved</p>		

Figure 25: Site assessment proforma (extract).

For each question, either a ‘red’, ‘amber’ or ‘green’ indicator was awarded, corresponding to a score of either 1, 0.5 or 0 and the assessment methodology established within BfL12. A maximum of 9 points were achievable. Additional data was captured to justify the score awarded through a coding process and occasional notation. Through this process, an overall score was awarded for each development enabling the researcher to rank schemes by their performance against BfL12. The proforma was tested and refined by way of a pilot study completed on the first two developments that were audited.

Each site visit took on average of a half hour to complete with the researcher undertaking the audit in two stages: 1) orientation ('getting a feel for the place'), 2) evidence recording and assessment.

#### Audited schemes

The table on the following page lists all the audited schemes. Findings are presented in Chapter 5.

Table 4: The audited 55 developments. Developments are listed under their marketing name. Italics denotes that marketing name for development was not known.

<b>Brand</b>	<b>Derbyshire</b>	<b>Leicestershire</b>	<b>Nottinghamshire</b>	<b>Total</b>
<b>Barratt Homes</b>	Saltergate (39)	Farndon Fields (49)	The Grange (41)	
	The Spires (40)		Merlin Park (42)	
	Newton Village (50)		Bridon Place(43)	
	Highgrove (51)		Waters Edge (44)	
			Fernwood Village (45)	
			Highlands (46)	
			The Courtyard (47)	
			<i>Chilwell</i> (48)	13
<b>David Wilson Homes</b>	Castle Heights (30)	DeLacey Court (24)	Sandlands (20)	
		<i>Park Lane, Castle Donington</i> (25)	Kings Meadow (21)	
		Ivanhoe Fields (26)	Papplewick Lane (22)	
		Hastings Park (27)	Newton Park (23)	
		Discovery Gardens (28)	Fernwood Village (37)	
		Ellistown (29)	<i>Clifton Village</i> (53)	
		David Wilson at Quorn (31)		
		The Chestnuts (32)		
		Farndon Fields (33)		
		Hathern (34)		
		The Greens (35)		
		Britannia Park (36)		
		Kibworth Meadows (38)		20
<b>Charles Church</b>			Manderley (17)	
			Harmonia (18)	
			Avalon (19)	3

<b>Persimmon Homes</b>	Varsity Court (12)	Saxon Gate (10)	Jasmine Gardens (14)	
	Harlow Fields (13)	Hayward Gardens (11)	Persimmon Gardens (15)	
		Valencia (52)	Millhouse Gardens (16)	
			Bridleways (55)	9
<b>Taylor Wimpey</b>	Weavers Gardens (8)	Terracotta Gardens (6)	Ruddington Place (1)	
	Saxon Gate (19)	Cedar Walk (7)	Lime Tree Gardens (2)	
	Dovedale Park (54)		Briars Chase (3)	
			The Brambles (4)	
			Kings Acre (5)	10
<b>Totals</b>	<b>10</b>	<b>19</b>	<b>26</b>	<b>55</b>

### 3.2.2 Accredited Building for Life Assessor Network

Between 2001 and 2011, CABE actively promoted BfL20 as an assessment tool by which the design quality of planning applications could be more objectively measured. CABE was keen to establish BfL20 as the definitive measure for housing quality in the determination of planning applications and in post completion auditing. CABE was successful in securing government support for BfL20 with proposals announced in the Housing Green Paper, ‘Homes for the future: more affordable, more sustainable’ (DCLG, 2007).

The network consisted of two distinct elements: 1. A network of Accredited BfL20 Assessors and 2. An ‘Assessor Centre’ – a password restricted website to which assessors were required to upload their BfL20 assessments. The purpose of the network was two-fold: to improve issues relating to the ‘under’ and ‘over’ scoring of development schemes against BfL20 and secondly, to establish a database that would provide CABE with ‘live’ data on the design quality of proposed developments progressing through the planning system.

A central feature of the scheme was CABE's 'offer' to every English local planning authority to train at least one employee to become an Accredited Assessor free of charge<sup>68</sup>. In October 2008 CABE announced plans to develop, "*A nationwide network of 500 accredited assessors is being set up by CABE to enable new housing schemes to be evaluated against the Building for Life criteria...Over the next three years, CABE will provide training, accreditation, support and monitoring free of charge for at least one accredited assessor in each local authority across England*"<sup>69</sup>. Government records for the network show that by the time of CABE's closure, 343 assessors had been trained<sup>70</sup>.

Potential assessors were invited to attend a one-day training session before completing a test assessment. During the training session participants received a briefing from a member of CABE staff or a CABE Enabler. Participants then had to assess a proposed scheme against BfL20 in small groups. At the end of the exercise each group of participants would share their findings with the intended outcome that each group would reach the same general conclusions on each of the 20 questions. Inconsistencies were discussed and where these existed the rationale for the approved CABE score for the scheme was explained.

The second stage involved candidates reviewing one of two test case studies in their own time. Candidates were then required to complete a written BfL20 assessment on a supplied proforma.

The test case study involved the candidate considering each BfL20 question in turn against the evidence provided before awarding each question a score of either 1 (fully meets requirements), 0.5 (partially meets requirements) and 0 (fails to meet requirements). A written justification was required against each question to justify the score awarded. Candidates then returned their assessment to CABE for review. Assessments were then either assessed by CABE staff or sent to one of small group of CABE Enablers. To achieve a 'pass' and in turn become an Accredited Assessor, each candidate was required to:

1. Be within a target 1.5 score variance.

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<sup>68</sup>[http://webarchive.nationalarchives.gov.uk/20110107170511tf\\_/http://www.buildingforlife.org/news/free-accredited-assessor-training](http://webarchive.nationalarchives.gov.uk/20110107170511tf_/http://www.buildingforlife.org/news/free-accredited-assessor-training). Date accessed 23 April 2017.

<sup>69</sup><http://webarchive.nationalarchives.gov.uk/20110107165544/http://www.buildingforlife.org/news/cabe-trains-accredited-assessors>. Date accessed 23 April 2017.

<sup>70</sup><https://data.gov.uk/dataset/building-for-life-local-authority-assessors-2010/resource/0a8a2220-cef9-4995-b2db-202d4b940aab>. Date accessed 23 April 2017.

2. Have all sections of the proforma completed as required, such as the name and location of the development and a completed ‘summary’ box where the overall observation of the scheme was made by the prospective assessor. In the case of schemes that failed to achieve the BfL20 standard, the summary box was required to offer constructive comments, highlighting areas for improvement.
3. Justify the score awarded for each of the 20 questions.
4. Provide constructive feedback where a score of 0.5 or 0 was awarded against a question.

Assessors successfully passing the test assessment were confirmed as ‘Accredited Assessors’.

In 2010, CABE commissioned the researcher (a CABE Enabler, Accredited Building for Life Assessor and trainer) to undertake a review of the Assessor Centre and the associated network. As the research was concluded shortly prior to the government’s decision to close CABE, this research has not been previously published.

CABE provided the researcher with a project brief that required the following tasks to be undertaken in accordance with a prescribed methodology over which the author had no control or influence.

- Mapping of scoring and illustrative diagrams to identify scoring patterns, e.g. criteria which tend to be met/not met etc.
- Identify a subset of 10% for detailed review, selected from across the scoring range. The detailed review should offer comments on the accuracy of scores, the adequacy of referencing and the appropriateness of the tone of the assessments.
- Summarise key findings from the quantitative and qualitative analysis, commenting on use of the tool (BfL20) and identify areas where inconsistencies or insufficiencies might be addressed through improvements to the tool, associated guidance, standard assessment template and the Assessor Centre on line database.

Assessments uploaded to the database on or before 14 October 2010 were included as part of the review.

In total, 204 assessments were reviewed, with a case study sample (subset) of 10% selected. The sub-set comprised of 12 desk-based reviews and 8 field-based reviews. Each review was a ‘light-

touch' review based on the evidence available to the researcher via local planning portals. In some instances, the researcher contacted the local authority to gain additional information.

The case study sample base was drawn from across all the regions (with the exclusion of the East of England and Yorkshire and Humber that had not uploaded any assessments to the database). Case studies represented all the scoring bands ('Very Good', 'Good', 'Average' and 'Poor'), a range of settings (urban, suburban and rural) and housing typologies. Case studies also represented a time spectrum with a combination of pre- and post-completion assessments reviewed.

### **3.2.3 Total Design Model: an adaptation of the theory for house building**

Throughout the course the action research, there was the risk of becoming too deeply embedded in the world of practice – being unable to detach oneself from the process: intellectually and emotionally; imposing a 'world view' constrained by organisational and cultural norms and behaviours. This risk was mitigated through: a) the researcher's awareness of this risk and, b) the validation of findings with other practitioners working in other market and local authority areas. This enabled both a holistic and robust understanding of what the researcher was seeing, experiencing and doing. Chapter 9 offers a detailed critique of the relationship between house builders, the planning system and BfL12.

To develop a deeper understanding of BfL12 and more critically analyse its effectiveness it needed to be understood through a different and more objective perspective. Pugh's Total Design Activity Model (1999) forms the basis for a critical analysis and new approach to BfL12 by linking disconnected but interrelated ideas and advancements in the planning and development process:

- Building Information Modelling.
- Visualisation.
- Planning system reform: a more creative, collaborative and efficient planning system (including but not limited to Neighbourhood Planning); planning enforcement.
- Post occupancy research.

The model was selected – as opposed to the RIBA Plan of Work – on the basis that it better reflected the nature and process of volume house building and its interaction with the planning system.

Pressures and the resultant changes relating to local government reorganisation (i.e. the ‘more for less’ agenda) are also considered within the context of the discussion.

A further key consideration is the aged planning system within which the tool seeks to operate. BfL12 is a creative and dynamic tool. Yet BfL12 often jars with a planning system that is slow and bureaucratic which struggles to be as creative and as dynamic as it might be, with comments, ideas and expectations being shared at the wrong speed and at the wrong time. As such, the following chapters explore and propose structural changes to the planning system that are required to more deeply embed BfL12 into town planning practice. As such, the proposed approach challenges the continuation of an approach that seeks to: first, influence change upon a planning system that is dated and not as fit for purpose as it might otherwise be; and second, achieve BfL12 predominantly through regulatory means.

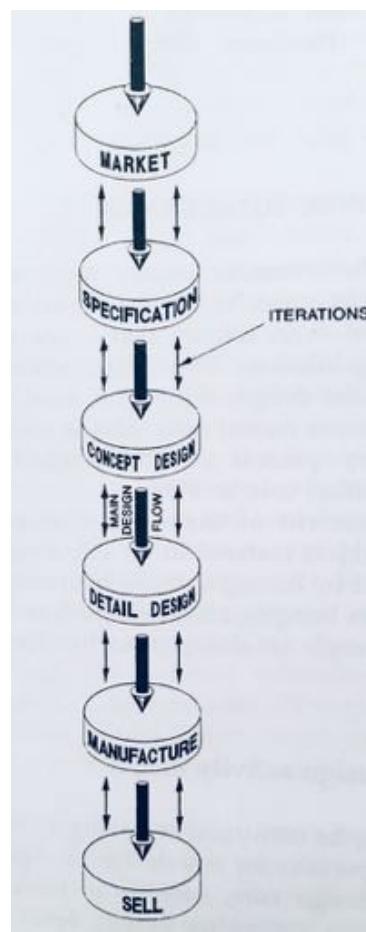


Figure 26: Pugh's Total Design Model (Design Core) 1999, p.6.

Pugh's Total Design Activity Model segments the design process into a series of key stages, expressed as design 'cores' - each influenced by a series of externalities or inputs. Pugh defines 'Total Design' as, "*The systematic activity necessary, from the identification of the market/user need, to the selling of the successful product to satisfy that need – an activity that encompasses product, process, people and organisation*" (1999, p.5).

Whilst Pugh's model was formulated for product engineering, it offers relevant and appropriate theoretical model for exploring and understanding BfL12 within a broader context – with new homes and the environments created around them as the 'product' of the house builders that produce them.



Figure 27: A modified list of Pugh's Total Design cores

By applying Pugh's model to the activity of new build suburban residential development, the potential exists to adopt a deeper and more holistic understanding of BfL12 within the industry, creating a better appreciation of why the urban design principles expressed through BfL12 are less widespread than they otherwise might be. Pugh's model also provides a basis for a critique of current working practices and a frame upon which a new model can be explored, constructed and tested. In the first instance (Chapter 9), the prevailing or common behaviour within each core will be presented and discussed. This discussion is generalist in nature capturing prevailing trends within the industry and planning practice. The discussion does not consider the behaviours and actions of more progressive house builders and local authorities that will be explored in Chapter 10.

A modified Total Design Model has been produced for this exercise. Whereas the original model comprises of six distinct design cores, two of these (concept design and detailed design) have been merged. The rationale for the merging of these two cores is that it is not untypical for schemes seeking planning approval to be based upon a layout plan (with prescribed house types) determined

at viability assessment stages (located within the specification design core) that is largely - if not completely - fixed.

It is therefore not uncommon for a local authority to be presented with a set of proposals that are located somewhere between concept and detailed designs; with the development proposals largely fixed by at an earlier stage in determining the viability of a site.

Whilst a local authority can reject such schemes and require developers to 'go back a stage', this often proves to be a futile exercise as a common response is for a developer to 'retrofit' site analysis, options testing and concept proposals to reinforce an assertion that the previously presented scheme is the 'correct' response.

Therefore, the rationale for merging these cores is to reflect common planning practice: what *happens* as opposed to *what should* happen.

The research findings interpreted through this theoretical model are discussed further in Part Three: Evaluation and Recommendations.

### **3.3 Research limitations**

The research concentrated on new build residential design quality in suburban locations. It therefore explored a form of development that is typically produced by large national house builders. These developments are typically constructed on green field sites in locations that are to varying degrees heavily reliant on private cars as the predominant mode of resident travel. Whilst this form of development is evident across the country, the research is primarily based on a single case study with findings tested and reinforced by observations and professional practice beyond North West Leicestershire. The research was also informed by practitioners working across both the private and public sectors within and beyond North West Leicestershire. These observations have been primarily – though not completely - drawn from within the 'Three Cs region' of Derbyshire, Leicestershire and Nottinghamshire. It is considered that the risk of researcher bias was reduced as a consequence, with the research findings reinforced by the practice and interpretations of those other than the researcher.

The benefits of such a focused piece of work is that a rich and deep understanding has been obtained. Yet this has been at the expense of a broader understanding that might have identified trends over a wider geographical area.

Whilst the nature of the planning system is essentially the same across England, market conditions vary. For this reason, there are potential limitations relating to wider applicability of the research and assuming that the same conclusions apply in all market areas. In higher value market areas, it may be possible to secure better quality design through strong and robust local regulatory pressure on the basis that higher values could be secured – offsetting the additional costs that might be associated with BfL12 compliance.

#### **4. Understanding the tool: Building for Life**

The purpose of this chapter is to provide the reader with an insight into the emergence and evolution of BfL, its use and its role within a changing planning system, political and economic environment.

##### **4.1 Definitions and distinctions**

There are some subtle though important differences in the way in which Building for Life is referenced throughout this thesis.

###### **Building for Life Partnership (no abbreviation used)**

The partnership is an un-constituted group of organisations that seek to work together to promote and where necessary change and edit the Building for Life questions. This partnership of organisations has changed over time, originally comprising of (in alphabetical order): CABE, the Civic Trust, Design for Homes, the Home Builders Federation. At the time of publication, the partnership had contracted following the collapse of the Civic Trust which went into administration in 2009 after 52 years of campaigning and the subsequent dissolution of CABE<sup>71</sup>. The current partnership now comprises: Cabe at the Design Council, Design for Homes and the Home Builders Federation.

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<sup>71</sup> Established by the Clean Neighbourhoods and Environment Act 2005, CABE was dissolved by The Commission for Architecture and the Built Environment (Dissolution) Order 2012.

### **Building for Life (BfL)**

Refers to the Building for Life initiative (2001 to present day) that has been ‘fronted’ by two distinct versions of the design quality indicator: BfL20 and BfL12.

### **Building for Life (BfL20)**

The original versions of BfL that existed between 2001 and 2010, comprising of twenty largely identical but re-ordered questions. Its scoring method required that ‘good’ schemes achieved 14 points out of a maximum score of 20 (CABE, 2008).

### **Building for Life 12 (BfL12)**

Refers to the remodelled version published in 2012. Comprising of twelve questions the previous scoring methodology was replaced with a traffic light system. Instead of encouraging ‘good’ schemes to achieve 12 ‘greens’, it recognised that issues relating to third party land ownership, land allocations (in particular rural exception sites) and viability might justify ‘amber’ lights against certain questions. BfL12 does recommend that schemes with one or more ‘red’ lights are avoided, i.e. planning consent is withheld. Language was deliberately (though in the view of some, unnecessarily) simplified, to make BfL12 more accessible and clear in light of the government’s localism agenda that sought to empower local communities more in the planning process (Birkbeck and Kruczowski: 2012, 2014, 2015).

### **Built for Life™ (no abbreviation used)**

Refers to the quality mark that schemes that secure 9 or more ‘green’ indicators and no ‘red’ indicators can obtain for use on marketing material. Schemes that secure 12 ‘green’ indicators are awarded ‘Built for Life™ Outstanding’ status. Designed to raise consumer awareness of BfL12, Built for Life™ was modelled on a local initiative successfully created and piloted by North West Leicestershire District Council.

### **Built for Life™ City and Built for Life™ Town and Country**

These terms relate to tentative plans by the authors of BfL12 to achieve a more consistent brand image for Built for Life by removing the name ‘Building for Life 12’. BfL12 as written would become ‘Built for Life™ Town and Country’ and the substitute questions contained towards the end of the BfL12 publication for more urban locations would become ‘Built for Life™ City’ and published as

two distinct documents with more specific guidance and imagery tailored to either urban or more suburban and rural locations.

Table 5: **The relationship between BfL20 and BfL12.**

<b>BfL20 [question reference in brackets]</b>	<b>BfL12</b>
	<b><i>Integrating into the neighbourhood</i></b>
Does the scheme integrate with existing streets, paths and surrounding development? [1]	1. Connections
Does the development provide (or is it close to) community facilities? [1]	2. Facilities and services
Does the development have easy access to public transport? [4]	3. Public transport
Is there an accommodation mix that reflects the needs and aspirations of the local community? [2]	4. Meeting local housing requirements
Is there a tenure mix that reflects the needs of the local community? [3]	
	<b><i>Creating a place</i></b>
Is the design specific to the scheme? [6]	5. Character
Does the scheme feel like a place with distinctive character? [8]	
Is the design specific to the scheme? [6]	6. Working with the site and its context
Does the scheme exploit existing buildings, landscape or topography? [7]	
Are streets defined by a well-structured building layout? [10]	7. Creating well defined streets and spaces
Do the buildings and layout make it easy to find your way around? [9]	8. Easy to find your way around
	<b><i>Street and home</i></b>
Does the building layout take priority over the streets and car parking, so that the highways do not dominate? [11]	9. Streets for all
Is car parking well integrated and situated so it supports the street scene? [12]	10. Car parking
Are streets pedestrian, cycle and vehicle friendly? [13]	
Are public spaces and pedestrian routes overlooked and do they feel safe? [15]	11. Public and private spaces
Is public space well designed and does it have suitable management arrangements in place? [16]	

Do buildings exhibit architectural quality? [17 – part only]	12. External storage and amenity space
The following 4½ questions are not reflected in BfL12, as such 12 ‘greens’ against BfL12 equates to a BfL score of 15.5 out of a possible 20, above the minimum ‘good’ score of 14.	
Do buildings exhibit architectural quality? [17 – part only]	
Does the development have any features that reduce its environmental impact? [5]	Not incorporated within BfL12.
Do internal spaces and layout allow for adaptation, conversion or extension? [18]	Not incorporated within BfL12.
Has the scheme made use of advances in construction or technology that enhance its performance, quality and attractiveness? [19]	Not incorporated within BfL12.
Do buildings outperform statutory minima, such as building regulations? [20]	Not incorporated within BfL12.

#### **4.2 The growing profile of design in the planning system**

The profile of design within the planning system flourished under the tenure of CABE between 1997 and 2011 (Carmona et al. 2017). The rising profile of (urban) design can be mistakenly credited to Labour administrations, particularly in light of the Urban Task Force report, ‘Towards an Urban Renaissance’ (1999). It served to further raise the profile of good design and influenced government policy, in particular PPG3/PPS3 that required greater intensification in the use of land.

The legitimacy of a role for ‘design’ within the planning system began to gain traction under the Conservative administrations of the 1980s and 1990s and following the publication of ‘Responsive Environments’ (Alcock et al, 1985) and ‘A Vision of Britain’ (HRH Prince of Wales, 1989). Whilst it was not until 1994 that the government began to explore issues relating to design and the role of government under Secretary of State John Gummer in the 1980s with ‘Quality in Town and Country’ published (DoE, 1994). This consultation document was significant in that it began to explore what legitimate role government might have in promoting good design, with the following questions particularly insightful into the government’s emerging thinking about design:

*8.2 Can a greater attention to coherent urban design make new housing more acceptable to the existing local community?*

*8.3 How can developers ensure that their new developments on the edges of villages are properly integrated into the existing fabric? (1994, p. 21).*

A turning point was reached in the republication of Planning Policy Guidance Note 1: General Policy and Principles (PPG1) in 1992. It replaced the previous 1988 version and introduced design considerations that were now justifiable – or material – planning considerations. PPG1 not only recognised the importance of design in planning, but the distinction between design quality versus design subjectivity.

Whilst contained with an ‘Annex’ to the main document, PPG1 identified the following as valid design considerations:

- Appearance in relationship to context (built and unbuilt)
- Scale (where out of scale with the existing context)
- Character (where out of character with the existing context<sup>72</sup>)
- Spaces between buildings; hard and soft landscape design.
- Density
- Height
- Massing
- Layout
- Access

(DoE, 1992).

Additionally, Planning Policy Guidance Note 3: Housing (1992) contained four paragraphs relating to design and ‘signposted’ planners to PPG1’s Annex A. Paragraph 4 encouraged developers<sup>73</sup> to achieve a high quality of design and referred to, “*using appropriate materials in particularly sensitive areas*” (DoE, 1992 p.2). Subsequent paragraphs reflected PPG1 in stating that relevant design considerations were: scale, density, height, massing, layout, access and parking arrangements and neighbour amenity (DoE, 1992, p.2).

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<sup>72</sup> This is a potentially problematic consideration where the wider context itself lacks any distinctive or otherwise local character. As such this policy could be interpreted as reflecting what has gone before as ‘local character’ even if that context is composed of standard house types that are neither bespoke or have any degree of local tailoring.

<sup>73</sup> This particular policy used the word ‘should’ as opposed to ‘must’, i.e. “Developers should aim for a high quality design” (DoE 1992, p.2), thereby significantly weakening the strength of this particular policy.

Paragraph 6 described that “*functional requirements*” were, “*for the most part a matter for the marketing judgement of development...*” continuing that, “*such matters would include provision of garages, internal space standard and the size of private gardens*” (DoE, 1992, p.2). A further consideration related to the mix of house types where control was only merited where there was a “*specific planning reason*” with even these reasons also balanced with, “*marketing considerations*”.

By 1997 a revised PPG1 had been published. Design had gained greater credibility as a legitimate part of decision and plan making process, with eight paragraphs now devoted to design within the main part of the document. In four years, design had leapt from a single cross-referenced paragraph to a total of eight paragraphs<sup>74</sup>. Whilst the content of these eight paragraphs was primarily that of the 1993 Annex text ‘brought forward’ into the main document, it is clear through not only the repositioning of the Annex text into the main document but also the introduction of new content, that concerns about design quality were gaining momentum.

A revised PPG1 (1997) recognised design considerations as, “*matters of public interest*” with a less tentative tone than that seen with the 1993 version of Annex 1. Paragraph 14 stated:

“*urban design should be taken to mean the relationship between different buildings; the relationship between buildings and the streets, squares, parks, waterways and other spaces which make up the public domain; the nature and quality of the public domain itself; the relationship of one part of a village, town or city within other parts; and the patterns of movement and activity which have thereby established: in short the complex relationships between all the elements of built and unbuilt space. As the appearance and treatment of the spaces between and around buildings is often of comparable importance to the design of the buildings themselves, landscape design should be considered as an integral part of the urban design*” (DoE, 1997, p.4).

The publication of By Design (DETR/CABE, 2000) and Better Places to Live: A Companion Guide to PPG3 (DTLGR/CABE, 2001) further strengthened the legitimacy and importance of design quality considerations within the planning system. As Carmona et al. (2017) point out, it was at this point that the government’s interest in and commitment to design was reaching its peak. Design was embedded into national and an increasing amount of local policy, CABE was at the peak of its influence, the HCA was championing good design as much as the level of development activity it

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<sup>74</sup> This single paragraph – number 50 headed ‘design considerations’ – simply referred the reader to guidance within the annex. As such there was only a limited presence of design within the main document.

supported. A wealth of research and good practice guidance had also been published by government agencies.

It was within this fertile climate, that BfL emerged as a campaign (as opposed to a design quality indicator) to challenge design quality within new build housing.

#### **4.3 The emergence of Building for Life**

*“Who shall decide on the nature of good design? ‘Me!’ ‘Me!’ ‘Me!’, come the cries of the response from the Prince and the planner, councillor and consultant, architect and accountant...”*

Home Builders Federation and the Royal Institute of British Architects ‘Good Design in Housing’ (1990 cited in Carmona, 2001, p.18).

Originally starting as a campaign, BfL12 was launched on September 11, 2001 – however the opportunity to secure press coverage was overshadowed by the terrorist attacks that took place at the World Trade Centre, New York City, the Pentagon and Shanksville that claimed the lives of 2,996 people.

One of the first BfL publications was entitled ‘Building for Life: Choose a home, choose a way of life’ and targeted at consumers (CABE, 2002b). It encouraged consumers of new homes to consider design in its broadest sense, from living in a walkable and less car dependent locations to energy efficiency. It stated a commitment from the ‘Building for Life team’ to “*good urban design and rural design*” (2002b, p.2) whilst also seeking to encourage local authorities to ‘fast track’ well designed schemes and tackle skills shortages within the house building industry.

At the time there was no set of questions, or a suggestion that a series of questions would be created. Instead the language was more akin to a movement: “*we start with optimism. We have seen the quality of many different products – food, furniture, cars, clothes – improve dramatically over the last few years as a result of increasing customer sophistication. Similarly, we believe that we are about to see a step change in the quality of new housing*” (p.5).

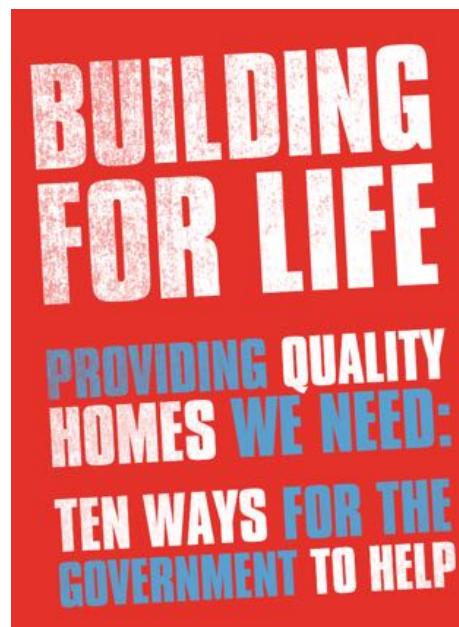


Figure 28: The striking front cover of the manifesto was targeted at government.

By June 2002, a Building for Life Manifesto was published with 'Ten Ways for the government to help' emblazoned on its cover. These recommendations included promoting planning reform, design led as opposed to design control local planning decisions such as overlooking distances, "which have no bearing on the quality on the quality of developments and, indeed, often detract from good design" (2002c p.2). The manifesto also highlighted the need to, "revise highways regulations and guidance to ensure that... the design of road junctions to favour the needs of pedestrians... allowing greater use of shared surfaces and creation of 20mph zones... greater flexibility over road widths, need for signal junctions, scale of roundabouts" (2002c, p.2).

It was not until March 2003 that a first set of design principles were proposed:<sup>75</sup>:

1. *Houses must not show backs to perimeter roads.*
2. *Priority should be given to housing layouts rather than roads.*
3. *Roads should track the line of houses.*
4. *Garages should be brought forward to form a continuous building line, or should be hidden behind properties. Space above the garages should be considered for flats.*

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<sup>75</sup> The publication itself does not number these design principles but they are numbered on this page for the purposes of cross-referencing and discussion with the text.

*5. Pedestrian routes should be integrated into the development framework and wherever possible, should be overlooked by dwellings.*

*6. Public and private spaces should be clearly defined.*

*7. Building styles and landscaping must unite to make places.*

*8. Disabled access is essential to creating inclusive communities.*

(2003b, p.2).

It continued to state: “*raising design standards will require major organisational and cultural change within house building companies*” (2003b, p.2). It continued to state, “*It must be recognised that developments within uniform house types, laid out on minimum plots, in schemes that ignore site characteristics and local character will not deliver value to the customer or to the shareholder*” (2003b, p.2).

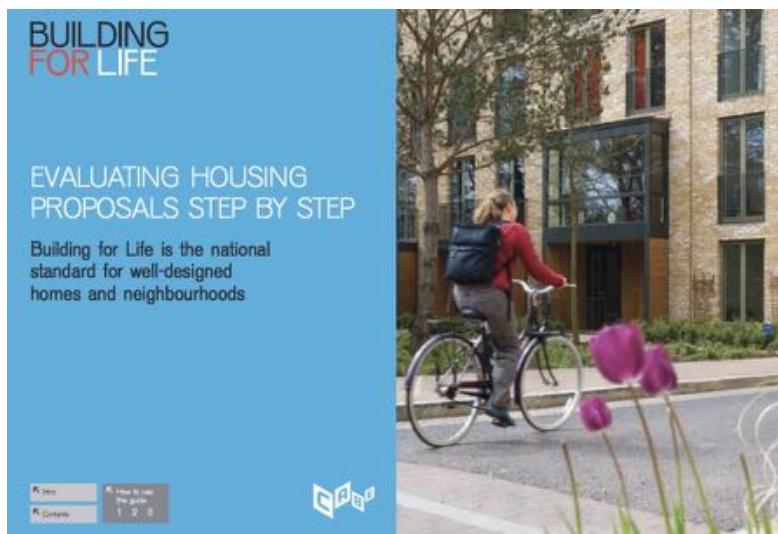


Figure 29: CABE published 33 BfL documents with guidance on how to understand the questions and apply the design principles that underpinned these.

The reference to shareholder value was undoubtedly a reference to CABE's 'The Value of housing design and layout' published a few months earlier (2003a) that highlighted uplift values on three out of the four case studies. The schemes that had experienced an uplift value were termed 'exemplar' as opposed to 'conventional' schemes with all of the case studies located in the south of England: Surbiton, Bishop's Stortford, Chelmsford and Aylesbury (CABE, 2003a, p.9) – higher (and rising) value areas where investment in better design may be more able to sustain higher revenues. Yet, despite this the remark relating to shareholder value is even more perplexing when one

considers that CABE's research concluded that, "*It [the research] has not provided any clear-cut results and could never be deemed to have selected and tested a representative sample... it has raised important issues about how design is valued and has indicated how it may make a difference to developers' profitability...Another question... is whether design can ever make a really big difference in a supply-constrained environment*" (2003a, p. 46).

It was not until 2005 that a series of twenty questions were first published. The questions "*embody the partners' vision of what housing developments should be: attractive, functional and sustainable*" (CABE, 2005d, p.2) Whilst these questions were reordered in 2008, they remained the same for a seven-year period (2005-2012).

Between 2001 and 2010, BfL became a well-known design quality indicator for new residential led developments. Whilst the original version (BfL20) did not focus on interrogating detailed issues relating to build quality (i.e. issues that would normally be remedied through new build warranties if proven defective or below standard) BfL20 recognised schemes that offered good internal space standards (although the definition of this with the absence of nationally adopted internal space standards remains somewhat vague), homes built to Lifetime Homes standards and developments that exceeded current Building Regulations by meeting Code for Sustainable Homes Level Three or above<sup>76</sup>.

By 2007, BfL20 had become the "*national standard for well-designed homes and neighbourhoods*" (CABE 2008). The establishment of BfL20 was significant in that it was the first time that a more measurable quality standard for issues relating to design and homes had emerged on the national stage since the Parker Morris standards<sup>77</sup> for space within the home were introduced in 1967 (later to be extinguished in 1980 in response to growing concerns about the cost of housing and public spending). However, BfL20 was not without its critics and within the house building industry it had failed to garner support, particularly following a series of nationwide housing audits that were published by CABE between 2004 and 2007.

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<sup>76</sup> In 2012, Building for Life was re-launched as *Building for Life 2012*. As part of the re-launch, Building for Life re-focused on twelve basic design principles. In the absence of national space standards and government appetite to debate issues relating to internal space within new build homes, issues relating to internal space were moved into a new product called Building for Life Plus. Code for Sustainable Homes performance was integrated into updated Building Regulations and therefore its inclusion in Building for Life 2012 was considered unnecessary duplication.

<sup>77</sup> [http://en.wikipedia.org/wiki/Parker\\_Morris\\_Committee](http://en.wikipedia.org/wiki/Parker_Morris_Committee). Date accessed 31 March 2012.

#### 4.4 Challenging suburban design quality

The design quality of new residential development particularly in suburban locations had largely remained unchallenged for decades. However, it became increasingly scrutinised once CABE was established in 1999 as part of the organisation's remit to improve the quality of the built environment<sup>78</sup>.

Between 2004 and 2007 CABE published three audits covering: London, the south east and the east of England (2004), North East, North West, Yorkshire and Humber (2005b); East Midlands, West Midlands and the South West (2007a). The audits were branded as CABE as opposed to Building for Life publications and assessed 100 schemes based on the (emerging and evolving) BfL20 questions. The 2004 audit concluded that 83% of audited schemes were either 'average' or 'poor'. Using BfL20 as an analysis tool, CABE continued to challenge the industry with the publication of two further audits (2005b, 2007a).

The headline findings for the Housing Audit for the East Midlands, West Midlands and South West revealed that, "*only 18 per cent – fewer than one in five – of developments we audited could be classed as 'good' or 'very good'... 29 per cent [were] so low that they simply should not have been given planning consent*" (CABE, 2007a, p.4). CABE's housing audits were the first time that the house building industry had collectively been challenged by a government funded organisation<sup>79</sup>. CABE stated that the audits "*uncover[ed] disturbing evidence*" (2007a, p.4) but others in the industry argued that the audits were needlessly selective in what they decided to expose. CABE argued that, "*This performance presents a serious challenge to developers, to the local authorities concerned, and to the government; not least because significant development is planned in the two Midlands regions*" (2007a, p.10). CABE continued, "*Not enough new housing developments adequately address the design standards set out in Building for Life, which have been agreed with the industry and which are consistent with the new PPS3*" (2007a, p.14).

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<sup>78</sup> CABE 2001, 2004b, 2005c, 2005d, 2006b, 2006c, 2006d, 2007c, 2008b, 2008c, 2008d, 2009, 2010b.

<sup>79</sup> The case study samples included housing in urban, suburban and rural locations.



Figure 30: **The audit for the East Midlands** was last of the three published audits was part of CABE's sustained criticism of house builders that alienated potential allies within the industry (CABE, 2007b).

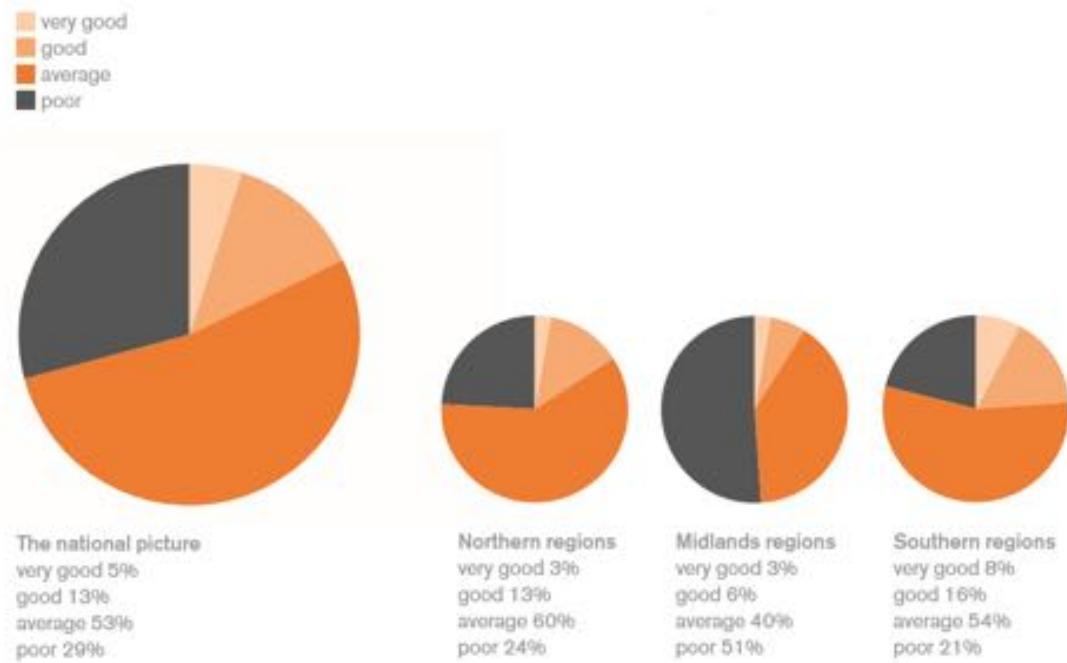


Figure 31: **CABE's housing audits:** nationally and per region. CABE (2007b), p.14.

CABE's audits revealed some disturbing and stark findings, spurring many local authorities (particularly those who had schemes within their administrative boundaries criticised by CABE) to begin to consider how housing design might be improved, with some using the audits as a basis on

which to build political support and create new design posts. Yet, the industry reacted differently and felt disenfranchised from the initiative. Many of those that were actively championing change within the industry comment that CABE's housing audits made it more difficult for them to secure internal political support. Whilst CABE successfully drew attention to the deficiencies of new build housing, they failed to successfully secure widespread industry support that was critically necessary to achieve the changes they wanted to see.

#### **4.5 Achieving Building for Life**

A 'good' standard of design was defined through BfL20 as a scheme that would achieve a score of at least 14 out of 20 criteria upon completion. Whilst some criteria were more challenging to achieve than others, it was possible to achieve a score of 14 through a series of different combinations. One possible combination was:

##### *Location and housing mix*

- Building in an accessible location served by public transport and benefitting from local facilities within a short walking distance (2 points).
- Meeting local housing requirements through the provision of appropriate housing types and tenures (2 points).

##### *Basic urban design principles*

- Tailoring standard product to suit a locality (2 points).
- Exploiting site features such as existing structural landscaping, views or topography (1 point).
- Buildings that define a network of streets and spaces (1 point).
- Legibility (1 point).
- Reducing dominance of parking and highways (3 points).
- Natural surveillance/buildings that turn corners (1 point).
- Connected street patterns (1 point).

This combination predominantly comprises of points relating to basic urban design principles (70% of the score) with half of the remaining 30% achieved by offering a locally appropriate housing mix and selecting a sustainable location (i.e. this would usually be any site identified as suitable for development within a local authority's Local Plan or (emerging) Local Development Framework).

Therefore, BfL20 compliance was not difficult to achieve if there were both the skills and a desire by a housebuilder to achieve it. Subject to a house builder engaging competent a competent designer(s)<sup>80</sup>, a flexible range of portfolio house types being available for the designer to use (for example, corner turning units) and a sense of character could be provided either through a strong landscape scheme and/or house types that could be tailored to suit local circumstances a well-designed scheme could be achieved.



Figure 32: **Oxley Woods**. The Building for Life Award winning, Manser medal winning and “critically acclaimed quick-build housing system”<sup>81</sup> pioneered at Oxley Woods, Milton Keynes by Richard Rogers was the flagship of John Prescott’s Design for Manufacture competition: low cost, low energy homes showcasing off-site manufacturing techniques. Some homes are currently being repaired with parts of the timber frame being repaired or replaced. Homes are being afforded a new construction detail to safeguard against future water egress. Milton Keynes. 2016.

In a highly competitive land market the need to maximise land coverage to maximise land bids commonly results in design qualities being ‘designed out’ of a scheme well before any meaningful design process has taken place. This ‘race to the top’ is also a ‘race to the bottom’, with more design-focused house builders often at a commercial disadvantage by preparing land bids that account for key design considerations that will have an impact on development costs and

<sup>80</sup> That an individual with an understanding of urban design principles and how to apply these successfully is employed (whether in house or external) to create a layout plan.

<sup>81</sup> [www.architectsjournal.co.uk/news/daily-news/rogers-to-bring-oxley-woods-ii-to-east-london/8652126.article](http://www.architectsjournal.co.uk/news/daily-news/rogers-to-bring-oxley-woods-ii-to-east-london/8652126.article). Date accessed 7 May 2017.

potentially future sales revenue. Through this process, parameters are often fixed and the space for design to ‘breathe’ or move is constrained by a predetermined answer. This predetermined answer is typically expressed as square footage per acre – a target amount of saleable space across a development. This is a different form of measurement to the one normally used by planners: dwellings per hectare (dph). Consequently, a 30dph built at 12,000 square foot to the acre will be very different a 30dph scheme built at 17,500 square foot to the acre.

Local authorities that do not have design expertise are more common than those that do – and those that do will (outside of cities) have at best a single designer working on a full or part time basis; with that person working on a high number of applications annually. Assuming the post holder can effectively interpret and apply the design principles embedded within BfL20, applications will usually require major improvement. Through pre-application discussions and negotiations, it is not uncommon for the weakest elements of a proposed scheme (and in turn, the strongest elements of a scheme against which a refusal might be upheld at an appeal) to be ‘designed out’. In such instances, a scheme might not be ‘good’ but will not be considered bad enough to refuse; and in turn officers will be conscious of the risk financial exposure to the local authority (please refer to Figure 64) by pursuing a design refusal. It is therefore not uncommon for local authority urban designers to adopt a pragmatic stance where: a) the improvements they have secured represent a significant gain for both the local authority and the local community; b) the improvements represent part of a broader progression of a local design agenda.

The primary reasons for schemes requiring major improvement will be that a house builder will: a) not place a commercial and/or social value on good design/BfL, and b) have subsequently failed to anticipate the implications of BfL compliance that will often require changes to their product, build costs and the amount of development (i.e. a lower coverage – square foot per acre – particularly if the developer is resistant to housing typologies other than two storey, predominantly detached dwellings).

Between 2003 and 2010, a total of 181 developments were confirmed as meeting either the ‘gold’ or ‘silver’ standard (depending on the score achieved), yet only 21 awards were presented<sup>82</sup>.

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<sup>82</sup> <https://data.gov.uk/dataset/building-for-life-awards-2003-to-2010>. Date accessed 7 May 2017.

Awards were designed to showcase the best developments<sup>83</sup><sup>84</sup>. Despite a growing case study library comprising of 90 UK and international schemes at the BfL20 website<sup>85</sup> these developments were typically more urban in character and did not reflect the typical nature of more suburban residential developments.

#### **4.6 Accredited Building for Life Assessor Network**

As BfL20 became more widely known CABE became increasingly concerned about significant variations in the scoring of developments (i.e. a developer self-assessing a proposed development as ‘very good’ when in reality it was ‘poor’) and the need for local authorities to have the skills and confidence to challenge these self-assessments when required.

CABE’s response to this was to begin to formalise the use of BfL20 and in turn, exert influence and control over the way in which it was being used. It did this by establishing the Accredited Assessor Network – a nationwide pool of CABE trained and approved assessors that were intended to become the arbiters of whether a development met the BfL20 standard locally. The Accredited Assessor Network is explored in more detail in Part 2, Chapter 6.

#### **4.7 Kickstart 1 and 2**

The global credit crisis of 2007-8 had a devastating effect on economies around the world. Whilst the turmoil of the banks and the controversy associated with banking failures, alleged irresponsible lending practices and the subsequent full or part nationalisation of banks dominated the headlines; the housing industry was on in peril as orders for private homes all but evaporated as mortgages became increasingly difficult to obtain and consumers lost confidence.

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<sup>83</sup> [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/247368/1177.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/247368/1177.pdf). Date accessed 7 May 2017, p.3.

<sup>84</sup> <https://data.gov.uk/dataset/building-for-life-awards-scores-2010>. Date accessed 7 May 2017.

<sup>85</sup> <http://webarchive.nationalarchives.gov.uk/20110118095356/http://www.buildingforlife.org/news/a-vintage-year-for-housing>. Date accessed 30 January 2016. Page no longer available.

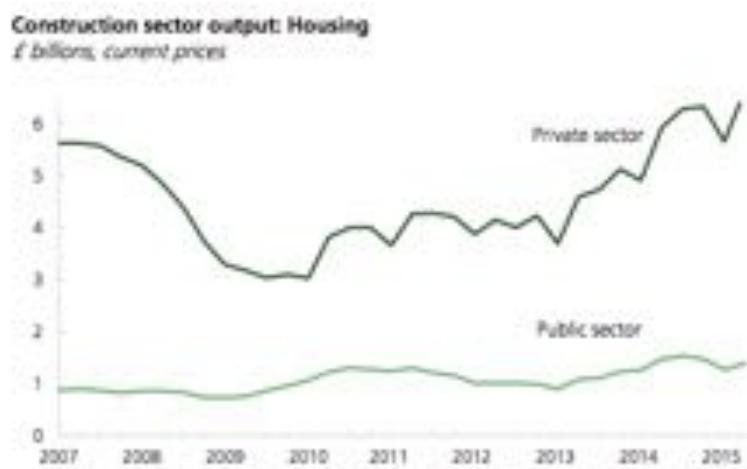


Figure 33: The global crisis saw the housing industry's output almost halve. Source: Rhodes, C. (2015), p.7.

Kickstart was a £1.06bn Housing Stimulus Programme<sup>86</sup> introduced by the Labour government that targeted stalled construction sites with the intention of delivering 22,000 new homes. Comprising of two competitive funding 'rounds' managed by the HCA a total of 299 developments were supported through the allocation of public funds.

As part of the Kickstart 1 application process, all developments seeking grant funding were subject to a Building for Life assessment. These design assessments were contracted by the HCA to CABE, and in turn a small number of CABE enablers that were specially selected for their BfL20 expertise. The enablers were required to review application material, and in some cases, BfL20 'self-assessments' submitted by applicants seeking Kickstart funding. Completed assessments were then re-assessed by CABE staff to ensure robustness and quality assurance.

Schemes that failed to meet the requirements of BfL20 typically exhibited the same design deficiencies that CABE highlighted in its housing audits (2004, 2005b, 2007a). Common issues were poor internal and external connectivity, lack of legibility, problematic areas of public and private space with no clear demarcation or meaningful purpose, generic house types and developments were no concessions were made to creating places with a local or otherwise distinctive sense of character, fragmented urban structure, heavily engineered roads and insufficient and poorly integrated car, cycle and waste storage.

<sup>86</sup> <http://cfg.homesandcommunities.co.uk/ourwork/kickstart>. Date accessed 1 April 2016.

Under confidentiality agreements, assessors were prevented from discussing any of the schemes they reviewed with anyone but named CABE staff. The researcher was a Kickstart assessor and overall the quality of schemes was generally very low. Whilst it was anticipated that the government might withhold funding from below standard schemes (or require improvements to be made as a condition of funding) this did not happen and over three quarters<sup>87</sup> of applications were approved for funding despite failing to meet BfL20. Despite the poor standards of design evidenced across Kickstart applications, all the schemes had previously received planning consent. The government was not prepared to withhold funding on the basis of design quality assessments on the basis that schemes had already secured planning consent (and had been deemed to be of a good standard of design by the local planning authority), that a design quality benchmark was not a pre-requisite of financial support under the programme alongside wider economic and housing supply issues.

As a result, Kickstart saw schemes that were assessed as either ‘poor’ and ‘average’ against BfL20 receiving public funds, despite the then Labour government’s well-established commitment to ‘good’ and ‘very good’ standard schemes (DCLG, 2007, p.61). As a result, a publicly funded fiscal stimulus programme injected a new tranche of below standard housing stock into the market place.

There are numerous perspectives from which a reader might consider this.

From one perspective, Kickstart served to undermine the efforts of CABE as well as the efforts of more enlightened developers and local authorities seeking to support the government’s aspirations to raise the quality of new housing developments. Kickstart not only undermined the government’s own policies and aspirations but the statutory obligations of the HCA<sup>88</sup>. Under the Housing and Regeneration Bill that established the HCA as a government created agency had four objectives. Two of these related to design. The first referred to, “*improv[ing] the supply and quality of housing in England*” (2008 p.1), the second to, “*contribut[ing] to the achievement of sustainable development and good design in England*” (2008 p.2). Quality was legally part of the agency’s remit.

From a counter perspective, the Kickstart fiscal stimulus programmes were an urgent government response to the unprecedented global credit crisis. Banks had or were at risk of collapse. The government was desperate to avoid major house builders from collapsing and had been warned by

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<sup>87</sup> 76.1% of Kickstart schemes failed to meet BfL20.

<sup>88</sup> <http://services.parliament.uk/bills/2007-08/housingandregeneration.html>. Date accessed 30 March 2012.

industry insiders<sup>89</sup> that some were on the verge of financial failure. The government was therefore keen to emphasise that funding had been offered to, “*get work started on housing developments stalled by the economic downturn*”<sup>90</sup>.

The original intention was that Kickstart would support not only the creation of new homes but the creation of, “*high quality, mixed tenure developments*” (Rhodes, 2015, p.12). It is, of course, conceivable that the original intentions of Kickstart were overtaken as the implication of the global credit crisis became more deeply felt. It is quite conceivable that ambitions for design quality could have simply been extinguished by what the HCA had to work with. How could the HCA support good quality schemes when it (largely) had was poor ones; and where there was an expectation from government that the HCA would allocate (or spend) the public monies assigned to it? All schemes seeking funding were required to have planning consent – and if, with some exceptions – these consented schemes were woefully inadequate in terms of their design credentials what might the HCA have realistically done about it? It is conceivable that the HCA expected the design quality of schemes that had been approved by local planning authorities to be significantly better than what they were.

Kickstart followed an unprecedented decade of design support and awareness raising that had been offered to local authorities nationally. CABE had delivered a nationwide programme of design support, training and advocacy activities; and a wealth of design support was available online at a website that was accessed by local authorities across the world. CABE had trained almost one Accredited Building for Life Assessor per local planning authority<sup>91</sup>. All local planning authorities therefore had access to either an in-house assessor, via a (CABE supported) regional architecture centre or via CABE directly<sup>92</sup>.

Kickstart began to expose even deeper issues associated with improving housing design quality. It demonstrated that despite the government establishing design expectations through policy,

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<sup>89</sup> Author's notes.

<sup>90</sup> <https://www.gov.uk/government/news/shapps-welcomes-publication-of-kickstart-assessments>. Date accessed 25 January 2016.

<sup>91</sup> There are 326 local planning authorities: 201 District Councils and 125 unitary authorities (excluding 27 county councils)  
Source: [www.lgiu.org.uk/local-government-facts-and-figures/](http://www.lgiu.org.uk/local-government-facts-and-figures/). Date accessed 23 April 2017.

<sup>92</sup> Local authorities could access CABE services at nil or a low cost through the enabling budget funded via CLG and DCMS grant funding.

investment in guidance documents and local authority training, poorly designed developments were still progressing through the planning system and into the market place.

The dispute about BfL20 and Kickstart surfaced in response to the HCA's subsequent decision to fund schemes that failed to meet BfL20, a situation that caused CABE significant concerns. CABE firmly believed that regardless of the wider economic situation, the government should not have funded schemes using public money to support developments that failed to meet the government's own national standard for well-designed homes and communities.

Table 6: **Kickstart Round 1 and 2.**

<b>Building for Life score/20</b>	<b>Building for Life band descriptor (based on score)</b>	<b>Number of schemes</b>	<b>Percentage</b>
16 +	Very good	21	11.2
14 – 16	Good	24	12.8
9 – 13	Average	68	36.2
Less than 9	Poor	75	39.9
<i>Average score</i> 9.3	<b>Totals</b>	<b>188</b>	<b>100.1</b>

A headline at building.co.uk on 8 January 2010 read, 'Cabe [sic<sup>93</sup>] and HCA bosses clash over Kickstart scheme'. It followed with, "*The HCA was criticised in December after it emerged that more than half the homes in the Kickstart programme failed the government's own design test. Of 136 developments, more than half achieved less than 10 out of 20 against the Building for Life design criteria.*"<sup>94</sup>

A division emerged between the organisations that were collectively involved in leading the BfL initiative. Whilst CABE criticised the HCA, David Birkbeck of Design for Homes commented that, "*Kickstart is a Marshall Plan for the devastated housebuilding sector. You do not just give emergency aid to the best dressed. The HCA is right to withhold support from only the very worst*"<sup>95</sup>.

<sup>93</sup> This should have been written as CABE (capitalised).

<sup>94</sup> [www.building.co.uk/cabe-and-hca-bosses-clash-over-kickstart-scheme/3155802.article](http://www.building.co.uk/cabe-and-hca-bosses-clash-over-kickstart-scheme/3155802.article). Accessed 25 January 2016.

<sup>95</sup> [www.building.co.uk/cabe-and-hca-bosses-clash-over-kickstart-scheme/3155802.article](http://www.building.co.uk/cabe-and-hca-bosses-clash-over-kickstart-scheme/3155802.article). Accessed 25 January 2016.

The argument escalated with calls made for the Kickstart assessments for schemes to be made public. A BD Campaign was launched, badged as ‘Come Clean on Kickstart’. By February 2010, it was announced that as part of Kickstart 2, CABE’s role was to be reduced. By March 2010, CABE and the HCA were said to be working more closely to resolve their differences, yet an interesting admission emerged on bdonline.co.uk when the HCA’s Director of Policy and Strategy, Trevor Beattie was asked if poor housing had been funded. Beattie did not seem to deny that poor housing had been funded, “*It’s badly needed housing – that’s the point*”<sup>96</sup>.



**Figure 34: Kickstart funded schemes were criticised for failing to observe basic principles of good design.** Despite this development turning its back onto a newly created public open space, Halls Lane, Giltbrook in Nottingham secured Kickstart funding. It had previously received planning consent from Broxtowe Borough Council. The application had been received by the Council’s urban designer officer and Nottinghamshire Police. Neither raised concerns about the lack of surveillance opportunity over the open space or the fragmented perimeter block structure. 2017.

The HCA stressed that, “*the design assessments need to be seen in the context of schemes that by definition as stalled sites have already received, or are well advanced towards, detailed planning permission where no public subsidy was originally anticipated; and in the need to maintain housing supply and help mitigate against the effects of the market downturn on the housebuilding industry*” (HCA, 2009, p.6). The HCA also claimed that some sites received consent prior to 2004, “*before Building for Life was fully established as a key industry standard*” (2009, p.6). A deeper and more concerning issue was hidden by the attention focused on the Kickstart programme. This deeper

<sup>96</sup> [www.bdonline.co.uk/hca-and-cabe-close-ranks-over-kickstart-%E2%80%93-but-chairman-admits-shock-over-standards/3159609.article](http://www.bdonline.co.uk/hca-and-cabe-close-ranks-over-kickstart-%E2%80%93-but-chairman-admits-shock-over-standards/3159609.article). Date accessed 25 January 2016.

issue was that in most cases, Kickstart schemes had already secured planning consent. BfL20 did not in itself introduce new concepts or ideas, instead it consolidated urban design principles that were well established and reflected in national and local design policy and guidance into a scoring methodology. A ‘good’ score under BfL20 could be secured by arranging standard house types in a well-considered way and did not necessitate bespoke architectural designs or buildings that outperformed Building Regulations.

Writing to the Architects Journal in March 2010, Paul Finch (then Chairman of CABE) said, “*Wearing my CABE chairman's hat, my perspective on this programme starts with the truism that the government desires to deliver numbers not of homes completed, but of homes that can be said to be 'starting' (those with planning permission and the funding to proceed, with that funding coming from the taxpayer in the absence of private-sector support).*

*You can see why housing minister John Healey is averse to discussing anything that might get in the way of those numbers. And he has a point when he says that, if the schemes have planning permission, why should consideration of design quality suddenly become a hurdle to a start on site? If a scheme was of sufficient quality to obtain planning permission, what is the problem?... If planning authorities hold their noses and grant permission to obviously useless design, should the government follow suit and funnel in taxpayers' cash?*

*This is the real question in the great Kickstart debate, and one that has a general implication for our built-environment policies at a time of financial stringency. For CABE, the question is not whether a particular scheme is a potential Stirling Prize winner, nor whether the design is 'good' in the sense of being a potential RIBA Award winner. The question is whether it is 'good enough'.*

*... There may be all sorts of sound and fury over which builder scored what points on which scheme in relation to the Kickstart programme, but the real question is about finding the appropriate balance between quality and quantity, and how we manage this better in years to come – without resorting to the provision of rabbit hutches?”<sup>97</sup>*

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<sup>97</sup> <http://webarchive.nationalarchives.gov.uk/20110118095356/http://www.cabe.org.uk/articles/the-big-questions-about-housing>. Date accessed 25 January 2016.

Within the HCA's review of the Kickstart (Round 1) programme, the HCA commented that it was, "*pleased with the positive moves towards uptake of the Code for Sustainable Homes*", however observed that, "*the results for design however were much less strong*" (HCA, 2009, p.6). Across the Kickstart programme, the average BfL20 score was 9.3 across the grant funded schemes in Round One, increasing to 12.5 in Round Two, somewhat below the minimum score of 14 required for a scheme to be considered of a 'good' standard of design.

BfL20 entered 2010 embroiled in controversy and within a highly sensitive political environment where economic concerns were placed on a far higher par than those associated with design quality.

#### Get Britain Building

*"Providing the shot in the arm that Britain needs to get back to business".*

Ministerial Foreword (HCA, 2012, p.2).

Labour's Kickstart programme was later replaced by 'Get Britain Building'. Broadly identical to Kickstart in its objectives, the emphasis was placed on accelerating the delivery of new homes through a further fiscal stimulus programme. In 2011, a £420m fund was announced. A further £150m was added to the fund in 2012. House builders were invited to apply for loans or equity investments to support construction development sites stalled through the difficultly in securing support from banks.

As opposition Housing Minister, Grant Shapps had criticised the Kickstart 2 programme when CABE's involvement was reduced when the requirement for BfL20 design assessments were not required as part of the due diligence process<sup>98</sup>. Shapps said, "*I think that it will be of concern to everyone to learn that quality design may now be being sacrificed during the Kickstart programme.*"

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In the second prospectus, Shapps explained that, "*in choosing which projects got the green light, quality and value for taxpayers' money had to be our watchwords*" (HCA, 2012, p.2). Though these quality and value considerations related to *financial* quality and value – as opposed to *place* quality

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<sup>98</sup> As they had been for Kickstart 1, resulting in a high degree of controversy.

<sup>99</sup> HCA cuts Cabe's role in Kickstart Round 2. <http://www.bdonline.co.uk/hca-cuts-cabe%20%99s-role-in-kickstart-round-2/3158382.article>. Date accessed 30 January 2016.

and limiting the public's future exposure to the costs of poor design. Whilst it cannot be assumed that the fund supported poorly designed schemes (there was no evidence either way), there was no due diligence process to ensure that only well-designed schemes were being supported; or at least withhold funding from the very worst designed schemes.

In the Ministerial foreword to the Get Britain Building Prospectuses, Shapps said, "*Building more houses means more jobs. More houses for people who dream of owning their own home. More economic growth. We need to get builders back on to "shovel ready" sites... So here's your chance to get back on site – to get those shovels back in the ground.*"<sup>100</sup>

The foreword reaffirmed the government's focus: house building and job creation. There was no focus or consideration of any issues relating to design quality (a view reaffirmed by a senior Homes and Communities Agency employee<sup>101</sup>). The fund was more about getting homes built, whatever their quality. Neither prospectus included any requirement or expectation that any government loan or investment was reliant on any design requirements being met. In a political climate where design attracted no meaningful government support or commitment, it remained increasingly unclear what expectations would be placed on house builders when it came to building places that were well-designed; and whether there was any substance behind occasional statements relating to design quality.

#### 4.8 The decline of CABE

In October 2010, HM Treasury published its Spending Review – the first of the new coalition government. This Review announced an, "*unavoidable deficit reduction plan*" (2010, p.5), stimulated by the largest budget deficit in Britain's peacetime history with the state borrowing £1 pound in every £4, it spent, with £43 billion spent on debt interest alone (2010, p.4).

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<sup>100</sup> Homes and Communities Agency (2011) Get Britain Building Programme Prospectus.

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/345215/get\\_britain\\_building\\_programme\\_prospectus.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/345215/get_britain_building_programme_prospectus.pdf). Date accessed 30 January 2016. Homes and Communities Agency (2011) Get Britain Building Prospectus: Round two

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/345221/gbb2\\_prospectus.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/345221/gbb2_prospectus.pdf). Date accessed 30 January 2016.

<sup>101</sup> Author's notes.

The Spending Review focused on what it called, “*wasteful spending*”, reducing welfare costs and reducing capital spending (2010, p.5). The government was determined to be seen as a champion of economic growth and prudent spending, fiercely tackling those activities it perceived to be wasteful use of public monies. Following the Spending Review, 46% of quangos were abolished with CABE considered ‘at threat’ since July 2010, and its future undetermined at the time of the publication of the Public Bodies Reform in October 2010.

The global credit crisis led to a seismic shift in the politics of planning as power shifted away from New Labour. New Labour’s appetite for good design, strong and well-funded government was replaced with an appetite for economic growth, lighter regulation, a slimmer (and cheaper) public sector and a less encumbered house building industry. CABE’s rise and fall is well documented in ‘Design Governance – the Cabe experiment’ (Carmona et al., 2017) though its demise requires consideration within this thesis as its downfall had direct implications for the future direction of the BfL initiative.

CABE was the successor to the Royal Fine Arts Commission that had been established in 1924. In 2010, its funding was withdrawn. CABE’s principal sponsor was DCLG that funded CABE with £6.9m between 2009-11. On the day of the Spending Review the government announced a 34% cut in administrative budgets across Whitehall, with savings totalling £5.9 billion by 2014/15 (HM Treasury, 2010, p.9). As part of the Review, DCMS was instructed to limit, “*cuts to 15% for core programmes like Museums, Arts Council England funding to frontline arts and Sport England’s Whole Sport plan*” (HM Treasury, 2010, p.66). Alongside DCLG, DCMS was required to meet these cuts by refocusing its priorities and reducing its support for what were referred to as ‘Arm’s Length Bodies’. Faced with cuts in real terms of 24%, on the day of the review, DCMS withdrew all its funding from CABE with effect from 1 April 2011.

DCLG faced a 33% reduction in its resources (51% in real terms). The government announced that DCLG’s priorities were, “*reforming the planning system and introducing a New Homes Bonus to support economic growth and increase housing supply*” (HM Treasury, 2010, p. 47). Noticeably, no reference was made in the Spending Review of quality homes and places – if for no other reason that poorly designed places can create increased risk of failure and in turn potentially create liabilities for publicly funded bodies.

With the exception of HM Treasury and the Department for Environment, Food and Rural Affairs that both faced cuts in real terms of 33% and 29% respectively (compared to DCLG's 33% cut), no other government department faced such significant reductions in funding. Yet a new agenda was coming to the fore, as expressed by the government's renewed remit of DCLG that included reducing, "*the total regulatory burden on the house building industry over the Spending Review period*" (HM Treasury, 2010, p.48) - an indication that CABE did not fit the new political era.

The decision to financially cripple as opposed to abolish CABE attracted comment from respected professionals within the industry. Ivor Samuels commented, "*This policy seems to me to reveal the emptiness of the Government's professed concerns about the long term. Nothing is of longer duration than our built environment whose street patterns, once laid down last for hundreds of years.*"<sup>102</sup>

Whilst John Calcutt, author of the previous government's review of house building stated,

*"The last government refused to give CABE any teeth this one has refused to give them any money. What we build now will stay with us for decades to come. Future generations will have to live in, work in and look at the buildings we construct today. Seldom in the history of development have the pressures to cut costs been greater. Surely by now the penny must have dropped, that CABE's remit went far beyond mere aesthetics. The built environment is a key determinant [sic] of how people live and behave, of how communities evolve. Without CABE to fight the corner for design standards that enrich rather than demean society, what sort of legacy are we now going to leave future generations? The core of CABE's work must be preserved, a way found to save us all from sinking in a sea of tat."*<sup>103</sup>

Lord Rogers of Riverside appealed to the government in January 2011 to save CABE. Rogers argued, "*If CABE goes to the wall, we may not see the impact this year or next. But over time the urban fabric of our towns and cities will deteriorate, the quality of life that they offer will be diminished, and we will realise what we have lost.*"<sup>104</sup>

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<sup>102</sup> <https://www.bdonline.co.uk/uk/cabe-to-be-wound-up-as-funding-is-axed/5007593.article>. Date accessed 31 January 2011.

<sup>103</sup> <https://www.bdonline.co.uk/uk/cabe-to-be-wound-up-as-funding-is-axed/5007593.article>. Date accessed 31 January 2011.

<sup>104</sup> <https://www.bdonline.co.uk/uk/cabe-to-be-wound-up-as-funding-is-axed/5007593.article>. Date accessed 31 January 2011.

A potential link up with the Prince's Foundation for the Built Environment (PFBE) was mooted. The PFBE suggested taking responsibility of one of CABE's two most high profile programmes: Design Review (the second being BfL20). The proposal was short lived. Meanwhile, CABE's staff numbers rapidly started to decline as redundancy notices were served. A small team was left to 'wind up' the organisation and deposit its records with the National Archives.

In January 2011, the possibility of CABE merging with the Design Council was announced. However, the idea of a merger was somewhat misleading. The 'merger' would amount to 19 staff – 15% of its previous professional capacity – moving to the Design Council. Of these staff, none were from the Urban Design and Homes Team that were involved with BfL20. As the official merger was announced in April 2011, the Housing Minister warned architects and house builders in a letter to the Design Council, urging them to avoid building, "*...bog standard, identikit Legoland homes that typify some new developments - all looking exactly the same on streets that could be anywhere in the country. Whilst we are seeing good examples emerging, too often new developments are dominated by the same, identikit designs that bear no resemblance to the character of the local area. I want more developers to think outside these Legoland designs.*"<sup>105</sup>

Since 2011, CABE has had a considerably lower profile and influence across the development industry and local planning authorities. CABE's demise led BfL20 to a turning point: it would either disappear or instead need to reform itself to align more closely to a delicate political and economic climate. It would also need to secure the support of the house building industry that were still deeply sceptical of the initiative.

#### **4.9 Building for Life 12**

In the early days of the Coalition government, ministers were keen to show some degree of commitment to design quality to somehow counter a strong emphasis on deregulation and relieving the house building industry of regulatory burdens. But how would this be achieved in practice? How could the government know this could be achieved in practice when the mechanisms that had been established to achieve these ends had been largely swept away? The dissolution of CABE was just the 'tip of the iceberg'. CABE supported regional architecture centres and funded the

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<sup>105</sup> Formation of the national strategic design body, <http://www.designcouncil.org.uk/about-us/The-Design-Council-and-CABE>. Date accessed 6 April 2011.

work of 191 CABE enablers that were distributed across the country<sup>106</sup> - all of whom were actively involved in doing the things that the ministers wanted to challenge. Furthermore, the funding cuts that affected local authorities led to loss of urban design posts across the country.

'The Bishop Review: The Future of Design in the Built Environment' published in 2011, began to explore these issues and challenges. The Review explored how design quality could be protected and improved in a new political and economic climate. Bishop described BfL20 as, "*one of the most successful of CABE's products*" (2011, p.19) and recommended that,

*"it is best for BfL to move away from the standards-based approach and back to being a starting point for negotiations. To this end, it would be prudent to review the operation of BfL with its partners and the industry. However, it is critical that in this move Design Council Cabe and its partners maintain the goodwill of the planning authorities and housebuilders by keeping BfL relevant to the new planning and development context"* (2011, p.19).

Combined with the HBF's significant influence, the scene had therefore been set for a review of BfL20 and taking it into its second decade. This would involve creating a new version of BfL that was consistent with the new political and regulatory climate; and one that would be led more by the industry than a crippled public sector.

#### **4.10 Conclusions**

The purpose of this chapter has been to offer the reader an overview of the tool, its emergence, evolution and use in town planning and development practice. The tool has survived a turbulent political and economic environment and its survival has been largely dependent on support within the house building industry alongside a need for the tool to change and evolve. An inevitable consequence of these changes has been the 'retreat' of BfL away from considerations relating to the environmental performance of individual dwellings and the size and design of internal spaces. Choy's (2013) research explored the transition from BfL20 to BfL12 with a former CABE employee stating that BfL12 represents the "*soft and cuddly cousin*" of its predecessor. However, these observations are unfounded (see Table 5) with BfL12 containing all but 4% of the original 20 questions. Critics of BfL12 seem to discount wider changes within the planning system and national

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<sup>106</sup> <http://webarchive.nationalarchives.gov.uk/20110118095356/http://www.cabe.org.uk/press-releases/strengthening-enabling-support>. Date accessed 23 April 2017.

governance since the global credit crisis – both of which required the tool to change for it to remain relevant and survive a very turbulent period; not only politically but within the planning system and wider development industry. Had the tool not been substantially changed, with references to the critique of internal living spaces and features such as environmental performance removed, the tool would have not only lost the little support and interest it had from the government but also the industry's representative body – the HBF. The tools most enthusiastic champions were either gone (CABE) or had their focus and remits shifted (HCA).

Six years since the launch of BfL12 and despite the lack of government funding, the tool remains in widespread use across both the public and private sectors and is the only widely recognised design quality indicator for new build residential development.

## PART TWO: EVIDENCE AND DATA ANALYSIS

This next part of the thesis presents the research findings across four chapters: Chapter 5 discusses the Three Counties Audit and Chapter 6 critiques CABE's Accredited Building for Life Assessor Network. Chapters 7 and 8 explores the effectiveness of BfL as a regulatory tool.

### 5. Three Counties Audit

The Three Counties Audit involved auditing 54 recently completed (or largely completed) residential developments against BfL12.

#### 5.1 Headline findings

Despite the changes made to BfL in 2012, it is possible to undertake a degree of comparison between the findings of CABE's housing audit for the East Midlands (based on BfL20) and the audit (based on BfL12) undertaken as part of this research by classifying schemes as either 'compliant' or 'non-compliant' with Building for Life.

Table 7: **Three Counties versus CABE audit:** compliance with BfL.

Building for Life compliant?	CABE	Author's research
Yes	3%	22%
No	97%	78%

Under CABE's methodology schemes that performed positively against BfL20 and achieved a score of 70% or higher were classed as good - or 'compliant' with national policies relating to good design (2007a, p.63). Therefore the same percentage threshold was adopted by the researcher, with schemes securing a score of 70% or higher against BfL12 classed as 'compliant'. Whilst the headline findings show that there has been noticeable improvement in quality, this still equates to less than a quarter of the schemes reviewed.

Table 8: Average BfL12 performance across all audited schemes.

	Average score (all schemes)	BfL12 question	Theme
Highest	0.76	1	Connectivity
	0.60	6	Site and context
		8	Legibility
	0.53	12	Storage and amenity
	0.51	7	Spatial definition
	0.50	11	Public and private space
	0.49	9	Streets for all
Lowest	0.42	10	Car parking
	0.35	5	Character

Note: The audit methodology involved assessing nine of the twelve BfL questions. The average score relates to the average performance of all audited schemes against the BfL question. As such, the average score for all audited schemes against Question 7: Spatial Definition was 0.51.

A series of design trends became evident following an analysis of the audit results. Of the nine assessed criteria, the strongest performance was against the question relating to internal and external connectivity. Assessed schemes generally performed well with pedestrian and cycle only routes a common feature; a vital design quality in making communities better connected and more walkable. Good but not as strong performance was achieved against criteria 6 (responsiveness to opportunities and constraints) and criteria 8 (legibility). Weaker performance was evident across the remaining assessed criteria: 12 (amenity space and waste storage), 7 (spatial definition), 11 (public and private space), 9 (streets), 10 (car parking); with weakest performance against 5 (character).

Overall only 22% of schemes were broadly in line with the requirements of BfL12, yet a greater proportion – 78% (rounded up) – performed poorly against the criteria assessed. A particularly notable finding was that the highest performing schemes and the schemes that were considered compliant with BfL12 across the audited developments were built by the same developer (albeit

under two different brand names) – performance that correlates to the emphasis placed on good design and BfL12 by this particular developer (Barratt Plc). Not one scheme built by either Persimmon Homes (including its premium brand of Charles Church) or Taylor Wimpey was identified as BfL12 compliant within the audited sample.

Table 9: The distribution of score performance against BfL12 by house builder.

	BDEV	DWH	PSM	TW	Totals	%
High	3	9			12	22.2
Mid high		2	2	3	7	12.9
Mid low	9	8	4	8	29	53.7
Low	2		2	2	6	11.1
<b>Totals</b>	<b>14</b>	<b>19</b>	<b>8</b>	<b>13</b>	<b>54</b>	<b>99.9</b>

77.7% below half maximum score

Notes: BDEV (Barratt Homes), DWH (David Wilson Homes), PSM (Persimmon Homes including Charles Church) and TW (Taylor Wimpey).

## 5.2 Findings: Integrating into the neighbourhood

Only criteria 1 was assessed under the first chapter heading of BfL12 (integrating into the neighbourhood). Whilst three quarters of developments performed positively against this consideration, a further quarter failed to establish the necessary connections – primarily pedestrian and cycle connections – to create a more connected community where reduced car dependency can be encouraged by offering residents ease of opportunity to walk and cycle more, particularly for shorter journeys.

The reasons for frustrated connectivity were predominantly:

- The existence of (retained/unused) ransom strips.
- Changes in level between the development site and adjacent land (which can require ramps and steps that will not only be costly for a developer to provide but are features that adopting authorities are rarely willing to adopt. For instance, it is not uncommon (albeit reluctantly) for a council to adopt a pedestrian/cycle connection but resist a connection

that relies on ramps and steps due to the higher maintenance costs associated with these features).

- The construction of a new home(s) (and/or ancillary structure, such as a garage) in the location where a connection is required.

Securing optimal connectivity if ransom strips exist (and if it is not possible for a developer to secure a ransom strip) and in turn provide a connection in a particular location, the ability to provide a connection in the future should be safeguarded.



**Figure 35: Fernwood Village.** Good internal connectivity provides a network of connected walking routes. 2015.

It is essential for points of connectivity to be identified at viability stage to ensure that any necessary costs associated with providing a connection and any potential loss in sales revenue are accurately anticipated.

### **5.3 Findings: Creating a place**

Two of the weakest performing questions within this section of BfL12 are discussed in greater detail:

#### **5.3.1 Character**

The area of greatest weakness in the audit related to the character and identity of developments (0.35 average score), with few schemes demonstrating any degree of local tailoring to better reflect

the characteristics of a site or its wider context or create a place with its own distinctive sense of character. The use of structural landscaping as a way to create a sense of identity was also very limited, used by only two developments despite the effectiveness of strong structural landscaping in creating places with character where standard house types have been used.



**Figure 36: The use of local stone** to the facades of standard house types makes a marked difference to creating place with a sense of locally inspired character (8. Weavers Gardens). 2013.

Instead, the overriding character of the majority of developments audited is one that can be best described as ‘placeless’ with a range of standard house types placed around a road network, indifferent to their locality and equally indifferent to creating a place that have its own sense of character. Even in low value market areas, the use of local materials can enable standard house types to offer a ‘nod’ and a connection to a locality. In the absence of any meaningful landscaping character within the foreground the eye of the observer is drawn to the facades of buildings. Typically these are ‘expressionless’.

The most successful schemes were not built with bespoke house types. Instead, they were either:

- Standard house types built with locally distinctive materials (for example, 8. Weavers Gardens, 28. Discovery Gardens and 39. Saltergate).
- Standard house types with or without modifications to elevations set within high quality street environments (for example: 19. Avalon, 24. DeLacey Court and 53. Clifton Village).

A further unifying quality of these schemes was an approach to street design more aligned to Manual for Streets with both a visually ‘softer’ aesthetic achieved and a simpler, more geometric street pattern where changes in street alignment were only used respond to the topography or other characteristics of a development site. However restrictions on carriageway width often result in vehicles being half parked on pavements.



**Figure 37: The use of less curvilinear street patterns is a noticeable feature of the developments.** The simplicity of the street structure creates further design benefits, creating more useable building blocks avoiding awkward junctions and left over pieces of land (27. Hastings Park). 2017.

David Wilson Homes house types were consistently observed to be architecturally more expressive than those of other house builders with a degree of architectural character that can generally be considered to draw references from traditional building characteristics in the basic form and proportions of dwellings. The use of street facing gables is a common characteristic that affords streets greater visual interest. Some of the David Wilson schemes were more successful than others in reinforcing this traditional inspired character through softer and more organic street design, locally appropriate materials, colours and detailing.

The better performing schemes had all invested more considerably in soft landscaping than the less successful schemes. The worst performing schemes were those where house types were ‘expressionless’, there was little or no landscaping – and usually there was no space for any landscaping to be planted, grow and flourish.



**Figure 38: A visual comparison of two similar house types** plotted in a similar way – close to the back of the pavement edge, yet with two very different characters. Many of the standard house types employed by some house builders are neither traditional nor contemporary in appearance and are instead characterised by design decisions that seek to minimise exposure to higher build costs. This in turn creates ‘expressionless’ buildings (top; 54. Dovedale Park). Other house builders use standard house types that are more traditional in appearance, with improved proportions (solid to void) and better materials and detailing. These are more visually expressive and can help to give a place a better sense of character (bottom; 25. Park Lane, Castle Donington). 2015.

With the exception of one scheme (53. Clifton Village), the Barratt and David Wilson house types seen across the audited schemes are more traditional and authentic in appearance than their competitors. These house types demonstrate a greater degree of attention afforded to traditional building ‘cues’, i.e. form, proportion, material and detailing. In contrast, the standard house types employed by Persimmon and Taylor Wimpey can neither be classed as ‘traditional’ or ‘contemporary’ in appearance, yet the inclusion of occasional ‘faux-traditional’ features such as

chimney stacks, porches and door surrounds suggest concessions secured by the local planning authority to create schemes with some sort of character - the typical approach being to gravitate towards a traditional style, albeit with varying degrees of authenticity.



**Figure 39: More contemporary styled homes** set within a generously landscaped setting help to create a place with a memorable identity. The house types are based on standard floor plates (54. Clifton Village). 2016.

The standard house types employed by Persimmon and Taylor Wimpey across the audited schemes appear to have been created in response to tight controls on build costs, with the form, proportion and overall appearance of buildings and their respective elements inspired less by a traditional or contemporary architectural reference points but instead by cost minimisation. The result is that schemes by these developers are typically defined by plain 'boxes' with the occasional porch or chimney appended to them. Traditional referencing is further eroded by the use of pre-fabricated detailing (in particular porch canopies formed by a singular piece of glass reinforced plastic, with spray painted 'tiles' and 'timber' brackets).



**Figure 40: Straight streets are discouraged by highways authorities** that require changes in horizontal alignment as a method of speed control. Whilst the street here lends itself to a simple straight street and speeds could have been controlled by designating the development as a 20mph zone (as 53. Clifton Village) and/or through the use of cobbled setts to act as speed ‘reminders’, these features would have been strongly resisted by the highways authority (34. Hathern). 2014.

These particular differences between the standard house types employed by different house builders partly explains why a housing layout upon which Barratt or David Wilson house types will be more likely to possess a sense of character than the same layout with Persimmon or Taylor Wimpey house types placed upon it. Whereas the standard Barratt and David Wilson house types will offer a degree of traditional authenticity and interest, the standard Persimmon and Taylor Wimpey house types are considerably less authentic and are instead ‘pared’ back – with little to nothing to create a sense of identity.

The audit also identified three particular and distinct approaches to scheme design:

1. **Planned** (designed to appear as a place designed and built by one organisation/person and at a particular point in time).
2. **Organic inspired** (designed not to appear as (too) ‘planned’ though typically this approach is conflicted by local or regional highways design standards).
3. Neither 1) or 2): examples 14. Jasmine Gardens, 15. Persimmon Gardens and 54. Dovedale Park.

The most successful schemes in the audit were those that were not attempting to appear organic and instead based on more geometric, linear street patterns with buildings framing a simple street

and space network. The quality of these schemes was complemented by good quality hard and/or soft landscaping. Notable examples were 27. Hastings Park, 39. Saltergate, 47. The Courtyard and 53. Clifton Village.



**Figure 41: Organic inspired schemes** were often compromised by over-engineered highways designs. Features imposed on developments by highways authorities typically include forward visibility splays that across a development can consume a large amount of space. It is not uncommon for these areas to be used as informal parking spaces. 2013.

Organic inspired schemes were generally poor with curvilinear street patterns creating awkwardly shaped building blocks which when standard house types were placed upon them often created unresolved relationships between buildings and between buildings and the street. However, even the most successful organic inspired schemes that were audited (34. Hathern) had been compromised by unflexible and rigid highways engineering standards.

The typical requirement for engineered ‘corridors’ with tarmacadam carriageways and pavements delineated by British Standard concrete kerbs consistently undermined efforts by some house builders to create softer street environments (consistent with the sources of development inspiration) and where drivers were encouraged to drive at slower speeds, adopting more cautious driving styles. One notable exception is 24. Towles Pastures where the physical restrictions of the site prevented a road of adoptable width to be constructed on the site. Released from the restrictive requirements of the highways authority, a softer lane that is shared by both pedestrians and vehicles has been created. The overall effect is a development that is the most convincing interpretation of a village’s more organic and traditional characteristics – whilst still functioning effectively as a highway.

The audit also demonstrated further differences in the quality of standard house types employed by developers. Whilst David Wilson house types generally related well to each other to create a more meaningful and coherent whole they were also more varied with a wide range of housing typologies able to fulfil certain functions within a wider spatial framework, in particular the ability to address street corners and changes in street alignment positively.

Only two schemes within the audit adopted a landscape led approach whereby structural landscaping as opposed to buildings were the principal source of character (27. Hastings Park and 54. Clifton Village). A further example partly used a landscape led approach along the development's main street (19. Avalon). The use of structural landscaping within these developments was also particularly effective in helping to create a mental map of a place.



**Figure 42: The use of structural landscaping** significantly contributes towards creating a place with a sense of character (19. Avalon). 2014.

### 5.3.2 Creating well defined streets and spaces

Schemes failing to perform positively against this question (average score 0.51) exhibited one or more of the following deficiencies:

- Incomplete or broken perimeter blocks.
- Weak or haphazard spatial definition, with fragmented, undisciplined building lines that are neither planned nor organic in character.

- The plotting of incompatible building types to one another, resulting in prominent and blank side walls to buildings projecting out prominently into the street scene and weak relationships between adjoining buildings.
- Poor resolution of internal vistas.
- Weak resolution of corners, with the absence of ‘corner turning’ or dual aspect house types.



**Figure 43: Indifference to the street** is commonplace (16. Millhouse Gardens). 2013.

With few exceptions, schemes seemingly attempted to convey an (unconvincing) impression of ‘organic-ness’ in the layout and arrangement of buildings and spaces. In reality, these schemes have no meaningful relationship with local and historic street patterns, plot characteristics, building forms and proportions, building heights, roofscape expression, materials, colours and detailing or variation within a generally consistent style or vernacular theme. The placement of buildings was instead ad-hoc dictated less by traditional street patterns and urban grain – and instead, by efficient plotting around a highways compliant road network.

Instead, the underlying design approach of these pseudo-organic schemes is to:

- 1) **Establish the most efficient road network**, partly in response to regional highways design requirements that require a change in horizontal alignment every 60m as a form of speed control; and partly to reduce capital expenditure on a potentially more extensive street and pathway network (a disconnected street pattern that is reliant on private drives to provide access to ‘tail’ properties will be cheaper to build than a more extensive and better connected adopted and publicly accessible street network).

- 2) **Placing buildings around this network** with a minimum set back distance (increasing for house types with in front of plot parking, for example integral garage house types).



**Figure 44:** An ad hoc building layout with the placement of buildings arranged around a compliant road network where changes in horizontal alignment are made every 60m (15. Persimmon Gardens). 2013.

- 3) **Pushing parking away from the street**, placing it to the side of plots, behind the building line (often in tandem style parking arrangements) or create parking courtyards to the rear of gardens.
- 4) Turning either sharp or shallow corners with **buildings that do not fit the shape of street corners** or do not fully address the spaces with which they need to have a positive relationship with, therefore only considering the principal facade of the building rather than considering how it sits within the street and in turn whether secondary elevations are additional primary elevations but virtue of their prominence.



**Figure 45: A fragmented and uncoordinated building arrangement** creates wasted spaces with no clear public or private function. (14. Jasmine Gardens). 2013.

To achieve a convincing sense of organic character requires (as a minimum) a range of building forms, types and in particular angles that are rarely found in the portfolio of volume house builders. Ideally these buildings need to be complemented by the design of the wider street environment. The audit discovered that only two of the volume house builders (Barratt and David Wilson) possess house types that can fulfill a wider range of spatial functions. These house builders consistently demonstrated an ability to resolve relationships between buildings and between buildings and the spaces around them well.



**Figure 46: David Wilson Homes standard house types** consist of building plan forms that enable homes to fulfil a wide range of spatial functions successfully addressing changes in street alignment. Whilst this may seem like a basic or obvious observations, it is not uncommon for other house builders to not have such a 'sophisticated' range of housing types (31. Quorn). 2014.

A further very common trend was linked to Question 10: Car parking, where the tendency to create rear parking courtyards has resulted in the centre of perimeter blocks being 'opened up' (see sub chapter 4.6.2). The potential pitfalls of this approach were compensated for in Poundbury by creating these areas as mews streets with high levels of natural surveillance opportunity afforded by properties placed both at the entrances to and within these mews areas. A particularly important design feature of these spaces is the provision of buildings with habitable rooms at ground floor. None of the courtyards within the audit had any of these qualities and instead were poorly

overlooked, isolated and often unlit spaces. The rear boundaries of back gardens were also particularly vulnerable.



**Figure 47: Internal vistas** are often not resolved as successfully as they might otherwise have been (16. Millhouse Gardens and 38. Kibworth Meadows). 2013.

#### 5.4 Findings: Street and Home

The four questions contained within the final section of BfL12 were consistently poorly resolved across the audited developments.

#### 5.4.1 Streets for all

Symptomatic of the disconnection between regional highways standards and Manual for Streets, a widespread feature of developments is the dominance of engineered highways (average score of 0.42). Few schemes were found to even modestly respond to the ethos of Manual for Streets and encourage more pedestrian friendly street environments where vehicle speeds are kept to 20mph or less. With the exception of three schemes (39. Saltergate, 54. Clifton Village and 24. Towles Pastures) not a single scheme had successfully demonstrated a different approach to street design.

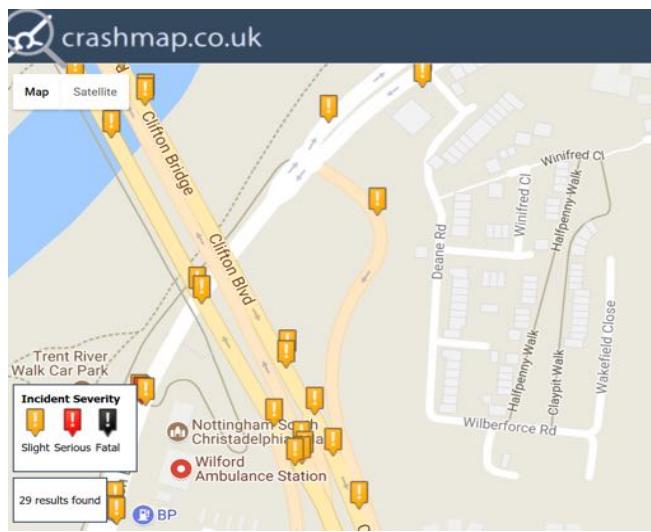


**Figure 48: Streets for people.** Only a few schemes within the audit successfully created environments consistent with the principles of Manual for Streets (53. Clifton Village).

In the case of 54. Clifton Village simple but effective features have been employed to calm vehicle speeds at the entrance to the development. These features are:

1. A change in surface materials (which then revert back to standard tarmacadam),
2. Strong edge of street landscaping that serves to create a more human scale to the development,
3. A 20mph speed designation,
4. Occasional changes in surface materials within the development,
5. Shallow kerb heights, creating a more level surface between the pavement and the carriageway surface and,
6. Tight street corner radii designed to reduce the speed at which vehicles can navigate corners.

Similar features have been used at 39. Saltergate.



**Figure 49:** Crashmap provides a database of recorded incidents. The Clifton development (Deane Road, Wilberforce Road, Wakefield and Winifred Close) is designed on a largely linear street pattern (against the recommendations of regional highways guidance), however there are not recorded incidents involving collisions between vehicles and other road users.<sup>107</sup>

A further benefit of the approach adopted at Clifton is that the visual impact of highways infrastructure has been reduced and therefore does not become an overly dominant feature. However, schemes such as Clifton are rare as highways authorities resist the features and linear street patterns used within the development.



**Figure 50: Should a driver be able to see around a corner?** The issue of forward visibility was raised in a recent Manual for Street conference (Burbidge and Kruczowski, 2017). These two consecutive slides extracted from the presentation show two very different approaches to forward visibility despite both being within the administrative boundaries of the same highways authority.

The issue of highways design compromising quality was discussed at a 'Manual for Streets: 10 Years On' – a conference hosted by the Urban Design Group in November 2017. The consensus was that Manual for Streets (DoT/DCLG 2007) has not significantly affected the practices of highways

<sup>107</sup> Source: <http://www.crashmap.co.uk/search>. Date accessed 31 December 2017.

authorities across England with a fundamental disconnect between what planning authorities and what highways authorities regard as the principle purpose and users of residential streets. It was also identified that despite the existence of local highways guidance, what would or would not be permitted by the Highways Authority could vary depending on the standpoint of the individual officer(s) involved, with some officers more ‘in tune’ to Manual for Streets than others; and therefore more willing and able to reconcile engineering considerations with those relating to quality of place. The issues associated with street design can be also attributed to the *guidance* as opposed to *policy* status of Manual for Streets which enables local highways authorities to place varying degrees of weight and emphasis on the document.

#### 5.4.2 Car parking

Issues associated with displaced parking were widespread across the majority of the developments audited, with either low levels of parking provision or allocated parking located in inconvenient and unattractive locations; parking courtyards some distance from people’s front doors. It was therefore not uncommon to see streets with high levels of ‘half on road and half on pavement’ car parking and largely empty parking courtyards (partly due to a reliance on narrower carriageway widths, for example 4.8m, that fail to take into account the common need for unallocated on street parking for both visitors and residents).

Interestingly, this is in contrast to Poundbury, Dorset where the use of car parking courtyards has been widely used to create more traditional streets; uninterrupted by breaks between buildings and gaps between the pavement and the façade of buildings to accommodate street accessed on plot parking to the side of, front of or within (for example, integral garaging/car ports) individual homes. Unlike the schemes audited, Poundbury is not affected by the half on and half off pavement car parking that compromises the quality of the street environment and frustrates pedestrian movement and comfort. This can be attributed to the high usage of allocated courtyard parking; with courtyards well used. Unlike those courtyards audited, Poundbury courtyards have common design features:

- they are part of a wider pedestrian movement network with people often walking through these spaces, adding a degree of natural surveillance.
- A loose bound gravel surface creates a noise when walked upon, easily allowing adjacent residents to hear when people are moving around a courtyard, particularly after dark.

- They are well lit.
- They benefit from high levels of natural surveillance opportunities from habitable rooms adjacent to and within courtyard spaces. It is not uncommon to see large detached dwellings and cottage scaled properties (with habitable rooms at street level) within courtyards. These compensate for the weakness of coach house or 'flat over garage' style accommodation that rarely offer residents ground floor surveillance opportunities, with habitable rooms typically at first floor level.

In addition, properties that have allocated rear courtyard parking have access to further unallocated parking provided within the street. Carriageway widths are markedly wider than one might expect for a traditionally inspired development; with kerb to kerb widths of 6-6.5m commonplace. This enhanced street width allows vehicle movement corridors to be safeguarded without parked cars needing to partly mount pavements.



**Figure 51: Displaced parking.** The remoteness between some homes and allocated parking spaces often results in displaced parking. Here one car is completely parked on a forward visibility splay and a second is completely parked on the pavement. Also note the prominent blank gable terminating a prominent vista (14. Jasmine Gardens). 2013.

The use of in front of building line car parking was rarely seen, with side of plot parking difficult to achieve where developments relied heavily on terraced building typologies. Where in front parking was used successfully was at 47. The Courtyard where a successful balance had been struck between the amount of frontage parking and space afforded to good quality landscape.



**Figure 52: A typical parking court** - unlit, lacking surveillance and dominated by hard materials (3. Briars Chase). 2013.

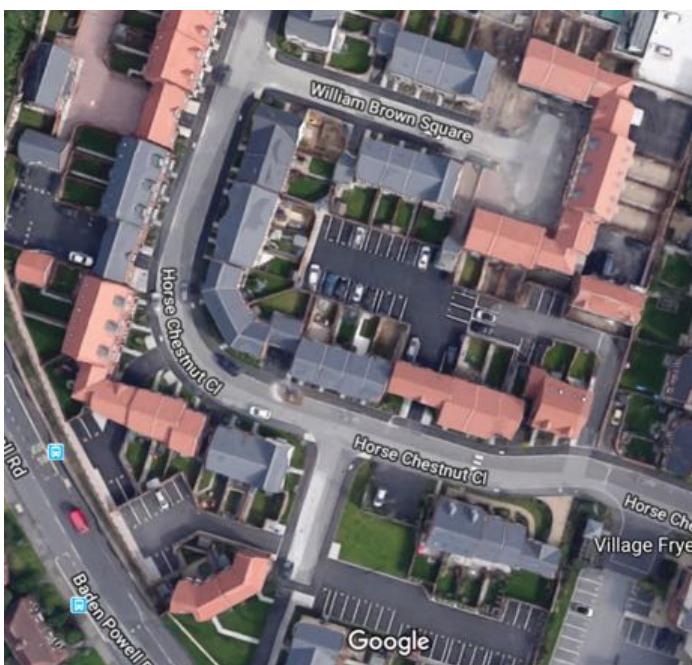


**Figure 53: Parking does not have to be hidden away.** A good balance between landscaping and car parking creates a good street environment where cars are parked close to people's front doors whilst also avoiding the need for car parking courts (47. The Courtyard). 2013.

A particularly striking example of a poorly designed courtyard was 40. Spires, Chesterfield where the influence of design thinking during the PPG3 era was very evident. The dominant building typology is terraced with buildings drawn close to the back of the pavement line, with parking predominantly located off plot and within rear courts. None of the courts benefit from good levels of natural surveillance with the largest courtyard capable of accommodating 27 vehicles. It is clear from the satellite image that the arrangement of boundaries within the courtyard create areas with

particularly poor levels of surveillance opportunity as well as areas that could easily conceal someone.

A consistent feature of courtyards was their isolated nature, their excessive size (it would be difficult for a resident legitimately using the space to know if someone else was a legitimate user or not) and their low-quality specification, with some not even provided with lighting.



**Figure 54:** The reliance on rear courtyards was reflective of planning trends at the time that sought to urbanise new development, intensify the use of land and reduce the visual dominance of parked cars by creating large parking courtyards within the centre of blocks. 40. The Spires. Source: Google Maps.



**Figure 55:** Large and isolated parking courtyards are commonplace (40. The Spires). 2013.



**Figure 56: Courtyards rarely benefit from any degree of natural surveillance opportunity even when it would have been very easy to provide some (14. Jasmine Gardens and 16. Millhouse Gardens). 2013.**

The only good quality parking courtyard was 28. Discovery Gardens where properties located at the entrances and within the courtyard create a well overlooked mews type street environment. Hard and soft landscaping was observed to be of good quality and the area was afforded good quality lighting.

The aspects of car parking provision and design that have a direct impact on viability relate to:

- The amount of car parking.
- The visual integration of car parking where spaces provided in front of the building line are successfully integrated into the street environment by affording space for landscaping between short blocks of car parking (see Figure 47).
- The requirements for rear parking courtyards, namely the need for strong surveillance opportunities to be provided by virtue of habitable rooms at ground floor at the entrance(s) to and within the courtyard; the provision of lighting; high quality hard and soft landscaping; restricting the amount of properties using a courtyard to ensure that non-legitimate users can be easily identified.

#### 5.4.3 Public and private spaces

Only half of audited schemes satisfactorily resolved the need to create a clear distinction between public and private spaces, with the space between the ‘back of the footpath’ and the face of the dwelling often left to chance.

A common observation was the poor resolution between the pavement and the space around the front door of individual homes, with the typical approach being to turf or screed and stone small areas that were either too narrow, too steep or otherwise impractical to mow or maintain.

Across all developments there were significant opportunities to use the semi-private space to the front of homes in a more creative way, encouraging greater use of the space outside and around the home; particularly where the street facing elevation of a dwelling faced south or south-west. Instead, these areas are far too often not only forgotten by developers but also purchasers as a means to extract the full value of the plot.



**Figure 57: Dead space.** Here a potentially pleasant sunny spot that could help to enliven the street and create an enjoyable place for residents is instead a patch of ground that will become forgotten and neglected (10. Saxon Gate). 2013.

It was very common to observe areas of land that were neither clearly defined as either public or private (Figure 51); yet regardless of their ownership these areas lended themselves to no meaningful public or private function. In the case of areas of left over land which were in either public ownership or publicly accessible but under some form of private management regime, many pieces of land were consuming public money but offering no social value. Likewise, areas of left over land in private ownership not only failed to offer any meaningful opportunity for private use; but collectively constituted a signficant amount of (wasteful) land take.

Other common issues related to the lack of surveillance opportunity over public open space, particularly pathways than ran within or adjacent to developments.



**Figure 58: What happens under the 'red line' boundary?** Buildings often ignored their wider relationship with the public realm (55. Bridleways). 2013.

#### 5.4.4 Waste storage and amenity

The final common area of weakness related to the lack of dedicated waste and recycling storage, with semi-detached and terraced properties often worse affected.

Whilst many planning applications drawings indicate waste and recycling storage provided by way of a slabbed area within a back garden. However, this fails to consider the ease of moving bins and crates between these spaces, the point of collection and the location of the kitchen within the home. It was very common for wheelie bins and other containers to be visually dominant with no obvious convenient and discreet storage point - contributing towards a poor-quality street environment.



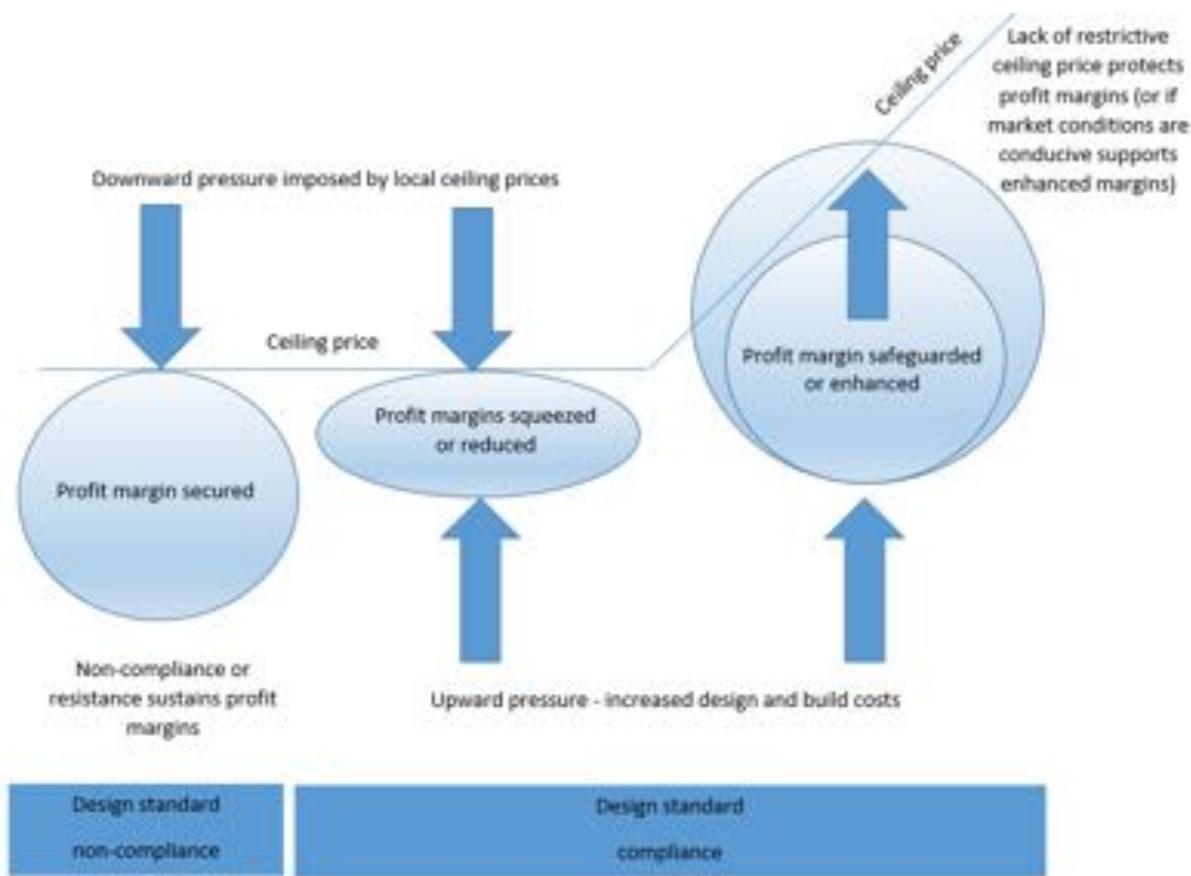
Figure 59: 'Bin blight' is a common feature of new developments (16. Millhouse Gardens). 2013.

### 5.5 Securing good design in lower value market areas

As part of the audit, a more detailed investigation explored the issues associated with securing good quality design in lower value market areas. The investigation took place in the District of Bolsover.

Bolsover District shares many similarities with North West Leicestershire. Both characterised by numerous former pit towns and villages, they areas are experiencing substantial levels of new house building. Within both authorities there is a strong political appetite and commitment to raise design standards.

These ambitions consistently clash with less buoyant local market conditions wherein increases in design and build costs are not always directly proportional to increases in sales values – with local 'ceiling' prices serving to exert downward pressure on profit margins. These more challenging local market circumstances contrast with the more buoyant market conditions in the south of England and a small number of more affluent settlements with the East Midlands region where increased in design and build costs can be translated into higher sales prices – resulting in profit margins being protected, if not enhanced.



**Figure 60: How do you secure good design in lower market value areas?** In less buoyant local markets, economic conditions can create a disincentive to good quality design. If the costs associated with securing good quality design (i.e. increased build costs and/or lower sales revenue) cannot be recovered through increased sales revenue, the only mechanism by which good quality design can be sustained is by adjusting the market value of the land.

Bolsover District in Derbyshire is typified by former coalmining communities that once dominated settlements within the Midlands region. Situated 19 miles to the east of Sheffield, the District offers a more affordable route to home ownership or for those 'climbing' the property ladder. Many communities within Bolsover District are still experiencing the economic and social implications associated with the closure of mining activity. Whilst these areas are often associated with the word 'decline' there is substantial growth in the form of suburban scale house building. These areas are providing opportunities for more affordable housing, particularly for those people unable to afford homes within the more expensive areas within and around the city of Sheffield – the city with which this Derbyshire district has a closer geographical and political relationship than Derby City.

Despite facing significant economic challenges, including significant reductions in local authority resources Bolsover has a strong emphasis on design quality investing heavily in securing and building capacity in design expertise utilising both in house and external designers.

A number of sales outlets<sup>108</sup> were visited in April 2016<sup>109</sup>. Sales staff at each of these outlets reported strong customer demand and healthy sales rates with no need to offer discounts or incentives to secure sales<sup>110</sup> with little or no need for incentives. Sales outlets also cited no local competition from other builders within the immediate area whilst also remarking that forward or off plan sales were strong; with one developer securing reservations for plots six months ahead of completion (October 2016).

Raising standards in these areas of regeneration is a constant challenge for local authority design officers requiring tenacity, energy and pragmatism. In many cases, whilst schemes could indeed be substantially better, they have been significantly improved however officers report that in securing improvements, viability is a consistently cited barrier to achieving all the required improvements.



**Figure 61: 'Value for money' housing.** The frontage railings that demarcate public and private space were secured via negotiation by the local planning authority. The lack of landscaping and the use of standard surface materials creates a stark appearance to this suburban development. 2016.

One poor quality scheme - characterised by a poorly considered layout and selection of standard house types, locally inappropriate materials, poor boundary treatments and low quality even crude plastic features and detailing; was verbally marketed as "*value for money*". The sales advisor explained, "*our customers do not want to be mortgaged to the hilt and they know you do not get anything for free*" - referring to the basic specification and fitting of homes.

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<sup>108</sup> Developments under construction where there is a sales presence on site.

<sup>109</sup> Avant, Bellway, Gleeson and Wheeldon.

<sup>110</sup> For instance, upgraded interior fixtures and fittings, carpeting or window coverings.

In a low market area and where demand for new housing is strong how can design quality be improved particularly where a house builder does not require good design to achieve the required sales rates and revenues?



**Figure 62: Cost saving detailing.** Housing with ‘traditional’ tiled canopies and dormer windows created from single prefabricated elements. 2016.

The Council’s urban designer recalled extended negotiations with house builders in an effort to achieve better standards of design. The finished result is what can be described as a ‘mixed bag’ of schemes. Where improvements have been secured, for instance the introduction of a boundary treatment has been secured to better define public and private space, these have been implemented cheaply (Figure 54). Instead of placing a hedgerow or shrubs behind the railing, the simply turfed front garden runs underneath the railings creating a difficult area for residents to maintain. In other cases, a significant improvement can be seen from what was originally proposed to what was finally achieved.

Through the intervention of the urban designer officer design standards have been improved and schemes have been guided to better reflect simple design principles such as perimeter block formation, improved spatial definition of streets and improved integration of car parking.



**Figure 63:** The poor quality of the entrance to this 'value' orientated development (opposite the sales porta cabin) does not seem to put off buyers, perhaps illustrating the difference between different purchasers in different market areas. 2016.



**Figure 64:** To create an outward facing block was a major achievement by the authority. Only through the intervention and insistence of the Council's urban designer did this development become outward facing – facing rather than backing onto a new public space. Without the intervention of the urban designer, this new public space in Clowne, Derbyshire would have been bounded by close boarded fencing. 2016.

A better designed development that responds more positively to its surroundings has been achieved at Clowne through the intervention of the Council's urban designer. A good perimeter block structure has been created, enabling the development to offer an outward facing edge onto an adjacent open space. However, the Council's efforts to secure this was strongly resisted by the developer on the basis that their viability appraisal did not anticipate the costs of a single sided street being necessary.

The market conditions within Bolsover are not dissimilar from those within some parts of North West Leicestershire. These market conditions present particular difficulties for local authorities seeking to improve design quality, whereby in responding to these requirements build costs will increase and unless these costs can either be absorbed by either the land owner or the developer (by way of reduced profit or a renegotiated land price), the increased costs will need to be passed on prospective purchasers. However, this may result in properties becoming unaffordable within a local market and/or exceeding the maximum value a mortgage valuer is able to attribute to a given property. In such circumstances, a local authority will often be required to secure as many concessions as possible and accept that other parts of a development scheme will need to remain largely unchanged.

### **Summary**

The audit largely reinforced the findings of CABE's audit and at the same time challenge the assertion of the Taylor Review (DCLG, 2012b) that the principles of good urban design have been mainstreamed into planning practice.



**Figure 65: The simplicity of the street structure** creates the framework for a well-designed place. The absence of a curvilinear street structure avoids the creation of left over pieces of land with no clear public or private function. 39.  
Saltergate. 2013.



**Figure 66:** Careful placement of buildings creates a footpath that benefits from natural surveillance opportunities and does not feel as isolated as it might otherwise be. 39. Saltergate. 2013.

However, the audit also identified a very small number of schemes that are exemplars of good design practice. In these instances, regulatory pressure or influence played a part in securing a well-designed scheme: 53. Clifton Village (local authority resistance to a ‘conventional’ development), 39. Saltergate (the existence of an adopted planning brief for the development site (Chesterfield Borough Council, 2009) prior to land acquisition by Barratt) and (Towles Pastures) the existence of a historic asset and the site’s location adjacent to a Conservation Area. These schemes share a series of characteristics:

- They are more ‘planned’ in character and appearance (Figure 59). They do not attempt to reflect traditional or organic street patterns, instead they adopt a more simplistic, linear street pattern.
- They are constructed from largely standard house types – albeit modified to varying extents. The least modified were 39. Saltergate, with the most modified 53. Clifton Village.
- They were designed and built by the same house building company, demonstrating that a difference in design emphasis and competence between different developers.

Finally, the audits are the first time that a comprehensive design quality audit has been conducted across the study area since 2007 when CABE last conducted research (2007a), representing a positive contribution to knowledge.

Table 10: Audit scores per scheme

Scheme	Location	Developer	Type	Location	Rating	Suburban	Urban	Score	Percentage
24 LECS	DWH	NR COM	SUB		3			9	30%
53 NOTTS	BDEV	COM	SUB		3			8	27%
29 LECS	DWH	LECS	SUB		2			8	27%
39 DERBYS	BDEV	CHES	LURB				3	7.5	81%
34 LECS	DWH	COM	SUB	1				7.5	81%
28 LECS	DWH	CV	SUB		3			7.5	81%
27 LECS	DWH	NR	SUB		3			7.5	81%
38 LECS	DWH	NR	SUB	1				7	70%
26 LECS	DWH	NR	SUB		3			7	70%
25 LECS	DWH	COM	SUB		3			7	70%
47 NOTTS	BDEV	NR COM	SUB		3			6.5	71%
33 LECS	DWH	MID	SUB	1				6.5	71%
11 LECS	DWH	MID	SUB	1				6	61%
12 LECS	PSM	MID	SUB		3			6	61%
13 NOTTS	TW	EARLY	SUB		3			5	57%
14 NOTTS	TW	EARLY	SUB		2			5.5	61%
15 LECS	DWH	MID	SUB		3			5.5	61%
16 LECS	PSM/CC	COM	SUB		3			5.5	61%
17 NOTTS	TW	MID	SUB	1				5.5	61%
49 LECS	BDEV	NR COM	SUB		1			5	50%
48 NOTTS	BDEV	NR COM	SUB		1			5	50%
49 NOTTS	BDEV	EARLY	SUB		1			5	50%
44 NOTTS	BDEV	NEWARK	SUB				1	5	50%
31 LECS	DWH	MID	SUB		3			5	50%
33 LECS	DWH	MID	SUB		3			5	50%
30 DERBYS	DWH	NR COM	SUB		1			5	50%
21 NOTTS	DWH	NR COM	SUB		1			5	50%
14 NOTTS	TW	MID	SUB	1				5	50%
51 DERBYS	BDEV	EARLY	SUB		1			4.5	50%
30 DERBYS	BDEV	EARLY	SUB		1			4.5	50%
23 NOTTS	DWH	MID	SUB		1			4.5	50%
41 NOTTS	BDEV	MERLIN	SUB		1			4	44%
21 NOTTS	DWH	NR COM	SUB		1			4	44%
20 NOTTS	DWH	EARLY	SUB		1			4	44%
18 LECS	PSM/CC	COM	SUB		1			4	44%
17 LECS	PSM/CC	EARLY	SUB		1			4	44%
13 DERBYS	PSM	MID	SUB		1			4	44%
9 LECS	TW	EARLY	SUB		1			4	44%
7 NOTTS	TW	MID	SUB		1			4	44%
45 NOTTS	DWH	NEWARK	SUB		1			3.5	39%
15 NOTTS	PSM	MID	SUB		1			3.5	39%
12 LECS	PSM	MID	SUB	1				3.5	39%
52 LECS	PSM	COM	SUB		1			3	33%
43 NOTTS	BDEV	NEWARK	SUB		1			3	33%
34 NOTTS	PSM	NR COM	SUB	1				3	33%
37 NOTTS	BDEV	NEWARK	SUB		1			2.5	29%
26 NOTTS	PSM	MID	SUB		1			2.5	29%
25 NOTTS	TW	MID	SUB	1				2.5	29%
40 DERBYS	BDEV	CHES	SUB		1			2	22%
32 NOTTS	TW	EARLY	SUB	1				2	22%
53 NOTTS	PSM	COM	SUB		1			1.5	17%
54 DERBYS	TW	MID	SUB	1				1.5	17%
41 NOTTS	BDEV	MID	SUB		1			1.5	17%
12 DERBYS	PSM	NR COM	SUB		1			1	11%
47 NOTTS	TW	PLATINUM	SUB	1				0	0
Total				12	40	8	256	4.48	53.7%
Average									
Based on 53 schemes									

Table 11: Scores per question (audited schemes)



Table 12: **Audit headline findings** identified particularly poor performance against a number of BfL12 questions. Note: BfL1 (Connections), BfL5 (Character), BfL6 (Site and context), BfL7 (Spatial definition), BfL8 (Legibility), BfL9 (Streets for all), BfL10 (Car parking), BfL11 (Public and private space), BfL12 (External storage and amenity).

BfL12 headline scores		BfL1	BfL5	BfL6	BfL7	BfL8	BfL9	BfL10	BfL11	BfL12
41	19	32.5	27.5	32.5	26.5	22.5	27	28.5		
0.76	0.35	0.60	0.51	0.60	0.49	0.42	0.50	0.53		
High	1.00 - 0.75			Upper quartile						
Mid high	.51 - .75									
Mid low	.26 - .50									
Low	25 and under			Lower quartile						

The Three Counties Audit has identified design qualities and deficiencies (linked to BfL12) that could – if some mechanism existed – be codified and be attributed a financial cost (either increase in development costs and/or decrease in sales revenue) by land buyers when seeking to determine a viable price for a given site. This would reduce the risk of design qualities being overlooked when determining the viability of a site whilst also helping to ensure that design qualities expressed within BfL12 are more consistently achieved across new developments.

## 5.6 Conclusion

The audit identified widespread design deficiencies in new build developments with well-designed schemes far from commonplace.

The reason for poorly designed schemes reaching the market place can be partly attributed to non-existent, weak or ineffective design regulation.

They can also be partly attributed to wider market and commercial conditions whereby these design deficiencies neither reduce the desirability of a house builder's product to consumers or a developer's subsequent profits.

Table 13: The distribution of schemes by house builder.

Derby, Derbyshire, Leicester, Leicestershire, Nottingham and Nottinghamshire audits									
Scheme	Count	Developi	Stage	Locatio	Rural	Suburb	Urban	Scor	Percentag
4	NOTTS	TW	N/START	RUR	1			0	0
<b>Total</b>					12	40	3	256	
<b>Average</b>								4.74	52.69
Highlighted - denotes highest, mid and lowest performing developments									
		BDEV	DWH	PSM	TW			%	
High	Upper quartile	3	9			12	22.2		
Mid high			2	2	3	7	12.9		
Mid low		9	8	4	8	29	53.7		
Low	Lower quartile	2		2	2	6	11.1		
		14	19	8	13	54	99.9		

The highest performing schemes (Table 13) across the audit were all produced by the same house builder – one that increasingly recognises design as an integral part of the product offer and market positioning. As such, the question arises as to how basic design qualities can be embedded into development schemes created by house builders that place little or no value on design quality considerations and where local regulatory pressure is either non-existent or ineffective.

## 6. Accredited Building for Life Assessor Network

Described by Carmona et al. as part of the “CABE Toolbox” (2017 p.214), the Accredited BfL Assessor Network (the ‘network’) was part of CABE’s efforts to challenge housing design quality and promote the use (and more consistent use) of BfL20 by creating a nationwide network of trained assessors.

This part of the thesis relates to research objective 2: to critically evaluate the effectiveness of CABE’s Accredited Assessor Network. The network was disbanded in 2012 following the closure of CABE that was responsible for managing and expanding it.

### 6.1 Data analysis

The assessments were all based on the (now superseded) 20-point version of BfL. The following charts capture the data analysis undertaken by the researcher, showing performance by region. The score distribution demonstrates an apparent preference for schemes to focus on questions outside of the ‘Design and Construction’ chapter (with the exception of the North West region), particularly those questions relating to outperforming statutory minima, environmental performance and modern methods of construction (Questions 18-20).

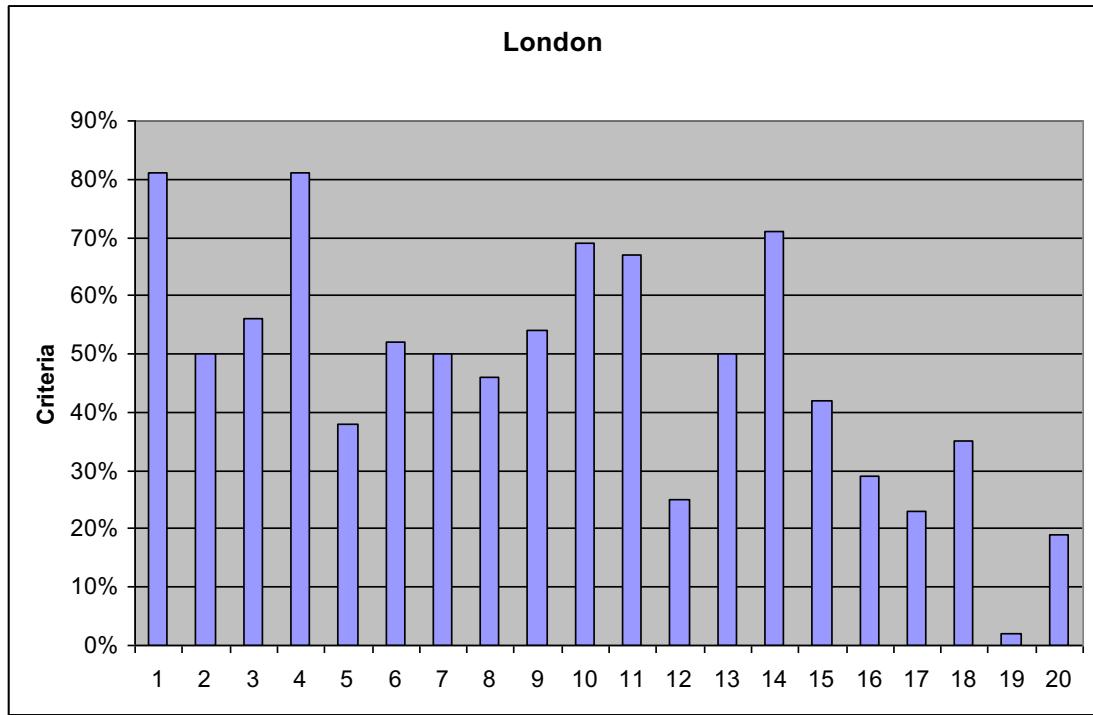


Figure 67: The distribution of BfL20 scores within London

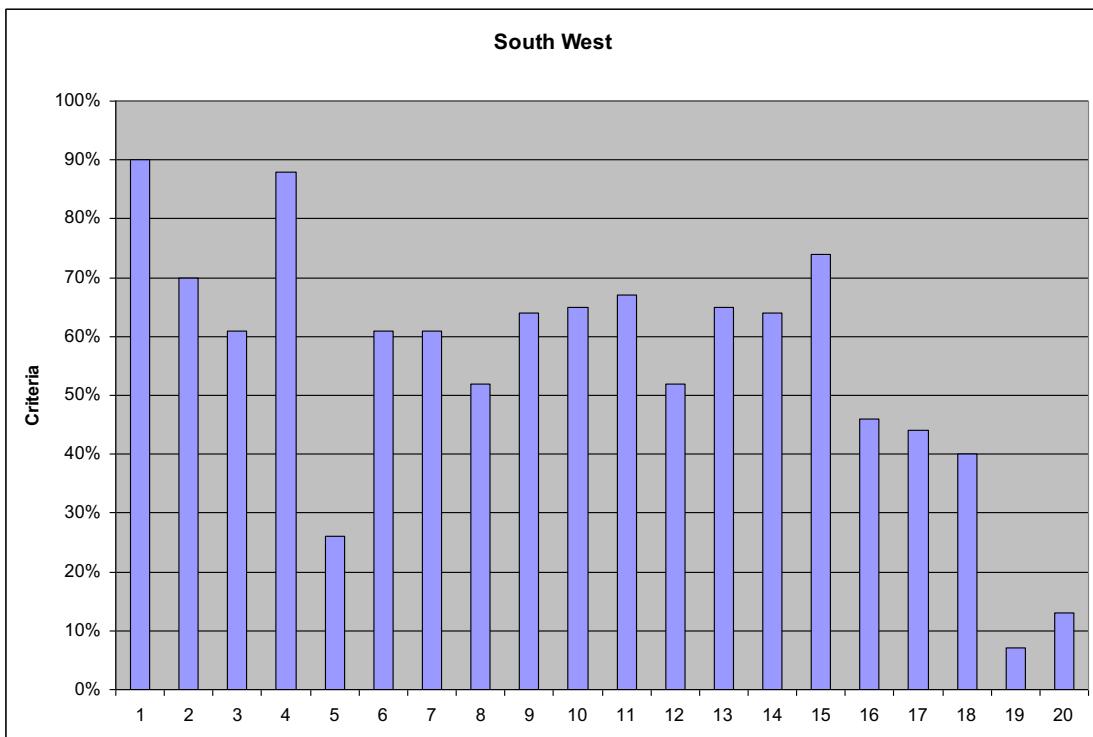


Figure 68: The distribution of BfL20 scores within the South West region

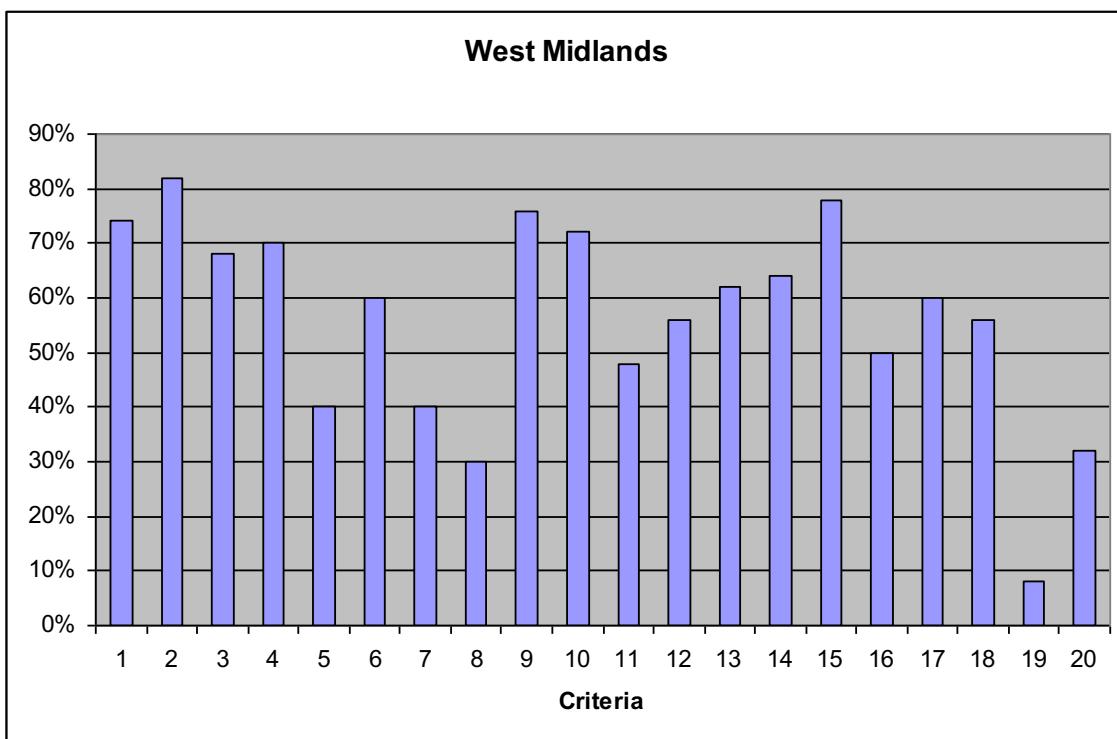


Figure 69: The distribution of BfL20 scores within the West Midlands region

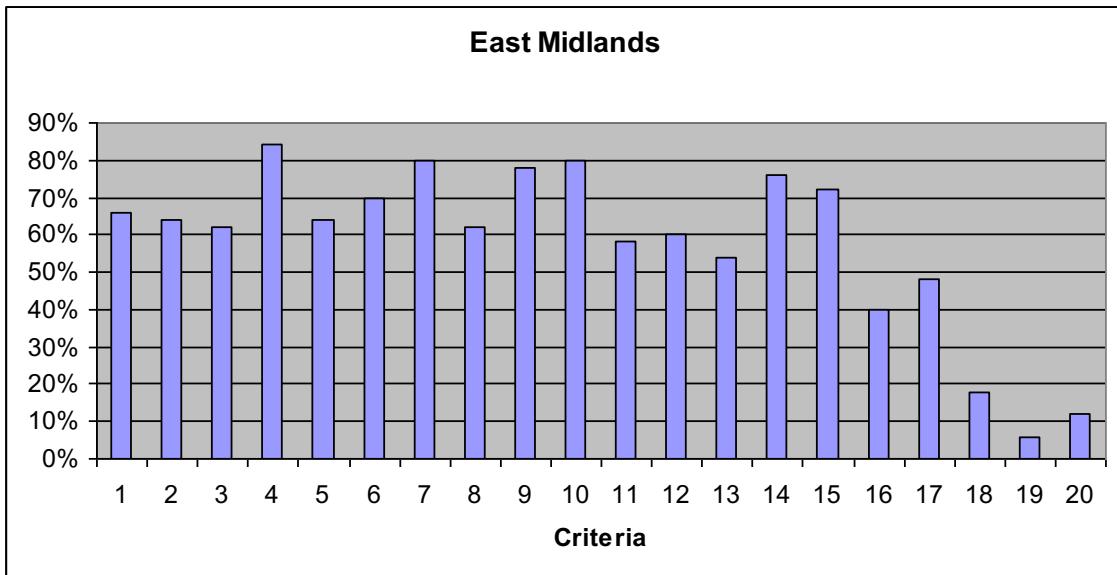


Figure 70: The distribution of BfL20 scores within the East Midlands region

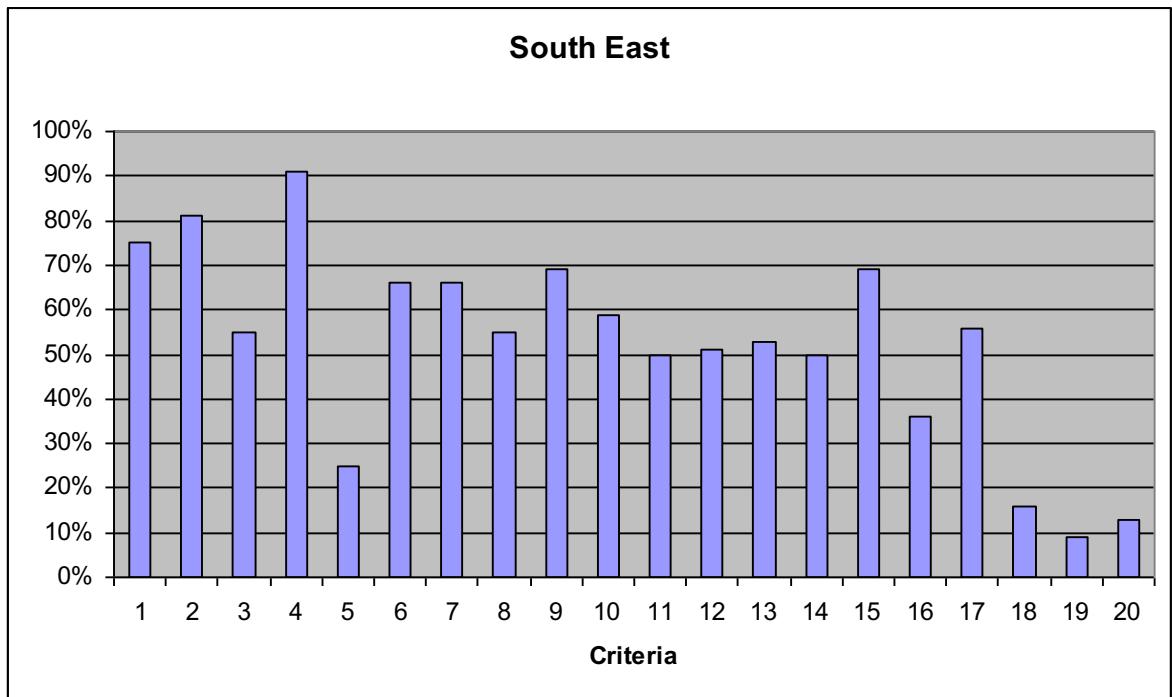


Figure 71: The distribution of BfL20 scores within the South East region

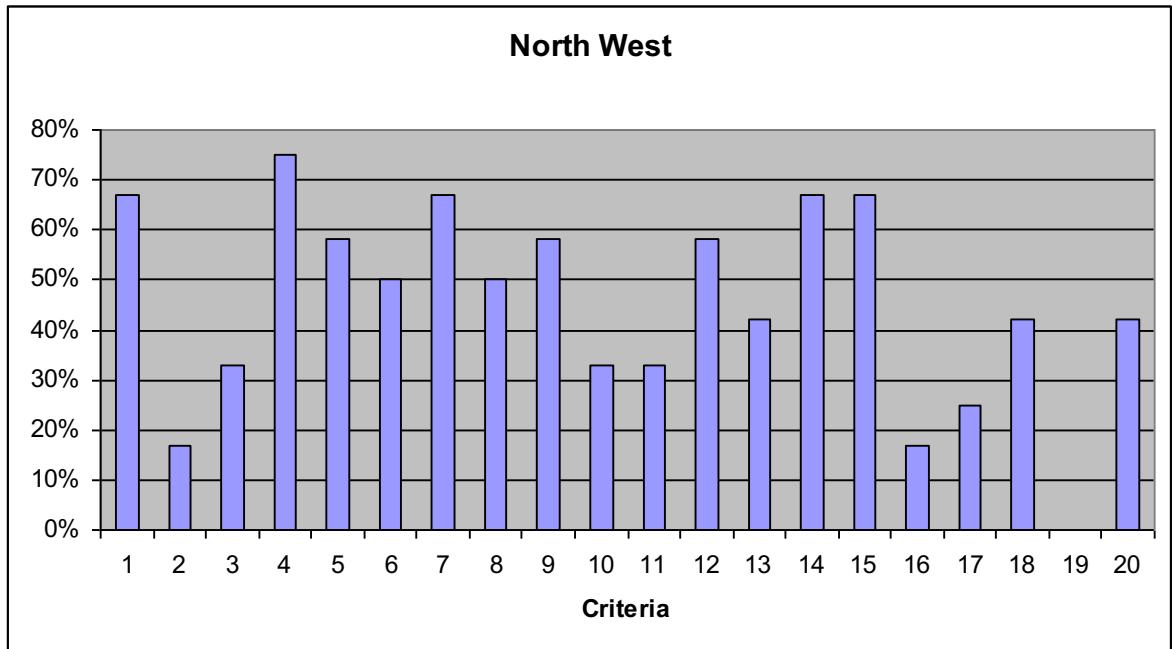


Figure 72: The distribution of BfL20 scores within the North West region

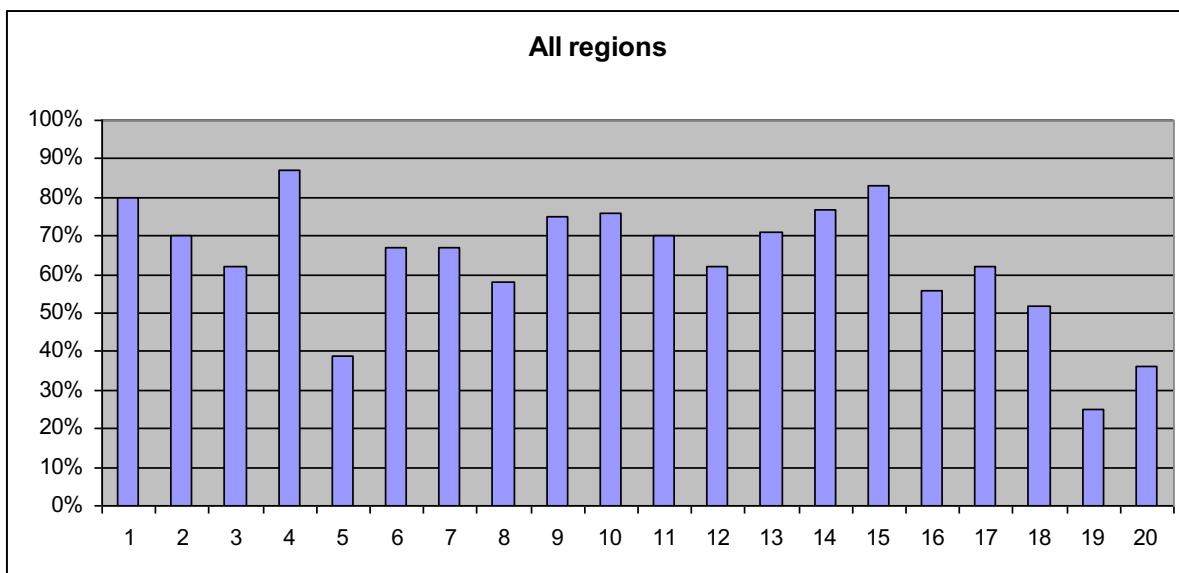


Figure 73: The distribution of BfL20 scores (unmoderated) across all regions

Analysis of trends enabled deeper insights to be gained in relation to the strongest and weakest performing criteria within each region and across all the regions. This was required to enable a more critical analysis of the submitted scores to be undertaken. For instance, was it accurate to conclude that the North West region was performing more strongly against Question 20 (Do buildings or spaces outperform statutory minima, such as building regulations?) than the rest of the country? Upon further investigation, it was evident that a high number of assessments within the North West region had been over-scored, with a full point awarded against Question 20 on the basis of the justification for a full point awarded against Question 5 (Does the development have any features that reduce its environmental impact?). This resulted in 'double scoring' with the 'same' point being awarded twice for questions that were similar but nonetheless distinct – an issue that assessors were made aware of during their training programme.

Despite the lack of information preventing the data to be organised into a more meaningful way (for example, a distinction between pre- and post- completion assessments), the assessments did provide a further insight into the design quality of schemes that had either already secured planning consent, were seeking planning consent or had been completed. As such, the network provided the only source of data for schemes that were progressing through the planning system. As Table 15 demonstrates despite potential 'over-scoring' the number of schemes achieving the BfL20 standard remained relatively low across all regions with less than a quarter being rated as either 'good' or 'very good' (22%). However, some regions were performing considerably better – most notably the

East Midlands regions that appeared to be undergoing a design renaissance with 44% of schemes being rated as either ‘good’ or ‘very good’. Therefore, the unmoderated assessments suggested a slight improvement in housing design quality across the country with 22% of developments either submitted for planning, approved, under construction or recently completed being rated as ‘good’ or ‘very good’. On first sight, this compares favourably to the 18% that were rated as ‘good’ or ‘very good’ across the first national housing audit conducted by CABE (2007a).

Table 14: **The strongest and weakest BfL20 criteria (unmoderated)**

Region	Part 1					Part 2					Part 3					Part 4				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
London	S=		S=	W			W	S		W		S					S	W		
South West	S			W			W	S		W		S	S		S			W		
West Midlands		S		W			W	S		W	W	S	S		S		S	W		
East Midlands			W	S			S	W	S			S			S		S	W		
South East			W	S			W	S		S		S	W		S		S	W		
North West		W	S				S	W	W			S					S	W	S	
All regions			S	W			W	S		W		S		S		S	S	W		

Part 1: Environment and Community, Part 2: Character, Part 3: Streets, parking and pedestrianisation, Part 4: Design and construction.

Table 15: **Data collections and analysis from CABE’s Assessor Centre database evidenced widespread issues relating to housing design quality in England. n.d denotes no data.**

Building for Life band	Poor	Average	Good	Very Good
All regions	39%	38%	17%	5%
London	54%	33%	8%	4%
East of England	n.d	n.d	n.d	n.d
South West	32%	48%	15%	5%
West Midlands	44%	44%	12%	0%
East Midlands	36%	20%	32%	12%
South East	43%	33%	20%	5%
North West	50%	17%	17%	17%
Yorkshire and Humber	n.d	n.d	n.d	n.d

However, these findings must be treated with caution. Unlike the first national housing audit, the data collated from the network was not based on a series of representative samples from across

each region. Instead, the data was generated by all those schemes uploaded to the database. It is therefore likely that the local authorities that were uploading assessments to the database could be termed as more ‘progressive’ on matters relating to design quality than other local authorities. As such, it would not be unreasonable to expect design standards to be higher across these authority areas than elsewhere. Therefore, network data fails to offer an insight of the standard of design being achieved across those authority areas (and in the case of the East of England and Yorkshire and Humber) and regions that were not engaging with the network. It is not possible to conclude with certainty whether the network did indeed show the makings of a change in housing design quality.

Table 16 and Table 17: **Data suggested that housing design quality was improving**. Yet in contrast to the first national housing audit, the 2010 review was not based on representative samples from across authority areas and regions. Instead, the review was based on data submitted by local authorities and regions that were actively engaged with BfL20.

<b>Building for Life band</b>	<b>Poor</b>	<b>Average</b>	<b>Good</b>	<b>Very Good</b>
Assessor Centre Review 2010	39%	38%	17%	5%
1 <sup>st</sup> national housing audit	29%	53%	13%	5%
<b>Evidence base</b>	<b>Below standard</b>		<b>Above standard</b>	
Assessor Centre Review 2010		77%		22%
1 <sup>st</sup> national housing audit		82%		18%

A further, more detailed analysis was made of a 10% subset across the scoring range. Each assessment was reviewed in detail and cross referenced to the submitted planning application material (where available) and a site visit (for completed schemes). The scores awarded per question within each assessment were then either validated or moderated (upwards or downwards).

Table 18: A subset of 20 case studies were subjected to a more detailed review and analysis. Analysis identified issues in the accuracy of assessments.

Building for Life band	Unmoderated	Moderated
Very good	10%	-
Good	25%	20%
Average	55%	50%
Poor	10%	30%

Excluding Questions 9 and 12, upward and downward score adjustments were made by the researcher. In the case of the Questions 9 and 12, minor score adjustments were made but when aggregating all the score adjustments these changes ‘cancelled’ each other out. For example, with respect to Question 12, the reviewer moderated one assessment by increasing the score by + 0.5 and moderated a second by – 0.5. This therefore resulted in an overall variance of zero.

The detailed analysis demonstrated that:

- The greatest negative (or downward) score adjustments related to Questions: 2 (Is there an accommodation mix that reflects the needs and aspirations of the local community?), 3 (Is there a tenure mix that reflects the needs of the local community?), 16 (Is public space well designed and does it have suitable management arrangements in place?), 19 (Has the scheme made use of advances in construction or technology that enhance its performance, quality and attractiveness?) and 20 (Do buildings or spaces outperform statutory minima, such as building regulations?).
- Scores against Questions 2 and 3 were moderated downwards on the basis that the evidence failed to justify the score awarded or there was no evidence to demonstrate that the criteria had been met.

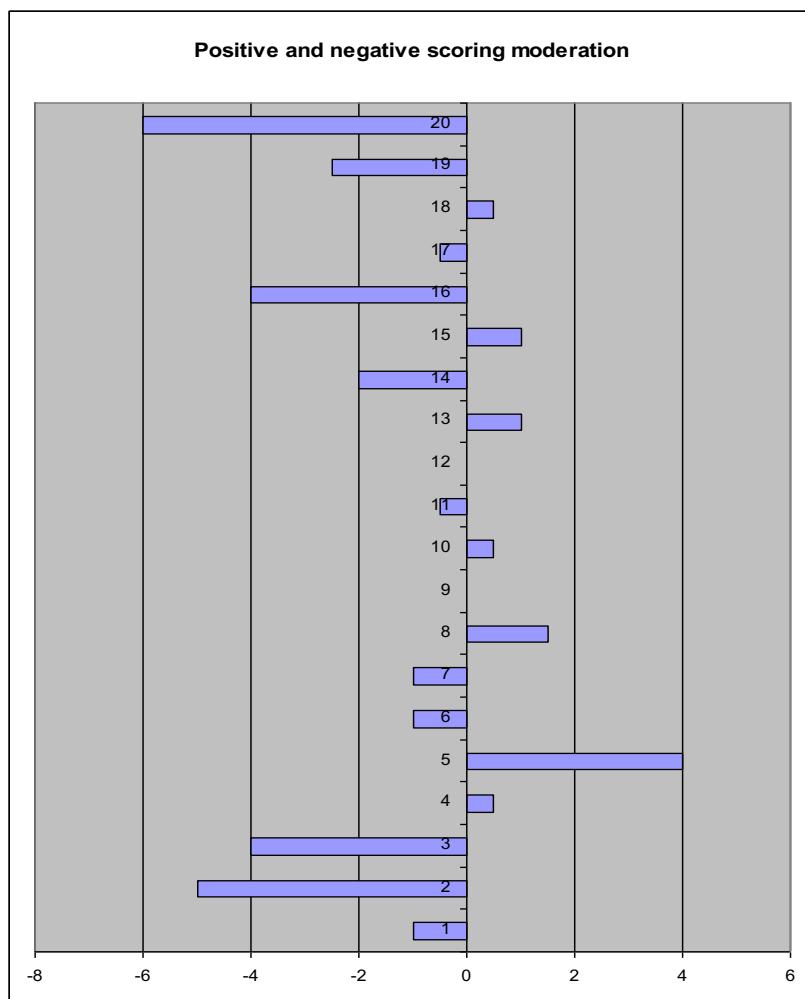


Figure 74: Positive and negative score adjustment across the BfL20 questions.

- Scores against Question 17 (Do the buildings exhibit architectural quality?) were moderated downwards due to assessors either failing to consider whether internal spaces were practical and therefore fit for purpose or determining that internal spaces were fit for purpose when they were not. For this to be assessed, assessors were required to critically assess the internal dimension of rooms within a building and determine whether these were fit for purpose. Furnished floor plans and ‘activity zones’ were the most effective way to determine compliance. Assessors were also required to consider whether sufficient storage space was provided for everyday items such as cleaning equipment, shoes, pushchairs and coats.
- There was significant evidence of confusion relating to Questions 19 and 20, in particular what constituted outperforming statutory minima and what measures merit a half or full point. In some cases, schemes were double scored for Code for Sustainable Homes Level 3

performance was recognised under both Question 5 (Does the development have any features that reduce its environmental impact?) and 20.

- Across all the assessments reviewed in detail, 8 of the 20 (40%) assessments resulted in a moderated score that led the variation exceeding the 1.5 point (or +/- 7.5%) target variation. It is important to note that assessors were only ‘passed’ as assessors after their training if their test assessment fell within this tolerance.

Table 19: **The scoring bands used by BfL20.**

Score	Band
16 and higher	Very Good
14 and 15	Good
10 -13	Average
9 and under	Poor

A further observation made with respect to the robustness of scoring related to the final classification – or band – within which a development scheme was placed. The BfL20 methodology categorised schemes that secured a score of 14 (out of a maximum of 20 points) as ‘good’; in turn considered consistent with national (and where these existed, local) policies relating to good design.

From a local authority perspective with respect to the determination of planning applications the issue of score variation is less of a concern where the variation results in an assessment crossing ‘paired’ bands i.e. from ‘poor’ to ‘average’ (i.e. below a ‘good’ standard of design) or from ‘good’ to very good’ (i.e. a ‘good’ or higher standard of design). Instead the issue of score variation is of greater concern when the variation results in an assessment crossing from meeting/exceeding the standard (i.e. ‘good’ or ‘very good’) to below standard (i.e. ‘average’ or ‘poor’) or vice versa.

Table 20: Detailed analysis identified issues with the accuracy of BfL20 assessments.

Post moderation results (case study sample)	Quantity	%
Assessments affected by a band change: <b>field and desk</b>	10/20	50%
Assessments affected by a band change: <b>field only</b>	2/8	25%
Assessments affected by a band change: <b>desk only</b>	8/12	67%
Assessments crossing 14/20 threshold*: <b>field and desk</b>	5/20	25%
Assessments crossing the 14/20 threshold*: <b>field only</b>	1/8	13%
Assessments crossing the 14/20 threshold*: <b>desk only</b>	4/12	33%

\*i.e. from 'good' or 'very good' to 'poor' or 'average' classification and vice versa

The impact of this phenomena was two-fold:

1. That schemes worthy of approval in terms of design were potentially at risk of being deferred or refused (therefore dis-incentivising the use of BfL20 by planning applicants).
2. Approval of schemes that were justified for deferral (to enable improvements to be made to a scheme if a scheme offers an 'average' standard of design) or refusal (in the case of schemes offering a 'poor' standard of design).

Table 21: **The detailed subset analysis** exposed weaknesses in the accuracy of assessments depending on whether reviews were post-completion (field based) or pre-planning (desk based).

Case study	Context	Assessor score	Assessor awarded band	CABE score	CABE awarded band	Variance	% change
<b>Desk based</b>							
1	Rural	5.5	POOR	3.5	POOR	- 10.0%	
2	Rural	12.0	AVERAGE	9.0	POOR	- 15.0%	
3	Urban (mixed use)	14.0	GOOD	11.5	AVERAGE	- 12.5%	
4	Urban (mixed use)	16.0	V. GOOD	14.0	GOOD	- 10.0%	
5	Rural	14.0	GOOD	7.5	POOR	- 32.5%	
6	Suburban	10.5	AVERAGE	11.0	AVERAGE	+ 2.5%	
7	Suburban	10.5	AVERAGE	8.0	POOR	- 12.5%	
8	Suburban	14.0	GOOD	14.0	GOOD	NIL	
9	Suburban	14.0	GOOD	11.5	AVERAGE	- 12.5%	
10	Urban	16.0	V. GOOD	15.0	GOOD	- 5.0%	
11	Suburban	9.0	POOR	9.5	POOR	+ 2.5%	
12	Urban	12.5	AVERAGE	14.0	GOOD	+ 7.5%	
<b>Field based</b>							
13	Suburban	13.5	AVERAGE	12.5	AVERAGE	- 5.0%	
14	Urban	14.0	GOOD	12.5	AVERAGE	- 7.5%	
15	Suburban	13.5	AVERAGE	12.5	AVERAGE	- 5.0%	
16	Suburban	11.0	AVERAGE	9.0	POOR	- 10.0%	
17	Urban	13.0	AVERAGE	13.5	AVERAGE	+ 2.5%	
18	Urban	11.0	AVERAGE	12.5	AVERAGE	+ 7.5%	
19	Urban	10.0	AVERAGE	11.0	AVERAGE	+ 5.0%	
20	Urban	10.0	AVERAGE	10.5	AVERAGE	+ 2.5%	
						Average % change all case studies	- 5.0% <b>(rounded)</b>

Note: assessors were expected to consistently achieve a target variance of +/- 1.5 points (7.5% or under).

Table 21 demonstrates the issue of band variation, with a scheme worthy of consent on design ground after moderation (for example, scheme 12) being incorrectly assigned an ‘average’ as opposed to a ‘good’ classification (upward score adjustment of 7.5%); and a scheme worthy of deferral or refusal being assigned a ‘good’ as opposed to a more accurate ‘poor’ rating (for example, scheme 5). This case study was over scored significantly by 32.5%.

The detailed analysis suggests that assessors were more robust in their scoring when undertaking post completion assessments, as opposed to desk based assessments that relied on assessors correctly interpreting two dimensional plans (pre-planning).

## 6.2 Conclusions

The analysis of the data within the network identified considerable problems and potential pitfalls with the network. The robustness of assessments was of concern as a high number of the case study assessments moved from the higher (‘very good’ and ‘good’) to lower bands (‘average’ and ‘poor’) post moderation. Table 18 highlights this issue where prior to moderation a promising picture of housing quality seemed to emerge, with 35% of the case study assessments appearing to meet the BfL20 standard. However, post moderation this figure dropped markedly by 15% to 20%, increasing the percentage of below standard schemes from 65% to 80% - a much less promising picture. 40% of the case study assessments were over- or under-scored (i.e. beyond set tolerances).

In reviewing assessments – both those within the case study sample and others uploaded to the portal, it was apparent that a considerable number of assessors were from non-design backgrounds. Whilst a minority of assessors were local authority design officers, many more were planning or in some instances, housing officers. Upon reviewing their written assessments and comparing these to development proposals, it was often clear that the individual had limited or incomplete design knowledge, thereby compromising their ability to make robust judgements against the design based questions of BfL20. This in turn led to individual questions being (to varying extents) under- or over-scored undermining the validity of an assessment.

The impact of over- or under-scoring beyond the set tolerances was as follows:

First, that schemes worthy of approval in terms of design were at risk of being either deferred or refused, thereby acting as a disincentive to the use of BfL20 by the industry.

Second, that schemes worthy of deferral (to enable improvements to be made to a scheme that offered an ‘average’ standard of design) or refusal (in the case of schemes offering a ‘poor’ standard of design) were approved.

Either scenario would undermine the credibility of BfL20 as a robust and objective measure of design quality.

A further, more critical observation was that reviews were being completed in isolation from the development management process. Rather than assessors being actively engaged in the pre-application process, or assessors using BfL20 to guide pre-application discussions (with a view to helping applicants meet BfL20), assessments were being once an application had been submitted.

This type of practice reinforced a growing view amongst some within the house building industry that BfL20 was increasingly becoming a ‘stick to beat us with’ rather than a more constructive and collaborative planning tool (Stewart, 2007). Whilst assessors were strongly advised in training to use BfL20 as more than an assessment tool and instead embed it into local policy and use it throughout the pre-application process the evidence suggested that this was not happening as a general rule. Whilst there were exceptions, BfL20 was primarily being used in an obstructive manner – something that the HBF was keen to address when the idea to refresh BfL20 was explored following the closure of CABE. This consequently led to the emphasis on collaborative working in BfL12:

*“local communities, local authorities and developers are encouraged to use it [BfL12] to guide discussions about creating good places to live... the questions are designed to help structure discussions”* (Birkbeck and Kruczowski 2015, p.1)

The network was disbanded in 2012 yet its usefulness is that it can inform the evolution of the BfL initiative. The analysis highlights the inherent difficulty of efforts to compensate for the limited design skills and knowledge that exist in local planning authorities: skills and knowledge that design trained practitioners have typically established over a minimum three-year degree programme and subsequent practice experience. The network attempted to educate and train non-design professionals to make informed design judgements (and ideally, dispense design advice) with just a single day of training.

The analysis also highlights deeper, structural issues within the psyche of local planning authorities that exhibit themselves in more reactive as opposed to proactive traits. For instance, many planning authorities were using BfL20 as an assessment tool but not mentioning it in either local planning policy or the pre-application process; as such they were not proactively guiding developers and their schemes to better designed developments. Instead, planning authorities were almost ‘bolting’ BfL20 onto existing procedures and processes as opposed to using it in a more proactive and creative way. Yet this could be considered a harsh critique of local planning authorities whose role is to operate the planning system locally – a system that is imposed upon them by the State. And herein perhaps lies the underlying reason for the failure of the network in that it was a response to the issues associated with poorly designed new housing schemes. However, the underlying reasons for these poorly designed schemes had not been fully analysed and understood.

## **7. Case studies: Investigating developments that did not use Building for Life**

Analysis of the case study demonstrates that whilst residential design quality improves where BfL20 or BfL12 is used as a means by which to frame pre-application discussions, organisational values more strongly influence design quality than design policy. These organisational values relate to those held by both local authorities and individual house building companies. Where these organisational values ‘push’ in the same direction with respect to design quality, the outcome is positive. However, where these organisational values are oriented in different directions, design quality will suffer.

In these circumstances, whilst a local authority may ‘push back’ against a house builder seeking to ‘pull away’ from design quality, the obligations placed upon a local planning authority to engage in pre-application discussions will inevitably result in a scheme of mediocre quality as each pre-application meeting will result in a series of incremental improvement. Each incremental improvement further erodes a justification for a design based refusal and increases the risk to the local planning authority of failure should its decision to refuse planning consent be challenged at appeal.

These findings challenge established thought that emphasise the importance of local authority design policies, design skills and the ‘lead agency’ theory (CABE, 2007a, p.4). Whilst these are important elements and cannot be discounted - these alone will not overcome widespread design

quality failures associated with new build, suburban scaled residential development. Instead, the research uncovers deeper, structural failures that will require changes to the way the planning system operates, particularly the way – and time – local planning authorities and house builders communicate with each other.

NWLDC is as its name suggests, the local authority for the north west of Leicestershire, abutting South Derbyshire to its western boundary and Derby City to its northern boundary. Covering an area of 107 square miles the District is located between the ‘wishbone’ of the M1 and the A42 making it a highly accessible location by car. East Midlands Airport is located towards the northern part of the District.

Despite a railway line crossing the District on an approximate east-west alignment (a spur off the Midland Main Line), 131 years of passenger services ceased in 1964 with the line currently used for freight only. High Speed 2 is planned to cut through NWL (on a south to north alignment) though no stops are currently planned with the District - not even at the airport where the line was originally intended to tunnel beneath. The Council has stated that, “*the proposed HS2 line delivers no benefit to the District*” (NWLDC, 2014, p.10). The District is therefore very inaccessible by public transport, with the largely rural and undeveloped character between its principal towns of Ashby de la Zouch, Coalville and Castle Donington interspersed by a network of villages. Despite these deficiencies in public transport infrastructure, the District has experienced considerable new housing growth; with its recently adopted Local Plan stating that, “*the HEDNA identified an Objectively Assessed Need (OAN) of 481 dwellings each year for the period 2011-2031. This equates to a total of 9,620 dwellings...a minimum of 9,620 dwellings will be delivered over the plan period 2011-31*” (2017, p.21). This equates to 481 new homes being completed per annum.

Home to 93,468 residents, half of the District’s population live in the two principal towns of Ashby de la Zouch and Coalville (NWLDC, 2016, p.14). The District is ‘commuter’ territory, with higher than average levels of car ownership. The Council’s Local Plan states, “*Travel to work is dominated by the use of the car*” (2017, p.13). Research by the RAC (2012) records a 9.9% increase in household car ownership across the District since 2001, with 602 cars per 1000 people – making the District the 90<sup>th</sup> highest local authority in the country for car ownership (out of 348 authorities, the highest being East Dorset: 694 and the lowest being Hackney: 170) (RAC Foundation, 2012). Daily ‘out commuting’ is commonplace, with many residents driving to the regional cities of Birmingham,

Derby, Leicester or Nottingham that are all easily accessible within 25 miles. Unemployment across the District is low, with growing employment opportunities particularly the expansion of large scale warehousing and distribution fuelling the demand for new homes locally.

In 2017, work began on the Strategic Rail Freight Interchange. Located along the airport's northern boundary, the interchange will provide further large-scale distribution and storage facilities.

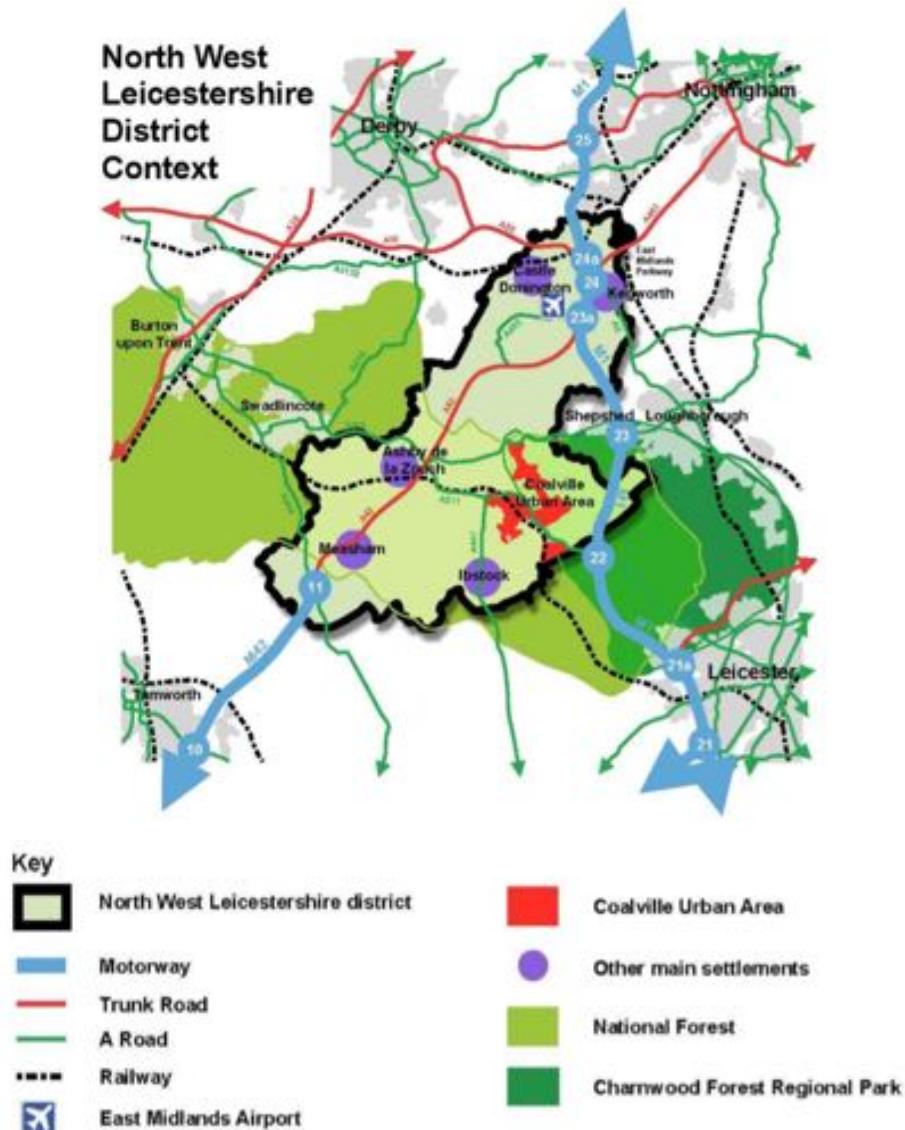


Figure 75: North West Leicestershire District (NWLD 2017, p.11).

In the years since the global credit crisis, the District has attracted a new Amazon fulfilment centre (with a second planned), 218 room Radisson Blu hotel, DHL Global Hub and a new UPS Distribution Centre.

Between 2007 and 2017, NWLDC experienced a period of strong political and officer leadership where a high priority was placed on design quality as part of the organisation's wider social, environmental and economic objectives. In contrast to many former coal mining areas that experienced (and continue to experience) economic and social difficulties, a change in political leadership and control in 2007 led to a shift in values with respect to what was expected of new development. Prior to any development there was an attitude that 'any development was good development' whereas beyond 2007 a more aspirational attitude was adopted whereby regeneration efforts would be supported by attracting more affluent home owners to the District. A serving Planning Committee councillor recalled in 2017,

*"I did not believe we could do it... I supported what Richard [the Council Leader] wanted to do and I told him I supported him. But I said to him I did not think we could raise design quality – but we have, he's proved me wrong.<sup>111</sup>"*

As the time of writing, the strong emphasis on design looks set to continue beyond 2017 following the appointment of a new Chief Executive after the retirement of the former Chief Executive, Christine Fisher.

The NWL case study offers a rich insight into the working practices of a local authority and the dynamic between house builders and local design regulation. The case study offers a longitudinal insight into the effectiveness of the tools at a local planning authority's disposal – and challenges the assertion that design regulation is an effective tool in stimulating change within the house building industry.

The research also challenges the recommendations made by CABE to local authorities as to how design quality in new build housing could be improved (2007a, p.4-5). CABE stated that, "*good or better design will result where at least one agency – landowner, local authority, social landlord or developer – has strong aspirations for achieving good design*" (2007a, p.4). Yet this theory, particularly the influence of the local authority in raising design quality - is challenged by this research. Whilst good or better design is *more likely* to result where a local authority has strong aspirations for achieving good design – it *will not necessarily* result in good design being consistently achieved.

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<sup>111</sup> Author's notes.

Instead, the NWL experience demonstrates that whilst local authorities can improve the quality of schemes, a good scheme will only result if this aspiration is shared by the developer. The stronger these aspirations are shared, the better a scheme will become. As such, good or better design *will only* result if both the local authority and the developer have shared aspirations for quality. There are some rare exceptions to this where the social or commercial motivations of a developer can result in good design even if a local authority is indifferent to design quality considerations.

Local authorities that are interested in raising design quality across their administrative areas have a series of tools available to them. These include:

- Creating, adopting and enforcing local design policies (aligned to national planning policy); using design quality indicators such as BfL20/12.
- Pre-application discussions (often called pre-application ‘negotiations’).
- Improving design literacy within planning teams.
- Recognising (and attempting to reward) design quality compliance.
- Ongoing critical reflection - learning from completed developments.
- Actively engaging Chief Officers and Lead Members to exert pressure and influence on developers to conform to design quality aspirations.

The use and effectiveness of these tools will be explored over the following sub-chapters.

### **7.1 Service transformation – turning around a failing organisation**

In 2007, NWLDC was undergoing organisational transformation following the government’s Audit Commission rating the authority as ‘weak’ in 2004. Criticised for the lack of long term thinking and poor staff morale, much of the District was still recovering from the closure of its coal mines during the 1980s and 1990s. With its landscape blighted by former mining activity, the District was far from a desirable place to live, work or invest. In 2004, Councillor Frank Shaw, then Leader of the Council said to the BBC,

*“No other council in Leicestershire has had to tackle problems of the magnitude presented by the closure of the pits. Acres of derelict land have been reclaimed and brought back into beneficial use, the local economy has been successfully diversified and unemployment has been brought down to below the national average. That has taken sustained focus over two decades and it was inevitable*

*that other things would suffer as a result. We made no bones about the fact that we are going through a period of transition.*"<sup>112</sup>

As part of the organisational transformation, the authority underwent a restructure with a major change in managerial and political leadership. Christine Fisher was appointed as the Council's new Chief Executive<sup>113</sup> and in 2007 Richard Blunt was elected Council Leader<sup>114</sup> following the Conservatives gaining control of the authority after 16 consecutive years of Labour control.

Through what was called the 'Service Transformation Programme', every aspect of the authority's activities was scrutinised; this process inevitably resulted in the reorganisation of teams, the departure of old and the arrival of new staff: "*The Council recognises it needs the right people, with the right skills, behaviours and approach to take it forward*" (NWLD, 2005, p. 2). Managerial and political leadership encouraged staff to identify areas of weakness alongside recommendations for improvement. It was within this period of organisational change as part of the review of the Council's planning department that the need for in house design expertise was identified.

This gap in expertise was also partly brought to the fore by CABE's Housing Audit (2007a) that cited a recent development within the District as being one of the worst new build housing schemes within the East Midlands (the third worst out of 34 schemes). Design quality therefore became an integral part of the Council's transformation agenda where a strong focus was placed on not only improving people's perception of the planning service; its speed and efficiency, but also the quality of its outcomes. There was a growing recognition that whilst planning applications were being determined within prescribed timescales and customer perceptions of the planning service were improving, things were not going as well as they might be on the ground.

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<sup>112</sup> BBC News (16 September 2004) 'Weak rating for Council services'  
<http://news.bbc.co.uk/1/hi/england/leicestershire/3661660.stm> Date accessed 25 July 2017.

<sup>113</sup> Christine Fisher served a Chief Executive between 2006 and 2017 until her retirement.

<sup>114</sup> Councillor Richard Blunt has served as Leader since 2007 and at the time of publication (2018) remains in this position.

## 7.2 A growing focus on design quality

In July 2007, the authority entered into a shared service agreement with South Derbyshire District Council to create a role an urban design post. Despite the increase in local authority urban designers during the early 2000s, the creation of the new post was unusual in that it was not common for District level authorities to appoint urban designers. Instead urban designers were more commonly found within cities and more urban than rural locations. Unlike larger, unitary authorities, districts typically did not possess the financial capacity and/or the political support to appoint their own urban designer. Yet at the time, the number of local authority urban designers was growing reflecting the increased recognition of the urban design (or placemaking) agenda across central and local government and the influence of CABE on local authority thinking.

NWLDC's focus on design quality gained further traction a year later when the authority decided to break away from its joint service agreement with South Derbyshire and appoint its own full time urban designer. This accelerated momentum was the product of a series of reinforcing factors:

- The increasing influence of CABE on both government and local planning authorities.
- A recognition by both the Leader of the Council and the Chief Executive that the authority's design aspirations<sup>115</sup> could not be realised through the time share agreement with South Derbyshire District Council.
- The resources dedicated to regional architecture centres, such as OPUN (part funded by CABE) that served to further promote CABE's design quality agenda locally; in particular initiatives such as Design Review, enabling support and BfL.
- Significant resources available via CABE and regional architecture centres to local planning authorities to develop their design awareness, skills and knowledge. Such resources were made available through on-line support (namely CABE's website), a constant stream of CABE publications, events and enabling support.
- A Regional Spatial Strategy allocation of 12,200 homes (GOEM, 2009).
- The introduction of a Key Performance Indicator known as 'H6: Housing quality' into Annual Monitoring Reports (part of the Council's Local Development Framework).

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<sup>115</sup> Specifically, the aspirations of the Leader of the Council, Councillor Richard Blunt.

The appointment of its own full-time designer marked a shift in the Council's design quality ambitions and in particular an interest in "*marking a line in the sand*"<sup>116</sup> with the house building industry. It is also perhaps not coincidental that this decision was also influenced by the (then) Deputy Leader's (also Portfolio Holder for Regeneration and Planning) first-hand experience of poor design - having purchased a home on the District's lowest performing new housing development at Waterworks Road, Coalville.

### **7.3 Improving the design quality of volume built housing developments**

It is important to recognise that prior to the Council's appointment of its own urban designer, whilst it was struggling to address design quality issues relating to volume built housing schemes, the quality of smaller residential developments was much better.

Across the District, numerous smaller scale residential developments had been sensitively designed, carefully integrated into their surroundings; making a positive contribution to the community. Improving design quality on larger schemes, particularly those built by the larger, volume house builders was proving more challenging. The difficulties associated with improving larger scale developments related to their increased design complexity and the additional work generated in resolving design issues in an environment where planning officers were already under considerable pressure to speed up the progress of planning applications through the system.

Part of the researcher's role in creating a strategy for improving design quality involved understanding the story behind 'failed' developments – *what* had gone wrong and *why* had they gone wrong? Planning officers cited a lack of design skills and knowledge, with limited confidence to challenge schemes (or aspects of a scheme) where their intuition told them something was not quite right. Whilst officers commonly recognised that schemes were poorly designed they lacked the ability to effectively communicate and challenge these deficiencies - and suggest possible solutions. The confidence of planning officers to challenge matters relating to design quality was also further undermined where house builders appointed design consultants. In some instances, even where these design consultants were proposing (and justifying) a poorly designed scheme, planning officers often felt under qualified to challenge developers' proposals. The situation was

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<sup>116</sup> Author's notes: Steve Bambrick, former Deputy Chief Executive.

further exacerbated by Design and Access Statements where an industry had developed (and remains to this day) where poorly designed schemes can be seemingly justified within a ‘smokescreen’ of design jargon, diagrams and pseudo options testing. As a result, the authority had lacked sufficient design knowledge and confidence to differentiate between well and poorly designed schemes.

Despite being a relatively young team of planning officers, not one member of the team had received any design training either within their degree course at university (either under- or post-graduate) or since graduation as part of their Continued Professional Development (CPD). Therefore, there was a lack of understanding when it came to the ‘basics’ of urban design, for example: why the urban design movement came into being and what it is about, what a perimeter block is and how ‘good design’ might be defined. Whilst government was well advanced by this time in embracing good design into national planning policy, the design knowledge and skills at local authority level had failed to keep pace.

Planning officers were very competent in selecting building materials and critiquing the detail of plans with an excellent knowledge of roofing materials and traditional methods of construction. And herein, the problem lay: how do you put buildings and spaces together to create a meaningful whole and what (and when) – beyond the street facing elevation of a building – requires consideration?

CABE’s housing audit for the East Midlands (2007a) – as with its earlier audits – was extremely critical of both the house building industry and local planning authorities. Its audit that encompassed the East Midlands drew attention to a 72-unit development by Barratt Homes in Castle Donington towards the north of the Council’s district. Rated as ‘poor’ by CABE, the development exhibited common failures typically associated with new build, volume produced housing developments in that it ignored its wider context, most notably in its rather crude ‘stitching’ into Station Road.

The publication of the audit was another criticism of a failing Council. Design was therefore added to the ‘list’ of other issues that needed attention with, “*Improving the quality of design within the built environment*” one of the Council’s improvement priorities for 2008-2011 (‘Priority 4: Improve the Planning Service).

As the Council start work on a series of post completion housing audits to establish a design quality baseline for the District (and create a strategy for improvement), it discovered that in comparison to other developments, the scheme at Station Road was substantially better than others that had been recently built within the District. In comparison, four developments built around the same time (and to the same higher density requirements of PPG3) in Coalville and Ashby de la Zouch were markedly less well designed than the scheme at Station Road: the design quality of new developments was markedly worse than CABE had identified.

#### **7.4 Establishing a design quality baseline**

The first step to improving design quality across the District was to establish a baseline. Six recently completed development were identified across the District and were subject to a BfL20 based assessment. The audited schemes shed light on more widespread and deeper design failings that has been identified by the CABE audit. The baseline findings were reported to the Council's Cabinet in December 2008:

*"the Council completed (in partnership with CABE) Building for Life audits of six recently completed residential schemes within the District. The performance generally mirrors national and regional housing audits and clearly indicates that there is significant scope for improvement which requires a strong commitment to design on the part of the Council."* (NWLD, 2008, 1.11).

In comparison to the national and regional audits, there were no 'very good' or 'good' schemes identified in the sample base with 33% classified as 'poor' and 67% as 'average' (using the CABE BfL20 scoring methodology).

At the Cabinet meeting, a decision was made by the Council's Executive to share CABE's aspirations that 'good' and 'very good' developments become the norm as opposed to the exception.



**Figure 76: PPG3 and good practice:** One volume built housing scheme by David Wilson Homes performed positively against BfL20 within the audit although fell marginally short of the 'good' tier against the scoring methodology due to the lack of surveillance along the development's central footpath. Millers Walk was one of the first higher density schemes built by the company and was the focus of a dedicated urban design team within the business that was formed to respond to the government's growing design quality agenda.

Ravenstone. 2015.

Details of these six developments can be found within the appendices. The developments were located across the District's three main settlements: Ashby de la Zouch. Castle Donington and Coalville; and the large village of Whitwick located to the north of Coalville. None of the schemes used BfL20 at any stage of the development process.

### 7.5 Audited developments: common trends

The audited schemes exhibited a series of common trends and represented a marked departure from what officers and councillors had been accustomed to in the design of new build residential suburban developments.

The first identifiable feature is the increase in density - a consequence of national planning policy that required developments to be built with a minimum of 30 homes to the hectare. This often resulted in widespread use of three storey buildings. Combined with a trend to remove cars from the street environment, side and rear of plot car parking became commonplace; buildings moved much closer to the edges of the street creating a 'harder' street environment with little structural landscaping provided.

With national policies also reducing the amount of car parking that was permitted per house hold (1.5 spaces), high levels of displaced parking are also common features. Whilst these developments were neither more or less legible than their predecessors (see 7.7. Buckingham Road) they did lack a sense of identity that was created through the use of landscape features, particularly trees and hedgerows.

## **7.6 Schemes beyond North West Leicestershire: common trends**

The previous five examples are not isolated cases - examples of schemes with largely identical design deficiencies can be found across the region and the country.

As with the previously discussed examples, these design deficiencies are primarily spatial as opposed to architectural with the design of the place a product of a commercially driven approach – as opposed to an approach that balances commercial considerations alongside wider social (design quality) considerations. Complying on a basic level with government design policy requirements and ideas, principally those relating to intensifying densities, reducing car usage by limiting car parking provision, creating more urban and less suburban type environments by drawing buildings closer to the street and each other; the quality of these developments is not only symptomatic of these policy requirements and ideas but weak or non-existent local design regulation.

Table 22 demonstrates that the NWL schemes share many of the same characteristics. These characteristics are common of many schemes built during the early 2000s. It is important to note that not all schemes of this era were poorly designed yet these were the exception as opposed to the norm.

Table 22: **Design characteristics** of schemes

<b>Design characteristics</b>	Connectivity to surrounding and legibility	Building to street relationships	Building to building relationships	Character	Parking: provision, location and usability	Public space design and street quality	Threshold design (space between back of street and the face of a building: semi private space)	Public and private spaces: clearly demarcated, clear functions.
<b>Scheme and location</b>								
<i>Italics denote schemes within NWL</i>								
<i>Station Road, Castle Donington.</i>	■				■			
<i>Birch Road, Ashby de la Zouch.</i>	■	■	■	■	■	■	■	■
<i>Meredith Road, Ashby de la Zouch.</i>	■	■	■	■	■	■	■	■
<i>Waterworks Road, Coalville.</i>	■	■	■	■	■	■	■	■
<i>Weavers Close, Whitwick.</i>	■	■	■	■	■	■	■	■
Trumpington Meadows, Cambridge.*								
Beaulieu Park, Chelmsford.*					■	■	■	
Buckshaw Village, Chorley.	■	■	■	■	■	■	■	■
City Point, Derby.	■	■	■	■	■	■	■	■
Chalons Way, Ilkeston, Derbyshire.	■	■	■	■	■	■	■	■
Smalley, Derbyshire (Peveril)	■	■	■	■	■	■	■	■
Smalley, Derbyshire (William Davis)	■	■	■	■	■	■	■	■
Edgware Green, Edgware.*								
Netherhall, Leicester.	■	■	■	■	■	■	■	■
Dunsil Road and Main Bright Road, Mansfield.	■	■	■	■	■	■	■	■
Chalfont Drive, Nottingham.	■	■		■	■	■	■	■
Owston Road, Annesley, Nottingham.	■	■	■	■	■	■	■	■
Voce Gardens, Hucknall, Nottingham.	■	■	■	■	■	■	■	■
Griffiths Way, Hucknall, Nottingham.				■				
Land north of Assarts Farm, Nottingham.					■	■		

Former High Pavement College site, Nottingham.	■	■	■	■	■	■
Former Bilborough College Playing Fields, Nottingham.	■	■	■	■	■	■
Wilford Village, Nottingham.*					■	
Ightham, Sevenoaks.*						
Kings Hill, West Malling.*				■		
Sparrowhawk Way, Wokingham.	■	■	■	■	■	■

- Denotes a failure to positively address the design characteristic.
  - \* Schemes that are recognised as examples of good practice.

## **7.7 Buckingham Road, Coalville**

The preceding examples represented a marked shift from the type of housing developments that were built in the area prior to the implementation of PPG3. PPG3 resulted in an intensification of land and the restriction of car parking to promote greater use of public transport – the latter proved particularly problematic within a heavily car dependent location, poorly served by public transport and not a single railway station within the entire District. However, PPG3 also represented a rejection of suburbia with Poundbury and Essex Design Guide thinking exerting a strong influence on planning practice at the time. At a time when the housing market was at the height of a boom, with strong levels of demand and good mortgage availability developers were only too willing to respond positively to ideas that essentially involved the densification of land.

Located on the outskirts of Coalville, the Buckingham Road estate is typical of the disconnected and unplanned developments that were built across the country during the 1980s and 1990s; discussed in the Chapter 1.



**Figure 77: Suburbia.** Whilst the Buckingham Road estate characterises what many professionals would regard as 'unsatisfactory suburbia' with its indifference to original trees and hedgerows, its maze line and identical looking streets – it has never been the source of political complaint or concern. Unlike developments built within the District during the early 2000s, Buckingham Road remains one of the most desirable places to live in Coalville. 2017.

Estates such as Buckingham Road can be found across NWL and for those that enjoy suburban living, these estates represent what they are looking for: quiet, (usually) generously landscaped, low density, self-contained plots, sufficient space for on plot, off street car parking and in locations well related to wider road networks. From a political perspective these developments created no major issues for local ward members and Executive Councillors, with none of the crime and anti-social issues that plague more troubled estates – typically those in full or part Council ownership. Yet, the PPG3 developments quickly became liabilities for the Council with Elected Members, the Police and even the Chief Executive becoming embroiled in neighbour disputes and concerns about the lack of car parking provision, disputes over pavement parking and issues relating to isolated, unlit and poorly maintained parking courtyards – issues that commonly plagued PPG3 developments.



Figure 78: **Life before PPG3.** Plenty of space for cars, trees and landscaping, the Buckingham Road estate is a stone's throw away from Waterworks Road but could be a world away. To date the Council has received no complaints about its wide soulless, lifeless and quiet streets - or the use of generic, standard house types set around a disorientating cul de sac street network. In contrast, the Council has received numerous complaints about more recent PPG3 developments. 2017.

The inevitable result has been a political 'kickback' against higher density schemes, three storey buildings and constrained parking provision. This has remained a constant challenge for officers that have sought to improve design quality, respond to local architectural/built form characteristics and maximise the use of developable land.

### 7.8 Conclusions: Reflections on PPG3

As previously discussed during the early 2000s, the government sought to intensify the use of land and make suburban developments more 'urban' through the largely untested application of PPG3 (later PPS3) policies. Heavily influenced by the ideals promoted in the Essex Design Guide (1997) that rejected the notion of suburbia and instead promoted more organically inspired settlement patterns, forms and street relationships, PPG3 (later PPS3) sought to challenge the suburban house building model. This model had been subject to little in the way of government interference with field upon field slowly consumed by a growing and placeless sprawl. Characterised by detached homes on increasingly smaller plots, physically isolated from local facilities and services and highly car dependent they remain highly desirable places to live for many people.

Three particular PPG3 policies challenged the suburban house building model. These were the imposition of: 1) minimum densities for new residential developments. 2) the prioritisation of brown- over green-field land and, 3) maximum parking standards for new homes; averaging at 1.5 spaces per new dwelling. Almost overnight the rules changed. Planning officers were faced with a considerable shift in government emphasis towards design quality considerations though with little or no design knowledge, skills or experience to implement these policies successfully (or even understand potential pitfalls). Local politicians no doubt struggled to comprehend what had changed and why – and how on earth spacious and green suburban estates had been substituted with ugly, cramped estates littered with parked cars.

The Urban Task Force Report (1999) promoted more urbanist inspired principles: concentration as opposed to sprawl, the greater efficient use of land, intensifying local populations and thereby creating the possibility for local facilities and services to become more viable. The most challenging idea was that by reducing car parking, households would be encouraged to shift their modal choices: from car to public transport, cycling and walking. This quickly proved to become a problematic policy in settlements with poor quality or non-existent public transport infrastructure. Such policies might be regarded as forward thinking and in the public interest (particularly if new development would contribute towards funding new public infrastructure) but much to the dismay of local politicians in NWL even the prospect of 5,000 homes in the Greater Coalville Area failed to secure government funding to reopen Coalville station to passenger traffic; connecting the town to the wider rail network.

Design had only recently become a material consideration in the determination of planning applications and a justified consideration in policy formulation. Whilst organisations such as CABE published a wealth of material relating to design, such as Design Codes and producing masterplans (2004a), time stretched planning officers would have struggled to develop a robust understanding of what good design was and instead tried their best to ‘muddle through’ as a housing boom gained further momentum and the number of planning applications began to peak.

It is therefore not surprising that as ‘suburbia’ leapt from placeless ‘box bashing’ to being something more land intensive, strongly ‘anti-car’, more locally distinctive and where to create a street the common approach was to pull buildings to edge of the street and push cars behind the building line (or more often into large parking courtyards), many local authorities struggled to keep pace.

Planning theory had shifted – and few understood what the desired outcome was (or what it should look like).

As a young professional at the time, the pace of change was exciting and in the spirit of the dynamic New Labour movement. Old ways of thinking and doing things were being replaced – a great big beautiful tomorrow beckoned. Yet in retrospect it was in part ill-informed. Policies and ideas had not been tested and the implications poorly understood outside of cities and larger towns.

Whilst land was developed more intensively, the limiting of car parking did not affect car ownership and instead created developments over run with parked cars in every available free piece of space. Half pavement parking was a common feature in locations where public transport was limited, inconvenient or impractical.

At a national and regional level, it was almost as though a denial of suburbia was underway, where the idea of suburbia was taboo (even though many people lived there and many more wanted to live there) – and where the more politically contentious issues that contribute towards the creation of suburbia and car dependency were ‘too hot to handle’. How could NWL accommodate 12,200 homes by 2026 with just 18,300 new parking spaces in a District with high levels of daily out commuting, fragmented bus services and not a single train station? With many households having at least two cars, where would the (at least) 6,100 other cars go?

Together with Chapter 4 (Three Counties Audit), this chapter has demonstrated that CABE’s housing audits were the ‘tip of the iceberg’ with issues relating to the design quality of new developments widespread. In some instances, the quality of new developments was lower than what CABE’s research uncovered. Chapter 4 offered a more complete picture of housing quality locally though demonstrated that there were new development models across the region that had not been cited in CABE’s audit (2007a). These new development models successfully applied principles of good design at higher residential densities and offered an alternative to: 1. the poorly designed schemes that characterised much of the PPG3 era, and 2. the low-density estates typical of the 1970s, 1980s and 1990s. However, these new development models were the exception as opposed to the norm.

A key finding was the importance of defining what good residential development was – and whilst the Council used BfL20 to assess the design quality of completed schemes – it had not used BfL20

to set expectations of developers (i.e. adopting the tool as policy), to frame pre-application discussions (and identify aspects of a proposed scheme that either complied or did not comply with BfL20) or support decision making (i.e. grant or withhold planning permission).

The Council subsequently adopted BfL20 (although it was not able to embed BfL (by this point BfL12 not BfL20) into its Local Plan until 2017), began using it to frame pre-application discussions, provide both structure and focus for officer design training and guide decision making.

As discussed at the start of this chapter CABE stated that, “good or better design will result where at least one agency – landowner, local authority, social landlord or developer – has strong aspirations for achieving good design” (2007a, p.4). CABE continued to provide specific recommendations to local authorities, including but not limited to, adopting BfL20 and investing in design skills. The following chapter explores how successful NWLDC was in its efforts to achieve good design – highlighting where and why design quality was improved and conversely where design quality outcomes were compromised despite the best efforts of the Council. Reinforced by observations and findings beyond NWL, the case study provides a robust rationale for the subsequent analysis and recommendations offered in Part 5 (Chapters 8 and 9).

## **8. The effectiveness of Building for Life in practice**

The previous chapter demonstrated that BfL20 was an effective method by it is possible to more objectively consider the design qualities and deficiencies of new residential developments. It therefore followed that design quality could be improved (and measured) if BfL20 was used throughout the development management process. This chapter explores how successful this approach was over a ten-year period with a more critical analysis offered in Chapter 8.

### **8.1 A local strategy for improving housing design quality**

NWLDC’s approach to improving housing design quality was largely based upon the recommendations made by CABE to local planning authorities (2007a, p.5). At the time, CABE’s significant profile and influence was at its peak. It was not uncommon for local authorities to accept CABE’s recommendations and advice having no reason to question either their validity or effectiveness. Having fared badly in the CABE housing audit (2007a) and with a favourable political

climate, NWLDC sought to implement each of CABE's recommendations at speed and with vigour - expecting these to largely 'solve' the problem of design quality in new housing.

Ten years later, it became apparent that many of the issues associated with residential design quality were more deeply rooted within both the industry and the planning system.

To identify potential solutions required a more comprehensive (and less localised) understanding of the way new residential developments came forward: the processes and practices that make them the places they are. The following chapter therefore demonstrates the limitations of individual local authorities to challenge established practice by exerting local regulatory pressure. However, it is important that the reader does not interpret this chapter as being dismissive of the value of BfL20/12 – indeed it has been an extremely valuable tool to the local authority across a number of levels, though it has not proven to be as effective as the Council had hoped in challenging the more deeply engrained behaviours by developers motivated less by design - either as a means by which to reinforce brand differentiation, achieve greater profits or demonstrate an interest in legacy.

## **8.2 NWLDC design initiative (ourplace™)**

NWLDC's design initiative (branded as 'ourplace™') was primarily created to signal a shift in the Council's design quality expectations. Partly influenced by research produced by the Joseph Rowntree Foundation (2002), the initiative was largely influenced by CABE's recommendations to local authorities:

- Local authorities need to ensure that they develop thorough local design policies, setting out what they expect of developers, as required by PPS3.
- Every local authority should adopt the Building for Life criteria as a mechanism to raise the quality of proposals that are brought to planning committees; and, critically, seek to enforce these standards once planning permission has been secured (i.e. avoiding erosion of quality through the discharge of condition process and/or failing to build out schemes in accordance with approved plans).
- Every authority needs to be sure it has access to sufficient urban design skills, either in-house or through a shared service resource with others; members and officers involved in

the planning process should have sufficient design training; and authorities without a design champion should consider appointing one immediately (CABE 2007a, p.5).

In December 2008, the Council's Cabinet adopted a design initiative through which CABE's recommendations were progressed. The Council's response to CABE's recommendations are further set out within the following sub-chapters and explore a three-fold approach:

- **Local design policies**, i.e. adopting and using BfL20 as part of everyday planning practice (see chapter 8.3).
- **Enhancing the level of design knowledge, skills and awareness** across the authority through training and using Design Ambassadors to raise the profile of design (see chapter 8.4).
- **Introducing a 'scores on the doors' scheme** (based on BfL20) that recognised developments that were expected to meet the BfL20 standard on build completion, whilst also encouraging home buyers to consider the design qualities of a development where they might be considering buying a home (see chapter 8.5).

The effectiveness of this approach is explored and critiqued through a series of examples designed and built between 2007 and 2017.

### **8.3 Local design policies**

In the absence of an up to date planning framework, BfL20 was linked to a Saved Local Plan Policy and subsequently embedded into the emerging new planning framework (first, the Core Strategy and more recently, the (new) Local Plan – adopted in November 2017).

By taking this approach, an interim (yet very weak) design policy was effectively established and BfL20 was formally adopted by the Council and used as a material consideration in the determination of planning applications. This was combined with a Cabinet resolution where the Council's Executive confirmed that, "*Cabinet shares the ambitions of the Commission for Architecture and the Built Environment (CABE) in expecting developments of 'good' or 'very good' standard to become the norm as opposed to the exception*" (NWLD, 2008).

BfL20 was subsequently adopted as the measure of design quality for all new residential developments of ten homes or more (regardless of whether applications were determined by the Planning Committee or by way of delegated authority). As the Council's urban designer, the researcher was also an 'Accredited Building for Life Assessor' and later became a CABE Enabler and a Building for Life trainer. The Council therefore considered that it would be able to exert a much stronger influence on house builders, both encouraging and where required, forcing them to comply with the design principles embedded with BfL20.

As part of the Council's joint service agreement with a South Derbyshire District Council (2007-2008), the successful use of BfL20 on Building for Life on a new development at Melbourne (see appendices) where the tool had been used to structure pre-application discussions and support decision making offered the Council's Executive a degree of confidence that by using BfL20 it could regain control of design quality that following the experiences at Birch Road, Meredith Road, Waterworks Road, Weavers Close – and less so, Station Road was under no effective Council control.

Despite the Council adopting BfL20, the issues associated with the local plan making process meant that the Council lacked a comprehensive and robust set of policies. Despite this, Council officers spurred by the support of the Executive used the Cabinet resolution to 'push' BfL20 and a wider design agenda as far as they could.

#### **8.4 Skills, training and champions**

A programme of design training for both Elected Members and officer started in 2008 and instead of a single design champion, five design ambassadors were appointed, providing high level 'coverage' across officers, local politicians and industry.

The role of the design ambassadors was partly to 'front' the Council's design initiative whilst also showing a 'consistency of message' across the organisation – straddling both officers and Elected Members, with the Leader, Portfolio Holder for Planning, Chief Executive and (the then) Environment Director (Chief Planning Officer) fulfilling Ambassadorial duties.



**“Creating places that people and businesses are proud to call home is at the heart of what we do”**

Design Ambassadors Councillor Richard Blunt and Councillor Trevor Pendleton champion good design across North West Leicestershire.

**Figure 79: Securing and maintaining political support and interest** in design is vital to maintain a continued focus on quality. NWLDC's design initiative has been led by the Council's Conservative Executive since it was established in 2008.  
NWLDC 2017, p.2.

This consistency of message, or “strategic alignment”<sup>117</sup> was particularly important to the Chief Executive - based on her knowledge and experience of how to drive cultural change. A fifth Ambassador was also appointed, with the authority taking a very unusual approach by appointing a representative from the house building industry. James Wilson, Managing Director of Davidsons Homes and a former Director at David Wilson Homes was selected on the basis of the Wilson family’s long-standing relationship with the District<sup>118</sup>, his knowledge of and influence within the house building industry, together with strong interpersonal skills and a willingness to support the Council. Over time this fifth Ambassador has provided (and informally continues to provide) the Council with a better understanding of how the house building industry operates and how best to stimulate behavioural change.

<sup>117</sup> Quoting Christine Fisher.

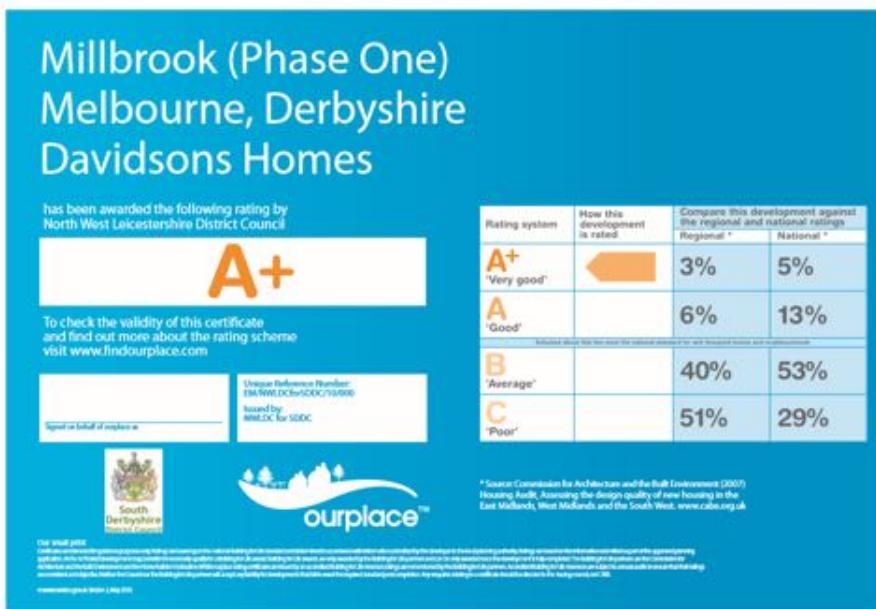
<sup>118</sup> David Wilson Homes was established within the District and as the company grew into one of the nation’s largest house builders, retained its Head Office within the District. When David Wilson sold his family’s stake in David Wilson Homes to Barratt, James Wilson established Davidsons Homes with David Wilson as Chairman. Davidsons Head Offices are located within the former Head Offices of David Wilson Homes.

Once the Ambassadors were appointed, the researcher designed and delivered a series of in house training sessions for officers and Elected Members. Focused on the basics of urban design and BfL20, the purpose of the sessions was to demonstrate how by applying urban design principles and using the BfL20 questions better designed schemes could be secured. Together with the Cabinet resolution and the ‘coverage’ offered by the Design Ambassadors a more consistent message was put forward to planning applicants: that design quality mattered, that we (increasingly) knew what we were talking about, how we would seek to (more objectively) measure quality and that we had broad support across the organisation.

### **8.5 Quality rating scheme for home buyers**

By introducing a ‘scores on the doors’ scheme the Council went further than CABE’s recommendations reflecting the degree of political ambition. Unlike other local authority design awards, the scheme involved developers receiving a quality rating before their scheme had been completed. The intention was that home buyers would be given the opportunity to differentiate between developments within their budgetary and locational parameters (assuming there was more than one developer within these parameters). Quality ratings were based on the Building for Life tiers of: ‘very good’, ‘good’, ‘average’ and ‘poor’.

Whilst the council did not have any intention of granting planning approval to ‘poor’ schemes, it was recognised that through the pre-application process it was not uncommon for what would otherwise be ‘poor’ schemes to be lifted to the higher end of the ‘average’ tier. In such cases, officers would have successfully ‘designed out’ the worst features of a proposed development yet found themselves caught between developers that did not value design quality and a scheme where the most robust reasons for a design based planning refusal had been resolved. The expectation was that house builders securing planning consent for an ‘average’ scheme would be at a commercial disadvantage, particularly where they might be selling a comparable product to a competitor in the same market area, at around the same price; though where this competitor had a ‘very good’ or ‘good’ rating.



**Figure 80: Millbrook Phase One.** Example of a quality rating certificate issued to new developments rated under BfL20 by NWLDC on behalf of South Derbyshire District Council. The scheme was the model for the national Built for Life™ quality marks.

The quality rating scheme was launched in 2009 and ran until 2012. During its time as a local scheme it proved popular with house builders that were more engaged with design quality considerations, yet the same time other house builders proved to be quite adept at manipulating the BfL20 scoring regime. A not untypical tactic employed by some house builders was to submit a scheme that did not meet the minimum score required for a 'good' rating (i.e. 14 out of 20) and then make incremental improvements and argue that additional points were merited, eventually resulting in a scheme reaching the 'pass' mark. This was typically achieved by modestly improving the environmental efficiency of buildings and modifying a proportion of homes to meet Lifetime Homes standards. This approach, combined with the 'pick and mix' methodology of the scoring regime resulted in schemes with a poor street environment still meeting the requirements of BfL20 – on paper, at least. Consequently, two schemes within the District did secure 'good' ratings under the Council's award scheme but are distinctly underwhelming places with poor quality street environments.



**Figure 81: Raising public awareness.** Extracts from the brochure created by NWLDC to explain the quality rating scheme to home purchasers.

In 2011, CABE described the scheme as a “flagship initiative” and it secured the Urban Design Group’s first Public Sector Award. In 2012, the scheme was used as the basis for the Built for Life™ Commendation scheme and rolled out nationally (see [builtforlifehomes.org.uk](http://builtforlifehomes.org.uk)). To date, there are 59 schemes with commended status.

## **8.6 House building rates in North West Leicestershire**

It would be amiss not to further contextualise the research - namely the pressure to build more homes and at a faster pace. The pressure on local authorities has intensified since the global credit crisis.



**Figure 82: You can have both quality and quantity.** In 2012, the Council reaffirmed its commitment to design quality within a wider economic and political climate that was increasingly focused on releasing planning constraints as part of a drive to support economic recovery after the global credit crisis. A strong emphasis was placed on demonstrating that the Council's design agenda was not compromising house building rates, hence the reference to 1,453 jobs, Council investment in development and the 'hard hat and digger' photograph. The pamphlet was launched at a briefing event and its messages were as much for Council officers and Councillors as they were for house builders (NWLDC, 2012).

House building rates within the District have remained high over the past five years. It has been a challenge for the Council to keep pace with a constant stream of planning applications whilst also

ensuring schemes achieve an agreed level of design quality with limited design capacity (albeit significantly more than neighbouring authorities that have no design support). In 2015/16 the case load was particularly high with 3,361 new homes granted planning consent.

**Table 23: Housing approvals and net housing completions in NWL** (Source: NWLDC (2016) 2015/16 Annual Monitoring Report 2015/16, p. 7).

Monitoring Period	Housing Approvals
2006 / 2007	73
2007 / 2008	295
2008 / 2009	182
2009 / 2010	149
2010 / 2011	364
2011 / 2012	967
2012 / 2013	1355
2013 / 2014	904
2014 / 2015	1232
2015 / 2016	3361
<b>Total</b>	<b>8,882</b>

Monitoring Period	Housing Completions Net
2006 / 2007	336
2007 / 2008	353
2008 / 2009	236
2009 / 2010	227
2010 / 2011	186
2011 / 2012	234
2012 / 2013	365
2013 / 2014	428
2014 / 2015	676
2015 / 2016	643
<b>Total</b>	<b>3,684</b>

Housing schemes range from developments on small infill sites through to large green field developments along the outskirts of existing settlements, as seen recently at Ashby de la Zouch (north, east and west), Castle Donington (west), Coalville/Ravenstone and Ibstock (north and west). Ranging from social housing only, mixed tenure and market sale only developments, schemes are built by a range of small local registered social landlords (Housing Associations), small local developers, though with the bulk by large national house builders. The house builders with a regular interest in the District are: Barratt Group (including David Wilson), Bellway (including Ashberry), Bloors, Davidsons, Miller, Persimmon and Taylor Wimpey.

The annual figures for housing approvals exclude residential schemes that are proposed in locations not supported by the authority (and consequently refused), but where resources are still committed to safeguarding design quality in case a planning refusal is appealed by an applicant and supported by a Planning Inspector. These figures also exclude applications that straddle multiple years either prior to the submission of a planning application (Money Hill, Ashby de la Zouch: 605 homes and associated community infrastructure) or during the preparation of a Reserved Matters application after the approval of an Outline planning application (South East Coalville: 2700 homes and associated community infrastructure). As such, the call for design support on planning applications is not insubstantial.

## **8.7 Testing the effectiveness of Building for Life**

Over a ten-year period, NWLDC tested the effectiveness of BfL20 (and later BfL12) to raise design quality in new housing over a series of major developments across the District. This testing took place across a range of market areas (from the less buoyant market of Coalville to the more affluent market of Ashby de la Zouch) and with different developers, each with a different approach and emphasis on design quality.

This ten-year insight has provided a unique opportunity to undertake a major piece of research with the researcher both an observer and as an active participant in the process. From 2010, the approach evolved to respond to changes in national planning policy and a new version of BfL that was subsequently created and tested in NWL prior to its national launch in 2012 following the publication of the NPPF.

The following chapters present, explore and critique a series of developments that have been placed into one of two design categories, reflecting either the underlying design approach:

- Organic inspired.
- Non-organic or planned<sup>119</sup>.

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<sup>119</sup> Whilst all developments are by their nature planned, the term 'planned' is used to differentiate between organically inspired schemes that attempt to create the illusion (albeit with varying degrees of convincingness) of a place being built up over time by more than one builder.

### 8.7.1 Organic inspired approach

The organic inspired design approach for new developments was encouraged by the Council as a means by which developments could and should create schemes that responded to local character. Reflecting wider planning trends in the late 1990s and early 2000s, influenced by the Essex Design Guide and the model town of Poundbury, this approach seeks to reflect the urban and architectural characteristics of traditional settlements often characterised by a slow morphological growth; almost ‘organic’ – hence the term ‘organic inspired’. This approach has had mixed success. Following the completion of Park Lane, Castle Donington this approach was replaced by a preference for what can be called a non-organic or planned approach where instead of a sense of character being created by a (pseudo) replication of traditional street patterns, urban grain, building forms, proportions, materials and details.



**Figure 83: The organic inspired approach** typically resulted in contrived layouts and street environments. Park Lane, Castle Donington. 2016.

In contrast, the non-organic approach was inspired by Garden and Corporation Suburbs with character created through the use of structural landscaping, simpler buildings and layout; and more geometric street patterns. This approach was also suitable as it reinforced the District’s emerging character as a place within the National Forest<sup>120</sup>.

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<sup>120</sup> The National Forest was a millennium project that has involved transforming blighted landscapes created through coal mining into new woodland.



**Figure 84: The organic approach and standard house types.** With highways standards often undermining efforts to create an organic or traditionally inspired place, it is often left to individual buildings, building compositions and street to building relationships to create a sense of convincingness. Both images reflect these developer's standard house types and demonstrate that some housebuilders are more suited to the traditional or organic inspired approach than others with key differences evident. Above, previous page (Davidsons): historically appropriate building form, proportions, materials, colour and detailing; dual aspect corner building. (Bellway): single aspect building that fails to address the street corner and its alignment, poorly referenced architectural detailing (note: inset chimney on the rendered plot). Anstey and Ibstock. 2015.

During pre-application discussions, applicants were routinely required to demonstrate a comprehensive appreciation for their site but also its wider settlement context; drawing reference from the distinctive and memorable features of a settlement. With many settlements across the District featuring a traditional, historic core and an outer band of post war, 'anywhere' housing,

there was a tendency for developers to point towards this post war, ‘anywhere’ housing as a justification for more of the same.

With the District being predominantly comprised of slow growing, largely rural Leicestershire villages and towns (with the typical vernacular characteristics not being unique to the District but instead stretching over a much larger geographical area (eastwards across into Charnwood; westwards into Derbyshire and East Staffordshire), efforts to encourage builders to create developments inspired by local character seemed a logical and not an unreasonable expectation. Davidsons’ development at Melbourne, Derbyshire was particularly influential in the Council’s thinking. This development had been particularly successful in reflecting the town’s more distinctive characteristics, whilst tending to use re-elevated ‘standard’ house types and a small number of specially designed buildings.

As the following sections demonstrate, this design approach had varying degrees of success as discussed through a series of examples listed below and presented in the following sub-chapters. Developers are therefore guided towards the non-organic or planned approach unless they have a proven track record of successfully reflecting organic characteristics within developments having a portfolio of house types that reflect traditional building forms, proportions and characteristics.

- Station Road, Melbourne.
- Battleflat Drive extension, Ellistown.
- Chiswell Drive, Coalville.
- Diseworth and Long Whatton.
- Usbourne Way, Ibstock.
- Frances Way, Ibstock.
- Pottery Lane, Lount.
- Park Lane, Castle Donington.
- Towles Pastures, Castle Donington.

A reader familiar with the area will no doubt notice that Station Road, Melbourne is not within the administration boundaries of NWL. The scheme is included here as it was designed and built (Phase One) under the joint service agreement between NWLDC and South Derbyshire District Council.

The case study findings are presented in Appendix B.



Figure 85: "Traditional" detailing: prefabricated GRP porches within a "traditionally" inspired development. Ibstock. 2016.

### 8.7.2 Non-organic or planned approach

As previously discussed, the organic inspired design approach was advocated by the Council as a means by which developments could and should create schemes that responded to local character. However, the experience gained by officers at the Council over numerous applications resulted in me – the urban designer and researcher - reflecting whether the organic inspired approach was the most effective means by which to secure good quality on larger developments; especially where a developer had previously failed to demonstrate a proven track record in traditional settlement characteristics, a genuine interest in good design and/or where local market conditions might not sustain increased build costs.

Schemes such as Ibstock (Bellway), Park Lane, Castle Donington and other schemes not previously discussed (Appleby Magna and Kegworth, Persimmon Homes) have demonstrated that despite the

considerable time and energy invested on the Council's part to create places that were reflective of traditional settlement character, the effectiveness of this approach is compromised by:

- Restrictions imposed on street design by the local highways authority.
- The limitations and deficiencies of the standard house types employed by many volume house builders.
- The 'downgrading' of proposals at the implementation stage through the inevitable cheapening of materials through the process of discharging planning conditions to the countless minor deviations from approved plans.
- Internal design skills within the house building company that vary in terms of their understanding of traditional building proportions and other characteristics.
- The absence of a commercial and/or legacy imperative that would otherwise motivate the developers to ensure that (street design aside) the quality and attention afforded to individual buildings and plots created a more authentic reflection of the buildings and spaces referenced within the planning application.



**Figure 86: New streets at Edgware Green** in London (Barratt Homes) demonstrate that organic inspired design is not the only way to deliver well designed streets and developments. 2016.

The experiences at Park Lane and the schemes discussed in the preceding sections led officers at the Council to begin to question whether the organic inspired approach was the most effective means by which to secure good quality across large development schemes. Through a process of critical reflection, officers began to explore whether better designed places might be created by

adopting a more planned approach to development, i.e. one where there was no underlying narrative relating to the more traditional and historic characteristics of a settlement. These thoughts and ideas began to take a firmer hold as the effectiveness of the Hastings Park masterplan began to emerge (albeit not without its faults) where a simple street hierarchy and a more geometric street pattern was proving effective in creating a distinctive and memorable place. The Ibstock experience (Figure 76) led officers to realise that some house builders were less able and motivated than others to successfully implement an organic inspired approach. Officers were also beginning to realise that advising developers to adopt an organic inspired approach could be problematic where one or more of the following conditions existed:

- A developer with no proven track record of successfully designing and building organic inspired developments.
- Standard house types that were very simple or functional with no evidence of traditionally inspired building forms, shapes (plan) and elevational treatments.
- A developer operating in less buoyant local markets where investment in higher design and/or build costs were not necessarily recoverable within target profit margins.
- A developer that targeted a more cost sensitive purchaser.



**Figure 87: St. Modwen Homes, Coalville.** The simplicity of the development in Coalville where character is primarily drawn from new and existing landscape features proved to be particularly successful with house builders targeting more price sensitive customers, in lower market value areas and/or with a more functional and limited range of house types. Coalville. 2017.

In the case of developers operating within less buoyant markets, whilst the Council had – in the case of Chiswell Drive, Coalville – successfully secured a higher quality scheme, the developer has since commented that the increases in build costs would - in more buoyant market conditions – have been recovered through a proportional increase in sales revenue. However, the market conditions in Coalville and local ceiling prices (i.e. the maximum price a property valuer would place on a two-bedroom terraced new home in a particular location) resulted in the developer recouping a lesser profit than they might otherwise have achieved.



**Figure 88: Largely standard house types** with landscape creating a strong foreground and character for the place. Minor elevation modifications were made to a small number of homes to create a stronger connection to the character of the town. Ashby de la Zouch. 2017.

The developer *could* have made more profit by designing a scheme to a lower standard, with issues raised relating to the costs of detailing to the Ashby Road frontage (including the boundary walls) and the specification to the courtyard behind it. However, this is a theoretical proposition as an enhanced profit margin (i.e. the margin the developer anticipated to make on the development) would have only been realised had a scheme designed to a lower standard been granted planning consent. In this instance, the Council was unwilling to negotiate on the quality of the Ashby Road frontage nor was it willing to compromise on the quality of the main courtyard.

Furthermore, had the Council withheld consent and had planning consent been subsequently secured via a successful planning appeal it is possible that any subsequent increase in profit could have been ‘cancelled out’ through land interest charges incurred<sup>121</sup>.

Whilst on the one hand, the Council could claim the development was a success in terms of its ‘place quality’, its positive contribution to the image of town – it was not considered a commercial success by the developer; as such it is appropriate to promote the scheme as a model for success?

Appendix C offers an insight into the non-organic or planned schemes built across the District.

### **8.8 Conclusion: the effectiveness of Building for Life locally**

The purpose of Chapters 7 and 8 was to address the research question:

- To assess the effectiveness of BfL as a form of regulatory design control; critically evaluating the validity of CABE’s housing quality recommendations for the East Midlands and by creating and testing a new version of BfL.

The NWLDC case study demonstrates that the use of BfL (20 and 12) has partly been effective as a form of regulatory design control: there are significantly more ‘good’ schemes across the District than there were ten years ago. However, the tool has been less effective with house builders that place little to no emphasis on BfL as part of their organisation’s values: whether these are motivated by commercial and/or social responsibility reasons. These findings challenge CABE’s ‘lead agency’ theory (2007a, p.4).

The difficulty for NWL has been that whilst ‘poor’ schemes have been eliminated<sup>122</sup> there are numerous developments where through the pre-application process their quality has been raised from a ‘poor’ to a mediocre standard. Once this mediocre standard has been reached, developers become increasingly resistant to making further additional improvements on the basis that the

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<sup>121</sup> Assuming the developer owned the land and was paying interest against a loan on it. “Awards cannot extend to compensation for indirect losses, such as those which may result from alleged delay in obtaining planning permission” Paragraph: 032 Reference ID: 16-032-20140306. [www.gov.uk/guidance/appeals](http://www.gov.uk/guidance/appeals). Date accessed 31 July 2017.

<sup>122</sup> With the exception of Bellway, Ashby de la Zouch and Persimmon, Kegworth where unforeseen changes in levels have significantly eroded the quality of the street environment.

viability assumptions upon which a development is based will be undermined: development costs will increase however no additional sales revenue will be achieved within their target market.

In the process of raising the standard of these developments the Council has ‘designed out’ the strongest reasons for a design based refusal. Whilst the Council could still refuse a scheme of mediocre quality, the risks of an appeal being upheld by a Planning Inspector are higher. Aside from the financial risks associated with a planning decision being overturned, the Council has also been very aware that a failure to uphold a design based refusal at appeal would significantly undermine its design initiative.

A particularly interesting finding (and one that requires further research) is the apparent absence of a commercial reward for house builders meeting the requirements of BfL20/12 with potentially a commercial disincentive where local market conditions cannot accommodate an uplift beyond ceiling prices to offer a house builder a greater profit than a competitor that may be building to a lower design standard. This disconnect between property values and design quality appears to contradict the research findings of RICS (2016) and Savills (2016) creating a major challenge for those seeking to improve design quality within the East Midlands region. Where house builders use BfL12 to market new homes they have apparently chosen to do so to build local reputation, reinforce the quality of their product, offering consumers greater confidence and in some instances as part of a wider corporate social responsibility agenda (for example, Barratt Plc.). As such, some house builders have commented that BfL12 has some value as a sales tool and is thought in some instances assist in securing sales, however no specific value (such as a percentage uplift compared to new homes for sale in the same market area) has been attributed to schemes that comply with BfL12 beyond RICS research. However these insights are purely anecdotal, exposing an area for future research (please refer to ‘Areas for future research’ 11.2)

It is important to recognise that the new build housing market is not homogenous. As with other consumer products, suppliers will target specific market segments. As such, house builders that target the mid to low market (where they specialise and where their brand fits) will not want to target the higher end of the market (where they do not specialise and where their brand does not fit). This therefore creates an additional dynamic where efforts by a local authority to improve design quality (and where the location of a scheme is such that increased build costs may be offset or capitalised upon by higher sales prices) may be resisted by a developer on the basis that this will

require them to target a higher market segment – something that may be undesirable if a particular market is well served by higher end developers.

It has become apparent that issues commonly arise where the design and cost implications of complying with BfL12 are not factored into a viability appraisal – and furthermore, where doing so could quite possibly result in a developer being ‘outbid’ on a piece of land in a market where land owners are seeking to maximise their capital receipt. Critically, the viability appraisal is commonly undertaken before any discussion takes place between the developer and the local planning authority. As a consequence, by the stage at which the developer seeks the views of the local planning authority on what it is seeking to build, a series of parameters have been set. These parameters often frustrate the ability of those involved to successfully and sensitively integrate a development into its surroundings, for example by virtue of the amount and type of connections and the scale, form and plot character of development. Other key parameters include the orientation of buildings, with homes fronting onto open spaces usually more expensive than homes backing onto open spaces; assumptions relating to sustainable urban drainage, in particular the land take of features such as ‘balancing lagoons’ (i.e. the less land take, the steeper the sides of the lagoon will be and the more challenging it will be to incorporate lagoons into an accessible part of a development’s open space provision).

The ability to create streets of different characters by virtue of their width and the use of structural landscaping to create a sense of character is often frustrated by coverage assumptions (i.e. the amount of saleable square footage across a given development) that are typically based on minimums, defined not by street types or a wider landscape strategy but instead by the parking arrangement associated with a given house type<sup>123</sup>. Efforts to introduce a series of street typologies across a development and/or introduce structural landscaping to create a sense of character will often be resisted by a developer on the basis that to accommodate these requirements will reduce saleable square footage and undermine the viability of the development by increasing build costs, decreasing sales revenue and in turn decreasing profit margins<sup>124</sup>.

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<sup>123</sup> For instance, a home with side of plot parking can be set back from the edge of the street by a minimum of 0.9m to comply with the requirements of the Highways Authority, whereas a home with an integral garage will normally be set back the length of a car parking space (approximately 5.5m).

<sup>124</sup> Whilst saleable square footage could arguably be recouped by decreasing the footprint of homes and instead increasing their height from two to three stories, house builders commonly cite lack of customer demand for three storey homes, resistance to three storey homes by sales teams, increased build costs and a proportional decrease in valuations for the third storey.

A series of barriers to BfL12 compliance have emerged through the research:

- **Developers that are disinterested or indifferent** to it.
- **Pre-application advice services** that enable a developer to make incremental changes to a scheme that will improve its quality to a mediocre standard whilst also diluting any robust reasons for a design based refusal that will have existed had the incremental changes not been made.
- **Local housing markets** where there is no evidence to demonstrate that developers that comply with the tool benefit commercially, i.e. progress through the planning system faster or generate faster and higher value sales.
- **Local highways standards** that create curvilinear street patterns that create plot shapes and building lines that are incompatible with many housebuilders standard house types.
- House builders that possess a very **limited and basic range of standard house types**.
- Standard house types that are **neither traditional nor contemporary**; with a reliance on buildings as opposed to landscape to create a sense of identity across a development.
- A bias towards creating (or attempting to create) character through (pseudo) references to **traditional vernacular architecture**, despite this being incompatible with most house builders standard house types and local highways standards.
- **Lack of consistency across local authorities**, with house builders expressing frustration that BfL12 is required in some areas but not others.

With respect to the last observation, one local authority planner described the need for goodwill across both the public and private sectors in the planning process:

*“Achieving good design is dependent on the goodwill factor. The goodwill needs to be on both sides. It needs planners who are willing to embrace the concepts within BfL and apply the principles consistently to guide the design of new developments. It needs the goodwill of developers to ... embrace new design principles and apply them uniquely to each site”.*

Part 5 will explore these issues in greater depth, drawing in wider research from outside NWL to provide more holistic understanding of the effectiveness of BfL12 in practice. Through this new understanding a series of propositions were made, explored with stakeholders and refined in order to suggest how a more effective approach to achieving BfL12 might be achieved; one that is more

resilient to viability pressures and is less reliant on urban designers, responding to the continued budgetary pressures that local planning authorities find themselves under.

## PART THREE: EVALUATION AND RECOMMENDATIONS

### 9. A Total Design Model based evaluation of BfL12

#### 9.1 Design core: Market

*"It is a fact of life, and a fact of industrial practice (irrespective of discipline or product) that what might be termed the 'front end' of design is still not handled at all well... Parallels exist in all of the design professions; the story of the Sydney Opera House... represents one of the best case studies on how not to design in a total sense."*

Pugh, 1999, p.29.

Pugh promotes the importance of total design as a critical factor in "*aquir[ing] and maintaining competitiveness*" (1999, p.30). Whilst this is clearly true for some consumer products (such as the mobile phone and car industries) where there is no immediate shortage in supply and where: 1) consumers are afforded a wide degree of choice from a number of different suppliers and, 2) where constant product improvement and innovation are vital to retaining and increasing market share; the same cannot be said of the house building industry in England.



**Figure 89: Nine Wells by Hill Homes** is designed to create a high quality place. The development features on plot rain gardens as part of a wider approach to the management of surface water. Cambridge. 2017.

As previous chapters have discussed, since the 1980s the bulk of new housing has been increasingly delivered by a small number of volume and super volume house builders as a result of buy outs, consolidations, mergers and repeat mergers. One of the most well-known of these being the purchase of David Wilson Homes by Barratt (these two distinct brands remain) and the merger of Taylor Woodrow and Wimpey Homes to create Taylor Wimpey. A significant proportion of market share is now concentrated within a relatively small number of companies – each producing a broadly similar product though not necessarily targeting the same market segment(s). Each has a portfolio of standard house types and targets for coverage. Coverage is measured in square footage per acre, with house builders varying as to what they include and what they exclude from this calculation, thereby making comparisons on this measure problematic and an area for further research. Deviation from standard house types is strongly resisted in the interests of organisational efficiency, shared product knowledge and build quality. Whilst examples of more creative and innovative designs exist (in both house designs and the arrangement of streets and spaces), these represent a small fraction of what the market builds annually.

One noted exception to this is Cambridge's urban extensions and surrounding towns such as Saffron Walden. Here, strong local authority leadership reinforced by strong market conditions (high demand and high residential values) has created a fertile environment for a series of exemplar developments. With many designed by leading architects and designers, there is a high degree of choice in the local market for those with (typically) at least £1m to acquire a new home. With a housing market highly attractive to developers, developers are required to operate in a competitive market with most developers using the quality of their urban design to attract potential home buyers and secure lucrative sales. With all new developers comprising of privately adopted streets, developers are released from the typical constraints associated with local highways adoption resulting in attractively designed streets and public spaces that commonly include well integrated and sensitively engineered sustainable urban drainage schemes.

Where demand outstrips supply, there is little or no incentive for suppliers to innovate as the ability to sell the product is all but assured. As Lock observes, "*the meanest ugliest new house will sell off the drawing board*" (2016, p.509). Even the most lucrative markets<sup>125</sup> are not immune, with a new

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<sup>125</sup> Average house prices in Saffron Walden are £356k, compared to 186k, 216k, 181k for Derbyshire, Leicestershire and Nottinghamshire respectively. Saffron Walden's average prices compare favourably to West Bridgford's average of 320k. Source: [www.rightmove.co.uk/house-prices](http://www.rightmove.co.uk/house-prices). Date accessed 28 September 2017.

development in Saffron Walden by Persimmon Homes demonstrating that even in high value markets, good design quality is not a necessity. More recently, demand has been increased further by a choke in supply during the global credit crisis where house building stalled. This lack of design innovation or creativity is therefore partly attributed to demand consistently outstripping supply and partly due to the market being dominated by a small number of volume and super-volume house builders where repetition and standardisation are central to business models. As one employee of a major house builder commented, “*We are under pressure to build homes in a few weeks and stick to standard product. We can get someone upstairs to press a button and everything we need to build a particular house will be ordered.*”<sup>126</sup>

Whilst another employee from the same company commented,

*“We have to stick to standard stuff and push this with the local authority. We can only deviate from the standard house types if we have something from a local authority in writing. We then need to get authorisation from [name of the company’s Chief Architect]... It’s not uncommon for a concept plan that has been prepared to determine the viability of a site to be far too dense just to secure the land deal. Sometimes we produce the concept plans – and have hardly any time to do them, let alone go to the site. Sometimes the land buyers get an outside consultant to knock one up. We know the local authority aren’t going to like it, but we have to figure out some way to make it work.”*<sup>127</sup>

If one compares other consumer goods where supply is more plentiful, such as the car or mobile phone industry, innovation, quality and product development are a necessity to retain and grow market share. The success of manufacturers within such fiercely competitive environments is, as Pugh suggests heavily reliant on ‘total’ design processes.

Simmons (CABE, 2010c) explored hypothetical ideas whereby design quality and innovation in new house building might be stimulated by. Ideas included removing restrictions on the release of new land for development; thereby creating an excess of supply, greater choice for consumers and in turn a greater motivation for house builders to innovate and improve the quality of their product and place offer. Simmons contested that a greater number of house builders within the market place could stimulate competition and innovation – raising design quality. With land banks and

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<sup>126</sup> Author’s notes.

<sup>127</sup> Author’s notes.

access to capital enabling further land to be purchased or put under option, the potential of new suppliers entering the market and challenging the volume house builders is low.

Subject to having the necessary capital and skills to acquire and develop land; build homes that reflect local market conditions (i.e. not too large, not too small, not too cheap and not too expensive), it is common for developers to be assured of commercial success – securing a good return or profit on their investment and risk; without having to comply with BfL12. As such, the root cause of BfL12 non-compliance is more deeply engrained. Historically, CABE and the government have sought to influence design quality by promoting further regulation to existing regulation. Yet this is akin to repeatedly wall papering over a crack in a wall. Instead, we need to understand why the crack in the wall is there by understanding the wider market and regulatory environment in which the house builders operate.

The following sub-chapters will explore the market in which house builders operate.

#### BfL12 and the land market

*“The person with the worst design gets the land – it’s as simple as that”.*

House builder

House builders need land as much as humans need air. Without a supply of land their businesses will soon collapse and die starved of the energy they need to survive. The shortage of land coming forward for development and the intensive use of land under the minimum density policies established under the previous planning regime have served to fuel high landowner expectations of the value of their land holdings.

Whilst improved design standards (i.e. complying with BfL12) *might* offer a developer the prospect of increasing their profit margins<sup>128</sup> - particularly in higher value market areas, within lower value areas local ceiling prices cap the maximum achievable sales price per square foot. This serves to further disincentivise BfL compliance as if the costs associated with compliance either reduce development revenue and/or increase development costs and these cannot be recouped through increased sales values or a reduced land price, profit will be reduced. The reduction of profit will

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<sup>128</sup> With many industry insiders unconvinced that they would.

be strongly resisted by a developer. As one house builder that seeks to positively respond to BfL12 remarked, *"it's become harder to achieve a premium... in theory there should be a premium – in practice, at the moment there isn't... and that's frustrating because, you know, all the effort that goes into creating something that looks good is not being rewarded."*<sup>129</sup>

During interviews, many house builders commented on the lack of effective local design regulation as a key reason for profitable and poorly designed developments reaching the market place. With local planning authorities typically failing to prevent below standard schemes from reaching the market place and with no negative effect on sales rates, volumes or values - there is often no strong commercial incentive for developers to ensure their developments comply with BfL12 and the principles it promotes.

The exceptions to this are where a local authority requires BfL12 compliance. However, unless a developer shares these aspirations for design quality, the NWL experience demonstrates that a stalemate situation can be reached. Often the result is concessions on both sides where the quality of the final scheme can often be mediocre. The motivations for agreeing to such concessions relate to neither a developer or local authority wishing to resort to an appeal scenario, exposing both parties to the risk of costs (even if there is the prospect of one party recouping their costs).

Instead, the best results are achieved where developers place a value BfL12 as part of a wider approach to: brand reputation or market positioning (this may include motivations relating to personal legacy, pride and job satisfaction) and corporate social responsibility commitments.

House builders that seek to achieve BfL12 consistently cite commercial costs and risks to adopting a more design orientated approach; in that profit can be reduced if local market conditions do not enable the house builder to recoup the costs of complying with BfL12 and if the costs of compliance cannot (or have not) been incorporated into the cost of the land. They also cite frustration at the planning system that affords planning consents to lower quality schemes that in some instances have succeeding in generating higher profit margins. Furthermore, in some cases where developers have sought to factor the costs of complying with BfL12 into their viability appraisals (and offer land owners a more considered offer for a piece of land) they have been outbid by a competitor that has

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<sup>129</sup> Author's notes.

'pushed up' coverage to maximise development income – a view shared by 63% of house builders that cite land values require developers to reduce costs and therefore design quality in order to secure land. In such instances, developers will seek to ensure that the cost of the land does not erode profit margins by decreasing the build costs of the development and maximising the use of developable land.

Table 24: **Survey findings** uncover that the underlying reasons for BfL non-compliance are more deeply rooted within the development process and are symptomatic of high demand for land, competition and prices.

High land costs reduce the build costs, compromising design quality	64%
Unrealistic or extremely challenging expectation of site coverage (density) resulting in a compromised design solution	57%

The lack of design skills in local authority fuels poor design as without effective design regulation, the market will often seek to exploit this weakness in an attempt to secure an advantage over a competitor and/or maximise their profit margins. To secure an advantage over a competitor, a house builder must secure a piece of land that its competitors are also seeking to acquire. Survey comments from house builders included:

*"insufficient ability, training and professional expertise in local authorities to champion or assess design/BfL, including lack of support at senior management level (with honourable exceptions!)"*

*"In some Councils there is a lack of understanding and/or training to ensure that key persons in the LPA know what Building for Life is. The issues are that LPA's are under staffed and there are limited training funds available. Attendance of post graduate urban design course has dropped significantly."*

*"Council's allow bad design to happen."*

*"[Authorities are] inconsistent... if [national] planning policy simply said use BfL then it would be a lot clearer in my view – and we would all just have to get on with it... some authorities use it and take it seriously, others don't. If they do you'll know – or should know at day one – what the approach of the authority is and, therefore, skiv it up accordingly."*

A developer will seek to reduce build costs to protect target profit margins. For example, by reducing the size of garages, number and size of parking spaces (a local authority may have policies that can counter such ‘squeezing’), reducing the size of internal space and ceiling heights, reducing the number and size of windows and specifying cheaper internal and external materials, fixtures and fittings. Across a larger development, the ability of a local authority to secure a basic street hierarchy such as a wide avenue, will be compromised by the developer seeking to plot homes as tightly as possible, reducing the space between the building and the street the minimum allowed (typically 0.9m from the back of the pavement).

Efforts by a local planning authority to improve design quality will be fiercely resisted as these will inevitably reduce development coverage (and in turn revenue from future sales) and increase built costs. The ability of the local authority to succeed will be highly reliant on its tenacity and the strength of political and Chief Officer leadership to resist the lobbying and complaints of the house builder. If a local authority lacks internal design expertise and/or a five-year housing land supply they will commonly ‘buckle’ at this stage, fearing an appeal that they may lack the confidence to defend. However, if the local authority has internal design expertise that advises a design based refusal is justified and defendable; and the authority can demonstrate a deliverable five-year land supply – both it and the house builder will know that the success of an appeal will be less than assured.

The house building industry has consistently lobbied government to speed up the planning system, with Calcutt (2007) proposing that well designed schemes should benefit from some form of fast track process to incentive design quality. In the absence of fast tracking processes, some house builders have tried to encourage local authorities to help them offset the increase in development costs associated with BfL12 by granting planning consent faster, thereby reducing interest payments. However, the potential to offset the reductions in profit through a faster progression through the planning system has been thwarted by, as one company Director explained,

*“A planning system that deals with stuff as it comes in. What arrived first in the post gets dealt with first, rather than an approach that seeks to slow down the bad stuff and fast track the good stuff.”*<sup>130</sup>

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<sup>130</sup> Author’s notes.

The Director expressed his exasperation when a local planning authority manager explained to him that his authority was indifferent to quality and the speed at which planning applications were determined. He recalled that, "*it makes no difference to us... we have so many applications to deal with.*" This scenario reminds us of Calcutt's view (2007) that if a developer were to comply with standards such as BfL12, there must be an incentive by way of the speed at which planning applications are determined.

There is no single cause of poor quality design with the market design core. As one local authority planner expressed, "*there are a mosaic of issues*"<sup>131</sup>. Workshops conducted by the researcher with a range of house builders and local authorities commonly cite the reasons for poor quality design as issues not limited to:

- Weak and ineffective regulation.
- Internal pressure to accept poor quality design (both within developers and house builders).

Workshop participants (house builders) consistently cited either the failure of land buyers to anticipate the true costs of BfL12 compliance; or the lack of consideration afforded to BfL12 compliance when bidding for land; with land buyers often relying on hurriedly produced layouts to enable assumptions to be made relating to development costs and revenue. Design assumptions are made, and the skill of the land buyer will be to secure land at a price that enables their company:

- to offer their target market the right product at the right price point,
- to design buildings and spaces to a quality that they are confident will secure planning consent,
- to reflect their customer offer/brand image.

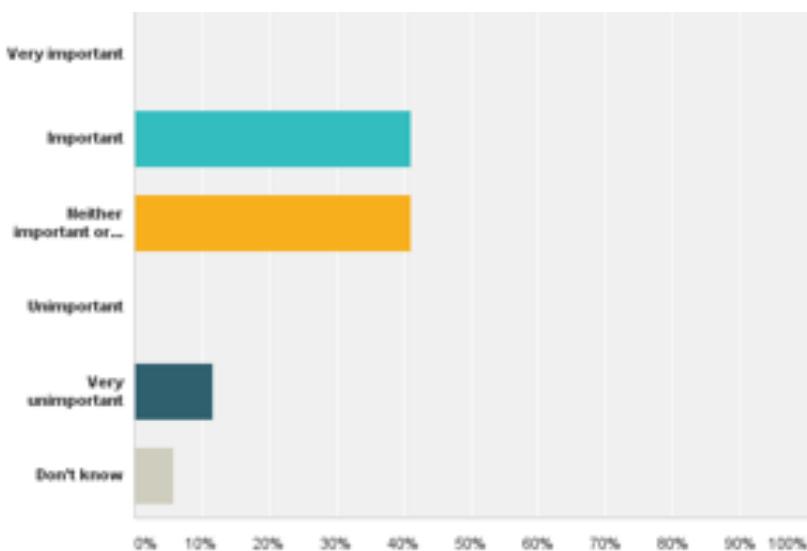
These assumptions are not problematic where there is no market 'check or balance' mechanism in place. Such a mechanism would normally be associated with a role of the regulator – a body whose existence will be to protect the interest of the consumer and the public. Within this market place the regulator will be the local planning authority with the power to withhold or grant planning consent - unless a refusal or a failure to determine an application is appealed by the applicant and consequently determined by a Planning Inspector or 'called in' by the Secretary of State.

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<sup>131</sup> Author's notes.

The role of the local planning authority may be reinforced - or substituted - by either an external mechanism whereby a land owner exerts an expectation of quality or an internal mechanism whereby a developer requires itself to comply with BfL12. It is interesting to note that this method of internal 'check and balance' has become increasingly common at a time where government has shifted its emphasis away from design quality considerations. It is also interesting to note that a decision to (voluntarily) introduce such measures has been increasingly common since BfL12 was introduced.

Where this internal 'check and balance' mechanism is in place, developers cite a new challenge whereby they are increasingly outbid on land. In such circumstances, their competitor will have secured the land by intensifying development coverage and drive down development costs in order to offset the premium paid to secure the sale or option.



**Figure 90:** How important do you think Building for Life is to your company's commercial success?

The business model for such "*cash and carry – or 'box-basher' house builders*"<sup>132</sup> sees the value<sup>133</sup> of a site sustained by extracting value from a development by reducing exposure to development costs and in turn design quality. In some cases, this will extent to commissioning cheaper design services from a consultant although there is evidence to suggest that some housebuilders are

<sup>132</sup> Quote: Managing Director of a house builder. Author's notes.

<sup>133</sup> As in the value paid. It is perhaps more accurate to refer to the over-valued price of a site.

engaging higher profile consultants as part of a strategy to intimidate local authorities, dissuading them from entertaining a planning refusal on design grounds whilst also providing an ‘insurance’ should they challenge a refusal at appeal.

To maximise coverage developers will seek to reduce the land take of individual homes (reducing internal spaces), limit garden sizes, reduce parking provision, shrink the size of parking spaces and garages<sup>134</sup>. Spaces between homes will be reduced and the distance between the pavement and the face of a building will be dictated by the car parking arrangement associated with a particular plot. This in itself creates unattractive streets and poorly functioning internal and external spaces. In an effort to further increase density, capture every available square foot of available land and at the same time limit exposure to costs, some developers will ignore basic design principles, in particular the formation of perimeter blocks and overlooked public open spaces. In such circumstances, the skill, confidence, political and managerial leadership of a local planning authority will be tested if such proposals are to be resisted. It is therefore unfortunate that many local authorities cite lack of design skills, confidence alongside political and managerial weakness. Many developers cite that with some exception, most local authorities will rarely challenge issues relating to design quality; and where they do are easily intimidated.

Developers seek to calculate the development cost of a home as not only the cost of the land and the cost of constructing the home, but also half of the street in front of it. It is therefore more efficient for a developer to back onto an area of open space than front onto it as the costs of constructing a street with houses on both sides of it will be met by properties on both sides of the street. Conversely, a street with homes on only one side of the street will increase the development costs for those homes.

This competition for land and the subsequent increase in land prices is therefore cited as a significant cause of poor quality design. Often cited by those in industry as “*viability issues*”<sup>135</sup> and by local authorities as, “*developers paying too much for the land*”<sup>136</sup>, one industry leader commented that,

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<sup>134</sup> In the absence of nationally agreed dimensions for parking spaces and garages, this can only be countered by the existence and enforcement of local standards.

<sup>135</sup> Author’s notes.

<sup>136</sup> Author’s notes.

*"the success of the Persimmon model means that others might be tempted to copy it. If say, [names of two large volume house builders] decided to copy, it could become difficult. It [the Persimmon model] is not a sustainable business as sooner or later they'll come under pressure for the poor quality they build...or at least, let's hope so"*<sup>137</sup>.

A common response to such concerns has been for local authorities to produce development briefs that establish design principles and other planning requirements for a development site. However, this requires:

- a) A local authority to be aware that a land is being sold for residential development, with many authorities presented with schemes for unallocated sites that have not been identified for development. This is more common where local authorities do not have a five-year housing land supply.
- b) A local authority to have the resources to dedicate to such an time consuming exercise. Where local authorities have access to an urban designer, their time is largely consumed by reactive work responding to planning applications as opposed to proactive work. Where proactive work is undertaken, this will typically be associated with preparing local design policies and documents for the whole administrative area.
- c) A developer to be aware of a development brief for a site and its status at the time a bid is prepared.

Development briefs are a valuable tool in setting expectations for a development site and where these are used, good design can be facilitated. The most effective briefs will be a valuable tool in offering land buyers a greater understanding of what a local authority will require on a given site. A developer will in turn have the option to 'walk away' or alternatively prepare a land bid that considers of the local authority's aspirations. If a development brief has been subject to a formal adoption process, it will carry greater influence and weight in the planning process and in turn more likely to influence a developer's viability appraisal.

The challenge associated with BfL12 and the land market is that the costs associated with complying with it are often discounted as failing to comply rarely presents a commercial risk to developers:

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<sup>137</sup> Author's notes.

with little or no risk of planning consent being withheld and/or little or no risk of consumer rejection.

### BfL12 and regulatory policy

A fundamental issue with BfL20 was that it lacked industry support, as such there was no consensus on how design quality should be defined. Therefore, a particularly important part of this action research was creating a shared definition of good design, one that the industry could - and has - better relate to.

Whilst BfL12 was written to align with the NPPF and Planning Practice Guidance, there is no direct reference to BfL12 within either of these key policy documents that form the foundations of local planning policy. Whilst the number of local planning authorities citing BfL12 in Local Plans is increasing, the picture remains patchy and incomplete reinforcing survey findings that highlight the lack of consistency between local authorities. There appears to be a perception that BfL12 is an 'add on' to national planning policies relating to good design as opposed to a mechanism by which compliance with national policies can be demonstrated.

These findings are reinforced by recent research conducted by the Place Alliance and Urban Design Group (2017, p.11) that shows that less than 10% of local planning authorities use BfL12. It is not clear what tools or mechanisms the remaining 90% of local planning authorities participating in the research used to determine the design quality of planning applications.

The previous national planning policy regime was more expressive with respect to design quality. Former national policy in the form of Planning Policy Statement 3: Housing that referenced BfL20 against the following policy statement, "*To facilitate efficient delivery of high quality development, Local Planning Authorities should draw on relevant guidance and standards*" (DCLG, 2006, p.9).

Since the suite of Planning Policy Guidance Notes and Planning Policy Statements were withdrawn by the government in 2012 and replaced with the NPPF, there has been no national policy reference to BfL12 which is symptomatic of the government's aversion to standards, which one industry expert explains, "*standards are a dirty word to this government*"<sup>138</sup>. The publication of the NPPF

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<sup>138</sup> Author's notes.

was part of a wider government programme to simplify the planning system at a time when the house building sector was coming out of the largest economic crisis since the Great Depression. The NPPF was introduced as, “*a key part of the government’s reforms to make the planning system less complex and more accessible*” (DCLG, 2012).

The publication of the NPPF was complemented by a wider review of national planning practice guidance led by Lord Taylor in 2012: “*The large amount of planning practice guidance currently in place makes it difficult for communities and businesses to engage effectively with the planning system. The Government is determined to radically streamline this advice to help make the planning system swifter and more accessible*” (DCLG, 2012, p.6).

Table 25: **Survey findings highlight a disconnect between BfL12, national and local policy**

Local authorities that require Building for Life are the exception as opposed to the norm	63% of house builders, and: 65% of local authorities surveyed agree or agree strongly with this statement
The design quality of applications is not robustly challenged by the majority of local authorities	82% agree or agree strongly
The majority of local authorities are willing to approve schemes that do not meet Building for Life	67% agree or agree strongly
There is a lack of national policies relating to good design/Building for Life	59% agree or agree strongly
There is a lack of local policies relating to good design/Building for Life	59% agree or agree strongly

As previously discussed, the report led to the cancellation of two key design documents: Better Places to Live By Design: A Companion Guide to PPG3 (DTLGR/CABE, 2001) and By Design: Urban Design in the Planning System - towards better practice (DETR/CABE, 2000). The former document promoted design principles that both BfL20 and BfL12 advocated. The justification for their cancellation was that, “*The guidance contains principles of good urban design, but these aspects*

*are considered to be well understood and mainstreamed in planning work*" (DCLG, 2012, Annex B (no page numbers)).



**Figure 91: The Taylor Review** considered that principles of good urban design were well understood and mainstreamed.  
City Point, Derby. 2016.

The basis on which the Taylor Review had concluded that the principles of good design were well understood and mainstreamed is far from clear. The only evidence that existed about housing design quality was the audits published by CABE and as previously discussed, these identified fundamental design quality issues.

The deletion of two 'cornerstone' design documents at the national level appears to have created a perception amongst many local authorities that the government has softened its approach to design. This has been further reinforced by the absence of any direct reference to BfL12 within the NPPF – despite BfL12 being "*endorsed by government*" (Birkbeck and Kruczowski, 2016, p.2). At the time the NPPF was published, the government was increasing anxious to stimulate house building and remove both actual and perceived barriers to construction projects. Previously in May 2009, a Chief Planning Letter was issued to local authorities reminding them that, "*It will come as no surprise in that context that the Government attaches particular importance to the identification of a good supply of land for housing.*"

Table 26: **The relationship between BfL12 and national policy.** BfL12 is a mechanism by which compliance with national policies can be demonstrated (Birkbeck and Kruczowski, 2016, p.8).

Building For Life 12 Question	Links with the National Planning Policy Framework (2012)	Links with Planning Practice Policy Guidance (2014)*
<b>Integrating into the neighbourhood</b>		
1. Connections	9, 41, 61, 75	006, 008, 012, 015, 022
2. Facilities and services	38, 58, 70, 73	006, 014, 015, 017
3. Public transport	9, 17, 35	012, 014, 022
4. Meeting local housing requirements	9, 47, 50	014, 015, 017
<b>Creating a place</b>		
5. Character	17, 56, 58, 60, 64	006, 007, 015, 020, 023
6. Working with the site and its context	9, 10, 17, 31, 51, 58, 59, 118	002, 007, 012, 020, 023
7. Creating well defined streets and spaces	58	008, 012, 021, 023
8. Easy to find your way around	58	022
<b>Street and home</b>		
9. Streets for all	35, 58, 69	006, 008, 012, 022, 042
10. Car parking	39, 58	010, 040
11. Public and private space	57, 58, 69	006, 007, 009, 010, 015, 016, 018
12. External storage and amenity	58	040

**Generally:**

NPPF: 63, 56 – 58, 63, 64

PPG\*: 001, 004, 005, 029, 031 – 038

(BfL12 is designed to be used to support consultation and community participation. It can also be used to guide masterplans, design codes, frame pre-application discussions and Design Reviews, structure Design and Access Statements, support local decision making and if necessary justify conditions relating to detailed aspects of design, such as materials).

\*paragraph references within 'Design' guidance category.

Whereas BfL20 was described as the “national standard for well-designed homes and communities” (CABE 2008a), the word ‘standard’ was deliberately avoided in the publication of BfL12; instead replacing this with the phrases “process” and “way of working” (Birkbeck and Kruczowski 2016, p.2). In 2013 when a former Planning Minister that was strongly in support of the initiative was asked if he could reference BfL12 in the NPPF explained, “he [George Osborne, the Chancellor of the Exchequer] won’t allow it. And if I were to get it in, I’d then have everyone else wanting theirs [BRE, Lifetime Homes etc.] put into it [the NPPF] too.”<sup>139</sup>

The government’s enthusiasm and apparent commitment for design did shift with the publication of the NPPF. This shift was evident not just through policy and standards rationalisation, but the closure of CABE and the strategic focus of the Homes and Communities Agency. Prior to the global credit crisis, the Homes and Communities Agency (HCA) sought to balance its housing delivery remit alongside its design quality remit - in line with the legal framework<sup>140</sup> under which the organisation was established:

<sup>139</sup> Author’s notes.

<sup>140</sup> In establishing the Homes and Communities Agency, the Act also abolished the Urban Regeneration Agency, the Commission for the New Towns and the Housing Corporation.

*"The objects of the HCA are—*

- (a)to improve the supply and **quality** of housing in England,*
- (b)to secure the regeneration or development of land or infrastructure in England,*
- (c)to support in other ways the creation, regeneration or **development of communities** in England or their continued **well-being**, and*
- (d)to contribute to the achievement of sustainable development and **good design** in England."*

HM Government (2008) Housing and Regeneration Act. Bold emphasis author's own.

The HCA was active alongside CABE in promoting good design practice, including but not limited to BfL20. Following the credit crisis, its remit shifted seismically towards boosting housing supply and administering the Kickstart fiscal stimulus programme that enabled stalled residential schemes to rebound. When BfL12 was launched, the HCA was – publicly at least - considerably cooler about the initiative, with design training events for Registered Social Landlords markedly more 'low key' than they had been before. A senior HCA officer commented in 2014 that, "*quantity is definitely more important than quality*"<sup>141</sup>. There was a sense that those with the HCA talking about design quality were exposing themselves to criticism from more senior levels of management.

In 2012, many local authorities had or were writing BfL12 into their Core Strategies and/or Supplementary Planning Documents with 65% of those local authorities surveyed stated that they had or intended to include a policy or reference to BfL12 in their emerging planning frameworks.

#### BfL12 and planning practice

CABE's housing audits and the researcher's own quality audits demonstrate that one of the fundamental weaknesses in the process is the inability or unwillingness of local authorities to challenge or effectively challenge poor design. Whilst this is understandable where local authorities lack access to design expertise, it is difficult to comprehend the logic and rationale of some planning judgements relating to design quality when:

- an urban design officer has missed a fundamental flaw in a development relating to a basic urban design principle (for example, perimeter block formation).

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<sup>141</sup> Homes and Communities Agency Senior employee. Author's notes.

- A statutory or non-statutory consultee raises design related concerns to the planning officer and these are not upheld without clear justification.

The research has uncovered that whilst a high proportion of local planning authorities are embedding BfL12 into their local planning policies (please see previous chapter), the use of BfL12 in practice is a more mixed picture.

For BfL12 to be effective in practice, it must be consistently used to structure pre-application discussions, inform decision making and be used as a basis to threaten if not actually refuse planning applications. However only 19% of those local authorities surveyed use BfL12 to structure pre-application discussions. 43% stated they used BfL12 ‘sometimes’. Similar results were found in local authority responses to the use of BfL12 in assessing the design quality of planning applications, with 24% using BfL12 ‘always’ and 46% using it ‘sometimes’. This ad-hoc usage is having a direct influence on local authority confidence with 42% ‘confident’ or ‘very confident’ that a refusal justified on BfL12 performance would be upheld at appeal, 30% ‘reasonably confident’ and 27% ‘not confident’. Furthermore, this ad-hoc usage neither incentivises nor discourages the use of BfL12.

#### **Example: Halls Lane, Giltbrook, Nottinghamshire.**

Supported by the government’s Kickstart 2 programme (£1,259,250<sup>142</sup>), Halls Lane is a development of 88 homes built by Persimmon Homes and designed by Ian Baseley Associates.

As with other Kickstart schemes, the development had previously secured planning consent. Planning consent and not design quality was a condition of applying for support under Kickstart. The Council’s Planning Committee report<sup>143</sup> included the observations of two consultees: the urban design officer and Nottinghamshire Police.

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<sup>142</sup> <http://www.mynewsdesk.com/uk/pressreleases/communities-and-local-government-healey-83-million-backing-for-first-time-buyers-and-housebuilding-jobs-381422>. Dated accessed 9 October 2016.

<sup>143</sup> Broxtowe Borough Council (14 April 2008) Report of the Director of Planning and Community Development: 07/01069/FUL Construct 88 dwellings at Halls Lane, Giltbrook. [http://planning.broxtowe.gov.uk/\(S\(hv5lfbq1dvyjle45qj0jea45\)\)/Published/BD19E67406E911DDB18F0017A4F8C9EE.pdf](http://planning.broxtowe.gov.uk/(S(hv5lfbq1dvyjle45qj0jea45))/Published/BD19E67406E911DDB18F0017A4F8C9EE.pdf) Date accessed 9 October 2016.

The urban design officer's response was summarised as follows:

*"The Urban Design Officer advises that the layout provides for an interesting and varied set of street-scenes and that there are distinctly different areas within the development that have their own character. He considers that the separate access onto Bacon Close contributes to joining existing and proposed development in urban design terms, as well as providing vehicular access."*

The response from the Police was reported as follows:

*"The Nottinghamshire police [sic] make comments with regard to anti-social behaviour by enquiring what prevention mechanisms are to be in place to limit motorcycle nuisance and advises on the height of boundary treatment for security purposes."*

In summarising the proposals, the planning officer wrote,

*"The layout of the housing is based on the buildings addressing key vistas and views within the site and this process has been enhanced by having the main road curve within the site, as opposed to a series of straight and less interesting roads. As a result, the street-scenes are interesting and varied and there are areas of different style and character within the proposed development. The layout does allow for good permeability with the new proposed bridleway to the south, and footpath connections from both existing bridleways and the proposed bridleway."*

*As a part of the Design and Access Statement, the applicants have appraised their scheme in respect of both the CABE 'Building for Life' standards and government guidance 'Manual For Streets'. It is difficult to measure the quality of the proposed development against the 'Building for Life' standards without attributing some subjectivity to the process but it is considered that the proposals score highly on a number of key points. Of particular note it is considered that the scheme will exhibit areas of different character through the layout of buildings and the use of different road surfaces. The streets appear to be well structured making it easier to navigate through the development and the houses on the southern boundary take account of the topography of the area. The proposed development integrates parking with the buildings, and this should reduce the dominance of the car in the street-scene."*

As a small development, legibility is not a particularly significant concern yet a key component of the rationale of legibility is around one's sense of orientation: knowing where one is in relation to other places. The site sits on the edge of a suburban housing estate. Before development the site benefited from views towards the Erewash Valley and attractive aspects to bridleways and open spaces along its eastern, north western and southern boundaries. However, when inside the development it is inward looking with little sense of setting or orientation. There are no views of its green and open surroundings.

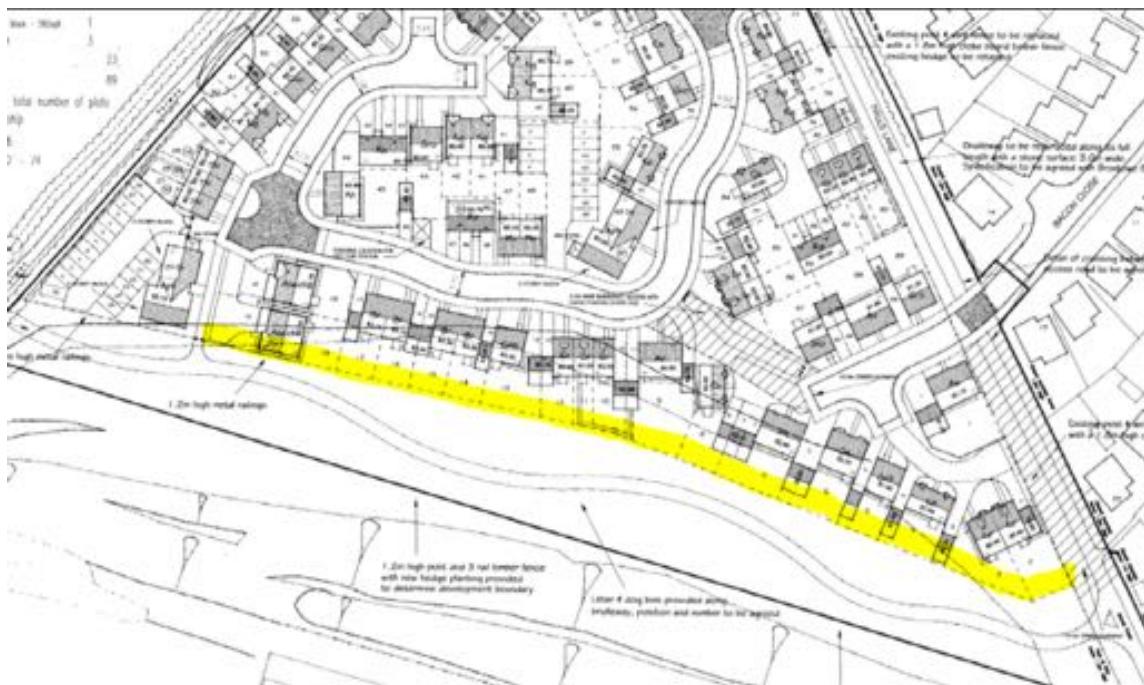


Figure 92: **Poorly overlooked public space.** Despite the poor quality of the layout plan (a scanned version of the original uploaded by the planning authority to its website), the fragmented perimeter block structure is clearly evident, with back gardens 'facing' the public open space and footpath further weakening the relationship between the development and the public realm. Yellow highlighting: author's own.

The scheme exhibits many design flaws that make it far from compliant with BfL20. High levels of displaced parking make it difficult for pedestrians and vehicles to move along and across streets and poorly overlooked parking areas are isolated, with courtyards devoid of lighting. Pieces of left over land with no clear public or (semi) private function – or ownership are commonplace across the scheme. The different character areas are nowhere to be seen. Rather than create varied and interesting street scenes, the constant shifts and cranks in street alignment create slithers and wedges of wasted land. The shifts in the building line expose the blank and faceless sides of buildings: elevations of 'mid run' house types that were never designed as prominent features

within the street; adding to the oppressive and indifferent blank brick walls that sit on street corners. This indifference to place and quality is most evident along the edges of the development. Walking along the perimeter bridleways and the southern open space, the development looks away from the public realm. Close boarded fences edge the open space creating a sense of loneliness and isolation. The side of the garage hugs the edge of one of the bridleways.



Figure 93: **Isolated parking courts**. At 1:500 scale the poor relationship between the surrounding bridleways and the development is clear to see from the location and orientation of dwellings. At this scale, a car parking courtyard with little natural surveillance opportunity is also evident. Yellow highlighting: author's own.

The lack of strong public realm surveillance is the development's most significant weakness yet is was not identified, despite exposed rear boundaries creating broken or fragmented perimeter blocks (something an urban designer should readily be able to identify and highlight as a serious flaw), whilst also exposing properties to risk of burglary and preventing good natural surveillance (and informal policing) of open spaces and footpaths (considerations one would expect the Police to identify as highly undesirable).

The Halls Lane example is not an isolated case, with many other authorities and their consultees failing to identify basic design failures. This is made more perplexing where other subjective design issues are presented, such as "*interest*" and "*variety*". The Halls Lane case also highlights the

widespread use of consultants by house builders whose role is partly to extol the design virtues of a scheme when in practice many fundamental design flaws exist.

### BfL12 and new build property valuations

New build valuations for new build homes are focused solely on the house as an object in space, as opposed to a building located within a desirable – or less desirable – built environment. Whilst research by RICS (2017) has demonstrated a positive correlation between design quality (including BfL12) and property values, these values are based on non-distressed sales (i.e. mortgage defaults) and this appears to be an area of disconnect.

Exploring why the RICS Red Book (2008) does not seek to differentiate between well and less well-designed developments, an employee of RICS explained,

*"Yes, a house in a good street will tend to sell for more than a house in a bad street. There's a maturity value that is evident on better estates. But when we value houses, we are essentially looking to determine what security a bank has on a home. If the house holder defaults on their mortgage and the bank repossess the house, the bank will be looking to get their money back quickly – it'll be a distressed sale. The market – the buyer - will know this too and the distressed value will most likely be lower than selling in a non-distressed situation where a home owner can wait for a buyer than values the true cost of the home and its setting. A bank is not going to want to hold onto the property."*

With the RICS research suggesting that properties in better designed developments perform more positively on the second-hand market, but with new build valuations often struggling to justify enhanced values for such developments this presents an obvious issue for house builders. If complying with BfL12 neither positively or negatively affects the value of a new build property, then where is the incentive or disincentive?

Some within the house building industry<sup>144</sup> are sceptical as to whether the research would yield the same results if repeated in more northern markets such as the East Midlands. With RICS currently not proposing to repeat the research in other market areas, there is a clear need for further

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<sup>144</sup> Author's notes.

research to be undertaken to determine the relationship between design quality and new build valuations (and resales) beyond the south east.

#### BfL12 and consumers

With mortgage finance now more readily available and house building rates failing to meet demand, if a prospective purchaser ‘walks away’, a house builder can be confident that someone else will not be far behind. A national house builder in Cheshire commented that their sales complex regularly attracted over 300 people every Saturday and Sunday. Whilst they knew the majority were not serious prospective purchasers and instead curious locals, they explained that they were not struggling to, “*get people through the door*”<sup>145</sup>.

Consequently, the urban design deficiencies of a development do not in themselves represent a commercial risk though house builders are more clearly more enthusiastic about creating better street environments and public spaces within higher value markets where purchasers can afford to be more discerning and selective. Review of marketing material from various house builders not only demonstrates a difference between what house builders are selling (*a house* versus *a home in a place*) but segmentation within the market with some developers targeting more price sensitive purchasers whilst others target more discerning purchasers.

#### BfL12 and corporate social responsibility

The speculative, high volume house building model has existed for decades and is more established than ‘design’ in the planning system. It is based upon standardisation of process, repeating tried and tested ways of extracting maximum value from land. Across the country, new build developments are being designed, approved and built that do not accord with the design principles embedded in BfL12. These developments are being sold to home buyers with no apparent negative impact on sales rates and sales values. Non-compliance with BfL12 presents little or no commercial risk. Planning consent is not withheld for schemes that fall woefully short of basic design principles, such as connected street patterns and perimeter block formation.

Where house builders have increased design quality standards this has been in response to regulatory pressures, land owner demands or in response to local market conditions that reward

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<sup>145</sup> Author’s notes.

enhanced design standards. The volume house building industry has generally remained largely impervious to design policy and regulation at the local level; and in particular efforts to embed the design principles of BfL20 and BfL12 into new developments.

Design quality considerations have been promoted by government since the mid-1990s - albeit to varying extents and with significantly different degrees of political vigour and enthusiasm. Complemented by design related initiatives that included but were not limited to BfL – these policies and initiatives have been applied to existing models and practices to instigate change within the industry.

The research has demonstrated that where BfL20 and BfL12 compliance has been achieved, this has been less to do with the existence and application of design policies and instead:

- The value placed on design quality by both local planning authority and/or the house builder, and/or:
- The nature of financial parameters associated with a site that either facilitate or constrain the ability of the local planning authority to secure a well-designed development should choose to exert regulatory influence and pressure.

As such, if a local planning authority require a good standard of design to be achieved it is likely that a better designed outcome will be achieved. However, the degree to which a given scheme is 'better' will depend on the willingness and motivations of the house builder concerned. The best outcome will inevitably be where both the local authority and the house builder share the same aspirations for design quality.

### Conclusion

It is evident that the market conditions within which house builders operate fail to require or offer an incentive to comply with BfL12. Those that choose to comply with BfL12 are often at a commercial disadvantage by doing so, risking being outbid on land or by reducing their profit margins. As such the market conditions are not conducive to BfL12 compliance in that:

The **high degree of competition for land** results in developers attempting to outbid their competitors. Higher land bids can be achieved by driving down design quality whilst still sustaining target profit margins. A developer that seeks to create a scheme that meets BfL12 and achieve this

by factoring these costs into their land bid will often be at a competitive disadvantage. Compliance or attempting to comply with BfL12 therefore represents a significant commercial risk to developers when bidding for land; as the (increased) costs of compliance will (in a market that does not necessarily differentiate between poor and good developments) result in a land offer that is lower than a competitor that has no incentive in complying with BfL12. If a developer runs 'dry' of a land supply its business will cease.

The **regulatory (planning) system is largely ineffective** in that:

1. Complying with BfL12 does not assure developers of a faster planning consent.
2. Non-compliance with BfL12 does not assure developers of a slower determination period and/or the refusal of planning consent.
3. Local authorities that require BfL12 compliance are in the minority with a lack of consistency across local authorities.
4. Local authorities that have adopted BfL12 in policy do not consistently use it as a tool for structuring pre-application discussions or a basis for decision making.
5. There has been a decrease in emphasis placed on design and BfL12 by government that is both perceived and actual. This decrease in emphasis has been expressed through changes in national policy, funding regimes and the government's strategic focus of the Homes and Communities Agency despite its regulatory remit.

There is no evidence to suggest or demonstrate that non-compliance with BfL12 negatively affects the **appeal of the product to purchasers, sales rates, sales volumes and sales prices**. Likewise, though with some exceptions, there is no evidence of a directly attributable uplift in sales rates, volumes and prices (i.e. price per square foot).

Consequently, there is a **significant disconnect between BfL12 and the market place**. Connecting BfL12 and the market place will require a series of interventions. These interventions will need to address:

- National and local planning policy.
- Realigning the Homes and Communities Agency's focus (leading by example), including disposing of public land that balances quality considerations with a capital receipt<sup>146</sup>.

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<sup>146</sup> Following submission of the thesis, the agency that is now known as Homes England has announced a drive to "bring back design". Part of this will involve the agency using BfL12 from January 2019 to measure design quality on developments and sites where it has an interest.

- Local planning practice, particularly the need for local authorities to have a mechanism by which to influence land values, tempering and countering a phenomenon whereby land values are inflated by competitive pressure; and where profit margins are subsequently sustained by driving down development costs and maximising sales revenue – often at the cost of design quality considerations.
- The need to encourage home buyers to consider design quality as part of their wider decisions when buying a new home.

These interventions will be explored further in Chapter 10.

## **9.2 Design core: Design specification**

*"All design starts, or should start, with a need that, when satisfied, will fit into an existing market or create a market of its own... a product design specification must be formulated – the specification of the product to be designed. Once this is established, it acts as the mantle or cloak that envelopes all the subsequent stages in the design core... [it] acts as the control for the total design activity, because it places the boundaries on the subsequent designs"*

Pugh, 1999, p.5.

Speculative house builder specification is driven by a motivation to maximise shareholder (or investor) value (profit and return on capital employed) by securing land, obtaining (an ideally fast and 'clean') planning consent, releasing plots at a rate that closely matches the anticipated sales rate (avoiding stock plots), building the product as fast as possible, selling at or above the target price with little or no discounting and completing the development to release adoption bonds held by the Highways Authority.



**Figure 94:** Davidsons Homes portfolio is based on traditional vernacular architectural styles found in Derbyshire and Leicestershire villages and towns, consisting of a wide selection of housing typologies, forms and elevational treatments. The range of house types available to company designers enables it to create more convincing interpretations of organic, slow growing settlements than many of its peers; placing it on par with companies such as Blackhawk and CG Fry. Variants designed to suit local circumstances are commonly employed, alongside bespoke buildings as part of the company's emphasis on place making and brand differentiation. Image: © and reproduced courtesy of Davidsons Homes. Melbourne. 2010.

With very few exceptions, BfL12 does not form part of the specification. The specification of a house builder can be considered as comprising of two parts:

- General, i.e. its standard house types (core product range).
- Site specific, i.e. the selected product range, density or coverage on a given development site.

As discussed in the previous chapter, both national and local regulatory conditions place limited emphasis on BfL12 and as such exert little influence in the formulation of a house builders general and site-specific specifications.

### 9.2.1 General specification: standard house types

The volume house building industry relies heavily on standard house types – tried and tested models that appeal to the market. Repetition offers benefits including speed through repetition, cost efficiencies and so on.

Different house builders have different standard house types, with the quality and range of portfolios varying considerably. However, as a general rule of thumb they will all seek to offer a product range that appeals to different market segments and needs. A typical portfolio range will include detached and terraced products, with a mix of integral and detached garaging.

Whereas some have quite limited portfolios with a very basic selection, others are considerably more advanced with a wide choice of footprints, typologies and in some cases, elevational variants for the same house type alongside ‘core ranges’ and ‘specials’.

Despite a tendency within professional circles to be dismissive of standard house types (despite some of our most cherished and highly prized streets to live are standard Georgian, Victorian and Edwardian house types), BfL12 compliance can be facilitated or frustrated by the quality, range (choice and flexibility) and application of standard house types.

For instance, if a developer *does not* possess ‘corner turning’ or ‘dual aspect’ house types that are able to address street alignments of various angles, compliance with aspects of BfL12 will be problematic. Likewise, if a developer does not have house types that reflect Georgian or Victorian proportions, it is impossible to create a convincing proposition that a proposed development will reflect such architectural styles<sup>147</sup>.

If a developer *does* possess ‘corner turning’ or ‘dual aspect’ house types that are able to address street alignments of various angles, compliance with aspects of BfL12 will be not be problematic. Yet a portfolio is merely a ‘kit of parts’ and the effectiveness of these is very much dependent on selecting the right house types to suit the circumstances, arranging these in a suitable composition. For instance, designers will need to ‘plot’ house types in a considered way, avoiding the use of single aspect house types in dual aspect locations. The house builder will also need designers that understand how to arrange house types and ancillary structures (such as garages) in a way that form strong (as opposed to broken or fragmented) perimeter blocks.

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<sup>147</sup> The vast majority of planning applications for new developments are based upon narratives that claim to be informed by traditional and local vernacular references – despite the use of standard house types that are neither traditional nor contemporary in style. Where such narratives are proffered, the vernacular references draw will be typically superficial and limited to materials and superficial details such as the occasional under proportioned and saddled faux chimney stack. Deeper vernacular references such as street to building relationships, building to building relationships, plot character, hard and soft landscaping, boundaries, and proportions will be overlooked.

Whilst the build costs of standard house types are known (from foundations to internal fixtures and fittings), no house builders are known to routinely factor in the costs of boundary features into these basic build costs; particularly the vertical demarcations between the pavement and the line that define public and (semi) private space.

Over a scheme comprising of say 100 plots, the costs of such boundary demarcations will not be insignificant particularly if local circumstances require these to be more costly features such as dwarf walls with railings. The clear demarcation between public and (semi) private spaces; specifically, the avoidance of grass ‘bleeding’ into pavements is a particular requirement of BfL12. This rather routine consideration is consequently often hotly contested by developers during the process of securing planning consent (or discharging conditions) as the failure to anticipate comprehensive boundary costs (over and above the minimum, i.e. close boarded fences to rear gardens) into viability appraisals will inevitably increase development costs. Unless these increases in development costs can be recovered by way of increases in sales revenue (either by virtue of the quality of a development or a rising market), these costs will erode profit margins.

As a result, there is often a fundamental disconnect between the basic components of a viability appraisal and BfL12. There is also – depending on the quality, range and application – a degree of disconnect between some house builders and their standard portfolio house types.

### **9.2.2 General specification: highways standards**

A particular difficulty encountered by both house builders and local authorities in two tier authority structures is the failure of highways authorities to engage in creative and collaborative discussions relating to the design of streets in proposed developments. It is rare for a highways authority to participate in pre-application discussions and involve themselves in the design process.

With highways authorities using technical standards to determine whether development proposals are acceptable or not, efforts by house builders and local authorities to adopt a more place led approach and create more pedestrian friendly street environments are regularly frustrated by the rigid application of highways standards.

It is not uncommon for a developer and a local authority to work together to produce a high quality scheme – often over the course of many months – only for the highways authority to respond to a consultation and identify areas that do not comply with highways standards. This will typically require a further design iteration, ranging from minor changes to a fundamental redesign. Typical changes will be the:

- Removal of non-standard surface materials.
- Adjusting building lines and landscape features to accommodate forward visibility splays.
- Removal of street trees.
- Replacement of straight streets with more curvilinear street patterns.
- Removal of vertical traffic calming features.
- Introduction of white lining.



Figure 95: **The softer approach to highways design at Trumpington Meadows**, Cambridge includes tree lined verges with shallow depressions as part of a site wide surface water management scheme. Streets are privately managed creating the opportunity for more creative design approaches. 2016.

A scheme that may well have conformed to the principles of Manual for Streets and in turn BfL12 Question 9 (Streets for All) will be reverted ‘back’ to a more engineered approach. Whilst a local authority might refuse to require a house builder to address all or some of the issues raised, it will normally seek to secure some compromise with the highways authority. However, the highways authority will inevitably have the ‘upper hand’ as if it is not satisfied with the changes made it will refuse to adopt the scheme once complete. This will be unacceptable to the house builder and equally unacceptable to the local planning authority.

The research conducted identifies that the disconnect between BfL12, Manual for Streets and highways authority requirements is a consistent cause of frustration for local planning authorities and house builders. The advisory status of Manual for Streets in England and the individual choice afforded to highways authorities to ignore or (partly) implement its recommendations is a major obstacle to many local planning authorities. There is a fundamental clash in thought between those that see highways as streets, where drivers need to be educated to recognise the primacy of pedestrians and cyclists compared to those that see highways as primarily tributaries for vehicles with a deep-set resistance to accept that driver must and can be changed.

With many highways authorities facing significant cuts in budgets and requirements to identify further efficiency savings, there is a cultural resistance to implementing the ideas of Manual for Streets locally and accepting non-standard surface materials and street trees – even if a house builder is willing to proffer the required commuted sums. A highways authority adoption officer explained,

*"We have holes in our budget where the commuted sums we received years ago are not covering the maintenance liabilities of the things they were intended to pay for. If something goes wrong – a failed surface material, a tree or an accident - it becomes our problem. We are being told to just keep things simple."*<sup>148</sup>

What might be the solution? In more affluent areas such as Cambridgeshire, highways authorities are not adopting new streets. Instead streets are being adopted by management companies – and essentially becoming private estates, although the private status of these estates is very subtle. There are no signs at the entrances to these developments or beneath street name plates announcing that they are 'private' as opposed to public streets; with many people using the new streets created as they would any other publicly adopted highway.

This is unlikely to be a viable proposition in less affluent areas. Whilst house builders have been required over the last ten years to place new open spaces into management companies ('MANCO's') when District, Parish or Town Councils have refused to adopt them, a growing number of MANCO's are attracting resident criticism.

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<sup>148</sup> Author's notes.

### 9.2.3 Site specification

A developer will have various considerations to address when forming a site-specific specification for a given site. Typically, they will need to create a specification to inform a viability appraisal for a prospective development site; and in turn inform the bid they will put forward.

In forming this specification, the developer will consider what product mix to build and will seek to select house types that most strongly appeal to the target market and any segments within this. A house builder will also seek to ‘plot’ their most profitable (or ‘efficient’) house types. For instance, some house builders are analytical in the way in which they determine the efficiency of house types enabling them to select the most profitable house type (i.e. land take, build cost, sales value). Consequently, it is not uncommon for a house builder to have a preferred range of house types selected from a larger portfolio range, where from a range of fifteen 5-bedroom detached house types, five are selected on the basis of their greater efficiency and profit potential. Conversely, some house builders have ‘banned’ house types that are considered undesirable to build. Interestingly, there can be stark variations between different regions within the same company where a particular house type might be preferred in one area and banned in another.

Whilst market or brand positioning will determine which sites certain house builders consider and others discount, all will seek to build the right product for the location to ensure that homes will be sold at or above the anticipated price. A house builder will seek to sustain a good, steady sales rate and in turn reduce the risk of unsold, completed stock plots remaining on their books.

House builders will also exercise caution to ensure that whilst there is sufficient choice to have a variety of product on offer to appeal to the different needs of individual prospective purchasers. They will seek to ensure that they do not build a product that is too large or otherwise over (or under) specified for the local market conditions. An oversized or otherwise incorrectly specified product will potentially ‘stick’ on the basis that it will be over priced for prospective purchasers or exceed prevailing market values – with prospective purchasers unable to secure mortgage finance if a given property is undervalued.

A property that ‘sticks’ will not only tie up capital but be vulnerable to discounting and therefore reduce margins. A developer will also seek to provide a constant ‘mix of product’ as their build programme progresses, thereby enabling them to have more chance of having a property of the right size and price for a broad range of prospective purchasers that might walk through the door of their sales office. This emphasis on product mix can sometimes prove problematic if the character of an area is defined by buildings with a sense of consistency as opposed to variation.

To ensure BfL12 compliance, it is necessary for a developer to factor the costs of compliance into their specification and in turn, the value attributed to the land (unless the costs of compliance can be recovered through increased sales revenue). Increases in sales revenue can be difficult to achieve in static or slowly rising markets. However, as previously discussed, this prudence can result in a developer losing a piece of land to a competitor. Whilst some developers will choose to take a modest ‘hit’ on their profit margins to retain design quality, in an industry where the performance of a business is regularly compared to one’s peers this is not a desirable situation:

*“taking a hit can put us under pressure to not do BfL and make the same profit as our competitors. However I do not want to do that, but it does make my life harder. The system just doesn’t reward you for doing it [BfL]. If I just wanted to make as much profit as I could, I wouldn’t do it [BfL] and most authorities wouldn’t put up much resistance.”*<sup>149</sup>

It therefore follows that if a developer is not interested in achieving BfL12 (whether for commercial gain, in the interests of legacy/corporate social responsibility; or a combination of these), it will be extremely challenging for a local authority to secure a scheme that meets the standard. As one local authority officer explained,

*“If a developer isn’t interested in achieving BfL, it’s like pushing treacle up hill. You keep trying to push it up and whilst you get more treacle up the hill than you otherwise would you’re inevitably left with a bit of a mess. The process has been hard and frustrating – and for what you gain you wonder if it was all the effort. It can get very dispiriting.”*

The officer continued:

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<sup>149</sup> Author’s notes.

*"At the end of the day, we'd have been better refusing the application from the outset and having a strong case to support a refusal at appeal. But the introduction of pre-application charging means that we can't do what we used to do [refuse to meet with a developer] – we are now obliged to try and push this pile of treacle up the hill. By doing this, we do make developments better than they would otherwise be; we drag a really awful scheme up to a mediocre standard and in the process, we design out all the really good reasons for a strong refusal. It is a bit of a no-win situation."<sup>150</sup>*

A question therefore arises as to whether there is the possibility of all land bidders factoring the costs of BfL12 compliance into site specific specifications. What might this mean and how this might be done will be explored in Chapter 10.

#### **9.2.4 BfL12 and viability appraisals**

BfL12 compliance does impact development viability and was a consistent theme raised by house builders across the workshops. There are costs attributed to achieving compliance: the question is what these costs are, where and how these costs are recovered. In suburban situations there was a consensus that the impact of BfL12 on viability related less to build costs and instead saleable square footage in that efforts to maximise coverage on a given site often compromised design qualities that relied on sufficient space between buildings and plots, namely structural landscaping.

The extent of these costs will be partly influenced by the individual house builder. For instance, a house builder with an extensive and relatively advanced standard house type portfolio (within which variants of architectural styles may exist) may be more adept than a house builder with a much more limited and less flexible portfolio. Furthermore, some house builders that 'pitch' towards more affluent consumers than more budget conscious consumers may well have standard budgetary costs that support higher quality materials that may in turn be more responsive to the local characteristics of a given area.

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<sup>150</sup> Author's notes.

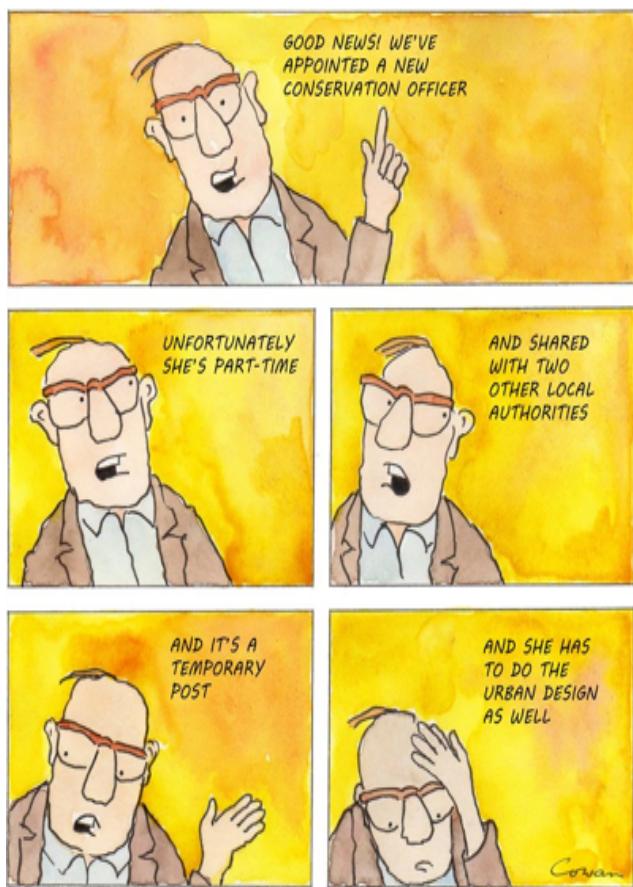


Figure 96: Cowan (2011) highlights the challenges faced by many local authorities. These challenges are further exacerbated by the decline in undergraduate and postgraduate urban design courses and more attractive terms and conditions available for urban designers in the private sector. A graduate urban designer joining a local planning authority is also unlikely to find a mentor in the form of an experienced urban designer; and instead will need to learn 'on the job'.

Whilst in higher value and more buoyant markets compliance may increase the desirability of a development and in turn support higher sales prices, elsewhere compliance can reduce development revenue by increasing development costs. One industry experts' view is that, "*the costs of meeting BfL need to come off the land value*"<sup>151</sup>. This is a view that is consistent with the way in which the value of land for development should be determined: "*Site Value should equate to the market value subject to the following assumption: that the value has regard to development plan policies and all other material planning considerations and disregards that which is contrary to the development plan*" (RICS, 2012, p.4). For this to become a sustainable proposition, all house builders need to prepare viability appraisals that consider the costs of BfL12 compliance; and local authorities must be more vigorous in resisting non-compliant schemes and accelerating the progression of compliant schemes. Yet this latter requirement is increasingly problematic as the

<sup>151</sup> Author's notes.

number of local authority urban designers has declined; and the responsibility for assessing the design merits and deficiencies increasingly fall to planning officers that may have little to no urban design knowledge or skills.

Whilst house builders will factor in policy compliance into development viability, they will only factor in what is known, what can be costed and where non-compliance would pose a commercial risk, i.e. a failure to secure planning consent. Examples include: Building Regulations compliance, compliance with affordable housing policies, policies relating to housing mix, highways design and open space provision. As one Managing Director for a regional house builder described, “*these policies are black and white: you either comply or you do not. Everyone has to factor the cost implications of compliance into their viability appraisals. With BfL it is less clear. It's not always clear what compliance will mean and whether the local authority will require it*”.<sup>152</sup>

Land buyers will seek to determine a land price that is partly influenced by their knowledge of what is likely to secure planning consent. Land buyers will identify risks – and these risks will be eliminated or mitigated by either walking away from a prospective sale or attributing a cost to this risk.

With few local authorities using BfL12 in pre-application but more critically in the determination of planning applications, the decision of land buyers to discount or ignore the implications of BfL12 on development costs, revenue and land value represents a very low commercial risk. Whilst local authorities that use BfL12 are applying a tool to ensure developments comply with national policies, their efforts are often frustrated by being one of a handful of authorities using it. This is despite BfL12 being endorsed by government and aligned to 23 policies within the NPPF<sup>153</sup>.

Land buyers will review the planning history of a site and where these are in place, an outline planning consent. The omission of any reference to BfL12 as either a planning condition or informative will further frustrate the efforts of a local planning authority to seek BfL12 compliance at a future Reserved Matters stage. Whereas if BfL12 is cited on a planning consent it will, “*raise a red flag to all the land buyers looking at a site... however it's very rare to see this*”.<sup>154</sup>

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<sup>152</sup> Author's notes.

<sup>153</sup> NPPF paragraphs: 9, 10, 17, 31, 35, 38, 39, 41, 47, 50, 51, 56-59, 60, 61, 64, 69, 70, 73, 75 and 118.

<sup>154</sup> Author's notes.

In NWL, where the authority has consistently used BfL12, some house builders have responded by factoring in a BfL12 compliance allowance into their viability appraisals. These house builders now routinely submit BfL12 compliant development proposals with little or no changes required by the local planning authority.

The following sections will explore the potential costs associated with BfL12 compliance, with each section of BfL12 considered:

- Integrating into the Neighbourhood.
- Creating a Place and Street and Home.

#### **9.2.5 BfL12 and viability appraisals: Integrating into the neighbourhood**

Whilst a developer needs to ensure that (a) principal highways access(es) is (are) provided both for construction traffic and to enable future occupiers to drive to and from their homes, receive deliveries and benefit from refuse collections; there is less incentive to safeguard links to adjacent undeveloped land or provide connections to other existing streets or footpaths where these are not needed for the basic initial construction and functioning of a development. Whilst a prospective purchaser is likely – in time - to be frustrated that the shortest and most direct walking or cycling route has not been provided between their home and the local shop, school or pub – they are highly unlikely to anticipate this potential frustration when considering purchasing a home on a given development. From a local authority perspective the provision of such links, whilst not offering a developer a profit advantage, do offer public health advantages by encouraging people to walk and cycle more, particularly for shorter journeys.

A more walkable or cycle friendly neighbourhood can reduce reliance on car usage; whilst also improving air quality, reducing pollution, consumption of fuel, improving public health, building a sense of community through face to face interaction and encounters and so on.

These additional or extra links do not offer a commercial value to a house builder. They may however offer a commercial risk to a house builder if a local authority is adamant that they must be provided. In most cases, securing new links and safeguarding land for future links will consume land that could otherwise be developed. For example, a local planning authority insisting on the creation of a single pedestrian/cycle link could result in the loss of a plot. Such links do not generate sales revenue. As such, who should pay? If such links are anticipated and factored into a viability

appraisal then the land owner would pay, as the land required for such a link would have less value than other parts of the site. However, if such links are not anticipated, the land will be sold at a residential development value and if this value is downgraded to a lower (commercial) value use these costs will be recovered by way of intensifying development elsewhere, cost efficiencies or by the developer accepting a lower profit. In either instance, the proposition is an unwelcome one to the developer if the viability attributed a residential development value to the land in question.

Whilst the potential benefits of such links may well far outweigh the benefits often secured by local planning authorities on behalf of County Councils for Section 106 contributions towards bus shelter improvements, travel coordinators and travel packs for new homes – should the costs of providing such a link be added to a developer's social obligations? With the costs of healthcare accelerating for public health issues related to obesity and the lack of daily physical activity level should compliance with BfL12 therefore be attributed a value that can be accounted for as part of a development's Section 106 contributions? If a system was devised whereby a developer not only could successfully compete for land whilst considering the costs of BfL12 but also receive a 'credit' towards Section 106 contributions, this would offer developers the potential of securing additional profit for BfL12 compliance. This would clearly be an attractive prospect to any investor or shareholder.

As such, the potential conflict between house builders, development viability and BfL12 starts to become more apparent particularly where the costs of complying with BfL12 do not offer a developer a financial return in a direct or more indirect way.

#### **9.2.6 BfL12 and viability appraisals: Creating a place; Street and Home**

With house builders and local planning authorities motivated by different objectives, what constitutes a successful development will differ between the various participants involved in the development process. Broadly speaking, house builders are motivated to generate maximum return on their investment, whilst local authorities are seeking to create environments that do not create liabilities for the public purse and that positively contribute towards the quality of the places they will become a part of.

Whilst a local authority may see a development where standard house types have been tailored to sit sensitively alongside a Conservation Area, with traditional timber windows and doors, hand thrown rough cast render and a historic wall lovingly restored by a local stone mason; an increasingly anxious developer may instead see their development costs escalating and the local market threatening to suppress any potential to increase the asking price for new homes.

A local authority insisting that a view of a church spire be protected to provide a sense of legibility and a stronger connection to the place could see a developer lose £1m of sales revenue as a five bedroom two and a half storey home factored into a viability appraisal is substituted for a single storey dwelling with a fraction of the saleable floor space with more land 'hungry' building plot.

A house builder with dual aspect house types will be more receptive to a local authority's request to avoid blank walls facing onto public open spaces and on street corners than a house builder with no such house types. A house builder with no such house types will seek to resist the costs of designing a new house type and the prospect of building this at a slower speed than the house types his contractors might be well accustomed to building. All these factors will increase his anticipated development costs and undermine viability assumptions.

Will prospective home buyers reject a home in a new development that fails to have a sense of local character or an otherwise distinctive identity? Purchasers with higher budgets may well be more discerning but the average purchaser is likely to be less concerned with such considerations. In such circumstances, how can a developer demand a higher price for these attributes?

Will a prospective home buyer be concerned that their home backs onto rather than fronts onto an area of public open space? Possibly not, with some house builder's sales agents remarking that many home buyers do not like the idea of the noise and activity associated with public open spaces, instead preferring their home to be separated from the open space by their back garden (despite the potential risk associated by making the rear of homes vulnerable to a break in).

Will a purchaser be concerned that their home is one of thousand in a disorientating maze of streets that all look alike? Quite possibly not as in a short space of time, they too will learn to navigate the maze of identical looking streets and homes. With the proliferation of cheap satellite navigation

systems increasingly integrated into mobile phones and cars, a maze is also not likely to be a problem for visiting house guests.

Developments will fail to comply with the BfL12 questions relating to car parking provision and the clear demarcation between public and private spaces where no budget is afforded to boundary demarcations beyond the minimum close boarded fences to rear gardens. The historically tight restrictions imposed by local authorities on household parking provision and the indifference to counting garages as parking spaces has resulted in viability appraisals being based on low levels of parking provision across new developments. With many local authorities now seeking increased levels of parking provision following the failure of government attempts to cap parking provision (in car dependent locations and where no significant investments have been made in public transport as new developments have been built), many house builders make flawed assumptions about parking provision levels.

A further difficulty commonly associated with BfL12 compliance is with the successful integration of waste storage into new developments. Whereas detached properties often have sufficient space within the individual plot<sup>155</sup> to discreetly accommodate bins and crates, this is less likely to be the case with semi-detached properties, but more so, terraced properties. With the number of bins, crates and bags a matter of choice for individual local authorities, it is challenging for house builders to anticipate and integrate waste and recycling stores into the design of homes (or plots) as part of standard house and plot specifications. Nevertheless, house builders commonly fail to anticipate the costs of resolving these issues, with the researcher recalling a house builder expressing frustration at the cost of 20 extra paving slabs to offer a path and paved area around the sides and to the rear of garages to detached properties costing purchasers upwards of £250,000.

If the purchaser is unwilling or unable to pay; if the developer is unwilling or unable to reduce their profit margins (whatever the moral arguments may be for a developer expecting a (say) 25% return on investment) – then who pays?

The only person left to pay is the land owner – however where complying with BfL12 is essentially optional for many house builders, a land owner is a strong position to reject an offer whereby the

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<sup>155</sup> An exception to this are developments where no direct rear garden access is provided, i.e. where the only means of access from the street to a property's rear garden is via a garage.

costs of BfL12 compliance are potentially going to be passed onto them. This therefore brings the ‘ball’ back to the purpose of regulatory controls: to exert control and influence on the market where it is in the public interest.

### 9.2.7 Outline planning applications

Outline planning applications are another mechanism by which a specification for a prospective development site is influenced, if not formed. Whilst house builders tend to favour<sup>156</sup> obtaining full planning permission as opposed to outline consent on the basis that the work and information required for an outline is such that it often takes little further effort to prepare a full application, outline consents are often favoured by land promoters. Land promoters will seek to obtain outline consent, raising the land value before selling the site to a house builder.

Outline consents can undermine a local authority’s efforts to secure a BfL12 compliant scheme if a prudent and cautious approach is not adopted. Typically, outline planning applications will include limited design information, with a Design and Access Statement seeking to establish key design principles and imagery of completed developments that are intended to offer a local authority a sense of assurance. Applications will seek to obtain consent for a maximum number of homes to drive higher land bids. Illustrative material will typically include an indicative masterplan. Designed to show how a future development might come forward, they are typically embedded with features that will undermine BfL12 compliance:

The maximum **number of plots being sought for approval will not be shown** on the indicative layout. Typically, the number of plots shown will be around 10% less than the planning application. Whilst this does not invalidate the planning application, a 10% increase in homes will significantly change the illustrative masterplan of a scheme.

**Street types** shown in the Design and Access Statement might not be reflected on the illustrative masterplan. If variations of street types are not shown on an illustrative masterplan, it will be difficult to secure these at a later planning stage as the nature of variation is that some streets will be noticeably wider than others. Typically, street types are shown as being largely identical widths.

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<sup>156</sup> Except on larger strategic sites where a house builder may be seeking to obtain an outline consent and then sell land parcels to other developers.

A more accurate illustrative masterplan with variations in street widths would consequently reduce the number of units.

**Fragmented or broken perimeter blocks**, such as buildings shown to back onto areas of public open space. Reorienting streets and reforming perimeter blocks may decrease the proposed coverage across a site.

The failure to **identify key view corridors and connections** beyond those required to build and service the development. These visual and physical connections must be identified as accurately as possible by the local authority and reflected on the illustrative masterplan.

**Surface water attenuation basins**. Outline applications will seek to minimise the land take of these features creating steep sided basins that will require safety fencing and not form part of an accessible (when either wet or dry) and attractive part of a scheme's wider open space network. A more gently graded basin will increase land take and in turn may reduce the number of units that may be reasonably accommodated across a site.

Below policy **car parking provision**. Again, complying with local policies relating to car parking will inevitably increase land take and in turn will reduce units.

It is therefore prudent for a local authority to require an illustrative masterplan that demonstrates that the maximum number of units can be accommodated on the site without compromising the:

- ability to create streets of varying widths.
- formation of perimeter blocks.
- creation of view corridors and connections.
- quality of the public open space provided.
- level of car parking provision.

If a local authority fails to identify the space that needs to be safeguarded from buildings, it will be highly likely that this will be difficult to retrospectively secure in a subsequent Reserved Matters application.

A common trend is for applicants to lure local authorities into a false sense of security with a Design and Access Statement containing visual and urban design terminology. In many cases, this will

afford the local authority of a sense of security – despite being unfounded. It is essential that these Statements are subjected to scrutiny as they can be used to justify a development scheme at a later Reserved Matters stage. Instead, it is more effective for an authority to insist on less material and attempt to secure a series of clearly defined design principles relating to:

- internal and external connectivity (BfL12 Question 1).
- character: organic inspired or landscape led (BfL12 Question 5).
- response to context – typically key considerations will be the most obvious, such as framing a short or long-distance view or respecting old boundary features that may cross a development site<sup>157</sup> (BfL12 Question 6).
- perimeter block formation (BfL12 Question 7).
- parking provision (BfL12 Question 10).

However, such an approach will only be effective if a prospective house builder considers the content and cost implications of these design principles as part of their viability appraisal. Yet the obvious dilemma for the land buyer will be whether their competitors will also take these considerations into account when determining their own appraisals. Their decision will inevitably be influenced by to what extent they would expect to encounter local authority resistance to a scheme that did not comply with these principles.

It would also be prudent of the local authority to reference the design principles and (as previously discussed) cite BfL12 compliance as a requirement of any future Reserved Matters application as either a planning condition or by way of an informative (also called a ‘Note to Applicant’).

### **9.2.8 Design Codes**

Design Codes are a further mechanism by which a local planning authority might seek to safeguard design quality and have been strongly advocated by Carmona (2001). There are two distinct ways in which Design Codes are produced: 1) to establish design principles (or rules) before any or all house builders appear ‘on the scene’, 2) to establish design principles when a house builder(s) has

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<sup>157</sup> Fixing key design parameters can be extremely effective in safeguarding features and quality at a future Reserved Matters stage. In North West Leicestershire, ensuring the outline application recognised the value of old stone wall field boundaries and requiring these to be integrated into the public realm, into front boundary schemes or into the plinths of new homes has been an extremely effective approach.

acquired a site for development and is required by a planning condition attached to an outline consent to progress a development.

Design Codes can be problematic regulatory tools and can give a local authority a false sense of security. Where used, design codes are typically a planning requirement (condition). If a design code fails to reflect a local authority's requirements, it can refuse to discharge a condition. However as previously highlighted, this can result in a stalemate situation where a local authority will be placed under increasing pressure to approve a code, discharging a condition and allowing development to come forward.

If a site has been purchased (or contracted to purchase) on the basis of a land value (development costs versus development revenue) that has not taken into account the costs of BfL12 compliance; and there is little or no prospect of a commensurate increase in development value as a result of BfL12 compliance – it is highly unlikely that a Design Code will commit a developer to BfL12 compliance. The ability of the local planning authority to secure a BfL12 compliant Design Code will have long since passed, even though discussions may have only just commenced with the authority. The 'strong idea' will have been formed, i.e. internal approval within the development team will often see the applicant seeking to pursue a planning application for a certain housing mix, product and density; with these decisions having underpinned a land purchase agreement.

Instead, local authorities are presented with extensive, complicated and confusing Design Codes, that are typically non-committal, contradictory and optional. In many cases they are not Codes – offering developers great flexibility and therefore clarity and certainty; in turn offering local authorities no clarity, certainty or reassurance.

Whilst some authorities challenge such Codes, other local authorities adopt these in good faith (perhaps gaining a sense of comfort from a thick, heavy document) or (where there is no in-house design expertise) on the basis that they have little or no knowledge of what a good – or poor – Code is.

The adoption of a poor Code by a local authority can limit its potential to challenge schemes seeking consent against the Code. For instance, the failure of one reviewed Code to determine design principles for car parking courtyards limited the authority's ability to challenge what were clearly

poorly designed courtyards. Without a Code the local authority could have vigorously resisted the proposed design. However having adopted a Code without any robust design principles relating to parking courtyards, it had limited opportunity to successfully challenge the developer. When it did challenge the developer, the developer promptly reminded the local authority that the Code neither stated this particular type of courtyard was either acceptable or unacceptable.

The inherent difficulty with Design Codes is that they are written by or for the landowner or house builder(s) and as such will seek to safeguard their interests, i.e. enable ‘business as usual’ or as close to ‘business as usual’. Efforts by a local planning authority to secure the qualities associated with BfL12 are often resisted where these will potentially reduce the amount of developable land and increase development costs or risk discouraging developers from bidding on a parcel.

Consequently, it can be exceptionally difficult for a local authority to secure basic design qualities such as connected, publicly accessible, single sided streets facing onto parks and open spaces. Instead, landowners and house builders will seek to obtain agreement from the local authority to approve a Code where the outward facing edges of a development are served by a network of disconnected private drives that will frustrate the ability of future residents to walk and cycle around a place freely, safely and without obstruction. A common ‘compromise’ proposal is to offer shared pedestrian and cycle paths set into the adjacent areas of open space. With these paths normally unlit (with developers not wanting to pay for the costs of installing lighting columns, cabling and commuted sums for adopting authorities), visually and physically detached from adjacent homes (limiting natural surveillance opportunities), such compensatory routes will fail to be attractive and safe routes after dark (and for some users, even during daylight hours).

A further risk with Design Codes is local planning authorities adopting Design Codes that are excessively long and complicated yet do little to safeguard against commonplace design failings. In the case of Lubbesthorpe to the west of Leicester (4,250 homes), the approval of the first phases identified that the Code had been difficult for both house builders and the local authority to use in practice. It has also proved ineffective in guarding against some simple and common failings associated with new build residential developments, in particular:

- Street design that prioritises cars over pedestrians and cyclists.
- Frustrated pedestrian and cycle connectivity, particularly along the development’s outward facing edges.

- Poor connectivity between development parcels.
- Lack of tangible character and character areas (i.e. what defines parcels from one another other than them being clearly build by different developers?).
- Lack of structural landscaping beyond primary streets.
- Poor visual integration of parked cars, particularly where parking is located ahead of the building line.
- Lack of storage for waste and recycling containers.
- Absence of active frontages.
- Predominance of two storey buildings (due to the nuances of language that state 'up to' storey heights thereby allowing the entire development to be largely two storey).

The initial comfort afforded to the local planning authority by what is a sizeable document has since been replaced by frustration that the Code has proved more effective at coding in 'business as usual' whilst frustrating the authority's ability to challenge design issues that it would have had the scope to do had a design code not been adopted.

### **9.2.9 Conclusion: specification**

The formulation of the specification is a fundamental stage in the development and design process; largely influencing the nature of the end product. At this stage, a developer (or land promoter) will seek to obtain the ownership (or the rights to) develop a given piece of land. They will need to make certain assumptions and will seek to maximise the amount of land that can be used for development. These assumptions will either frustrate or facilitate the extent to which BfL12 compliance can be achieved.

Unlike BfL20 that consisted of a choice of questions, with 'good' schemes achieving a score of 14, BfL12 measures a 'good' scheme as one that responds positively to each of the 12 questions, unless 'waivers' are justified against certain questions. As such the same BfL considerations now apply to every prospective development site, although local circumstances will influence what the most appropriate response to a question will be. For example, whilst one site may require three additional connections; another may require none. One site may be in a more affluent or buoyant market area and require a more tailored architectural response. A different site in a less affluent or

less buoyant market area could be more modestly tailored; perhaps through using a suitably local material palette.

Parking requirements may vary with some local authorities designating some areas as no car or low car ‘zones’; others are less accessible and require higher levels of parking provision. It is for the local authority and other local stakeholders to secure a site-specific response from the developer. Yet, the nature of the development process, particularly the stage and timing at which a local planning authority is approached by a developer is *after* the specification stage.

However, other questions are more general. A strong perimeter block is markedly different to a weak or broken perimeter block. A strong perimeter block is the same regardless of whether it is in Newcastle or Norwich. A weak perimeter block is the same regardless of whether it is in Burnley or Bristol. Yet it is not uncommon for layouts prepared for viability appraisals (often becoming the basis for a planning application) to be based upon broken or fragmented perimeter blocks.

Some questions straddle general principles and the need for a site-specific response. For instance, clearly demarcating public from (semi-) private space to the front of dwellings is a well-known urban design principle. However, the most appropriate response will vary depending on location. A row of terraces in a town centre location may well demand a more expensive brick wall complete with double bull nose blue brick copings – or one made of stone if the town centre is located in (say) the Peak District. Likewise, a series of detached houses on the edge of a village might require a softer treatment such as a post and rail fence against which a field hedge is planted. Whatever the situation, BfL12 will require a boundary scheme and depending on the location, the type of treatment and costs of this treatment will vary. For a larger development, a variety of boundary treatments might be employed to help differentiate street types from others and reinforce character areas.

Typically, a developer will only approach a local planning authority once it has acquired a site (or a land deal has been agreed<sup>158</sup>). By this stage the specification has been largely set and depending on the assumptions made in this specification, the degree to which a developer can accommodate BfL12 considerations will range from none to low; at best a mid-degree of flexibility can be

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<sup>158</sup> In some circumstances, a developer will have the option to renegotiate the land price once the planning requirements of a scheme are better understood. However, these land options are not typical.

expected. In such circumstances, a local authority will need to decide whether it will resist development (and consider whether it could successfully resist a planning application) or seek to work with the developer to secure the best possible outcome.

A local authority should be able to set these expectations at the stage at which developers are preparing viability appraisals. If prompted, planners will tend to be able to advise on whether a site merits a hard or softer form of boundary treatment. Though without the prompt, it is not uncommon for planners to return to their default design references: elevations and the linear distance between dwellings.

This type of information: perimeter blocks, connections, street frameworks, building distributions (i.e. basic massing: small versus large, linked versus un-linked), views in, out and through; parking provision and building to street relationships is not dissimilar to the preparation and content of a planning (or design) brief for a prospective development site. However, the majority of local authorities are prevented from preparing development briefs for sites proposed for residential development on the basis that:

- The site is *unallocated* for development.
- The site is allocated for development, but the authority lacks the resources to prepare site specific briefs for allocated sites.

Whilst many authorities are preparing local plans and supplementary planning documents to establish design requirements, many developers are reactive to these policy documents; and fail to consider the potential implications of design policies within viability appraisals. The nature of such policy documents is that they are not site specific instead establishing overarching design policies for a wide geographical area. Whilst a more design orientated developer might anticipate what the correct interpretation of a local policy would be on a given site there is no assurance that this will be same interpretation by the local planning authority. Therefore, even a well-intentioned developer might fail to accurately anticipate what the local authority might consider to be an appropriate design response for a particular site.

In the case of larger, strategic sites where land is being promoted by land owners and/or a consortium of house builders it is critical for design principles to be established as early as possible before the financial expectations of land owners become too entrenched. However, this is

potentially fraught with difficulties where land owners control substantial land holdings that form a significant part of a local authority's long-term housing supply needs. In such circumstances, the specification is fortune to ransom.

Despite the inherent difficulties associated with larger, strategic sites the degree of disconnect between BfL12 and the specification can be potentially narrowed. Connecting BfL12 and specifications will require a series of interventions that will be explored in Chapter 10. These interventions will need to consider how general and site-specific specifications might be influenced to become more closely aligned with BfL12; doing so in a way that requires all potential land purchasers to take the same design considerations into account when formulating a financial appraisal.

### **9.3 Design core: Concept and detailed design**

It is only by the time the developer reaches this stage does it engage with the local planning authority. By this stage, the developer will usually have a strong idea of what it intends to build. There are however exceptions to this where a land price has not been agreed or where a piece of land has been in company's land holdings for some time. In such cases there will normally be a greater degree of design discussion, exploration and flexibility.

Typically, a developer will request a meeting with the local planning authority and present an indicative layout for comment. This indicative layout will normally have been prepared as part of the viability appraisal for the site. There will often be no evidence of any design rationale other than a scheme that was prepared to determine the anticipated development costs and anticipated development revenue. It is not uncommon for 'faux' analyses drawings to be presented – created by overlaying the indicative layout. In such cases the analyses clearly came after the indicative layout. The associated narratives are often unconvincing and fail to provide a rationale design logic for building forms, building typologies, density, plot character and street types (usually only one type based on the company's tightest possible plotting requirements).

#### **9.3.1 Negotiating and agreeing development proposals**

With the viability appraisal as a starting point for designers (a process where a house builders' designers might have had little to no involvement or influence), it is up to a house builder planning and design teams to secure agreement with the local planning authority and if necessary, carefully negotiate changes that do not fundamentally alter the financial parameters set.

It is common as part of the viability appraisal process for land buyers to undertake a basic design exercise, exploring what might be accommodated on a development site – essentially a process of seeing what might fit on a site and how much costly infrastructure (such as roads) may be required. This design exercise might be outsourced, or may be kept in house. If outsourced, the house builders' planning and design team may well be frustrated that key design considerations that they know would be raised by the local planning authority have been overlooked. If kept in house, design teams often comment how little time they have to prepare illustrative layouts for viability assessments; and may not be even afforded sufficient time to visit the development site.

As a result, those working within the planning and design teams of house builders commonly cite frustrations that viability appraisals and the assumptions made curtail their ability to respond positively to a local authority's demands or requests. They also cite frustrations with standard house types, their inflexibility and internal diktats that 'ban' certain house types, often for spurious reasons. Often these banned house types fulfilled certain spatial requirements and their removal frustrated the ability of designers to have access to all the tools they needed. Other cited frustrations include:

- Land buyers that fail to consider the need to decrease densities along sensitive edges of development and in some instances, allow variations in density including:
- Deviating from minimum plotting distances to the front, sides and rears of new homes which can help to create a gentler transition between existing and proposed new development, reinforce character areas and particularly distinctions between street types (particularly on larger developments).
- Management pressure to increase square footage across a development site.
- Sales and management resistance to three storey homes. The use of three storey homes can offer land efficiencies but also offer a designer different building forms that can help to maximise views, frame key spaces or reinforce the hierarchy of different routes.
- Lack of consistency between local authorities across a variety of design impacting issues, from the degree to which local authorities use or do not use BfL; the extent to which the

highways authority support or frustrate efforts to create streets consistent with the principles expressed in Manual for Streets; wide ranging requirements for waste and recycling storage; lack of agreement across local authorities as to what constitutes a suitably sized garage or parking space despite car manufacturers not making regionally different sized cars.

- Local authorities rejecting BfL12 and instead measuring ‘good design’ in a more subjective manner.
- Local authorities failing to differentiate between ‘good’ and ‘poor’ schemes; with many local authorities seemingly unable to recognise or unwilling to accept a good scheme and instead seek improvements or alterations.
- The unwillingness or inability of local authorities to differentiate between good and poor standard’ house types; instead rejecting the notion of standardised house types outright.

Local authorities commonly cite the following frustrations with house builders:

- Fixed and non-negotiable parameters.
- The use of standard house types.
- The use of in house or external consultants with little or no understanding of urban design.
- Excessively long design documents that are difficult to unpick, understand or challenge.
- Failure of house builders to appropriately respond to site opportunities and constraints.

Many local authorities also share the same frustrations as house builders with the increasing resistance of highways authorities to schemes that reflect the principles of Manual for Streets.

It is possible that these frustrations and obstacles could be largely, if not completely, overcome at the previous specification stage.

### **9.3.2 Pre-application discussions**

Current planning practice for large-scale applications typically involves a developer engaging in pre-application discussions with the local planning authority.

The purpose of such discussions is to offer developers the opportunity to better understand and respond to a range of planning related issues ranging from the policy implications of proposals

through to clarifying validation requirements. A developer might also be under pressure to finalise a land deal and will be seeking reassurance that the proposed development is in an acceptable form to the local planning authority.

Whilst negotiations do take place after a planning application has been considered, this is generally discouraged by planning officers and resisted by developers. When a planning application is submitted it will be publicised allowing members of the public, councillors and other consultees the opportunity to make comments. Any subsequent changes to these plans (unless very minor in nature) will be required to be re-advertised, creating additional work for all those involved. Consequently, a local authority would seek to ensure that submitted proposals meet its requirements ahead of any formal submission.

Despite many authorities now charging for pre-application advice, applicants will often regard these discussions as a good investment to ensure that any resultant planning application:

- a) Is valid,
- b) Has a higher probability of being a proposal that will be policy compliant,
- c) Addresses the concerns of influential consultees (whether statutory or non-statutory), such as a local authority design officer who (where employed) often carry a significant amount of influence with planning committees,
- d) Progresses through the eight or thirteen statutory time limits as fast as possible,
- e) Is less likely to be subject to a maximum 26-week period – also known as the ‘Planning Guarantee’ (the maximum time permitted by a local authority without the agreement of the applicant).
- f) Is less likely to be subject to an ‘extension of time request’ by the local authority which is usually requested by the authority if it is expected to take longer to determine an application than the statutory time limits and/or planning guarantee.
- g) Is less likely to require major alteration to secure policy compliance and/or address the requirements of influential consultees (see c) above).

On occasion, the local authority planning officer might seek to engage statutory and non-statutory consultees more actively in the planning and design (most commonly the local highways authority) through what is known as a development team approach. This approach is particularly valuable for significant or strategic applications as issues, opportunities and constraints can be discussed and in

theory, agreed or resolved at an early stage. On smaller applications, more proactive officers will seek to involve consultees at the earliest opportunity with a view to building consensus between the developer and consultees, avoiding costly re-designs and conflicts later in the planning process.

### 9.3.3 The day to day operation of the planning system

Despite considerable advances in mobile technology over the last decade, the basic, day to day operation of the planning system has remained largely impervious to advancements in technology.

Future Cities is exploring potential applications of technology in city planning, from the management of services, identifying community needs and aspirations, engaging communities and stakeholders in the planning process and enabling those involved to see proposed developments in situ using augmented reality software. The potential benefits of technology in creating a more dynamic, efficient and effective planning system are exciting possibilities.



Figure 97: Too many plans, too small a desk. A planning officer and other consultees will need to cross reference various plans, drawings and documents together in an attempt to fully understand development proposals. 2017.

For instance, geo-located mobile devices offer their users the opportunity to combine the real world around them with computer generated objects and images. The popularity of these devices and systems in engaging people in a range of activities has been demonstrated by the popularity of platforms such as Facebook, Instagram and real-world gaming platforms such as Pokémon Go. The

location specific discussion groups (such as Spotted: Nottingham) that can be found on Facebook enable an individual to make comments and share ideas receiving almost instantaneous feedback from others within their community. The possibilities for the planning system to harness such technologies are significant.

In 2018, the local planning system remains heavily paper based: slow paced, lacking dynamic participation despite the potential of new technologies. Plans are routinely submitted in two-dimensional form with limited use of digital technology. The outsourcing of works to specialist by house builders' results in a series of plans that a planning officer will need to consider as a whole, with discrepancies and issues easy to miss.

Two dimensional plans, drawings and documents to support and explain development proposals will be submitted by the applicant (or their agent) to the local planning authority. These can be submitted by post or on line via the planning portal.

If the plans are received by post, these will be scanned and uploaded to the council's website. The plans will then be placed into the working file that will be kept by the planning officer. Often referred to as the 'public file' the file will contain all plans, consultation comments and correspondence (including printed copies of emails). The file is available for inspection by councillors and members of the public. If plans are received electronically, these will be uploaded to the council's website and a set will also be printed for the working file.

It is commonplace for developers to submit comprehensive proposals without any prior discussion with the local planning authority. All the plans, drawings and documents will have been prepared including the engineering drawings that will show what the finished levels will be across the development and where required, how level changes will be resolved. Efforts by a local planning authority to address design deficiencies raised by the planning officer, internal or external consultees and those living in the local community will clearly not be welcomed by the developer, with considerable costs associated with revisiting development proposals.

### 9.3.4 Consultation on planning applications: internal and external consultees

Once a planning application has been validated, the application for planning consent will be advertised. Letters will be posted to neighbours, local councillors and where they exist, Town or Parish Councils will be notified. One or more printed notices will be placed on street columns on or close to the proposed development site announcing the submission of a planning application and the deadline for comments to be made by. For larger developments, a notice will be placed within the local newspaper.

A planning officer will notify a range of statutory and non-statutory consultees. Consultees will be specialists employed by either the council, county council<sup>159</sup> or other government funded organisations such as Historic England and Highways England<sup>160</sup>. Typical consultees are: the local Highways Authority, Strategic Flood Authority, ecologists, archaeologists, landscape architects, urban designers and tree officers.

Each consultee would typically visit a site – with at least a (printed) site plan, recording their observations in writing before returning to their desk to type these up; emailing these to the planning officer. These observations would then be passed onto the applicant for a response. During this process consultations will be received at different times. A planning applicant may choose to make amendments to their proposals to respond to one or more particular consultee(s). If this is the case, revised plans will be resent to the consultees (including the consultee whose comments may have resulted in the amended plans being produced).

This process places the planning officer between consultees and the applicant whilst also creating a limited two-way form of communication between a consultee and the planning officer. There is no collective discussion and the planning officer can be placed in a ‘no win’ situation where one solution might satisfy the concerns of one consultee, but exacerbate the concerns of another.

Securing consensus is frustrated by not only the way in which the planning system operates but the tight parameters that will have been fixed during the specification stage.

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<sup>159</sup> Within two tier authority structures.

<sup>160</sup> Those consulted will be determined by the nature of the planning application and for non-statutory consultees, the officer’s professional judgement.

### 9.3.5 Consultation on planning applications: local residents and stakeholders

Residents of a local area will be invited the opportunity to offer their views on a proposed development. If a resident is not a site neighbour the ability of an individual to comment on an application will be reliant on the person seeing a notification in a newspaper (as previously stated, these are only used for major developments), regularly checking the Council's website for undetermined applications or by seeing a notice erected adjacent to the proposed development site. From a BfL12 perspective, the involvement of the local community is important particularly in considering how well a development might connect and relate to its surroundings (BfL12 Questions 1 and 6). With BfL12 also written to enable communities to participate in the planning and design process it is essential for this thesis to consider what the experience is for local residents seeking to contribute in a positive manner.

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Figure 98: **The digital interface** between a member of the public and a planning application for 348 dwellings. Note the lack of meaningful descriptions for some of the plans. The floor plans are in fact elevations and floor drawings of individual house types. The page could easier to orientate if the floor plans were accurately labelled, for example: 'House type drawing: Lumley Type A'<sup>161</sup>.

<sup>161</sup> Source: <https://myservice.erewash.gov.uk/Planning/Ig/GFPlanningSearchResults.page>. Date accessed 1 August 2017.

The practice of informing local residents is problematic with newspaper circulation falling. It relies on a resident regularly checking the Council's website or seeing a notice that will normally be fixed to a telegraph pole or street light column. Assuming a resident finds out about an application they will need to either visit the Council Offices to view the proposals or access the application on line. Once the application has been retrieved, the individual can be faced with a bewildering set of documents. For someone that has no knowledge or experience in the built environment professions, it can be difficult to know what document is required (in the example below there are seven pages of documents to choose from). It can also be difficult for people to understand and interpret two dimensional plans when most people simply want to know, "*what will I see from my house?*".

Planning applications for new homes are often strongly resisted by local residents with those involved in responding to planning consultation often being older as opposed to younger residents. The government's aspirations that planning becomes more positive, creative and collaborative is frustrated by the choices people need to make when making a representation on a planning application.

On line consultation forms enable residents to offer their views on a proposed development. Yet, these require a person to position themselves as either an objector or a supporter of an application. This inevitably creates a more rigid and less flexible or responsive process. If an individual had successfully navigated the documents associated with a planning application and managed to interpret these, they might identify an aspect of the scheme that was of concern to them. However, the process does not encourage people to offer a potential solution.

For instance, a resident might object to a three-storey home being placed behind their two storey home – a reasonable concern. A simple solution in this case would be for the planning authority to require the developer to either remove or relocate the three-storey building, placing a more modestly scaled building in its place. Instead the process requires people to express their grounds for objection and check a box indicating whether or not they wish to object to the application. It does not encourage a more collaborative process, whereby a resident could check a box that might be labelled, '*Support proposals if the change detailed below is made*'.

Furthermore, an individual is not offered the option to object to the principle of development (something that they are within their rights to do though not necessarily a valid planning

consideration. For instance, a site may have been identified in a Local Plan (and as such is allocated for development) or is consistent with a valid outline consent) yet offer comments on how the scheme might be improved should their principle objection be over ruled. Neither are they encouraged to offer a constructive representation, for instance, “I object to this because of x, y or z, but if the developer did a, b or c, I would not object”. As such, the consultation process fails to encourage creativity or collaboration.

The form consists of several input fields and a question. At the top are two horizontal text input fields labeled 'Telephone Number' and 'Email Address'. Below them is a section titled 'YOUR REPRESENTATION' with the question 'Do you wish to object?'. This section includes two radio buttons: 'Yes' and 'No'. At the bottom left is a note: 'Grounds for Objection (note that text is not limited to the window size, more can be added)'. To the right of this note is a large, empty rectangular text area for entering grounds of objection.

Figure 99: Extract from Amber Valley Borough Council's website showing the two choices for representation<sup>162</sup>.

These confrontations can occur even when the principle of development has been agreed either through a local plan allocation or through the consent of outline permission on a particular piece of land. To help illustrate the point, North West Leicestershire District Council received 70 comments on its recent Local Plan consultation – out of 93,700 residents. Yet a development coming forward on allocated sites can attract hundreds of objections.

Commonly cited reasons for local resistance and expressed in letters of objection directed to the relevant local planning authority are:

- The actual or perceived strain on local public services, such as nurseries, schools, doctors surgeries and dentists.
- Lack of public transport and consequently the creation of additional car dependent households.
- Lack of employment opportunities locally.
- The proposed site being located in an unsustainable location.

<sup>162</sup> Source [www.ambervalley.gov.uk/environment-and-planning/planning/development-management/planning-applications/comment-on-a-planning-application](http://www.ambervalley.gov.uk/environment-and-planning/planning/development-management/planning-applications/comment-on-a-planning-application). Dated accessed 10 February 2015.

- The cost and need for new housing (“who will buy it?”).
- Settlement growth in preceding years (“we’ve had our fair share”)
- Existence of wildlife, typically Great Crested Newts, badgers, owls and bats – and the risk of harm.
- Loss of green space and fields locally.
- Settlement coalescence.
- Concerns relating to flooding (“concreting” over the countryside).
- Existing residents adjacent to the proposed development site losing views over undeveloped land.
- Use of land (either with or without land owner consent) by local residents for recreational use and/or for access to other land.
- Increased local traffic and the consequent strain on existing (strained) local highways infrastructure.
- Affordable housing perceived as accommodation for ‘undesirables’ as opposed to key workers.
- Pending consideration of land as a village green.
- Lack of local consultation on the principal of development (regardless of whether a site benefits from a Local Plan allocation and/or an outline consent).

It is not uncommon for these letters of objection to be preceded by a statement that the objector is not a ‘NIMBY’ and is instead supportive of house building – except in the location proposed.

House builders often seek to ‘engage’ with the community through consultation events. However, it is not uncommon for these events to be dominated by objectors to development and by the nature of consultation, i.e. held during the day or early evening, in a church or village hall and require an individual to have the time and inclination to travel to a venue and look at a series of display boards – typically attract those of non-working age. Those who have most to gain from development or who might have constructive suggestions about how a development might relate to its surroundings and contribute towards community infrastructure do not engage with this process – either through choice or lack of awareness of the event or the impact they could have.

From an applicant’s perspective the formal consultation process on a planning application leads to a very reactive form of planning. By the time a scheme reaches the public domain it must be well advanced, i.e. ‘set’ to enable a local authority to meet its obligations that it consults on a scheme

exactly as it would be build should it be granted consent. Despite ‘NIMBYism’ being commonplace, public consultation can raise valid concerns that can be resolved through design – sometimes very easily. However, these may impact on development costs and revenue - and in turn viability. As a result, something that could have been ‘easy to fix’ earlier on in the development process (i.e. during the specification stage) becomes considerably more difficult to resolve.

If an applicant does find a way of resolving local concerns that do not affect viability, revised plans will need to be submitted to the local planning authority. These plans will then be subject to another round of public consultation. It therefore follows that by responding to concerns or issues raised in public consultation, a developer will be faced with a longer determination period on their application. Therefore, it is not uncommon for developers to ‘ride out’ objections and seek to gain a positive recommendation on the basis of the overall planning argument for consent. Yet this approach, whilst understandable from a commercial perspective this can intensify community perceptions that “no one listens to what we say”.

### **9.3.5 Planning Committees**

Many concerns that are regularly raised by planning committees could be identified much earlier in the process by improvements to engagement with elected members and local communities.

A number – if not all - of these issues would be better raised earlier in the design process on the basis that they should influence either concept and/or detailed design with some of these minor in nature and easily resolved if identified much earlier in the development process. For example: building placement and orientation, pedestrian and vehicle conflict, hard and soft landscaping (including the design of boundary treatments to secure defensible space), lighting, views in, out and through a proposed development, local character and identity (based on growing resistance to ‘clone’ and ‘identikit’ developments, in particular housing and retail led schemes), accessibility (in particular pedestrian access and safety) through to wider connectivity such as the creation or contribution to greenway networks (for example, safe routes to schools and providing people with direct, safe and attractive routes to encourage greater use of public transport, cycling and walking particularly for shorter distance journeys).

In some instances, this can lead to planning applications being deferred at committee with both the authority and the applicant incurring what could arguably be unnecessary – or avoidable – costs if a different form of consultation was in place. These costs will be:

- The developer would incur costs amending the proposals and preparing revised application material.
- The developer may well encounter further costs if land is within their ownership and interest charges are being incurred. Other additional costs may include site security.
- The local authority would not be able to charge the applicant an additional fee for deferral and therefore officer time in progressing the application and preparing it for a future committee is at the council's expense. It could therefore be argued that inadvertently established methods of consultation in some instance frustrate the ability of local planning authorities to utilise limited resource in the most efficient manner.

### 9.3.5 The use of technology in planning

The use of technology in local planning authorities beyond GIS and record keeping systems is limited. With no requirement for digital models, the use of these as a means of design communication is very limited. In the researcher's own professional experience, only one planning application has used a (basic) Sketch Up model to present development proposals and support pre-application discussions.



View looking into the site from Station Road from main access point



Figure 100 and Figure 101: **Extracts from the Sketch Up model** prepared for South Derbyshire District Council's Planning Committee (Davidsons Group, 2007, p.25 and 4).

### 9.3.6 Conclusion: Concept and Detailed Design

The chapters in this section have demonstrated the challenges associated with securing BfL12 compliant developments and the structural deficiencies within the planning and the land market systems that disincentivise a more balanced commercial-design led approach by developers.

By the time the concept stage is reached, the specification – and as a consequence, the design – will have been largely fixed, with certain immovable financial parameters set by the constraints of viability. This creates an inevitable friction between local authorities seeking to influence and improve design quality and developers seeking to remain within set financial parameters. It also creates a tension between developers and the aspirations of a local community and other stakeholders, particularly where by meeting these aspirations development costs are increased and/or development revenue is decreased. Furthermore, any changes to a development scheme will result in a longer determination period for a developer as in most instances, changes will require a further consultation period. Depending on the nature of community aspirations, a developer might be able to secure some assurance from a planning officer that by not responding to aspirations a planning application might still be able to secure planning consent.

In such circumstances, either a compromise position will be reached which inevitable results in a better, though nevertheless, lower quality scheme than could be otherwise secured.

#### **9.4 Design core: Manufacture**

The fourth design core relates to the manufacture of the product: in this instance the building out of the development – the homes, its streets and open spaces, ancillary structures and the planting of landscape schemes including (where required) the creation of new surface water management systems.

##### **9.4.1 Build out**

Where developers do not have a commercial or legacy imperative that places a value on design quality, the manufacture or ‘build out’ stage of a development represents a further risk to achieving quality standards. Attention has occasionally been cast over the built quality of new build homes: BBC Watchdog explored construction issues by homes built by Westbury (owned by Persimmon) and Miller homes<sup>163</sup>. More recently, widespread issues were raised about the quality of homes built by Bovis Plc<sup>164</sup>, defects that resulted in the company paying £7m in compensation to purchasers and the value of the company declining by £100m<sup>165</sup>. Bovis’ Chief Executive subsequently resigned and the company announced a decline in production levels to focus more on quality<sup>166</sup>.

As previously discussed, design quality as measured by BfL12 relates to the design of buildings, their placement, relationship to each other, the street and the context of the site. BfL12 also relates to the quality of the public realm and the way in which public and private spaces are designed and demarcated. All these macro and micro elements will be fixed by virtue of a planning consent that will approve the exact position of streets, spaces and buildings and their detailed design. Whilst the larger structural elements of a development, particularly the position, form and appearance of buildings are less vulnerable to change; it is the smaller structural elements that are at greater risk

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<sup>163</sup> [www.youtube.com/watch?v=XRP\\_FIQB1-Y](http://www.youtube.com/watch?v=XRP_FIQB1-Y). Date accessed 4 December 2017.

<sup>164</sup> [www.theguardian.com/money/2017/jan/28/bovis-home-hundreds-of-snags-angry-buyers-unfinished-homes](http://www.theguardian.com/money/2017/jan/28/bovis-home-hundreds-of-snags-angry-buyers-unfinished-homes). Date accessed 4 December 2017.

<sup>165</sup> [www.theguardian.com/business/2017/feb/20/bovis-to-pay-7m-to-compensate-customers-angry-at-poorly-built-homes](http://www.theguardian.com/business/2017/feb/20/bovis-to-pay-7m-to-compensate-customers-angry-at-poorly-built-homes). Date accessed 4 December 2017.

<sup>166</sup> [www.ft.com/content/0a11cf9c-f743-11e6-9516-2d969e0d3b65](http://www.ft.com/content/0a11cf9c-f743-11e6-9516-2d969e0d3b65). Date accessed 4 December 2017.

of change or degradation. These smaller structural elements can have a direct and significant impact on the quality of the public realm and wider street environment.



Figure 102: **The build out of a development** can undermine quality as discrepancies between plans can make it difficult for a local authority to legally enforce (in this case) a new pedestrian connection to be implemented, even when the intention to create a connection is obvious from the provision of a new path across the new public open space. Ashby de la Zouch. 2017.

Building details can have a significant impact on the character of the street and the development as a whole; its relationship with its wider context. The default approach by many developers is to

adopt a traditional vernacular style, yet depending on the individual developer, the quality and convincingness of implementation can vary significantly; regardless of the architectural style adopted. If architectural features and details are not agreed as part of the planning application, the opportunity exists to resolve these detailed aspects by way of a planning authority imposing one or more planning conditions.



Figure 103: **Changes in carriageway levels** resulted in the street 'dropping' creating an unforeseen level change between the back of the pavement and the front door. Whilst the developer secured consent for the changes in carriageway levels from the highways authority (County Council), they failed to notify the planning authority (District Council). A potential breach of planning is now being investigated. Whatever the outcome, the finished development will not be as envisaged as the planning authority does not consider it has a strong enough case to require this particular house to be rebuilt level with the street partly on the basis that Permitted Development Rights were not removed. If site staff had access to augmented reality the risk of deviating from approved (multiple) plans could have been identified prior to the laying of foundations. Ashby de la Zouch. 2017.

If these details are not agreed as part of the planning application or a planning condition is not imposed, the ability of the local authority to safeguard (or improve) the quality of these architectural features and details will be lost. Yet, even where planning conditions are imposed if a developer does not attach either a financial (commercial) or legacy value to quality implementation, it is often challenging for the local planning authority to secure the quality they might wish to on the basis that the developer has fixed cost parameters they will seek to remain within. In such circumstances - taking a development with a traditional vernacular style as an example - it will not be uncommon for a developer to want to use the cheapest materials and details or seek to coerce the planning authority to discharge the condition 'lightly' if not dispense with the requirement altogether. Typical areas of conflict include:

- Locally inappropriate bricks (in terms of colour and/or texture) and/or roofing materials (material, colour, size and thickness).
- Plastic enclosures to verges and eaves (as opposed to more traditional or ‘wet bedded’ exposed detailing).
- Factory made components, typically glass reinforced porches and/or door surrounds (in some instances, these will be singular moulded components that are factory (spray) painted).
- Undersized (or absent) chimney stacks; decorative chimney stacks constructed off site and affixed in architectural inaccurate positions.
- Simple stretcher bonded external walls, with no brick detailing such as string or other decorative courses.

If a local planning authority has to insist on the implementation of such details and encounters resistance to these, there is a good likelihood that the developer will seek to avoid the costs associated with implementation through either cheaper implementation or by failing to implement a scheme completely in accordance with approved plans. As one developer expressed, “we’ll chance it”.

Common areas where there are deviations between approved plans and their implementation are: 1) definition and means of delineation between public and (semi-) private spaces, 2) areas of hard and soft landscaped public open spaces. Typically, at a plot level such deviations might be considered minor – yet collectively over a wider area and a larger number of plots, these deviations can significantly undermine the quality of a development.

In such instances, if aspects of detailed design are part of plans approved by the local planning authority, there is scope for the local authority to insist on remediation works to achieve compliance with approved plans. However, the powers of the local authority to insist on these works being undertaken are reliant in the first instance on the authority knowing that there are issues related to compliance with approved plans.

In the absence of a well-resourced planning enforcement team that routinely scrutinises all aspects of completed developments (or those under construction) it can be difficult for a local planning authority to identify aspects of non-compliance. To ensure compliance with approved plans,

compliance inspections are reliant on individual planning officers noticing a (potential) breach. It is common for planning officers to periodically visit schemes as part of their wider planning duties or as part of their routine visits of their ‘patch’. It is during these visits that a planning officer’s detailed knowledge of and familiarity with a scheme can come to the fore and enable them to identify potential issues. If time permits, a planning officer will commonly investigate a potential breach. In such instances, a planning officer will visit the development in question with the (paper) case files with the intention of checking compliance with approved plans.

However, this process is often time consuming with approved plans consisting of multiple plans: those submitted and approved and cited on the Planning Permission in addition to plans and documentation associated with the process of discharging any planning conditions. If a potential breach relates to features within the public highway (for instance, hard and soft landscaping might be different to what was approved by the local planning authority), it will be likely that the feature was removed by the local highways authority as part of the highways adoptions approval process – an anomaly within the system that often results in “*the mystery of the disappearing trees*”. Under the adoptions process (Section 38, Highways Act 1980) a scheme can be required to deviate from the approved plans yet neither the developer nor the highways authority will notify the local planning authority to secure agreement or determine whether the existing planning consent will be still valid.

If there is a suspected breach (i.e. deviation from approved plans), informal action is usually taken by way of the planning officer seeking clarification from the developer. In some cases, resolution is easily reached by way of carrying out remedial works – in others there will be an in passé. This in turn can escalate and be passed to the (under-resourced) planning enforcement team. If it is deemed in the public interest to pursue the alleged non-compliance, hours of officer time will be consumed on both the part of the planning and enforcement officer checking the authority’s case before approaching the developer.

Despite this investment of time, there is no guarantee that compliance can be secured and a local authority might be resistant to employ its full powers or influence when an alleged breach is considered within a larger pool of cases. As such, a developer’s lack of cooperation can be consequence free, particularly if the non-compliant element(s) is (are) a smaller structural element(s) as opposed to larger structural elements of a development.

Whilst a single non-conforming element is not in itself problematic it is the cumulative effect of multiple non-conforming elements that can have a significant impact on the quality of the place as a whole.



Figure 104: **The requirement for a field gate** to allow agricultural vehicle access to the field beyond was misinterpreted by the contractor following the two-dimensional boundaries plan. Ashby de la Zouch. 2017.

Local planning authorities vary considerably in the emphasis placed on planning enforcement. Some authorities benefit from the resources to undertake periodic inspections at key build stages, ensuring that homes are built at approved finished floor levels through to ensuring that detailed hard and soft landscaping schemes are implemented correctly. Other planning authorities are more reactive and rely on council officers or members of the public identifying issues that might be amiss. This reactive approach can be considerably less effective as when a new home is occupied there will be considerable resistance from the developer and hesitancy from the local planning authority to undertake rectification or remedial works unless considerable public harm or a clear breach of planning consent can be demonstrated.

Where deviations from approved plans are identified, they commonly relate to level changes, failure to interpret plans correctly or implementing plans that have been superseded<sup>167</sup>. The resolution of levels is a common area of discrepancy where errors made by one or more of a developer's designers or consultants can result in level changes that were not expected. In such instances, it is not uncommon for the developer to find a 'fix' that does not require expensive remediation.

For instance, a developer could legally commence and progress construction works if all necessary conditions have been discharged. Other conditions may need to be discharged relating to, for example, boundaries and retaining structures; with their 'trigger points' (i.e. the point at which a condition must be discharged in order to retain the right to build) designed to coincide with a later stage of the development process.

Such staged triggering can enable developers to commence preparatory works on site helping to speed up the delivery of new homes. Further benefits of such staggering of conditions can enable a local authority to create a more manageable workload on a planning application, processing one or a group of condition discharge application at a time as opposed to all of them at one time.

Whilst there are benefits to both the developer and the local planning authority of condition staging, there is a risk that drawings issued to site will be superseded. Even if the correct plans are referenced, there have been many instances of discrepancies in finished floor levels that can be difficult to rectify if these are only identified once construction works are well advanced.

The reliance on two dimensional plans can create further difficulties during the manufacturing stage, where a local authority might have read plans as creating an alternative three dimensional outcome to what is actually built on site. Highlighted as potential planning breaches, prior to progressing formal enforcement investigations

#### **9.4.2 Conclusion: Manufacture**

The manufacture stage of the development process presents a further risk to achieving compliance against BfL12. This can be primarily attributed to the failure of those building a scheme to fully

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<sup>167</sup> Likely to occur when a local planning authority is seeking to address design deficiencies or issues – and when construction works are well underway.

understand or benefit from clear communication as to what the expected end product is intended to be. Failure are primarily related to the quality of the street environment with discrepancies in level changes and the use of incorrect materials, colours, landscape and detailing.

The reliance on paper based plans and drawings which are often reliant on an individual cross referencing various plans and documents is both impractical (particularly in inclement weather), time consuming and confusing. It can therefore be difficult to interpret plans (or easy to misinterpret plans) and through the course of the research it is not uncommon for various plans to be inconsistent with one another.

Consequently, there is a further disconnect between BfL12 and the development process within the manufacture design core.

## **9.5 Design core: Sell**

The fifth and final design core relates to the selling of the product to the consumer, marketing the product to reach and appeal to the target market; achieving or exceeding anticipating revenue income.

### **9.5.1 The marketing of new homes**

The disconnect between BfL12 and the current design process is further reinforced by the way in which the product is marketed and sold to the market; and how it is financially valued.

The way in which the product is sold is focused more on the individual home as opposed to its wider development setting, though proximity to good schools and accessibility to other places are often emphasized in marketing materials. Marketing material may draw attention to proposed and existing local facilities, though accessibility to these by car will be more often mentioned than what (if anything) is within a short walking or cycling distance.

Typical marketing material will show a given house type in an isolated setting: its elevation and its internal layout (which may or may not be furnished with items of furniture). The product will more often than not be shown sitting within a lawn area, perhaps with some ornamental shrubbery

though with no clear delineation along the approximate boundaries of the individual plot. No reference will be made to the design of the street or the way in which parking and considerations such as waste and recycling storage may have been resolved. Whilst a prospective purchaser will have the opportunity to view a layout plan showing where a given plot is located within the development, that will also show where features such as car parking assigned to a given plot is located (and how much) alongside other features such as the location and amount of soft landscaping; the home buyer will not normally be offered any three dimensional representation of the street environment (that may or may not influence their decision to buy or willingness to pay above a certain price). As a result, the design qualities or deficiencies of a particular development are not brought to the fore; in turn neither making the product more – or less, desirable.

## **9.6 Conclusions**

The preceding chapters have identified a series of disconnects with BfL12 throughout the urban planning and development process. The existence of these disconnects within and across the various stages of the design process highlight the inherent difficulties associated with seeking to embed BfL12 into development schemes through a regulatory led approach. The regulatory approach to improving design quality seeks to impose change on an already well-advanced design process, with (local) regulatory influence currently timed to coincide with the concept and detailed design stage (or core). This can only have (and has been proven to have) limited impact on the degree to which new developments comply with the requirements of BfL12. Instead, local authorities can only meaningfully influence design quality through proactive involvement at the specification stage – a stage in the process that currently takes place ahead of any dialogue between a house builder and a local planning authority.

Each design core exhibits a degree of disconnect with BfL12, with interventions required to current processes to resolve these disconnects. Only by connecting the design cores to BfL12 will it be possible to force out the worst aspects of new residential development, primarily by linking design regulation to the specification and land buying process.

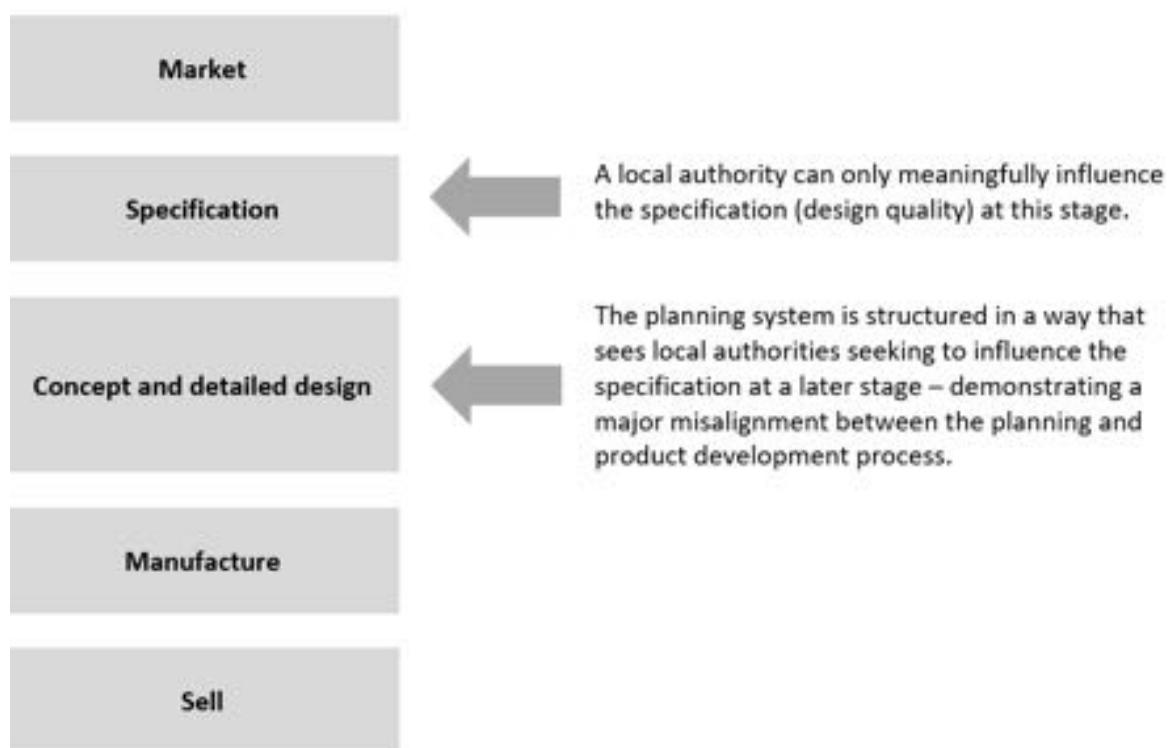


Figure 105: **Analysis demonstrates misalignment between the product development and planning process** limiting the extent to which a local planning authority can meaningfully influence the specification. Competitive pressures resulting in cost saving design specifications being employed to protect profits whilst also enabling developers to offer competitive land bids.

Design Core	Disconnect with BfL12	Key Intervention required
Market	Medium	Improved design regulation linking BfL12 to national and local policy
Specification	High	Enabling local authorities to contribute towards a BfL12 oriented specification
Concept and detailed design	High	More meaningful community and stakeholder participation
Manufacture	Low	Improved communication of proposals between local authority, developer and site
Sell	High	Connecting house builders and consumers to BfL12

Figure 106: **A summary of the relationship between design cores and BfL12.**

## **10. Towards a Total Design Model of BfL12: applying a theoretical model to practice**

The preceding chapter demonstrated that the design quality typically associated with new build residential suburban developments can be partly attributed to market and regulatory conditions where BfL12 compliance is neither required to secure planning consent, generate sales revenues and target profit margins. It can also be partly attributed to the relationship between the development/design process and the planning system.

The research demonstrates that the mechanisms that exists through which local authorities are afforded the opportunity to exert regulatory control over design quality has little to no impact on either the ‘market’ or ‘specification’ design cores. The reasons for this can be partly – though not wholly - attributed to the absence of market control through robust policy formulation and application at both the national and local level.

The research has demonstrated that where local authorities seek to exert influence over design quality (and in turn, the general and site-specific specification) the time at which this happens (at the ‘concept and detailed design’ core) is too late in the design process. By this stage, the design process is already well advanced; the ‘specification’ stage has been passed.

This thesis proposes a series of interventions, modifying the Total Design model in a way that weaves BfL12 into the wider product process – ‘breaking it’ out of its current position as something that sits within the realms of planning and within a single design core.

The model is primarily modified through the insertion of a series of ‘Supplementary Design Cores’ that are complemented by structural alterations to current planning process – changing the way – *and time* - local authorities and house builders communicate with each other; whilst also offering local communities a more accessible and meaningful way to engage in changes that may affect them.

Each of these supplementary design cores is specifically introduced to resolve areas of disconnect whilst also relating to the design core that sits before and after it. To maximise the potential benefits of this model, an intelligent urban design tool is proposed. This new tool differs from existing and emerging digital tools that are being proposed within urban planning in that it is

designed to operate within a modified planning system; as opposed to operating within the current confines of the current planning system.

Whilst the primary objective of the research was to identify how BfL12 might become better embedded into development schemes, it has become evident through the course of exploring, testing and refining the specification for the model that additional benefits can be achieved beyond those associated with improving residential design quality. Residential design quality will be improved by offering a mechanism by which disconnects relating to design quality and viability can be overcome. These additional benefits are:

- **Enabling local authorities to make better design judgements**, even if they do not have access to a specialist design officer.
- **Improving the responsiveness of the planning system; speeding up the efficiency of the planning system** by reducing reliance on a time consuming and ineffective ‘bat and ball’ approach to communication between local authorities, house builders, local communities and other stakeholders. Additionally, this will support local authorities that are under financial and political pressures to deliver new homes whilst also achieving a good standard of design quality.
- **Reducing the likelihood of development schemes stalling** in the planning process as local planning authorities seek to address design issues. The structure of the system that frames objective design considerations will also reduce the risk of house builders encountering difficulties associated with planning officers seeking to impose subjective design values and judgements on development proposals.

These proposals will offer the opportunity to improve plan making, design quality and development management, reflecting the government’s increasing emphasis on addressing issues relating to design quality, the use of technology in planning and improving community engagement: “*we want to support...more innovation and high quality design in creating new communities... to ensure that new development meets the Government’s ambitions for quality as well as quantity...*” (DCLG, 2017, p.4, p.9).

A recent call for funding applications under an £11m Planning Delivery Fund for allocation over 2017/18 and 2018/19, the government sought proposals that made, “*innovative use of digital or other tools to support more effective and efficient plan-making, design quality or development management; for example, by improving access to planning information or improving engagement of communities in plan making and planning application processes*” (DCLG, 2017, p.11).

The following sections will explore reform of the planning system before presenting how the modified model is structured and how it works in practice; demonstrating the relevance of the research and its recommendations.

### **10.1 Reforming the planning process**

There are increasing pressures on the local planning system – a growing list of expectations that are being placed upon over-stretched and under-resourced planning departments. It is an opportune moment to explore how new and emerging technologies might help to alleviate these pressures and enable local planning authorities to become more effective, efficient; reimagining how planning might function in the 21<sup>st</sup> century. A key opportunity exists to not only replace ‘paper with technology’ but consider whether the process and the timing of these processes are appropriate, relevant and effective.

Reductions in central government grant funding to local authorities have seen many planning departments reduce in size. With reductions in design officers, planning officers will need to become more skilled in issues relating to good design if they are to approve developments that are consistent with the design policies contained with the NPPF (DCLG, 2012a). Whilst the cuts to local planning departments were not particularly problematic in the years immediately following the credit crisis when house building rates largely stalled, as the economy and house building industry recover, house building rates are increasing year on year and local authorities are under sustained political pressure to process applications without unnecessary delays. At the same time, the government has expressed within the NPPF (DCLG, 2012a) that planning,

*“...must be a creative exercise in finding ways to enhance and improve the places in which we live our lives. This should be a collective enterprise. Yet, in recent years, planning has tended to exclude, rather than to include, people and communities. In part, this has been a result of targets being*

*imposed, and decisions taken, by bodies remote from them. Dismantling the unaccountable regional apparatus and introducing neighbourhood planning addresses this.” p.i.*

What a creative and collaborative system might mean is only starting to be explored with local initiatives such as the urban rooms proposed by the Farrell Review<sup>168</sup>. Whilst Neighbourhood Planning (introduced by the Localism Act, 2011) is seen by the government as addressing its aspirations and does give communities a greater role in planning, the process of creating a Neighbourhood Plan is much like Local Plan preparation: dry, slow paced, bureaucratic – typically driven by those that already tend to engage with the planning system – namely retired, older members of a local community. As such, the process of Neighbourhood Planning does little to address the exclusion of younger people in the planning process, particularly those who have the most to gain from new development and might well have new and innovative ideas as to how their communities might best grow and change.

Advancements in technology offer the opportunity to address many of the expectations being made of the planning system. Therefore, there is no need for ‘us’ to choose one expectation over another. Instead, it is the nature of the current system that requires us to choose one expectation over another. It is almost as if there is a prevailing perception that we cannot think or talk about design when we are faced with a major housing shortage.

The following sub chapters begin by explaining to the reader how the modified model and the tool emerged and developed through empirical research, analysis and design.

## **10.2 Stakeholder workshops: exploring the effectiveness of BfL12 in practice, developing and refining the specification**

Through a series of stakeholder workshops held between October 2015 and November 2017, the researcher gained a rich and valuable insight into the effectiveness of BfL12 in practice; and in particular the barriers that frustrate the ability of users to design and implement schemes that are consistent with its principles. Workshops were also used to develop and refine the specification for the Total Model proposals. Whilst workshops were structured by way of framing questions or

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<sup>168</sup> The Farrell Review: [www.farrellreview.co.uk](http://www.farrellreview.co.uk). Last accessed 1 May 2018.

proposing specific interventions, the open-ended nature of workshops enabled participants to explore a wide variety of issues including public participation in planning. By way of an overview, house builders focused on the dynamic between BfL12, financial viability and conflicts associated with internal policies and processes. Local authorities focused on issues relating to in house capacity particularly design skills, difficulties associated with highways design; their confidence and ability to meaningfully differentiate between good and poorly designed schemes.

Table 27: **Workshop locations, dates and participants**

<b>Workshop (location)</b>	<b>Date</b>	<b>Participants</b>
Nottingham Trent University	May 2013	Local planning authorities
Romford	October 2015	House builder
West Malling	October 2015	House builder
Nottingham Trent University	November 2015	House builders
Nottingham City Homes	December 2015	Registered social landlord
Leyland	December 2016	House builder
Bracknell	January 2017	House builder
Cheshire East Council (Sandbach)	June 2017	Local planning authority
North West Leicestershire District Council (Coalville)	September 2017	Local planning authority
East Midlands Councils event (Melton Mowbray)	October 2017	53 local authority participants, covering 27 authorities including one National Park Authority.

The workshops offered a particularly insightful in developing a broader and deeper understanding of the use of BfL12 in practice, across a range of different market areas. Workshop findings were reinforced by semi-structured interviews, an online survey and the researcher's own experiences working for and with local planning authorities beyond North West Leicestershire. Subsequently interventions have not only been proposed, but also implemented and tested. Additional interventions have also been suggested. These interventions are required to bridge disconnects between BfL12 and various stages of the design process (design cores).



**Figure 107: Workshop session** in progress. Melton Mowbray. 2017.

Interventions are framed by way of a proposed modification of the Total Design Model to create a Total Design Model of BfL12. The basis for this model recognises the inherent limitations of achieving BfL12 within the current planning practices in place. Therefore, for BfL12 to become more widely applied in practice, the current approach of ‘bolting’ BfL12 onto the current planning process will need to be replaced.

### **10.3 Moving towards a Total Design Model of BfL12**

The proposition that BfL12 cannot be effective as a ‘bolt on’ to the current planning process is a significant shift in our knowledge of how BfL12 works in practice. The prevailing view has been that BfL (both the 20 and 12-point versions) need only be appended to the current planning process, i.e. at the Concept and Detailed Design Stage which is the stage at which local planning authorities become involved with proposed development schemes.

The research demonstrates that this is not a wholly effective method by which local authorities can exert regulatory design influence or control. The NWL experience demonstrates that where BfL12 compliance is secured, it has been as a result of the developer voluntarily embedding BfL12 into the specification as opposed to as a result of regulatory influence or control. In such circumstances, by the time a development scheme has reached the Concept and Detailed Design core, the local

authority is presented with a credible proposition. This in turn shifts the local authority from a ‘hard regulator’ and instead towards a ‘softer regulator’; or more accurately a critical partner where minor adjustments or improvements are suggested and more welcomed by the house builder on the basis that they are more timely and offered when there is opportunity to fix issues.

In circumstance where a local authority is presented with an unacceptable scheme it will (subject to the authority having the necessary design skills, confidence and internal support) seek to secure changes to the proposed development. Effectively the authority will be seeking to regress the project back to the preceding specification design core. However, unless a developer has the scope to either renegotiate a land price or is confident that an alternative approach to development can be found within the same cost (viability) parameters these efforts will be resisted strongly by the developer. The local authority will resist a developer’s intransience and a stalemate will be reached.

A local authority will have three options:

1. **Allow the process to continue unimpeded**, processing a planning application with a house builder possibly making minor concessions to a scheme to allow a local authority to demonstrate it has added value to a proposal (and justified its existence beyond merely processing a planning application). Such minor concessions will allow the forward momentum of the development process to be maintained.
2. **Seek to impose changes on a scheme**, however the high speed of the process by this stage and the previous determination of the specification will create an inevitability that changes will have limited chance of being incorporated into development proposals (these ideas will lack the ‘stickiness factor’).
3. **Use its regulatory powers** (or the threat of using these regulatory powers, i.e. “we will refuse this if you will not change this”) to slow the process: insist that the developer returns to the specification core and ‘restarts’ the process.

There are three fundamental issues with this third option that must also be brought to the reader’s attention:

First, it can delay the completion of a new development: further frustrating the delivery of new homes, increase development costs (perhaps increasing the need for higher sales revenue, resulting in the consumer paying more than they might otherwise would).

Second, it will inevitably infuriate a developer. In an effort to restart the process and continue on the proposed course, it is not uncommon for a developer to actively lobby local politicians and chief officers. Regardless of whether the decision to halt the process is justified on design grounds or not, it will potentially alienate politicians from an authority's design agenda – an option that officers will seek to avoid.

Thirdly, it is inevitable that eventually a planning application will be submitted (with or without concessionary changes). If refused, the developer might seek to appeal the decision with a Planning Inspector considering the application before upholding or dismissing the appeal. Whatever the eventual outcome and regardless of which 'side' prevails, the underlying causes of the problem will remain. Ultimately no-one 'wins' as the problem will keep occurring and the delivery of new homes will be frustrated.

If one imagines the Total Design Model as a spinning, cylindrical object that rotates at an ever-increasing speed as a house builder progresses their 'product' (a development) from one design core to the next, by the time the Concept and Detailed Design core stage is reached, the product (design) is already well advanced; the core is spinning at a high speed. Key decisions relating to the product specification will have been made and financial parameters will have been set. Yet it is when the core is rotating at this high speed (at the Concept and Detailed design core stage) that a local planning system is normally offered the opportunity to comment on a scheme<sup>169</sup> - and seeks to influence the specification. With the development and design process moving forward and heading towards the next core: Manufacture, it is not timely to shift the focus back. Efforts at this stage by the local authority to address design issues (and in turn the specification) will result in a developer stating that by addressing these issues, the scheme will be made unviable. In reality, it is not that the design requirements are unviable per se, but instead that they are unviable on the basis that they were not factored into the financial model for the project.

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<sup>169</sup> There are exceptions to this where a local authority has produced a development brief for a specific site. As discussed in previous sections, this scenario is not uncommon and many development schemes are initiated without a development brief having been prepared for a site.

Whilst this research was guided by a hypothesis that for a local authority to ensure that new residential developments met BfL12 all it needed to ‘do’ was exert its regulatory ‘muscle’, this has proven to be a narrow, theoretical view. Instead, the underlying causes for the disconnect between BfL12 and house builders run much deeper and farther back into the design and land acquisition process.

Before progressing onto these sections, it is important to recognise where these research findings might ‘fit’ into the rapidly evolving field of new technologies in urban planning and public participation.

Research (please refer back to the Literature Review; Chapter 2) is currently focused on how these technologies might function in more urban contexts: cities as opposed to suburbs. Furthermore, these research projects consider how technologies might be applied to the *current* planning process.

Whilst technology will inevitably improve the current planning system, particularly with respect to improving public participation and visualisation (understanding of development proposals), by replacing paper with technology, we will not address other issues associated with our planning system; nor will we entirely resolve the issues discussed within this thesis.

For these reasons, the Total Design Model for BfL12 is proposed: partly comprised of a new digital and participatory platform that will change the time and way in which participants in the planning process communicate. The platform will operate from the specification stage of the design process before becoming part of a community’s urban room: a digital representation of a village or town.

#### **10.4 Developing and refining the specification**

The specification is expressed by a series of supplementary design cores. The specification was created by exploring issues raised during a series of stakeholder workshops with professionals across both the public and private sectors. The most recent workshop took place in October 2017 as part of an East Midlands Councils event relating to design and viability. The researcher presented to and explored ideas with 65 local authority planners representing 27 authorities (including one National Park Authority). The collective experience of these planners amounted to 1,055 years, with many officers having over 30+ years’ experience.

Participants identified common structural deficiencies related to permeability, connectivity, legibility, the demarcation between public and private spaces, active frontages, perimeter blocks and spatial definition.

A more creative and proactive approach to regulation is required that offers local authorities the ability to take a stronger place-led approach to planning, shifting planners from being reactive regulators and instead towards proactive place makers.

A different approach is advocated whereby the way in which local authorities plan and influence new development fundamentally changes - capitalising on the potential of new digital and immersive technologies that are more engaging, dynamic, accessible and democratic than current systems and processes. The system would stimulate the same degree of creative thought and expression witnessed within gaming technology (such as Minecraft). By enabling younger people to opportunity to participate in the planning process, a demographic shift in planning participation will be possible whilst also offering a means by which younger people might be encouraged to explore the built environment professions as a potential career choice.

Where BfL12 principles have been successfully integrated into new developments, the reasons for this are less to do with local policy and regulation<sup>170</sup> and more to do with the values of the house builder<sup>171</sup>. In these circumstances, the costs associated with better design are anticipated and captured at the stage at which development viability is determined; as such the financial parameters *enable* rather than *frustrate* the creation of better designed developments. However, the reader should not interpret this as the researcher discounting the importance of the wider regulatory framework, but instead recognises the limitations of regulation, particularly in light of:

- Effective design regulation being reliant on specialist trained officers.
- A national political climate that favours less regulation in the interests of supporting small (and cheaper) government structures, business and economic growth.

Political emphasis continues to remain focused towards restricting the extent of bureaucracy, a point made by Carmona: "*From the right have come concerns that giving undue consideration to*

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<sup>170</sup> That typically prevents the worst as opposed to safeguarding the best.

<sup>171</sup> Where design is valued either on the grounds of social responsibility and/or enhanced profits.

*design can undermine the operation of the free market, tying up local initiative and creativity with unnecessary delays and ‘red tape’” (2016, p.713).*

The resultant model was presented and explored with professionals working within the industry; offering a new process for development management, replacing the current outdated and reactive process with a more creative and collaborative approach. Critically, rather than overlaying current process with technological interventions, the model proposes to reform the current process - broadening the role of BfL12 from its current compartmentalised identity as a predominantly regulatory and measurement tool.

## 10.5 Model overview

The model is based on inserting supplementary design cores between the principal design cores presented in the previous chapter. These supplementary design cores form the structure of the urban planning and design tool the model. The purpose of these supplementary design cores is to address multiple areas of disconnect between BfL12, the house building industry, the planning system and the consumer.

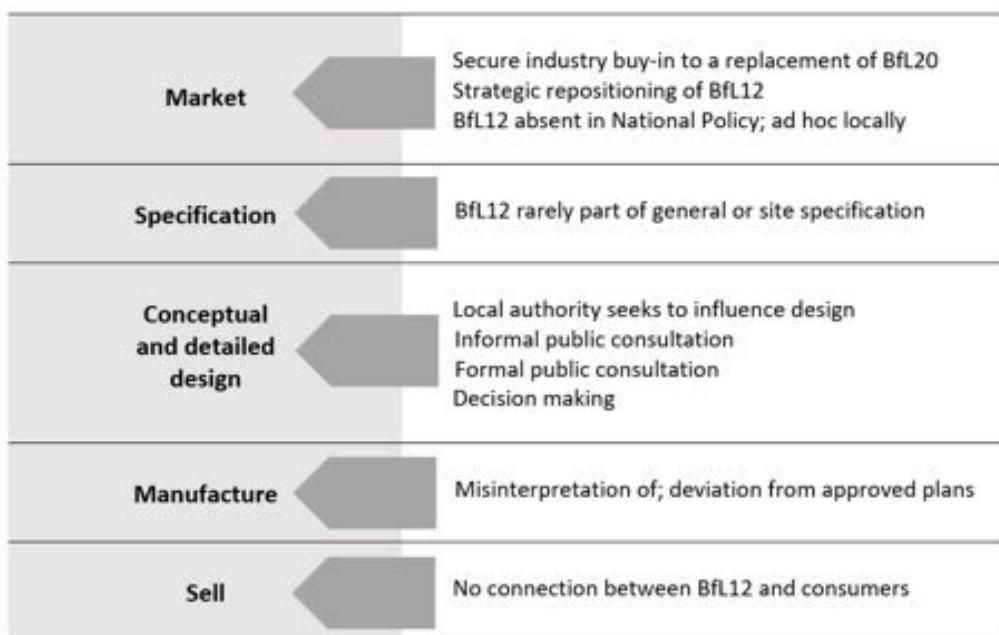


Figure 108: A summary of the disconnects between BfL12, the industry, planning practice and the consumer.

Table 28 shows the principal design cores (on the left) and the supplementary design cores (on the right) that combine to produce the structure of the Total Design Model of BfL12.

Each supplementary design core is complemented by a series of interventions. A number of these interventions have been developed and tested as part of the action research.

Table 28: Insertion of supplementary design cores into the Total Design model structure



By combining the principal design cores with the supplementary design cores, the structure of the complete (or total) model of BfL12 is produced.

Table 29: The Total Design Model for BfL12 – created by merging of the principal design cores and supplementary design cores.

National and local policy
Market
Viability and key design principles
Specification (concept design)
Community and stakeholder participation (primary consultation)
Detailed design
Second formal consultation and decision making
Manufacture
Quality assurance and compliance
Sell
Post occupancy and learning (Urban Room)

## 10.6 Supplementary design core: National and local policy

Stakeholder workshops, semi-structured interviews and the survey have identified that there is a perception that BfL12 is not supported strongly by government. There is also a perception among local authorities that is reinforced by government and ministerial announcements that housing delivery is a greater priority than issues relating to design quality. A more overt commitment needs to be made by government by explicitly citing BfL12 in the NPPF. This in turn would create a stronger regulatory framework within which the market would be required to operate.

Whilst previous governments were previously considerably more supportive of BfL20, there was a critical disconnect in that the house building industry was considerably less supportive of BfL20 as they are of BfL12. Research by the UDG reinforces these findings (2015). The underlying reason for the industry's lack of support for BfL20 was that it was used by CABE between (dates) to criticise the house building industry. As one house builder remarked,

*"I got the impression that they were politically motivated. I asked which sites they [CABE] had been to and I said to them that they were probably our worst sites... they chose all the ones we wouldn't have taken them to."*

The ethos of BfL12 was different from the start and was designed to involve the industry in shaping what was to become the first edition (Birkbeck and Kruczowski, 2012). Whilst contributors could not change any of the questions (that had been written on the basis of what the (then emerging) NPPF had defined as valid design considerations<sup>172</sup>), they critiqued the way in which questions were phrased, how sub-questions were phrased and the recommendations presented against each question.

Table 30: Supplementary design core summary

<b>Objective</b>	To establish clear design parameters (policy) for new build residential suburban development within which the market will be required to operate.
<b>Preceding design core</b>	None
<b>Subsequent design core</b>	Market

<sup>172</sup> This explains why BfL12 does not require schemes to address issues relating to building performance (covered by Building Regulations), internal space standards (now covered by the nationally prescribed space standards) or modern methods of construction.

Intervention required	Impact of action research
Create a design standard that is aligned to national policy, is supported by the industry and can be used effectively in the local planning process.	<p>BfL12 created, tested and endorsed by the government (Birkbeck and Kruczowski, 2012).          BfL12 Cymru adopted by the Welsh Government (Birkbeck and Kruczowski, 2015).          BfL12 has been adopted by growing number of house builders (more house builders have adopted BfL12 than BfL20).</p>
Further interventions required (identified through the research).	Observations; Recommendations
Embed BfL12 into the National Planning Policy Framework.	Government has consulted on the integration of BfL12 into the National Planning Policy Framework (DCLG, 2017b).
Local authorities embed BfL12 into Local Plans.	Authorities are required to align Local Plans to the National Planning Policy Framework and are likely to follow its lead on BfL12 if it is integrated into an updated NPPF.
Local authorities use BfL12 to structure pre-application discussions and;  justify the design merits or deficiencies of a proposed development	The government's localism agenda seeks to respect local decision making and avoid 'top down' government. Therefore (to date) government has not required local planning authorities to adopt or use BfL12. However, this may change following proposals in the White Paper (DCLG, 2017b).
Sharing good practice	<p>For BfL12 to be effective and for house builders to become increasingly accustomed to its use (and aligning their products and processes to BfL12) government should seek to require local authorities that embed BfL12 into Local Plans to use it as a tool for structuring pre-application discussions.</p> <p>The proposed digital platform will guide local planning authorities and developers through BfL12 considerations; structuring pre-application discussions.</p> <p>Local authorities and house builders will need access to BfL12 training.</p> <p>In place at <a href="http://builtforlifehomes.org">builtforlifehomes.org</a> (developed by Birkbeck and Kruczowski).</p>

House builders to embed BfL12 into corporate policies, key performance indicators (and future targets).

Government to require public land sold for development and grant funded schemes to comply with BfL12.

Barratt/David Wilson, Davidsons, Taylor Wimpey and Redrow have already made progress in this respect.

The need for government to demonstrate place leadership; lead by example.

Ensuring that the government receives good value for public land could be safeguarded by mechanisms such as uplift clauses.

Homes and Communities Agency (to be renamed Homes England in 2018) to require BfL12 compliance a requirement of grant funding.

The involvement of the industry has led to a greater sense of industry buy-in to BfL12 than the previous 20-point version. Prior to the publication of BfL12, Barratt Plc. created a modified version of the questions under what was called 'Q17' (u.d). Since the publication of BfL12, the company has adopted BfL12 as a key performance indicator (Barratt Plc., u.d, 2014, p.26; 2015, 2016). Taylor Wimpey is seeking to embed its BfL12 into its operating procedures, with Redrow Homes developing its own series of placemaking principles that reflect BfL12. In 2017, as part of a process to transform its business, Bovis began work on developing a new range of BfL12 compatible house types.

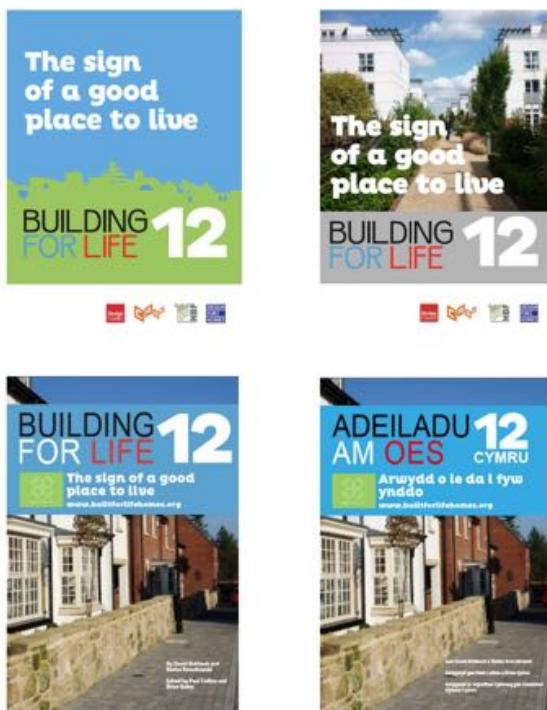


Figure 109: The first three editions of BfL12 (2012, 2014 and 2015). The third edition was published in Welsh following adoption by the Welsh Government.

In February 2017, the government published proposals for consultation within the White Paper, ‘Fixing our broken housing market’. Consultation proposals included “improving the approach to design” (DCLG, 2017, p.29) and amending the NPPF to,

*“recognise the value of using a widely accepted design standard, such as Building for Life, in shaping and assessing basic design principles. These principles are crucial to the success of a scheme, but often get less attention than what a house looks like. They should be reflected in plans and be given sufficient weight in the planning process.”*

DCLG, 2017b, p.30.



Figure 110: **Built for Life™** - the quality mark for developments that meet the requirements of BfL12 has engaged the industry in a way that BfL20 failed to.

*“The White Paper sets out a range of measures to further support neighbourhood planning, and strengthen the ability of communities to influence the design of what gets built in their areas. Many of these involve changes to national planning policy, which we propose to amend so that...policy*

*recognises the value of using a widely accepted design standard, such as Building for Life, and makes clear that this should be reflected in plans and given weight in the planning process."*

DCLG, 2017b, p.86

At the time of thesis submission (January 2018), the government had yet to announce the outcome of the public consultation process and whether it will implement its proposal.

A joint publication by the Design Council Cabe and Department of Communities and Local Government (u.d.) entitled, 'Briefing paper Design for everyone: a guide to the design process' promoted BfL12. However, in its response to the White Paper, the Design Council said:

*"We welcome the government's intention to promote good-quality design by reflecting design standards, such as Building for Life, in plans and by giving weight to them in the planning process. However, there are many design tools for achieving good-quality design. Flexibility is needed to allow local planning authorities to use the right tools for the job, depending on local need and context."*

Design Council, 2017, p.31.

If a strong degree of alignment was achieved creating a consistency of message from national planning policy, feeding into Local Plans and critically into a planning process – BfL12 could begin to start influencing the market conditions within which house builders operate.

However, as Carmona et al. argue, regulation is a type of machine that is only as good as those operating it, "*just as markets fail, so do governments. The presumption that 'good' design guidance and control automatically provides 'good' design must therefore be treated with caution and scepticism*" (2004, p.238). Carmona continues, "*whilst public intervention might be seen as an appropriate response to poor place-making, for a variety of reasons the assertion that more intervention will necessarily deliver better design, or the presumption that 'good' design guidance and control will, ipso facto, create good places, should be treated with extreme caution*" (2016, p.717). As such this raises the question as to whether the way in which regulatory design controls are created and applied might be changed and improved.

The research previously identified significant shortcomings in design literacy within CABE's BfL20 Accredited Assessor Network (please refer back to Chapter 5). It is therefore important for the government to recognise that local authorities will need support to develop the skills, knowledge

and confidence to use BfL12 effectively. Equally house builders will need support in understanding and applying BfL12. One potential solution is a currently unfunded proposal by the researcher and Design for Homes to create a cost effective online training tool for house builders and local authorities. Based on face to face training techniques that have been successfully used by the researcher for many years, the training would enable participants to understand the basic principles of urban design. Early discussions have taken place with a university affiliated to Future Learn<sup>173</sup>, the Home Builders Federation and the Department for Communities and Local Government as to how such a programme might be funded.

### **10.7 Design core: Market**

In contrast with the current market place where house builders can be more often than not assured of little robust challenge with respect to issues relating to design quality/BfL12, the strengthening of national and local policy combined with improved design literacy across the public and private sectors will increase the commercial risk to a house builder of non-BfL12 compliance. However, compliance will be further encouraged by the interventions within the subsequent design core.

Table 31: Design core summary.

<b>Objective</b>	A market with clear design parameters for new build residential development. Compliance is a requisite of securing planning consent regardless to which local authority a planning application is submitted.
<b>Preceding design core</b>	National and local policy
<b>Subsequent design core</b>	Viability and key design principles

### **10.8 Supplementary design core: Viability and key design principles**

Substituting existing forms of communication and processes with new technology will have limited effect in addressing the issues discussed in previous sections. The reason being that the input of external stakeholders, in particular local planning authorities (and their statutory and non-statutory consultees) is not timely – missing the stage at which a specification for a site is prepared.

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<sup>173</sup> [www.futurelearn.com](http://www.futurelearn.com). Date accessed 1 August 2017.

Table 32: Supplementary design core summary

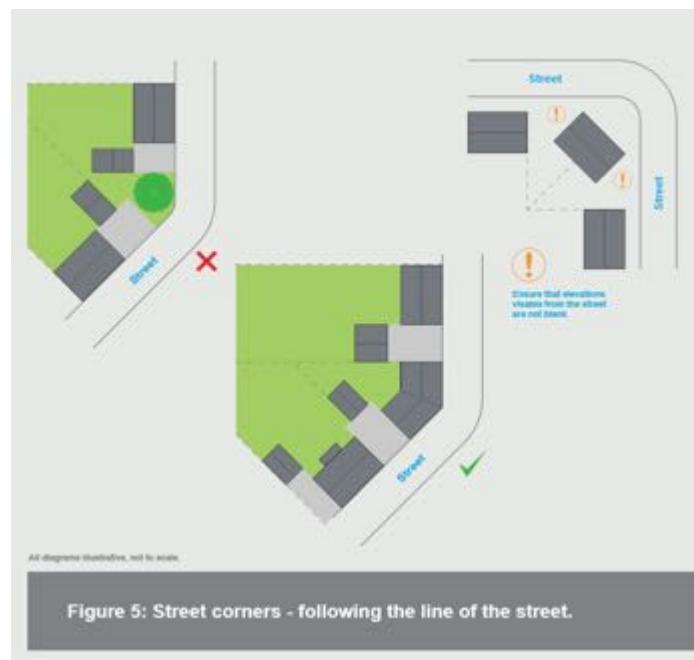
<b>Objective</b>	For local authorities to identify and communicate critical design principles and requirements (structured against BfL12) that will be required to be integrated into development proposals to secure planning consent. These principles and requirements will directly inform the specification and concept design.
<b>Preceding design core</b>	Market
<b>Subsequent design core</b>	Specification (concept design)
<b>Intervention required</b>	<b>Impact of action research</b>
Create a mechanism by which local authorities can quickly and easily communicate design principles and requirements ahead of prospective developers acquiring a proposed development site and agreeing a land value (price).	Through practice insight, workshops, survey and semi-structured interviews a specification has been developed.
<b>Further interventions required (identified through the research).</b>	<b>Observations;</b> <b>Recommendations</b>
Local authorities will require training on basic urban design principles in order to use the platform effectively.	Training could be provided by the software developer/provider.

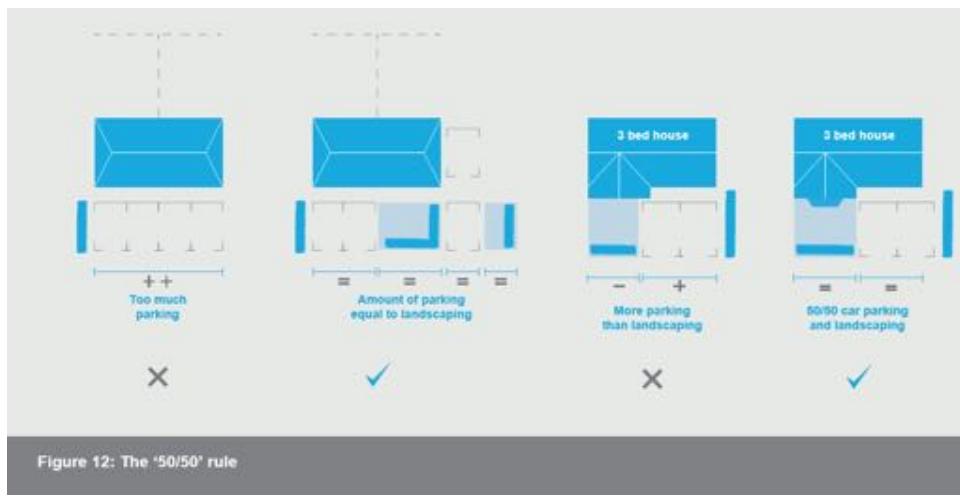
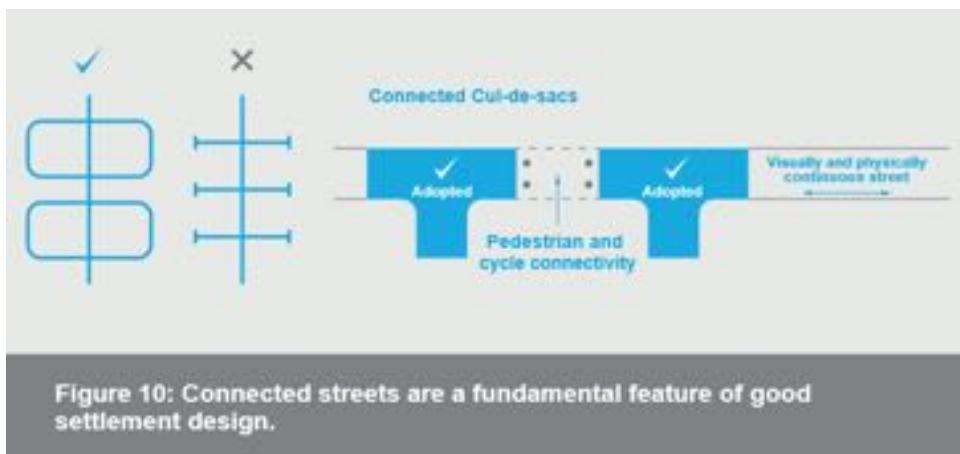
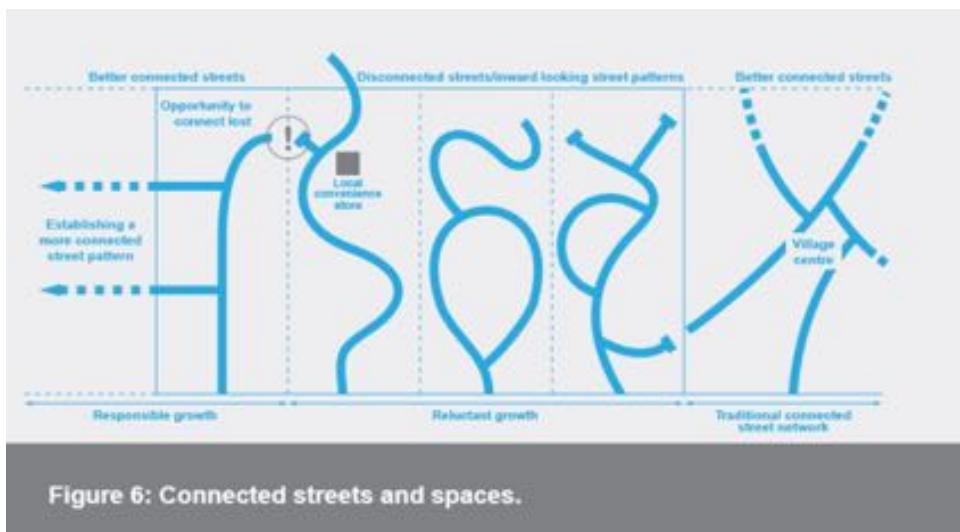
During stakeholder workshops, participants explored how mobile, geo-located and augmented reality technologies might be used in facilitating a more dynamic and creative planning process, improving dialogue between local planning authorities and developers. These ideas have been refined and tested through further workshops with planning officers and unstructured interviews with professionals working within the industry across both the public and private sector.

Through a series of further workshops, these ideas have evolved and been refined to form the specification of a three-dimensional, geo located model – an on line participatory platform - that creates a collaborative workspace and a mechanism by which development proposals can be explored using augmented reality software. A feature of the software is that it will guide local authority planning officers through a series of design considerations (structured against BfL12) whilst also enabling them to better visualise development proposals as they evolve. The software will also be preloaded with basic design principles that will automatically form part of the specification unless deselected by the user. These basic design principles address common failures identified in the researcher's quality audit work. Simple imagery and graphics would reduce the

reliance on written material. These elements would therefore function as a form of design code and as they would be established pre-site purchase, the risk of a local authority being presented with a scheme that does not accord with these principles (please refer back to 9.2.8 Design Codes) would be significantly reduced.

The illustrative graphics below are extracted from NWLDC design policies (written by the researcher) that have been adopted following consultation with house builders as part of a wider public consultation process. Policies are based on the authority's local experiences of good and poor practice; and the extent to which design quality aspirations can be progressed within economic/market, wider policy and political constraints. These policies should not be construed as a lack of understanding on the part of the researcher or the local authority as to what (much) better design could and should mean; with principal design constraints relating to: market and consumer preferences, highways standards (outside of the control and increasingly influence of the planning authority), high levels of private car ownership and the poor quality of public transport infrastructure. Therefore officers have focused on making everyday, ordinary places as good as they can be.





**Figure 111: Graphical representations of design principles** based on the illustrations above would form part of a pre-loaded system specification. The top graphic 'Figure 5 – Street corners' would prevent poor resolution of street corners as seen in Figure 45). NWLDC, 2017, p.19, 32, 37.

The software is therefore designed to enable planning officers to become more competent and more confident in establishing both general and site-specific design requirements for a development site through a combination of default options and easy to understand prompts. The

timing of the exchange of this information between the local planning authority and prospective developers of a site will in turn inform the specification. The effectiveness of prompting planning officers is demonstrated by the action research where it has been shown that whilst *planners often know the answers, they do not know the questions* that give rise to these answers.



Figure 112: **Common site visit appraisal practice** is for council officers to visit a proposed development site and record observations by hand on paper. Observations will then be sent via an email. The proposed system would replace the clipboard, pen and paper with a mobile, geo located tablet devise where the user would work through a series of design (BfL12) based prompts. After completing the survey, the user would 'submit' their responses and these would be shared via the platform with the prospective developer(s).

Whilst many in the urban design profession advocate the need for local planning authorities to employ in house design expertise, the lack of design expertise within authorities was an issue prior to the global credit crisis (DETR, 2001, p.8). Over 15 years since the report of the Urban Design Skills Working Group (DETR, 2001), the skills deficit remains:

*"Almost half of local planning authorities have no dedicated in-house design capacity at all. Of those that do, most have only a single officer often covering design as one part of a larger role. Only around 10% have what might be referred to as an urban design / place-making team (more than two people). There is an increasingly heavy reliance on conservation staff to double up as urban design officers...It appears that non-specialist planning officers are making the key decisions in relation to design schemes of all types, including public realm schemes and the preparation of design guidance."* (Place Alliance and Urban Design Group, 2017, p.1).

The severe cuts local authorities have faced since the 2010 Spending Review (HM Treasury, 2010) have put budgets under considerable strain:

*"Since 2010, the government has reduced its funding for local government in England as part of its plan to reduce the deficit...Government funding for local authorities has fallen by 28% in real terms over the 2010 spending review period. This reduction will reach 37% by 2015-16...Within environmental and regulatory services, spending on community safety fell 47.1% in real terms."*

National Audit Office, 2014, p.5-9.

Whilst there is the possibility that local authority budgets will be replenished, there are no indications that such a possibility is on or even beyond the horizon. As such, it is essential to explore how technology might be used as an 'intelligent' urban design tool that supports planners with little or no design training or knowledge.

By creating a tool that is embedded within a modified planning process (that will enable the right information to be shared with the right people at the right time), through repeated use planning officers will become increasingly competent and confident in considering the design issues associated with a particular development.

The ability of such software to include functionality that enables users to cross reference and identify other web based material, such as, but not limited to published books and journals on urban design theory as well as examples of good practice (namely builtforlifehomes.org and hdawards.org.uk/archive) will enable the tool to help users to enhance their knowledge more readily.

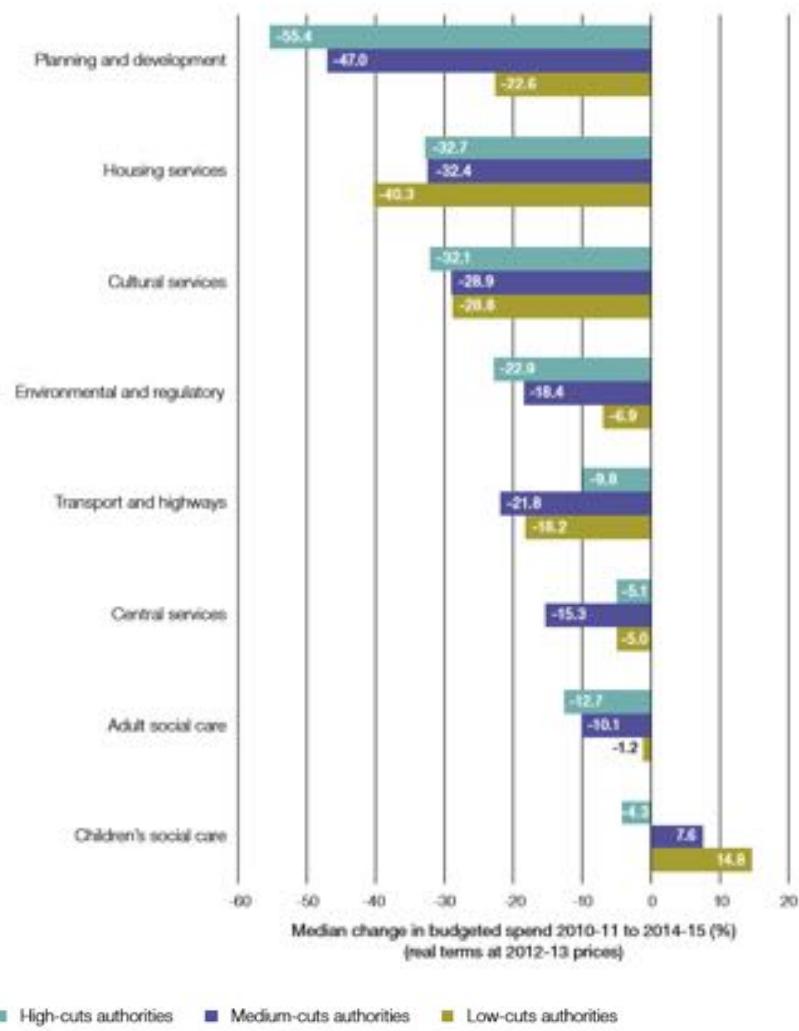
The common and basic failures associated with new build residential developments do not necessarily require an urban designer to identify and resolve – instead they require planners, local councillors and local communities to be guided towards better design decisions.

With the software using BfL12 as the structuring element of the software there is considerably less risk of planners deviating (whether intentionally or not) into more subjective judgement of design quality, misinterpreting design principles or making misguided design judgements.

**Figure 13**

Change in budgeted spend, 2010-11 to 2014-15

High-cuts councils have been less able to protect social care



**Notes**

1 Local authorities with high cuts are those with real-terms reductions in spending power greater than 23.5% (1 standard deviation below the mean) between 2010-11 and 2014-15. Those with low cuts saw a fall in spending power of less than 15.0% (1 standard deviation above the mean).

2 Data are for single tier and county councils only.

Source: National Audit Office analysis of Department of Local Government and Communities data

Figure 113: Changes in budgetary provision 2010-11 to 2014-15. Source: National Audit Office (2014) p. 30.

**Example: Cheshire East Building for Life 12 skills workshop**

Participants (planning officers) were asked to match 40 colour photographs to 40 markers positions on a 1:500 scale layout plan for a completed residential development in Ashby de la Zouch.

The colour photographs were each numbered (1-40) and the markers on plan were given a letter reference (A-Z, then continuing AA, BB etc.). The markers included a directional arrow to show the position of the photographer and the direction in which they were facing when taking the photograph.



Figure 114: **Thinking three-dimensionally.** Exercises demonstrated the difficulty many planning officers have with translating two dimensional plans into three dimensional forms.

The purpose of the exercise was to understand to what extent planning officers can effectively translate two dimensional representations of a place in plan form into a three-dimensional reality.

Compared to similar exercises undertaken with urban designers and house builders, it was evident from both the time it took for groups to complete the exercise and observing the discussions within the groups that planning officers may not be as skilled in creating three dimensional representations of places in their minds.

The exercise has been repeated with other local authorities and house builders and the same issues have been observed.

## 10.9 Design core: Specification (concept design)

With key design principles established during the preceding stage, the developer can utilise the information gathered to create a more informed concept design to support a financial appraisal for a site. The developer may choose to undertake initial design work in plan form as opposed to through a three-dimensional model until they have secured the site.

Table 33: Design core summary

<b>Objective</b>	Developer creates a (three-dimensional model) concept design that responds positively to key design principles. Once complete the developer shares this model via the on line participatory platform.
<b>Preceding design core</b>	Viability and key design principles
<b>Subsequent design core</b>	Community and stakeholder participation (primary consultation)

Once a developer has secured a site, it will create a three-dimensional model of the concept proposals (Sketch Up or equivalent compatible software) that conform to the local authority's specification requirements and upload this to the platform.

### 10.9.1 Supplementary design core: Community and stakeholder participation (primary consultation)

Current planning processes place public consultation at the 'back end' of the design process. By the time a planning application is in the public domain, the specification has been set and thereby consultation is largely tokenistic.

Table 34: Supplementary design core summary

<b>Objective</b>	To enable the local community and other stakeholders to better understand and visualise development proposals and be offered the opportunity to influence detailed design proposals.
<b>Preceding design core</b>	Specification (concept design)
<b>Subsequent design core</b>	Detailed design

<b>Intervention required</b>	<b>Impact of action research</b>
Create a specification for a new on line participatory platform with functionality that allows interactive participation.	Through practice insight, workshops, survey and semi-structured interviews a specification has been developed.

Further interventions required (identified through the research).	Observations; Recommendations
Will require changes to secondary legislation to recognise the process as part of the formal consultation process on planning applications (Town and Country Planning (Development Management Procedure) (England) Order 2015).	With proposals designed to respond to the government's aspirations for a more creative and collaborative planning system, if changes are required to secondary legislation it is anticipated that this would be supported by government.

These proposals would move community participation from the sphere of tokenism and into citizen control – or partnership (Arnstein, 1969).

The system would enable users to set one or multiple areas of geographic interest, with the system sending notifications when a new planning application is their defined area is open for consultation.

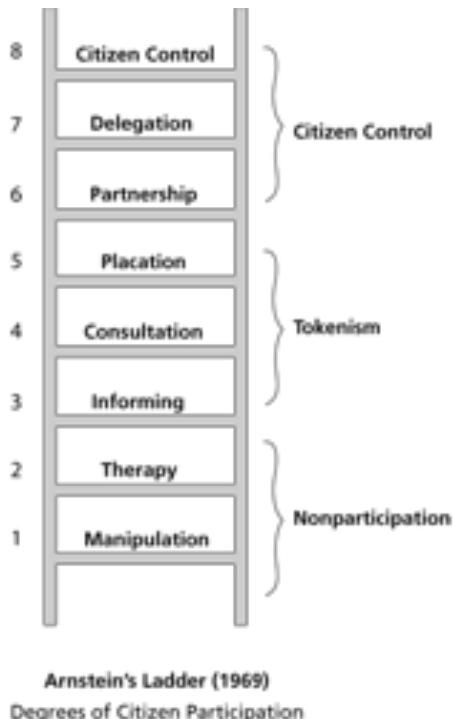


Figure 115: **Arnstein's Ladder**, 1969.

The user would be able to view a model of the development proposals within the on line participatory platform and post comments in the form of 'tags' or 'flags' on the model. Geo-location

functionality would enable users to better understand development proposals through augmented reality, for instance enabling a resident adjacent to a proposed development to better understand what they might 'see' from a particular window within their home.

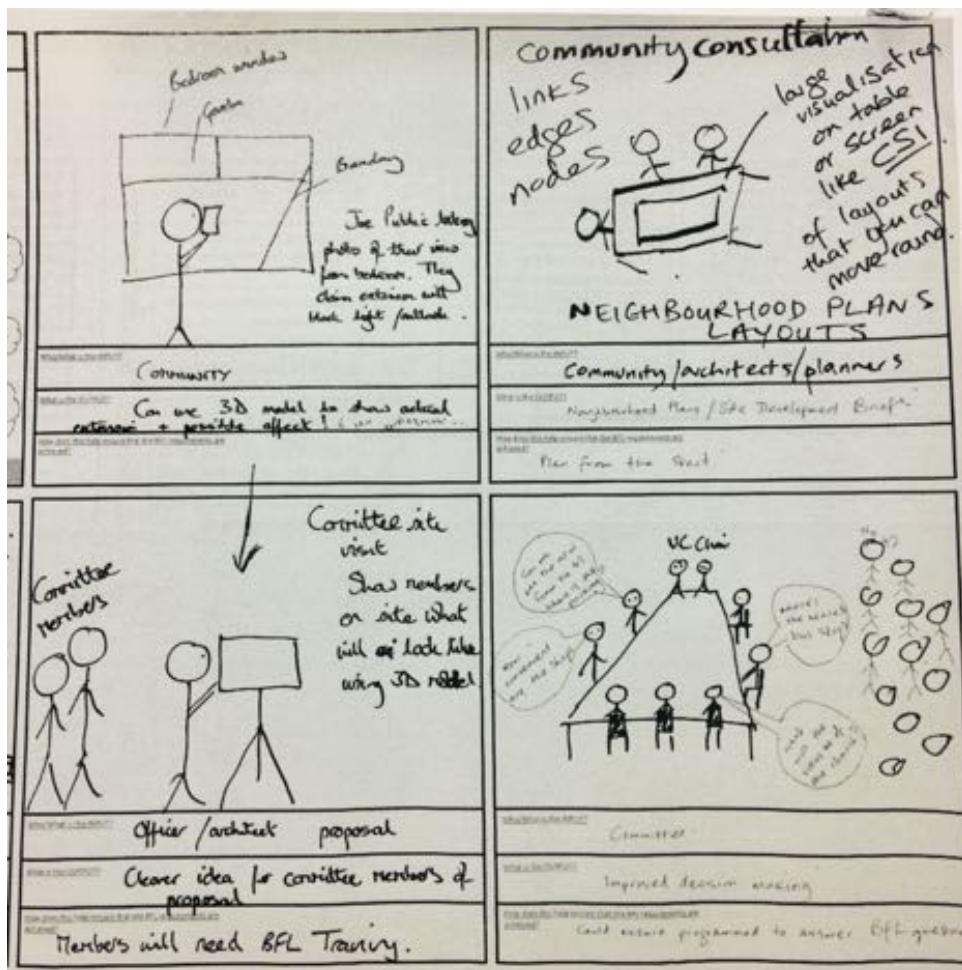


Figure 116: **An extract from a workshop** session demonstrating how one group envisaged how community participation in planning could be transformed using new digital technologies that could utilise augmented reality.

Users could also 'flag' issues relating to local infrastructure, such as concerns about local healthcare facilities or school places. Other users would be able to see previous comments made (subject to moderator approval) and either support the comment, idea or suggestion. Alternatively, other users could suggest and share different ideas. In contrast to the current planning process whereby finalised development proposals are offered for community and stakeholder consultation, this new process will allow those with an interest to influence the detailed design proposals.

This process will be different to the way in which developers typically consult with local communities prior to the submission of a planning application. Typical consultation approaches involve a developer displaying plans of development proposals in a local venue and inviting comments. However, these types of events are typically attracting more senior members of a local community thereby limiting the extent to which a more representative sample of a local community is involved in development proposals. Attendees to such events are usually handed a comments form on which to write their views. These events can often be confrontational and do little to encourage more creative and collaborative participation.

#### **10.10 Design core: Detailed design**

Following the community and stakeholder participation, the developer will consider the various comments, observations and suggestions ('tags') made using the platform to respond accordingly. For example, if the concept model attracted suggestions relating to improving local community infrastructure then a developer might respond by agreeing to invest in local improvements as part of their Section 106 obligations.

Table 35: Design core summary

<b>Objective</b>	Developer creates a (three-dimensional model) concept design that responds positively to community and stakeholder participation.
<b>Preceding design core</b>	Community and stakeholder participation (primary consultation)
<b>Subsequent design core</b>	Second consultation and decision making

After considering the tags, the developer would have their responses reviewed by the local planning authority whose role would be ensure that the developer's responses are reasonable and justified. Detailed design work would then progress with the platform hosting a more detailed model of the development proposals. During the preparation of development proposals, the local authority would be able offer comments on the proposals with the system guiding the user through a series of BfL12 considerations. For instance, the user would be prompted to:

*"Check that public and private spaces are clearly demarcated. Please tag any pieces of land that are not clearly public or private."*

The user would then navigate the model and where necessary 'tag' locations where there might be an issue requiring consideration.

### 10.11 Supplementary design core: Second consultation and decision making

Users would be able to see tags posted during the primary consultation stage and action proposed and agreed with the local planning authority by the developer, i.e. upheld – change made, not upheld – no change made (with reason). This stage of the consultation would not enable those that might have ‘missed’ the primary consultation to offer comments that would have been considered at this primary stage. Therefore, comments will only be accepted from participants that engaged in the primary consultation.

Table 36: **Supplementary design core summary**

<b>Objective</b>	To enable the local community and other stakeholders to review final proposals (on or off site, with on-site utilising augmented reality), undertake formal consultation prior to formal determination of the application.
<b>Preceding design core</b>	Detailed design
<b>Subsequent design core</b>	Manufacture

<b>Intervention required</b>	<b>Impact of action research</b>
Create a specification for a new on line participatory platform with functionality that allows interactive participation.	Through practice insight, workshops, survey and semi-structured interviews a specification has been developed.

<b>Further interventions required (identified through the research).</b>	<b>Observations;</b> <b>Recommendations</b>
Will require changes to secondary legislation to recognise the process as part of the formal consultation process on planning applications (Town and Country Planning (Development Management Procedure) (England) Order 2015).	With proposals designed to respond to the government’s aspirations for a more creative and collaborative planning system, if changes are required to secondary legislation it is anticipated that this would be supported by government.

Users will be permitted to:

- View final proposals.
- Challenge a decision to uphold a comment or suggestion (tag) or other alleged procedural breach. Any such comments will be considered by the Council’s chief planner and/or the

Council's Planning Committee. In this instance, the user would place a further 'tag' on the issue of concern.

- Challenge design changes made to the scheme following primary consultation that result in a material change that subsequently give rise to a cause of objection or concern. In this instance, the user would place a 'tag' on the issue of concern.

In determining the application, the Council would be able to see the evolution of the model, each tag and subsequent changes and/or responses to these tags.

#### **10.12 Design core: Manufacture**

The proposed system offers benefits and applications beyond the planning application and approval process, extending into the manufacture or 'build out' stages of a development.

Table 37: Design core summary

<b>Objective</b>	Ensure that construction staff understand the required output and standard for the completed development and where necessary can identify potential discrepancies early in the construction process.
<b>Preceding design core</b>	Second consultation and decision making
<b>Subsequent design core</b>	Quality assurance and compliance

<b>Intervention required</b>	<b>Impact of action research</b>
Create a specification for a new on line participatory platform with functionality (augmented reality) that allows site and other construction staff to visualise the required standard for the completed development.	Through practice insight, workshops, survey and semi-structured interviews a specification has been developed.
<b>Further interventions required (identified through the research).</b>	<b>Observations;</b> <b>Recommendations</b>
Building Information Modelling (BIM)	This specific intervention has potential synergies with the roll out of BIM within the house building sector.

### 10.13 Supplementary design core: Quality assurance and compliance

The proposed system would also offer benefits and applications for other local planning authority functions, particularly those relating to the identification of discrepancies or deviations from approved plans. These functions are undertaken by planning enforcement officers.

Table 38: **Supplementary design core summary**

<b>Objective</b>	Ensure that Council compliance officers (Enforcement) can identify potential discrepancies early in the construction process.
<b>Preceding design core</b>	Manufacture
<b>Subsequent design core</b>	Sell
<b>Intervention required</b>	<b>Impact of action research</b>
Create a specification for a new on line participatory platform with functionality that allows site and other construction staff to visualise the required standard for the completed development.	Through practice insight, workshops, survey and semi-structured interviews a specification has been developed.
<b>Further interventions required (identified through the research).</b>	<b>Observations;</b> <b>Recommendations</b>
User training.	The ability of compliance officers to check compliance on site with access to a three-dimensional model of completed proposals and detailed drawings will offer significant advantages to the current process whereby officers are required to carry paper files onto site and refer to one or more two dimensional plans. The proposed system offers considerable time and practical advantages.

Any areas of non-compliance can be quickly and easily identified, with the compliance officer ‘tagging’ any issues on the participatory platform. These ‘tags’ can be discussed with the Site Manager face to face, with a digital record of the issue held on the platform (model) with the system sending notifications of the tag(s) to nominated individuals within both the planning authority and the developer.

#### 10.14 Design core: Sell

The proposed system is designed to offer further benefits to house builders, with enhanced rendering of the model enabling it to be used as a sales and marketing tool.

Table 39: Design core summary

<b>Objective</b>	To allow developers to utilise the model created to offer potential home buyers a greater understanding of how a development might look and feel.
<b>Preceding design core</b>	Quality assurance and compliance
<b>Subsequent design core</b>	Post occupancy and learning (Urban Room)



Figure 117: **Interactive digital models** are being increasingly used on higher value developments to illustrate the quality of the street environment. Redrow Homes utilise Futurium Technology at Woodford Garden Village, Cheshire. The model was created exclusively for the purpose of sales and marketing activity and was neither used nor in existence when the development was in the development and planning stages. The model allows users to navigate the site plan, select a plot/home and then view this within the wider street environment. Users can see what a home would look like from the street and they can also look back at the street from the front door.

#### 10.15 Supplementary design core: Post occupancy and learning

The final function of the proposed system is that it could be hosted with a local 'urban room' – an online cloud based resource open to the local community. The model would either be the first model in a local urban room or join existing models. Over time, the urban room could be complemented with models of the existing urban fabric with a local community enabling residents to experience and interact with a three-dimensional representation of their town or

village. A particular function envisaged would be the ability of residents of a new development to share observations relating to the design of their development allowing both the house builder and the developer to develop new knowledge relating to the design performance of new developments. Additional functionality opportunities could allow residents to communicate with public service providers via the platform to raise issues relating to: public realm maintenance, anti-social behaviour and matters relating to waste and recycling collections.

Table 40: **Supplementary design core summary.**

<b>Objective</b>	Broaden the value of the model created to allow communities to incrementally build their own Urban Rooms – three dimensional representations of their village or town. Urban Rooms will offer the opportunity for the community to engage with each other and other stakeholders.
<b>Preceding design core</b>	Sell
<b>Subsequent design core</b>	None

<b>Intervention required</b>	<b>Impact of action research</b>
Create a specification for a new on line participatory platform with functionality that enables a local resident of a new development to share issue relating to the use and functionality of streets and spaces.	Through practice insight, workshops, survey and semi-structured interviews a specification has been developed.

Therefore, the envisaged participatory model has the potential for applications beyond the planning, development, sales and marketing processes.

It is widely recognised that to improve the quality of future products (buildings and places) we need to better understand the user experience – their levels and reasons of satisfaction and dissatisfaction: what is working well, what is not working as well as it might; why and how we might improve in the future. The undertaking of post-occupancy research is limited, with local authorities lacking the resources and house builders lacking the motivation to engage in such activity.

The ability of the occupants of a development to express their perspective could offer an opportunity for house builders to develop a better understanding of their customers and in

particular identify potential innovations that might support more creative ways to differentiate their brand from others. Occupants would be able to offer opinions and ideas about the internal design of new homes, the design of the plot, street and the wider development.

#### **10.16 Summary: overview of system functionality**

Figures 102, 103 and 104 on the following pages illustrate the participatory model in a detailed, diagrammatic form. The digital model draws upon the work of Mueller (2011) - the creation of virtual team spaces and intelligent design tools. The platform can be defined as, “*slightly ‘intelligent’*” (p.21) that will, “*be able to help designers identify information that can be provided with only little additional effort*” (p.21).

Table 41: Summary of system functionality

Theoretical basis <i>Total Design Model - Bfl12</i>	Rationale	Principal method
National and local policy	Improved design regulation linking Bfl12 to national and local policy	National and local policy influences the market
<b>Market</b>		
Viability and key design principles	Enabling local authorities to influence a Bfl12 orientated specification	<b>On line participatory platform (model)</b>
<b>Specification (concept design)</b>		<b>STAGE ONE</b> Restricted
Community and stakeholder participation (primary consultation)	A more meaningful way for communities and stakeholders to participate in the development process	<b>STAGE TWO</b> Public
<b>Detailed design</b>		<b>STAGE THREE</b> Restricted
Second formal consultation and decision making		<b>STAGE FOUR</b> Public
<b>Manufacture</b>	Improved build quality	<b>STAGE FIVE</b> Public
Quality assurance and compliance		
<b>Sell</b>	Connecting house builders and consumers to Bfl12	<b>STAGE SIX</b> Public
Post occupancy and learning (Urban Room)	Extending the life and value of the digital model	

The system will prompt users to input data at various stages of the design process. On first use by the local planning authority, a principal user will be required to enter generic data relating to local design requirements, for instance those relating to waste and recycling storage requirements (see ‘generic design standards’ shown within Figure 102. The system itself will also be pre-loaded with

design requirements such as perimeter block principles that will automatically become part of a site-specific specification unless de-selected by the local authority user.

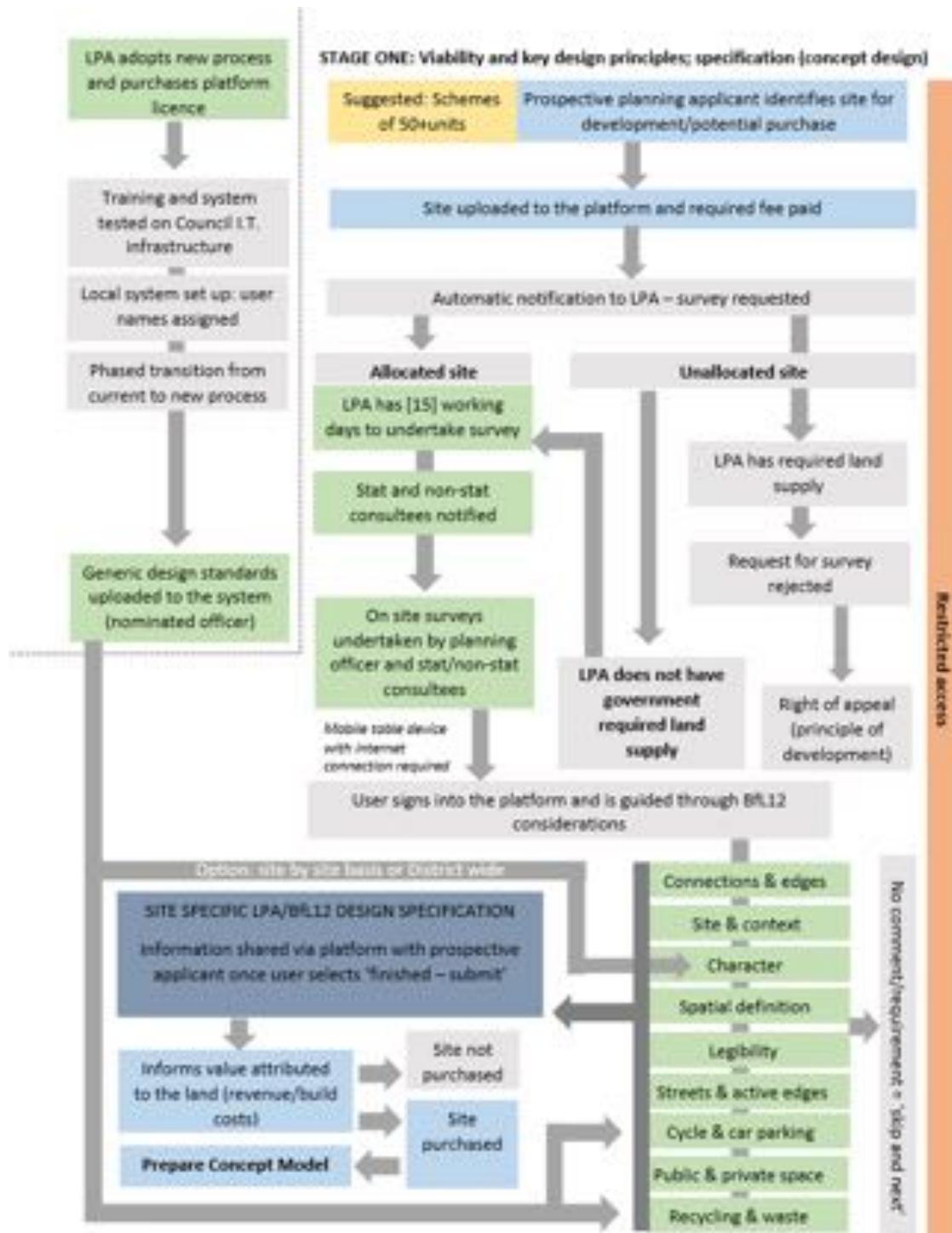


Figure 118: The Total Design Model of BfL12 (1/3)

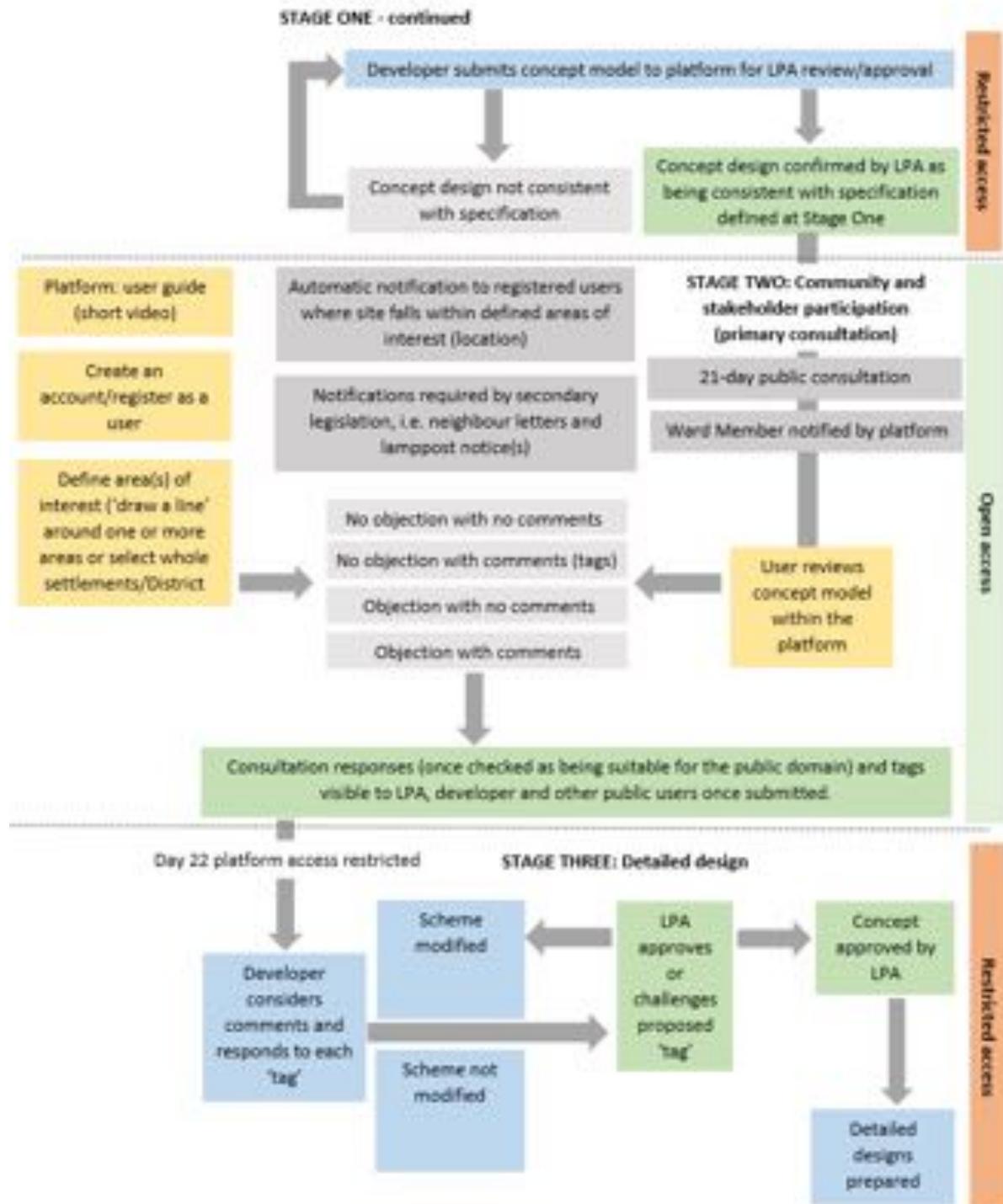


Figure 119: The Total Design Model of BfL12 (2/3)

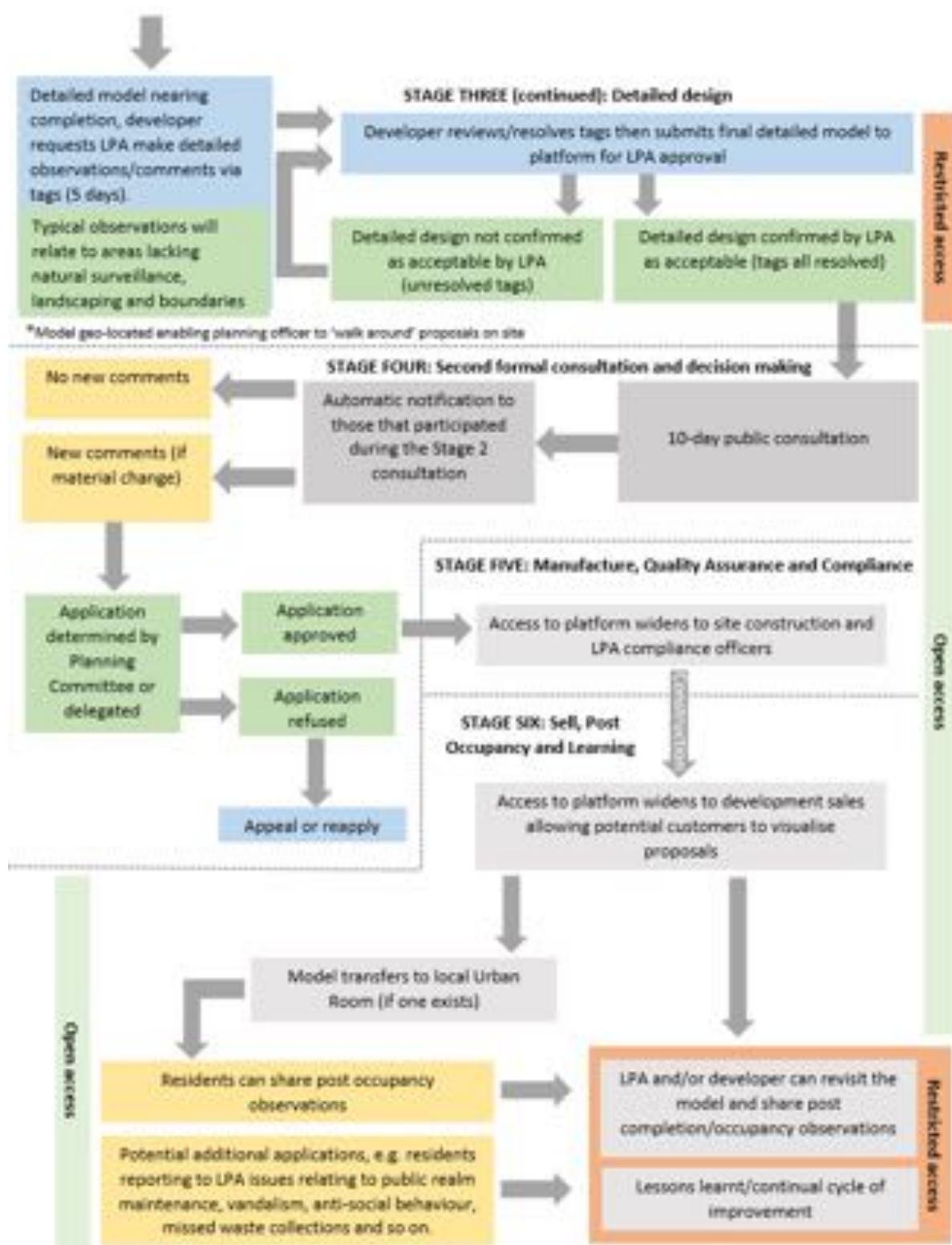


Figure 120: The Total Design Model of BfL12 (3/3)

## 10.18 Conclusions and recommendations

The research represents the first time that the design quality of residential suburban development has been explored, critiqued through the Total Design model (Pugh, 1999). It also presents a new model for town planning and development practice that is based upon a modified version of this model.

The Total Design Model for BfL12 draws together a theoretical model with industry insight to create an online participatory platform that offers a series of benefits:

- Increasing the proportion of new homes and developments built in accordance with the design principles embedded within BfL12 by enabling land buyers to make better informed viability appraisals; safeguarding against excessively fierce land bids that are achieved by ‘squeezing’ out basic design qualities through cost and/or space minimisation or ‘efficiencies’ (please see ‘level the playing field’ below).
- Enabling local planning authorities greater ability to more effectively influence those house builders that are either resistant or impervious to design regulation by offering a mechanism by which authorities might secure meaningful improvements to design quality as opposed to incremental changes.
- Helping to ‘level the playing field’ by ensuring that all house builders that are potentially bidding to purchase a site are required to attribute costs to same design considerations as their competitors. As such, the system supports and encourages those house builders that have engaged with BfL12 but are at risk of either losing land (by factoring in the costs of BfL12 compliance and consequently compromising land acquisitions) or relying on cost/revenue recovery by means of outperforming the local market – a strategy that is not guaranteed and in turn puts industry norm profit margins at risk.
- Supports local planning authorities to make better informed design decisions, particularly where authorities have little or no access to in house design expertise.
- Improves the efficiency of the planning application process by replacing linear methods of communication with a virtual team space approach (Mueller, 2011). Time efficiency savings will be offered to local planning authorities through the system comprising of pre-uploaded design requirements and pre-loaded but locally populated design requirements. The locally populated design requirements comprise of: 1) generic information (for

example, waste and recycling storage) that need only be fed into the system as part of the local set up process; 2) site specific information that the user is guided through on site.

- A more collaborative form of planning encouraging broader community engagement in the development process.
- Improved visualisation of development proposals.
- Easier identification of potential breaches of planning approval (failure to build in accordance with approved plans).
- Enabling potential home purchasers to visualise developments.
- Post occupancy intelligence.

## PART FOUR: THESIS CONCLUSIONS

### 11. Overview of research findings

The research hypothesis was based on a policy led approach to improving residential design quality in new suburban developments. It assumed that the dominant theory (Carmona 2001, CABE 2007a) that robust regulatory control was the principal means by which local authorities could secure well designed developments. The evidence has disproved this hypothesis with the conclusions considerably different to those anticipated.

Policy does not operate in a vacuum – there is no simplistic cause and effect. Whether good, poor or mediocre, the design quality of developments cannot be completely attributed to the planning system: its policies and those that operate the system. Instead, the quality of schemes is a response to market conditions and the organisational values of those creating them – the planning system is one part of a wider system of production.

For the planning system to meaningfully influence the quality of new developments and see the principles of BfL12 more consistently achieved requires fundamental changes within and outside the planning system: changes that better relate to the product design process and where communication is more fluid, dynamic, creative and timely.

If we continue to progress with this dominant theory - a policy led approach to improving design quality (whether defined by BfL12 or some other method) we will simply continue to ‘paper over the cracks’ rather than recognise and address the disconnects that exist between design quality and the way in which the producers (house builders) operate. This approach also fails to recognise the changing nature of the planning system: expectations that local authorities ‘do more with less’, engage more, inspire a creative and collaborative approach to planning, harness emerging technologies, build more homes: faster and to better standards of design.

The purpose of the research was to develop an improved understanding of Building for Life in town planning and development practice, identifying barriers to the application of the principles embedded within it and to offer recommendations:

***To assess to what extent new suburban residential development across the '3Cs region' (Derbyshire, Leicestershire and Nottinghamshire) are consistent with BfL12.***

An audit comprising of part and fully completed developments identified that only a minority are compliant with the requirements of BfL12 with many schemes failing to respond positively to basic design principles: character, responding positively to site and contextual features, spatial definition (perimeter block formation, the relationship between buildings, streets and spaces and the relationship between buildings), legibility (in particular the absence of meaningful street hierarchies on larger scale developments and other simple, legible features), the prioritisation of pedestrians over vehicles, the visual integration of parking within the street environment, public and private spaces with a clear function and ownership, the provision of convenient and discreet waste storage.

Principal causes of design failure are: the limited use of BfL12 as a pre-application and decision-making tool, limited or non-existent local authority design skills, local authority predisposition towards curvilinear street patterns in an attempt to reflect traditional settlement characteristics, the poor quality of some house builders' standard house types, the emphasis on buildings as opposed to landscape as a means by which to create character.

***To critically evaluate the effectiveness of CABE's Accredited BfL20 Assessor Network.***

The network proved to be ineffective in regulating design quality locally on the basis that many assessors had little or no prior design training, knowledge, skills or experience. The network could not compensate for a fundamental gap in local authority skills and expertise.

***To assess the effectiveness of BfL as a form of regulatory design control; critically evaluating the validity of CABE's housing quality recommendations for the East Midlands and by creating and testing a new version of BfL.***

BfL20/12 enabled NWL to substantially improve design quality locally yet it was not wholly effective in preventing non-compliant schemes from securing planning consent. Planning applicants proved adept at making incremental improvements to proposed developments that eroded the authority's reasons for refusal. In many instances, the fixed (or immovable) financial parameters of a development site limited the authority's ability to raise the quality of schemes beyond a mediocre standard. The findings contradict CABE's lead agency theory, i.e. the assertion that BfL compliance

can be achieved through local authorities clearly setting expectations of developers operating within their administrative areas. Nevertheless, BfL12 has attracted broader support across the industry than its predecessor (BfL20).

Barriers relate to a perception amongst local authorities that design quality/BfL12 is not supported by government and design skills both within house builders and local planning authorities. Barriers also exist within the planning system whereby local authorities seek to influence the specification of the product (i.e. the development) at a stage in the development process where the financial parameters of a scheme have been (typically) fixed.

***To propose a new Total Design Model of BfL12 that utilises digital technology that will offer local planning authorities, developers, local communities and other stakeholders a more creative and collaborative way of working.***

To increase the use and effectiveness of BfL12 an alternative model and specification has been justified and proposed (an online participatory platform) that illustrates how the planning system might be modified to improve design quality but also address issues associated with a paper based planning system. Moving to a digital based planning system and utilising game based technologies will assist planning officers in managing case loads more effectively and efficiently, whilst also addressing issues associated with: visualising proposals, communicating concept and detailed design requirements, cross referencing plans, improving public and stakeholder participation and compliance checking. Such a system could offer additional benefits by using the models created in the process of preparing development proposals to support the creation of Urban Rooms.

## 11.1 Thesis impact

Through the process of producing this thesis, the author has identified barriers to BfL20/12 compliance. These barriers have related to the tool itself (which was remodelled as part of the action research): the author published a new version of Building for Life (BfL12) with David Birkbeck. BfL12 has since been adopted by several volume house builders as the definitive measure of residential design quality and is more widely accepted by the industry than its predecessor. In 2017, the government announced proposals to directly reference BfL12 within the NPPF. BfL12 has attracted more positive engagement (2012 to the present) with the industry than its predecessor (see Table 42) at a time where the government's interest has been at its lowest points since 1997. By working with the industry, a greater degree of self-regulation has been achieved whereby many house builders are using BfL12 as a means by which to demonstrate the depth of their corporate social responsibility.

BfL12 has gained a strong degree of industry credibility since 2012. This is most notably demonstrated by:

- The country's largest house builder<sup>174</sup> adopting BfL12, with the company requiring all new developments to meet the standard from 1 January 2014 (Barratt Plc. 2014, p.5, p.26).
- Next Generation<sup>175</sup> measuring BfL12 performance (proportion of developments completed) as part of its corporate social responsibility methodology under Category 14 (Place making). Next Generation is an industry benchmark standard designed to measure the sustainability of house builders. It is managed by JLL, the UK Green Building Council and the HCA.
- House builder interest in and engagement with the Built for Life™ quality mark ([builtforlifehomes.org](http://builtforlifehomes.org)). The initiative was modelled on NWLDC's ourplace™ quality rating scheme that operated from 2008 – 2012.
- Bovis Homes seeking to incorporate BfL12 considerations into a new house type range for launch in 2018.

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<sup>174</sup> Measured by turnover. <http://www.theconstructionindex.co.uk/market-data/top-20-house-builders/2012>. Date accessed 21 January 2018.

<sup>175</sup> <http://nextgeneration-initiative.co.uk/#Benchmarks>. Date accessed 21 January 2018.

- Redrow Homes embedding BfL12 into its development processes through a series of placemaking principles.
- Persimmon Homes introducing basic dual aspect house types.
- An increasing number of local planning authorities referencing BfL12 in Local Plans and using it as a basis for decision making.
- The use of BfL12 by Planning Inspectors as a means of determining the design quality of appealed planning decisions (2013: Persimmon Homes, Knotts Drive, Colne; 2017: The Spittal, Castle Donington).
- Recognition of the value of the tool by government (MHCLG, 2017b), RICS (2016) and Lyons (2014).

Table 42: The relationship between major house builders and BfL20/12

<b>House builder</b>	<b>Relationship with BfL20 (2001-2010)</b>	<b>Relationship with BfL12 (2012-present)</b>
<b>Barratt/David Wilson</b> <b>Ranking:</b> 1. <b>Units (annual output):</b> 14,838. <b>Consented (units):</b> 66,570.	Developed its own version of BfL20 called Q17 that omitted three questions of the tool that it did not support.	The company adopted BfL12 on 1 January 2014. Confirmation that BfL12 compliance can be achieved is required to secure Board approval to acquire new development sites. BfL12 features prominently in annual reports under the 'Great Places' corporate priority. Highest number of Built for Life™ commendations secured.
<b>Persimmon Homes</b> <b>Ranking:</b> 3. <b>Units (annual output):</b> 13,509. <b>Consented (units):</b> 87,720.	None.	The company has introduced basic dual aspect house types.

Taylor Wimpey		
<b>Ranking:</b> 2.	None.	The company secured one of the first Built for Life™ commendations.
<b>Units (annual output):</b> 12,454.		BfL12 acknowledged as part of the company's social responsibility agenda.
<b>Consented (units):</b> 75,136.		A tool has been created to increase the number of developments complying with BfL12. <sup>176</sup>
Bovis		
<b>Ranking:</b> 8.	None.	As part of 'Project Phoenix' the company is seeking to create a range of BfL12 aligned house types.
<b>Units (annual output):</b> 2,231.		
<b>Consented (units):</b> 18,062.		
Countryside		
<b>Ranking:</b> 11.	Secured a number of BfL20 awards.	BfL12 adopted by the Board in 2016 with the authors of BfL12 delivering training across the company in 2016.
<b>Units (annual output):</b> 2,134.		
<b>Consented (units):</b> 13,408.		
Davidsons		
<b>Ranking:</b> n/d.	Partly supportive.	Adopted for all new developments.

<sup>176</sup> <https://www.taylorwimpey.co.uk/about-us/what-we-do/sustainability/social-sustainability>. Date accessed 21 January 2018.

<b>Units (annual output):</b> c.350  <b>Consented (units):</b> n/d.		Secured multiple Built for Life™ commendations.
Redrow  <b>Ranking:</b> 7.  <b>Units (annual output):</b> 3,597.  <b>Consented (units):</b> 16,724.	None.	Placemaking principles have been created that are based on BfL12 to support improved NextGeneration performance.

Table 42 captures the response to BfL12 by major housebuilders. These house builders produced 73% (62,240) of new build housing output in 2015 (the top 25 house builders built 84,950 units)<sup>177</sup>. If one were to exclude Persimmon's output from this percentage (13,509) on the basis that their response to BfL12 is somewhat more modest than other house builders, the remaining house builders produced 57% (based on 48,731 units) of new build housing output, thereby demonstrating the impact of BfL12 on encouraging a shift towards a more commercial-design balanced approach to new developments.

Other barriers to BfL12 compliance relate to:

- **Highways authorities**, with the research strengthening the case for Manual for Streets to be afforded policy as opposed to guidance status.
- **The nature of the planning and development process**, with the research offering recommendations as to how these processes can be remodelled to enable house builders to factor BfL12 compliance into viability appraisals.
- **The range in quality of individual house builders' standard portfolio house types**, with the research identifying that some house builders are more able to respond to BfL12 than

<sup>177</sup> Data source: Green, B. (2015).

others based on the quality of their house types. The research also demonstrates that the use of standard house types does not preclude developments from complying with BfL12.

- **Local authority design knowledge, skills and confidence**, with the research offering recommendations as to how a new digital urban design tool could facilitate a more effective and efficient means of communication between house builders, local authorities and the wider community.

The author has been sharing emerging research findings through teaching (PG Cert Planning, Urban Design and Sustainable Development, Nottingham Trent University 2013-2016), presentations (National Urban Design Conference, Oxford (2012), Homes and Communities Agency Design Seminar, Nottingham (2013), Home Builders Federation Conference, Birmingham (2013), NTU First Graduate School Conference (2014), Guardian on line article (2014), Homes and Communities Agency Design Seminar, Cambridge (Wolfson College) and Sheffield (2015), NTU Second Graduate School Conference (2015), East Midlands Councils (Design Quality: 2016 and Design Viability: 2017) and through consultancy work (for example, Design Council Cabe Built Environment Expert, CABE enabling commissions, Blaby District Council (Lubbesthorpe, the East Midlands largest residential led development), Fitzwilliam Malton Estate (High Malton), Wigan Metropolitan, Nottingham City, Mid Bedfordshire, Derby City, East Lindsey District, North East Derbyshire and Mansfield District Councils).

## **11.2 Areas for future research**

Four key areas are suggested for prioritisation of future research efforts:

- Creating a prototype of the system followed by testing on 'live' planning applications.
- BfL12 and property valuations within the East Midlands market area.
- BfL12 and post occupancy satisfaction.
- The relationship with BfL12 and place attachment.

## **11.3 Principal recommendations: next steps**

The research hypothesis was based on a policy based approach to improving residential design quality in new suburban developments. Based on a dominant theory that robust regulatory control

is the principal means by which local authorities can secure well designed and resist poorly designed developments, the research has disproved the hypothesis with the conclusions far from what was expected.

By further progressing a policy led approach to improving design quality (whether defined by BfL12 or some other method) we will simply continue to ‘paper over the cracks’ rather than recognise and address disconnects between design quality and the way in which volume house builders operate. This policy led approach also fails to recognise the changing nature of the planning system: expectations that local authorities ‘do more with less’, engage more, inspire a creative and collaborative approach to planning, harness emerging technologies, build more homes: faster and to better standards of design.

The principal recommendation of the research is that DCLG (the policy makers) consider the specification presented and explores the restructuring of the planning system at local government level as opposed to ‘layering’ digital technologies over current processes and operations.

Achieving BfL12 requires talented and passionate urban designers working together across the public and private sectors. However, the lack of urban designers within the market place and the reduction of urban design posts within local authorities (and the long-term attractiveness of these roles) demands new thinking as to how design quality might be raised: relying more on planning officers and less on urban designers.

The urban designers that do exist in the public sector must concentrate their efforts on raising the level of basic design skills across local authorities so that planning officers can confidently recognise design quality and deficiencies in new developments.

Therefore, the proposed system will support planning officers in offering *better* design advice and making *better* informed and less subjective design decisions. Relying on non-designers is far from an ideal situation however it is a more realistic proposition than an idealistic one that a) expects local authorities to create urban design posts whilst still facing significant budgetary pressures, and b) assumes that these posts could be filled by suitably qualified individuals where university teaching in urban design has declined in recent years.

Without the implementation of these recommendations it is likely that BfL12 compliance will be largely concentrated within higher value market areas and where house builders are more receptive to design quality considerations.

#### 11.4 Critical reflections

A challenge of the research process has been identifying the area of focus. Within such an under researched topic much effort was expended in pursuing areas of interest and relevance – but beyond a clearly defined focus. This has less reflected an absence of academic discipline and instead an ‘excess’ of academic (and practice) curiosity.

Prior to ‘sitting back’ and reflecting on the process, there has been a temptation to scold oneself at the time and effort expended gathering empirical evidence that has not directly or explicitly been referenced within this research. This process has also exhibited itself in completed and draft but unincorporated chapters – files that remain buried within folders on a hard drive. Again, there has been a temptation to become frustrated at the time and effort expended in writing passionately but for these writings not to be shared with a wider audience.

It is only upon deeper (and calmer) reflection that it has been possible to resolve that this has all been part of the research process, developing a deeper and more holistic understanding of the area of research: exploring and writing to better understand. Time may have been used more efficiently but it has not been wasted.

The outcomes of the research have challenged preconceptions and pose a dilemma for the author who stills works within a local authority planning department.

With the research findings leading to the formulation of a new theory of effective design regulation within new build suburban residential development; and the limited effectiveness of current methods of design regulation where house builders that have little or no motivation to embrace the principles of BfL12 – there is some sense of frustration that one’s efforts are – at times – fruitless.

Yet, this assumes that the *only* positive outcome of a meeting between a developer and a local planning authority is a well-designed development that subsequently secures planning permission. Though this underplays the role of urban designers and the wider urban design movement.

Alongside many of my esteemed local authority peers, I would rather be practicing urban design more than arguing for or making a case for it. Visits to carefully crafted new settlements – notably within Denmark, Sweden, Germany, Switzerland, parts of London and Cambridge and Poundbury, are both inspiring yet also somewhat dispiriting when one is forced back towards the constraints of the ‘day job’.

The ‘day job’ regularly involves making new developments as good as they can be within the structural constraints of the planning system and commercial parameters; recognising that the failure to create more meaningful settlements is more deeply rooted in the nature of modern day planning, development and design. These issues are further compounded by the disconnect between locations for house building, investment (or non-investment) in public transit and the most direct and convenient connections between people and places often being by car.

Frustrations with the day job are compounded by the criticisms of fellow peers who seemingly dismiss the effort, work and knowledge of urban designers working within largely car dependent locations; despite these designers regularly making major improvements to the quality of new developments.

As with other urban designers working in locations with similar characteristics, our ‘starting point’ or our ‘game pieces’ are almost always the polar opposite of what urbanism is about (and what urban designers in more urban locations start with): car dependent instead of walkable and easily accessible by public transport, dispersed as opposed to the mixing of complementary land uses, coarse rather than fine grain, drive throughs and retail parks with residents seemingly content with a life largely based on a retreat into their private realm, car based commuting, disconnected from place and community. These frustrations have resulted in some urban designers informally referring to themselves as ‘settlement’ or ‘suburban’ designers; with the author producing a discussion article for the Urban Design Group’s Journal calling for its content to better reflect the work of designers working in less urban locations; with an alternative option to form a ‘Suburban Design Group’.

Urban design is about more than delivering better designed places - although this is obviously its principal objective. Urban design is also about challenging and questioning established thought processes and ways of working; encouraging others to question, think and design places differently. It is about inspiring others that can equally or more effectively instigate change recognising that urban designers are often influencers and advisors – and not typically in positions of strong influence or power.

Whilst the author’s perception of influence within the local planning process has now been tempered by the findings of empirical research, subsequent analysis, the application and adaptation of a theoretical model – part of the author’s responsibilities to the urban design movement remain as important as they have always done: to question, challenge, encourage and to try and inspire others.

It is nevertheless important to recognise that even within the confines of the current planning system, the researcher can continue to positively influence the quality of new build residential suburban developments by securing both major and minor improvements to planning applications and educating other practitioners working across the public and private sectors – encouraging them to champion the principles of good urban (or settlement) design. Consequently, the researcher will continue to be able to fulfil his professional obligations to make *“better places for people than would otherwise be produced”* (Carmona et al., 2003, p.3). This has and will continue to ground the author of this thesis as he moves his attention away from academic pursuits and back towards the world of practice.

## BIBLIOGRAPHY

- Adams, D. and Tiesdell, S. (2013) *Shaping Places: urban planning, design and development*, Routledge, London.
- Alexander, C. (1978) *A pattern language: towns, buildings and construction*, OUP, USA.
- Allpress, B. (2011) 'Pedagogical frameworks for emergent digital practices in architecture ', in Kocaturk, T. and Medjdoub, B. (ed.) *Distributed intelligence in design*. Chichester: Wiley-Blackwell, pp. 51-70.
- Alcock, A., Bentley, I., McGlynn, S., Murrain, P. and Smith, G. (1985) *Responsive Environments: a manual for designers*, Routledge, London.
- Alpha, D. (u.d.) *Where we live: a guidebook to urban design*, Hampshire.
- Ambrose, P., Barlow, J., Bonsey, A. and Pullin, M. (1996) *The Real Cost of Poor Homes* London, Royal Institution of Chartered Surveyors.
- Arnstein, R. (1969) 'A Ladder of Citizen Participation', *Journal of the American Planning Association*, 35: 4, 216 — 224
- Barratt Development Plc. (u.d.) Q17: Creating great places to live.
- Barratt Developments Plc. (2014) Annual report and accounts.
- Barratt Developments Plc. (2015) *Building Excellence Barratt Developments Plc: Annual Report and Accounts 2015*, Barratt Developments, London.
- Barratt Developments Plc. (2016) *Building sustainable values: Annual Report and Accounts 2016*, Barratt Developments, London.
- Ball, M. (1999) *Chasing a Snail: Innovation and Housebuilding Firms' Strategies*, Housing Studies, Vol 14 Issue 1.
- Barker, K. (2004) *Barker Review of Land Use Planning Final Report – Recommendations*, HMSO, London.
- Barker, P. (2009) *The freedoms of suburbia*, Frances Lincoln, London.
- Barlow, J. (1999) "From craft production to mass customisation: Innovation requirements for the UK housebuilding industry" *Housing Studies* 14 23–42.
- Barrow, M. and Bachan, R. (1997) *The Real Cost of Poor Homes: Footing the Bill* London, Royal Institution of Chartered Surveyors.
- Benwell, M. (1980) *Public participation in planning – a research report*, Centre for Transport Studies, Cranfield Institute of Technology.
- Biddulph, M. (2001) *Home Zones: a planning and design handbook*, Policy Press.
- Biddulph, M. (2003) *Towards successful home zones in the UK*, London, Routledge.
- Biddulph, M. (2006) *Introduction to residential layout*, London, Routledge.

- Birkbeck, D. and Kruczowski, S., Collins. P (ed.) (2012) *Building for Life 12: the sign of a good place to live*, Nottingham Trent University.
- Birkbeck, D. and Kruczowski, S., Collins. P (ed.) (2014) *Building for Life 12: the sign of a good place to live*, Nottingham Trent University.
- Birkbeck, D. and Kruczowski, S. (2015) *Building for Life 12: the sign of a good place to live*, Nottingham Trent University.
- Birkbeck, D. and Kruczowski, S. Collins. P (ed.) (2015) *Adeliladu am Oes 12 Cymru: Arwydd o le da I fyw yn ddo*, Welsh Government.
- Bizjak, I. (2012) The effectiveness of crowdsourcing public participation in a planning context, First Monday 2012, Vol.17 (12).
- Blake, R. and Golland, A. (2004) 'Site appraisal and residential estate layout' in Golland, A and Blake, R. eds. *Housing development theory, process and practice*, Routledge, London.
- Bonaiuto, M., Aiello, A., Perugini, M., Bonnes, M. and Ercolani, A., (1996) Multi-Dimensional Perception of Residential Environment Quality and Neighbourhood Attachment Journal of Environmental Psychology Volume 19, No. 4, December 1999, p.331-351.
- Booth, R., Shutt, R. Harris, K., Williams, D. and Woodhouse, R. (2013) *Bournville through time*, Amberley, Gloucestershire.
- Bowling, A., Banister, D., Sutton, S., and Evans, O. (2001) *Older Peoples' Models of Quality of Life and its enhancement* London, University College London.
- Brabham, D. (2009) Crowdsourcing the public participation process for planning projects. *Planning Theory*, 8 (3), 242-262.
- Brand, K. (2009) *The Park Estate*, Nottingham.
- Building Research Establishment (1998) *Site Layout Planning to Improve Solar Access* Watford, BRE.
- Building Research Establishment (1999) *An Assessment of the Police's Secured by Design Project* Watford, BRE.
- Brody,S.D.,Godschalk,D.R. and Burby,R.J. (2003) 'Mandating Citizen Participation in Plan Making: Six Strategic Planning Choices', *Journal of the American Planning Association* 69(3): 245–64.
- Brown, G., Yeong, S., and Chin, W. (2013) Assessing the effectiveness of public participation in neighbourhood planning, *Planning Practice and Research*, Vol. 28 (5), p.563-588.
- Building and Social Housing Foundation (2009) *The future of housing: rethinking the UK housing system for the twenty-first century*, Coalville.
- Building and Social Housing Foundation (2010) *Abolition of Regional Spatial Strategies: Rapid Impact Assessment for the Midlands and North of England*, Coalville.

Building and Social Housing Foundation (2011) Self-help housing: supporting locally driven housing solutions, Coalville.

CABE (u.d.) CABE response to the Office of Fair Trading's study into the UK house building industry, London.

CABE, Home Builders Federation and The Civic Trust (2001), Building for Life Quality, London. CABE (2001) A bibliography of design value, London.

CABE (2001a) Urban design skills working group: report to the Minister for Housing, Planning and Regeneration, London.

CABE (2002) Better civic buildings and spaces, London.

CABE (2002a) The value of good design: how buildings and spaces create economic and social value, London.

CABE (2002b) Building for Life: Choose a home, choose a way of life, London.

CABE (2002c) Building for Life. Providing the quality homes we need: ten ways for the government to help, London.

CABE (2003) Protecting design quality in planning, London.

CABE (2003a) the value of housing design and layout, London.

CABE (2003b) A commitment to quality from housebuilders: Building for Life, London.

CABE (2004) Housing Audit: South East and East of England, London.

CABE (2004a) Creating successful masterplans, London.

CABE (2004b) Design Reviewed Urban Housing, London.

CABE (2005) Winning housing designs, London.

CABE (2005a) Design Reviewed: Issue 2, London.

CABE (2005b) Housing Audit: North East, North West, Yorkshire and Humber, London.

CABE (2005c) Whose place is it anyway: CABE annual report and accounts 2004/5, London.

CABE (2005d) Delivering great places to live: 20 questions you need to answer, London.

CABE (2005e) Building for Life standard: a better place to live, London.

CABE (2006) Design and Access Statements: how to read, write and use them, London

CABE (2007) Briefing: this way to better streets. Ten case studies on improving street design, London.

CABE (2007a) Housing Audit: East Midlands, West Midlands and South West, London.

CABE (2008) Delivering great places to live: 20 questions you need to answer, London.

CABE (2008a) Good design: the fundamentals London.

- CABE (2008b) Evaluating housing proposals step by step, London.
- CABE and The Housing Corporation (2008d) Achieving Building for Life, London.
- CABE (2009) Summary: this way to better residential streets, London.
- CABE (2010) Improving the quality of new housing: technical background paper, London.
- CABE (2010a) Ordinary Places, London.
- CABE (2010b) Housing standards: evidence and research. Space standards: the benefits
- CABE (2010c) Simpler and better: housing design in everyone's interests, London.
- CABE (2010d) A vintage year for housing, London.
- CABE (2010e) Mapping existing housing standards, London.
- Calcutt, J. (2007) The Calcutt Review Review of Housebuilding Delivery, HMSO, London.
- Carmona, M. (2001) Housing design quality: through policy, guidance and review, London, E & FN Spon.
- Carmona, M., Punter, J. and Chapman, D. (2002) From design policy to design quality, Thomas Telford, London.
- Carmona, M., Heath, T., Oc, T. and Tiesdell, S. (2004) Public places urban spaces: the dimensions of urban design, Architectural Press, Oxford.
- Carmona, M. (2015a) Place quality – a 2020 call to action, Town and Country Planning, May 2015, 252-255.
- Carmona, M. (2015b) Building houses or building places? Town and Country Planning, August 2015, 360-363.
- Carmona, M. (2015c) Planning – the clue is the name, Town and Country Planning, November 2015, 525-527.
- Carmona, M. (2016) Building better places – a national call to action, Town and Country Planning, June 2016, 258-263.
- Carmona, M. (2016a) Design review – past, present and future, Town and Country Planning, September 2016, 386-391.
- Carmona, M. (2017) The forman and informal tools of design governance, Journal of Urban Design, Vol. 22, No.1, 1-36.
- Carmona, M., Magalhaes, C. and Natarajan, L. (2017) Design governance: the CABE experiment, Routledge, London.
- Carmona, M. and Giordano, V. (2017) Design skills in English local authorities, Place Alliance and Urban Design Group, UCL, London.

Carozza, L., Tingdahl, D., Bosché, F. and van Gool, L. (2014) Markerless vision-based augmented reality for urban planning, *Computer-Aided Civil and Infrastructure Engineering*, January 2014, Vol.29(1), 2-17.

Catapult Future Cities (2016) Future of planning: State of the Art Innovations in Digital Planning.

<http://futurecities.catapult.org.uk/wp-content/uploads/2016/12/FCC-FoP-State-of-the-art-innovations-December-2016.pdf>. Last accessed 2 January 2018.

Choy, N. (2013). The many lives of Building for Life: the politics and governance of housing design standards. In *Housing Studies Association*. York: Housing Studies Association.

Cirulisa, A. and Brigmanisb, K. (2013) 3D Outdoor Augmented Reality for Architecture and Urban Planning. *Procedia Computer Science* 25, 71 – 79.

Coleman, A. (1985) Utopia on Trial: Vision and Reality in Planned Housing London, Hilary Shipman.

Collins, P.R. and Blake, R., 2004. Planning and land acquisition. In: A. Golland and R. Blake, eds., *Housing development: theory, process and practice*. London: Routledge, pp. 123-163.

Conroy, M. (2011) Influences on public participation in watershed planning: why it is still a struggle? *Planning Practice and Research*, Vol. 26 (4), 467-479.

Cooper Marcus C., (1982) The Aesthetics of Family Housing: The Residents' Viewpoint *Landscape Research*, Vol.7, No.3, pp9-13.

Cowan, R. (2011) Plandemonium: The best of Cowan's cartoons on planning and urban design, Streetwise Press Limited, London.

Crookston, M. (2014) Garden suburbs of tomorrow? A new future for the cottage estates, Routledge, London.

Crosby, T. (1965) *Architecture: City sense*, Reinhold Publishing, New York.

Crouch, S., Shatfoe, H. and Fleming, R. (1999) *Design for secure residential environments*, Longman, Berkshire.

Cullingworth, J.B. (1989) *Town and Country Planning in Britain* (10<sup>th</sup> Edition), Unwin Hyman Limited, London.

Cullen, G. (1961) *The concise townscape*, Architectural Press, Oxford.

Darley, G. (2007) *Villages of vision*, Five Leaves, Nottingham.

Davidsons Group (2008) *Design and Access Statement: Station Road*, Melbourne.

Department of Communities and Local Government (2007) *Homes for the future: more affordable, more sustainable*, HMSO, London.

Department of Communities and Local Government (2008) *Regional Spatial Strategy and Local Development Framework: Core Output Indicators – Update 2/2008*, HMSO, London.

Department of Communities and Local Government (2011) *Planning Policy Statement 3 (PPS3) Housing*, HMSO, London.

- Department of Communities and Local Government (2012a) National Planning Policy Framework, HMSO.
- Department of Communities and Local Government (2012b) External Review of Government Planning Practice Guidance, HMSO.
- Department of Communities and Local Government (2013) Town and Country Planning Act 1990 (Section 78) Appeal by Persimmon Homes Lancashire, Knotts Drive, Colne, Lancashire, London.
- Department of Communities and Local Government (2015) Technical housing standards – nationally described space standard, HMSO.
- Department of Communities and Local Government (2017) Planning Delivery Fund: Supporting joint working, high quality design and innovation.
- Department of Communities and Local Government (2017a) Planning Delivery Fund: supporting joint working, high quality design and innovation, HMSO.
- Department of Communities and Local Government (2017b) Fixing our broken housing market, HMSO.
- Department of the Environment (1992) Planning Policy Guidance (PPG1): General Policy and Principles, HMSO, London.
- Department of the Environment (1994) Quality in town and country, HMSO, London.
- Department of the Environment (1997) Planning Policy Guidance (PPG1): General Policy and Principles, HMSO, London.
- Department of the Environment, Transport and the Regions/Commission for Architecture and the Built Environment (2000) By design: urban design in the planning system: towards better practice, HMSO, London.
- Department of the Environment, Transport and the Regions (1998) Places, Streets and Movement: A companion guide to Design Bulletin 32: Residential roads and footpaths, HMSO, London.
- Department of Transport, Local Government and the Regions/Commission for Architecture and the Built Environment (2001) By design: better places to live, London, Thomas Telford.
- Department of the Environment, Transport and the Regions (2000) Planning Policy Guidance Note 3: Housing, HMSO, London.
- Department of the Environment, Transport and Regions (2000a) Encouraging walking: advice to local authorities, HMSO, London.
- Department for Transport, Local Government and the Regions (2001) Urban skills working group: Report to the Minister for Housing, Planning and Regeneration, DTLR, HMSO, London.
- Department for Transport, Local Government and the Regions and CABE (2001a) Better places to live – summary: companion guide to PPG3, HMSO, London.
- Department for Transport, Local Government and the Regions and CABE (2001b) Better places to live: a companion guide to PPG3, HMSO, London.

Department of Transport/Department of Communities and Local Government (2007) Manual for Streets, HMSO, London.

Department of Transport/Department of Communities and Local Government (2007a) Manual for Streets 2, HMSO, London.

Design Council (2017) Designing a future economy: developing design skills for productivity and innovation, London.

Design Council (2011) The Bishop Review: The Future of Design in the Built Environment, London.

Design Council (2017) Purposeful design for homes and communities Design Council response to the Housing White Paper, London.

Dominguez, E., Escudero, D., Riera, A. and Degado, I. (2017) Educating Urban Designers Using Augmented reality and mobile learning technologies, Revista Iberoamericana de Educacion a Distancia, Vol 20 (2) p.141-165.

Duany, A., Plater-Zyberk, E. and Speck, J. (2001) *Suburban Nation*. Farrar, Straus and Giroux, New York.

Duany, A., Speck, J. and Lydon, M. (2010) The Smart Growth Manual: New Urbanism in American Communities, McGraw-Hill Education.

Dunham-Jones, E. and Williamson, J. (2011) *Retrofitting Suburbia, Updated Edition*, Wiley, London.

Edwards, D. and Pigram, R. (1986) London's underground suburbs, Bloomsbury, London.

Ely, A (2004) The Home Buyer's Guide – what to look and ask for when buying a new home, Black Dog Publishing, London.

English Partnerships and the Housing Corporation (2000) Urban Design Compendium 1, London.

English Partnerships (2006) Car parking: what works where, London.

English Partnerships (2007) Policy guidance: English Partnerships' Quality Standards Delivering Quality Places, London.

Eppli, M. and Tu, C. (1999) Valuing the New Urbanism Washington D.C., Urban Land Institute.

Essex Planning Officers Association (1997) The Essex Design Guide: for residential and mixed use areas, Colchester, County Council of Essex

Forrest, R., Kennett, T. and Leather, P. (1997) Home Owners on New Estates in the 1990s Bristol, The Policy Press.

Franklin, B. (2006), Housing Transformations, Routledge, Oxon.

Gallagher, L. (2014) The End of the Suburbs: Where the American Dream is Moving, Penguin, New York.

Gehl, J. (1971) Life between buildings: using public space, Island Press, Washington D.C.

Gehl (2010) Cities for people, Island Press, Washington D.C.

Girling, R. (2005) Rubbish!, Transworld, London.

- Government Office for the East Midlands (2009) East Midlands Regional Plan, TSO: London.
- Golland, A and Blake, R. eds. (2004) Housing Development Routledge: London.
- Gordon, E. and Manosevitch, E. (2010) Augmented deliberation: Merging physical and virtual interaction to engage communities in urban planning. *new media & society* 13(1) 75–95.
- Gordon, E. and Manosevitch, E. (2011) Augmented deliberation: Merging physical and virtual interaction to engage communities in urban planning. *New Media & Society*, 0, 2011, Vol.13(1), pp.75-95, *Computers in Human Behavior*, February 2016, Vol.55, pp.504-518.
- Greed, C. (1996) Introducing town planning, Longman, London.
- Grohmann, M. and Tessman, O. (2011) 'Geometry, topology, materiality: the structural parameters in a collaborative design approach ', in Kocaturk, T. and Medjdoub, B. (ed.) *Distributed intelligence in design*. Chichester: Wiley-Blackwell, pp. 252-259.
- Hall, P. (1996) Cities of tomorrow, Blackwell, Oxford.
- Hall, P. (2014) Good cities, better lives: how Europe discovered the lost art of urbanism, Routledge, London.
- Hanna, S. (2011) 'Digital tools for creative hinges', in Kocaturk, T. and Medjdoub, B. (ed.) *Distributed intelligence in design*. Chichester: Wiley-Blackwell, pp. 106-122.
- Hanzl, M. (2007) Information technology as a tool for public participation in urban planning: a review of experiments and potentials *Design Studies*, 2007, Vol.28(3), pp.289-307.
- Hardy, D. (2006) Poundbury: the town that Charles built, TCPA, London.
- Hayward, R., Samuels, I. and Thomas, L. (2015) Comparing house builders' approaches to urban design: a pilot study to understand its role and value to the industry, Urban Design Group, London.
- Herzog, L. (2015) Global Suburbs: Urban Sprawl from the Rio Grande to Rio de Janeiro, Routledge, London.
- HM Government (2009) World class places: the Government's strategy for improving quality of place, HMSO, London.
- HM Government (2015) The Town and Country Planning (Development Management Procedure) (England) Order 2015.
- HM Treasury (2010) Spending Review 2010, HMSO, London.  
[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/203826/Spending\\_review\\_2010.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/203826/Spending_review_2010.pdf) Last accessed 2 January 2018.
- HM Treasury (2016) Budget 2016, HMSO, London.  
[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/508193/HMT\\_Budget\\_2016\\_Web\\_Accessible.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/508193/HMT_Budget_2016_Web_Accessible.pdf) Last accessed 2 January 2018.

Homes and Communities Agency (2009) Kickstart Housing Programme: HCA Review of Round 1, London.

[http://webarchive.nationalarchives.gov.uk/20110404223120/http://www.homesandcommunities.co.uk/public/documents/Kickstart\\_Round%20\\_1\\_Review.pdf](http://webarchive.nationalarchives.gov.uk/20110404223120/http://www.homesandcommunities.co.uk/public/documents/Kickstart_Round%20_1_Review.pdf) Last accessed 2 January 2018.

Homes and Communities Agency (2010) Kickstart Housing Delivery Programme: HCA Review of Round 2, London.

<http://webarchive.nationalarchives.gov.uk/20110404223059/http://www.homesandcommunities.co.uk/public/documents/Review-of-Kickstart-Round-2.pdf> Last accessed 2 January 2018.

Homes and Communities Agency (2011) Get Britain Building Programme Prospectus, London.

Homes and Communities Agency (2011) Get Britain Building Programme Prospectus: Round Two, London.

Homes and Communities Agency (2012) Get Britain Building Programme Prospectus, London.

Homes and Communities Agency (2017) 2017 to 2018: Land Development and Disposal Plan,

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/639915/FINAL\\_June\\_2017\\_LDDP.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/639915/FINAL_June_2017_LDDP.pdf) Last accessed 2 January 2018.

Hooper, A. & Nicol, C. (1999) 'The design and planning of residential development: standard house types in the speculative housebuilding industry', *Environment and Planning B: Planning and Design*, 26, 793–80.

Hooper, A. & Nicol, C. (2000) 'Design practice and volume production in speculative housebuilding', *Construction Management and Economics*, 18, 295–310

Housing Corporation (2007) Design and quality strategy, London.

HRH Prince of Wales, (1989) *A Vision of Britain: A Personal View of Architecture*, Doubleday, London.

Hubbard, E. and Shippobottom, M. (2007) *A guide to Port Sunlight Village*, Liverpool University Press, Liverpool.

Jackson, A. (2006) *London's Metroland, Capital History*, London.

Joseph Rowntree Foundation (2002) *Consumer choice in housing*, York Publishing, York.

Katz, P. (1993) *The New Urbanism: Toward an Architecture of Community* McGraw-Hill Education

Kiviniemi, A. (2011) 'The effects of integrated BIM in processes and business models', in Kocaturk, T. and Medjdoub, B. (ed.) *Distributed intelligence in design*. Chichester: Wiley-Blackwell, pp. 125-135.

Knight, A. (2013) Building for Life guidance in planning practice, Centre for Urban and Regional Studies, University of Birmingham.

Kocaturk, T. and Medjdoub, B. (2011) *Distributed intelligence in design*, Chichester: Wiley-Blackwell.

Lawson, B. (2011) 'Of sails and sieves and sticky tape', in Kocaturk, T. and Medjdoub, B. (ed.) *Distributed intelligence in design*. Chichester: Wiley-Blackwell, pp. 3-15.

- Kruczkowski, S. and Martinelli, A. (2015) Quantifying quality. *RICS Land Journal*, 14-16.
- Lane, M. (2005) Public participation in urban planning: a case study for serious on line games, Computers, Environment and Urban Systems (36), p.195-206.
- Lane, M. (2005a) Public participation in planning: an intellectual history, Australian Geographer, Vol.36, No. 3, November 2005, 283-299.
- Leicestershire Constabulary and Leicestershire County Council (u.d.) Crime prevention by planning and design, Leicester.
- Leishman, C. and Warren, F. (2006) Private housing design customization through house type substitution, Construction Management and Economics, Volume 24, 2006 - Issue 2, 149-158.
- Leopold, E. and Bishop, D. (1983a) 'Design philosophy and practice in speculative housebuilding: Part 1', Construction Management and Economics, 1, 119–144.
- Leopold, E. and Bishop, D. (1983b) 'Design philosophy and practice in speculative housebuilding: Part 2', Construction Management and Economics, 1, 233–268.
- Levitt, D (2010) The Housing design handbook: a guide to good practice, Routledge, London.
- Lim, R., Novo de Azevedo, L. and Cooper, J. (2015) Embracing the conceptual shift on new ways of experiencing the city and learning urban design: pedagogical methods and digital technologies, Journal of Urban Design, 21:5, 638-660.
- Lock, D. (2016) 'Housing, housing, housing – the agenda for 2017', Town and Country Planning, December 2016, 507-508.
- Lynch, K (1960) The image of the city, MIT Press, Mass.
- Lyons, M. (2014) The Lyons Housing Review: Mobilising across the nation to build the homes our children need, Digital Creative Services Limited, London.
- McGlynn, S. and Murrain, P. (1994) The politics of urban design, Planning Practice and Research, Volume 9, Issue 3.
- McGlynn, S. and Samuels, I. (2000) The funnel, the sieve and the template: towards an operational morphology. *Urban Morphology*, 4 (2), 79-89.
- Meeda, B, Parkyn, N. and Walton, D.S. (2016) Graphics for urban design, ICE Publishing, London.
- Merschbrock, C. and Munkvold, B. (2012) A Research Review on Building Information Modeling in Construction—An Area Ripe for I.S. Research. Communications of the Association for Information Systems, Volume 31 Article 10, 207-228.
- Miller, M. (2010) English Garden Cities, English Heritage, Swindon.
- Milton Keynes Development Corporation, n.d Residential Design Feedback, Summary Milton Keynes, Milton Keynes Development Corporation.
- Ministry of Housing, Communities and Local Government (2018) National Planning Policy Framework: draft text for consultation, London.

- Montgomery, C. (2013) Happy city: transforming our lives through urban design, Penguin, London.
- Mueller, V. (2011) 'Distributed perspectives for intelligent conceptual design', in Kocaturk, T. and Medjdoub, B. (ed.) Distributed intelligence in design. Chichester: Wiley-Blackwell, pp. 16-26.
- National Audit Office (2014) The impact of funding reductions on local authorities, London.
- Next Generation (2017) Sustainability benchmark report – future fortified: creating quality homes. London.
- NHBC (2015) Avoiding rubbish design: providing bin storage on new housing developments, London.
- Nicol, C. & Hooper, A. (1999) 'Contemporary change and the housebuilding industry: concentration and standardisation in production', *Housing Studies*, 14, No. 1, 57–76.
- Nicolaides, B. and Wiese, A. (2006) The suburb reader, Routledge, London.
- Nottingham Park Conservation Trust (2007) The Park: A Conservation Plan for the Nottingham Park Estate, Nottingham.
- North West Leicestershire District Council (2002) Local Plan Statement, Coalville.
- North West Leicestershire District Council (2005) Service transformation, Coalville.
- North West Leicestershire District Council (2008) Annual Monitoring Report, Coalville.
- North West Leicestershire District Council (2008) Cabinet: Urban Design Initiative Proposals, Coalville.
- North West Leicestershire District Council (2009) Annual Monitoring Report, Coalville.
- North West Leicestershire District Council (2010) Annual Monitoring Report, Coalville.
- North West Leicestershire District Council (2011) Annual Monitoring Report, Coalville.
- North West Leicestershire District Council (2012) Annual Monitoring Report, Coalville.
- North West Leicestershire District Council (2012) Annual Monitoring Report, Coalville.
- North West Leicestershire District Council (2017) Good design for North West Leicestershire. Supplementary planning document for new developments, Coalville.
- North West Leicestershire District Council (2017) Local Plan, Coalville.
- Office of the Deputy Prime Minister (2005) How to improve residential areas, HMSO, London.
- Office of the Deputy Prime Minister (2005a) Planning Policy Statement 1: Delivering sustainable development, HMSO, London.
- Olatunji, O., Sher W. and Gu, N. (2010) Building information modelling and quantity surveying practice. *Emirates Journal for Engineering Research*, 15(1), 67-70.
- OPUN (u.d) East Midlands Design Review Panel, Nottingham.
- Owen, B. (1999) Suburbia.

- Paterson, E. (2012) Urban design and the national planning policy framework for England, *Urban Design International* Vol. 17, 2, 144–155.
- Persimmon Plc. (2016) Growth and capital discipline through the cycle: Annual Report 2016, York.
- Pidgley, T. (2015) Changing the culture of planning, *Town and Country Planning* January 2015, 45-47.
- Planning Inspectorate (2016) Appeal decision: APP/E2340/W/15/3035915, Land to the north of The Meadows, Colne, BB8 7ET, Bristol.
- Poplin, A. (2012) Playful public participation in urban planning: A case study for online serious games, *Computers, Environment and Urban Systems*, Elsevier, Volume 36, Issue 3, May 2012, 195-206.
- Popular Housing Forum, 1998 Kerb Appeal Winchester, The Popular Housing Forum.
- Potts, R., Jacka, L. Yee, L. (2017) Can we ‘Catch ‘em All’? An exploration of the nexus between augmented reality games, urban planning and urban design. *Journal of Urban Design*, Volume 22 (6), p.866-880.
- Place Alliance and Urban Design Group (2017) Design skills in English local authorities, UCL, London.
- Prince’s Foundation for the Built Environment (2007) Valuing Sustainable Urbanism, London.
- Pugh, S. (1999) Total Design: Integrated Methods for Successful Product Engineering, Prentice Hall, London.
- RAC Foundation (2012) Car ownership rates per local authority in England and Wales, [https://www.racfoundation.org/assets/rac\\_foundation/content/downloadables/car%20ownership%20rates%20by%20local%20authority%20-%20december%202012.pdf](https://www.racfoundation.org/assets/rac_foundation/content/downloadables/car%20ownership%20rates%20by%20local%20authority%20-%20december%202012.pdf)
- Redondoa, E., Fonsecab, D., Sanchez, A and Navarroa, I. (2013) New strategies using handheld augmented reality and mobile learning-teaching methodologies, in architecture and building engineering degrees. *Procedia Computer Science* 25, p. 52–61.
- RIBA (2009) Improving housing quality: unlocking the market, London.
- RIBA (2012) The future homes commission: Building the homes and communities Britain needs, London.
- RICS (2008) RICS Valuation Standards, London.
- RICS (2012) Financial Viability in Planning, RICS, London.
- RICS (2016) Placemaking and Value, RICS, London.
- Roskrow, B. (undated) Continuing the Wilson Dynasty and Davidsons, [http://www.house-builder.co.uk/issues/index.php?id=7034&magazine\\_section=&orig=default&page=article](http://www.house-builder.co.uk/issues/index.php?id=7034&magazine_section=&orig=default&page=article) Last accessed 2 January 2018.
- Rutherford, S. (2014) Garden Cities, Shire Publications, Oxford.
- Rydin, Y. et al. (2015) Five radical ideas for a better planning system, University College London.

Sanders, M. (2014) A case study into the urban expansion of Castleton Park, Church Gresley, South Derbyshire, Nottingham Trent University.

Savills, (2016) Spotlight Development: The Value of Placemaking, London.

Shrahily, R., Medjdoub., Kashyap, M. and Chalal, M. (2015) Communication framework to support more effective onsite construction monitoring - in: L. Mahdjoubi, L., Brebbia, C. and Laing, R. (eds) Building Information Modelling (BIM) in design, construction and operations. Proceedings of BIM 2015, Bristol, 9 September 2015. WIT Press, pp. 195-203.

Shen, J., Wu, Y. and Liu, H. (2001) Urban planning using augmented reality. *Journal of Urban Planning and Developments*. 118-125.

Simmons, R. (2015) Constraints on evidence-based policy: insights from government practices *Building Research & Information*, 43:4, 407-419.

Skelton, C. (2013) Soft city culture and technology: the Betaville project, Springer-Verlag, New York Inc.

Speck, J. (2013) Walkable City, North Point Press.

Stanley, K. (2016) Buzzability, *Housebuilder*, May 2016, 57-62.

St-Aubin, B., Mostafavi, M., Roche, S. and Dedual, N. (2010) a 3D collaborative geospatial augmented reality system for urban design and planning purposes. *International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, Volume 38 Part 1.

Stern, R., Fishman, D. and Tilove, J. (2013) Paradise Planned: the garden suburb and the modern city, Monacelli Press.

Stewart, J. (2007) Humpty Dumpty on design, *Housebuilder*, November 2007, 22-23.

Town and Country Planning Association (2013) Creating garden cities and suburbs today: a guide for councils, London.

Stubbs, M. (2002) Car parking and residential development: sustainability, design and planning policy, and public perceptions of parking provision, *Journal of Urban Design*, Vol.7, No.2, 213-237.

Sturzaker, J. (2013) Progressive planning and community engagement, *Town and Country Planning*, December 2013, 507-509.

Tippett, J. (2013) Creativity and learning – participatory planning and the co-production of local knowledge in *Town and Country Planning*, October 2013: *Urban and Regional Ecology and Resilience*, p.439-442.

Town and Country Planning Association (2014) New Towns and Garden Cities, lessons for tomorrow: Stage 1: An introduction to the UK's New Towns and Garden Cities, London.

Town and Country Planning Association (2015) Public health in planning: good practice guide, London.

Towers, G. (2005) An introduction to urban housing design: at home in the city, Architectural Press, Oxford.

- Twitchen, C. and Adams, D. (2012) Using web technology to increase levels of public participation in planning, *Town Planning Review*, Nov 2012, Vol. 83 (6), VII-XIII.
- Transport for London and Urban Design London (2017) The design companion for planning and placemaking, RIBA Publishing, London.
- Urban Design Group (1998) Involving local communities in urban design: promoting good practice, *Urban Design Quarterly*, Issue 67, July 1998, London.
- Urban Task Force (1999) Towards an urban renaissance, London, E & FN Spon.
- Urban Villages Forum Economics of Urban Villages (u.d), Urban Villages Forum, London.
- Wang, X. (2007) Experimental Study on Augmented Reality Potentials in Urban Design. 11th International Conference Information Visualization, 567-572.
- Wedd, K. (2012) Victorian Housebuilding, Shire Publications, Oxford.
- Wellings, F. (2006) British house builders: history and analysis, Blackwell, London.
- Wu, H., He, Z. and Gong, J. (2010) A virtual globe-based 3D visualization and interactive framework for public participation in the urban planning processes, *Computers, Environment and Urban Systems* (34), 291-298.

## REFERENCES

- Academy of Urbanism, The Frieburg Charter for Sustainable Urbanism, London.
- Allmendinger, P. (2009) Planning Theory, Palgrave, Hampshire.
- Barratt Developments Plc. (2007) Corporate Responsibility Update.
- Barratt Developments Plc. (2008) Corporate Responsibility Report.
- Barratt Developments Plc. (2009) Annual report and accounts.
- Barratt Developments Plc. (2014) Great Places.
- Barratt Developments Plc. (2016) Plotting book: achieving efficient layout coverage using good design principles.
- Barratt Development Plc. (u.d.) The Barratt Green House.
- Barratt Development Plc. (u.d.) Residential design quality and placemaking.
- Barratt Developments Plc. (u.d.) A design guide for standard and non-standard houses and apartments.
- Barratt Developments Plc (u.d.) Working in partnership.
- Berkeley Homes (u.d., c.2015) Placemaking: Not just housebuilding, London.
- Berkeley Group (u.d.) 10 principles of placemaking.
- Berkeley Group (u.d.) Placemaking not just house building.
- Berkeley Homes (2016) Aspen Place, Ryewood, Sevenoaks.
- Birkbeck, D., Collins, P. and Kruczowski, S. (2013) Building for Life 12 and the urban design agenda in Urban Design 126, pp45-46.
- Brooke, S. (2005) Seaside, Pelican, USA.
- Brown, T. (2009) Change by design, Harper Collins, New York.
- BSHF (2010) Abolition of regional spatial strategies: rapid impact assessment for the Midlands and North of England, Coalville, Leicestershire.
- BSHF (2011) Self-help housing: supporting locally driven housing solutions, Coalville, Leicestershire.
- CABE (2001) Celebrating innovation: innovation and integration in design and construction, London.
- CABE (2004) Policy note: preventing anti-social behaviour in public spaces, London.
- CABE (2005) Does money grow on trees?, London.
- CABE (2005) What home buyers want: attitudes and decision making among consumers, London.
- CABE (2005) What it's like to live there: the views of residents on the design of new housing, London.

- CABE (2005) Physical capital: how great places boost public value, London.
- CABE (2006) Design at a glance, London.
- CABE (2006) Who we are, What we do. Why it matters. London.
- CABE (2006) Design at appeal, London.
- CABE (2006) The cost of bad design, London.
- CABE (2006) The principles of inclusive design (they include you), London.
- CABE (2007) Actions for housing growth: creating a legacy of great places, London.
- CABE (2007) The value handbook: getting the most from your buildings and spaces, London.
- CABE (2007) Paved with gold: the real value of good street design, London.
- CABE (2008) Housing market renewal: action plan for delivering successful place, London.
- CABE (2008) Building for Life Awards 2008, London.
- CABE (2008) What makes an eco-town? London.
- CABE (2008) Civilised streets, London.
- CABE (2009) No more toxic assets, fresh thinking on housing quality, London.
- CABE (2009) A crisis too big to waste, London.
- CABE (2009) Summary: space in new homes what residents think, London.
- CABE (2010) Mapping existing housing standards, London.
- CABE (2010) A vintage year for housing, London.
- CABE (u.d.) What are we scared of? The value of risk in designing public space, London.
- CABE (u.d.) Powerpoint presentation for enablers BfL.
- CABE (u.d.) Local authority design champions, London.
- Carmona, M. (1998) Controlling the design of private sector residential development: Context, practice and innovation, University of Nottingham.
- Charwood Borough Council (2005) Leading in design: Supplementary Planning Document, Loughborough.
- Colquhoun, I and Fauset, P. (1991) Housing design in practice, Longman, Essex.
- Conservative Party (2010) Strong Foundations: Building Homes and Communities, TPF Group, Brentford.
- Costley, C, Elliott, G. Gibbs, P (2010) Doing work based research: approaches to enquiry for insider-researchers, SAGE Publications Limited, London.
- Countryside Plc. (u.d.), Places people love: our route to a stronger, re-energised Countryside brand.

Countryside Properties (u.d.) Design for Living.

Cousins, M (2009) Design quality in new housing: Learning from the Netherlands, Taylor and Francis, Oxon.

Creswell, J. W. 2009 Research design: qualitative, quantitative, and mixed methods approaches (3<sup>rd</sup> edition) SAGE Publications Limited, London.

David Wilson Homes (u.d) De Lacy Court.

David Wilson Homes (u.d.) A design guide for standard and non-standard houses and apartments.

De Botton, A. (2006) The Architecture of Happiness, Penguin, London.

Department for Communities and Local Government (2011) An introduction to neighbourhood planning, HMSO, London.

Department for Communities and Local Government (2011) Laying the foundations; a housing strategy for England, HMSO.

Dunster, B. (2006) 'What is the 'New Ordinary'?', in Moor, M. and Rowland, J. eds. Design Futures, Oxon: Routledge.

Catalyst London (2016) Portobello Square: Above all the world needs dreamers and Beyond all wildest dreams, London.

Catalyst London (2016) Portobello Square: A good laugh is sunshine in the house and There's no place like home, London.

Crook, C. (2016) 'Know your place', RICS Land Journal, December-January 2016, p.6-7.

Design Council Cabe (2013) People. Places. Potential, London.

Design Council Cabe (u.d.) Broader, further, closer and leaner, London.

Design Council Cabe and Department of Communities and Local Government (u.d.) Briefing paper

Design for everyone: a guide to the design process, London.

Edwards, D. and Pigram, R. (1988) London's Underground Suburbs, Bloomsbury, London.

English Partnerships, Northampton Borough Council and the Princes Foundation for the Built Environment (2005) Upton Design Code.

Eveleigh, D. (2011) Town house architecture, Shire Publications, Oxford.

Gallent, N and Tewdwr-Jones, M (2007) Decent Homes for All, Planning's evolving role in housing provision, Routledge, Oxon.

Gardiner, J. (2004) Life after death for Cabe [sic] arms as housing rating tool revived, *Building magazine*, November 2010, p.13.

Gause, J.A. (ed) (2005) Housing for niche markets: capitalizing on changing demographics, Urban Land Institute, Washington.

Guide dogs for the Blind Association (2006) Shared surfaces street design research project, Reading.

- Green, B. (2015) Housing Market Intelligence 2015: the top 25 house builders, *Housebuilder*, 19-32.
- Green Building Council Australia, Green Star Communities National Framework, Sydney.
- Greisen, L. J. (ed.) (2011) New Architecture in Copenhagen 2011/12, Copenhagen X, Danish Architecture Centre.
- Grindrod, J. (2013) *Concretopia*, Old Street Publishing Limited, London.
- Harvey, A. (2005) A culture of excellence, *Building*, December 2005, p.20.
- Henn, M, Weinstein, M and Foard, N (2009) a critical introduction to social research (second edition), SAGE Publications Limited, London.
- Hill Homes (2017) Ninewells, Cambridge.
- Home Builders Federation (2006) Annual Report 2006, London.  
[www.hbf.co.uk/fileadmin/documents/Annual\\_Report/Annual\\_Report\\_2007.pdf](http://www.hbf.co.uk/fileadmin/documents/Annual_Report/Annual_Report_2007.pdf) Last accessed 2 January 2018.
- Housing Design Awards (2002) Pick of the crop, London.
- Hurst, W. (2010) Cabe [sic] to be wound up as funding is axed [online], 20 October 2010.  
[www.bdonline.co.uk/news/uk/cabe-to-be-wound-up-as-funding-is-axed/5007593.article](http://www.bdonline.co.uk/news/uk/cabe-to-be-wound-up-as-funding-is-axed/5007593.article) [Date accessed 27 October 2010].
- Jackson, A. (2006) London's Metroland, Capital Transport Publishing, London.
- James T. White (2015) Future Directions in Urban Design as Public Policy: Reassessing Best Practice Principles for Design Review and Development Management, *Journal of Urban Design*, 20:3, 325-348.
- Kruczkowski, S. (2010) An investigation into the compatibility of government housing quality aspirations and the working practices of house builders, local authorities and consumer behaviour. In: S. BANDYOPADHYAY, ed., *College Conference: Re-defining Research, 8 July 2010: conference proceedings*. Nottingham: Nottingham Trent University: CADBE, pp. 61-69.
- Kruczkowski, S. Bandyopadyay, S. Chilton, J. and Collins, P. (2011) Consumer choice as a method of raising design quality of new homes and neighbourhoods, 4<sup>th</sup> international urban design conference proceedings, AST Management Limited, Nerang, Queensland, Australia.
- Kruczkowski, S. (2014) The eight problems that plague new housing developments, The Guardian online, <https://www.theguardian.com/housing-network/gallery/2014/dec/17/new-housing-development-problems-pictures>.
- Kruczkowski, S., (2015) Is there any value left in Building for Life? In: M. HOXLEY and A. CRABBE, eds., *CADBE Doctoral Student Conference [Nottingham Trent University, 9-10 June 2014]: 2014 proceedings*. Nottingham: Nottingham Trent University: CADBE, pp. 173-181.
- Kruczkowski, S. (2016) Book Review: Avi Friedman, Town and terraced housing for affordability and sustainability, *Journal of Urban Design*, Vol.21 (2), p.276-278.

- Krier, L. and Thadani, D. (2009) *The architecture of community*, Island Press.
- Kumar, R (2005) *Research methodology: a step by step guide for beginners*, SAGE Publications Limited, London.
- Locality (u.d.) *Neighbourhood Plans roadmap guide*.
- Locality (u.d.) *Localism: the key components*.
- Marshall, C and Rossman, (2006) *Designing qualitative research (fourth edition)*SAGE Publications Limited, London.
- Mayes, S. (2016) Pump up the volume, *Housebuilder*, December 2015/January 2016, p.19-20.
- McDonald, N. and Whitehead, C. (2015) *New estimates of housing requirements in England, 2012 to 2037*, TCPA, London.
- Milton, S. (2013) *Minecraft*, Egmont, London.
- Mole, T. (2003) *The mole: housing's most underground columnist*, *Housing*, p.10.
- Office of the Deputy Prime Minister (2004) *Creating better places to live: a guide to the planning system in England*, HMSO, London.
- Owens, B. (u.d.) *Suburbia*, Fotofolio. Persimmon Group (2007) *Sustainability Report*, <http://corporate.persimmonhomes.com/psn/csr/stakeholder/2007/> accessed 10/05/2010.
- Punter, J. (2006) 'The Planning system and the delivery of design quality', in Moor, M. and Rowland, J. eds. *Design Futures*, Oxon: Routledge.
- Redrow Plc. (2012), Annual report and accounts.
- Redrow Homes (2016), *Heritage Collection*.
- Redrow Homes (2016), *10 Green Reasons to Choose a New Redrow Home*.
- Redrow Plc. (u.d.) *An introduction to Redrow*.
- RICS (2013) *More good homes and a better United Kingdom*, London.
- Rooney, B. (2016) 'Pump up the volume', *Housebuilder*, December-January 2016, p.19-20.
- Roskrow, B, 2017. Quality v quantity - a balance to be struck. *Housebuilder*, May 2017. 5.
- Smockum, E. (2006) *Tomorrow's World – Future Proof*.
- Taylor Wimpey plc. (2007) *Annual Report and Accounts*, [http://www.taylorwimpeyplc.com/Resources//Documents/InvestorRelations/ReportAccounts/2007\\_annual\\_report.pdf](http://www.taylorwimpeyplc.com/Resources//Documents/InvestorRelations/ReportAccounts/2007_annual_report.pdf), accessed 10/05/2010.
- Thaler, R. and Sunstein, C. (2009) *Nudge*, Penguin, London.
- Town and Country Planning Association (2015) *The future of planning and place-making*, London.
- Townsend, M. (2006) 'Men shouldn't decide everything', in Moor, M. and Rowland, J. eds. *Design Futures*, Oxon: Routledge.

Tregoning, H (2006) 'It's sprawl, but it's my sprawl', in Moor, M. and Rowland, J. eds. *Design Futures*, Oxon: Routledge.

Unknown (2004) New home designs "average", *Housebuilder*, November 2004, p.4.

Unknown (2005) Design of new housing slammed by CABE and Rogers' urban taskforce, *Housebuilder*, December 2005, p.2.

Urban Design Group (2010) 21<sup>st</sup> Century Suburbs, *Urban Design Group Journal*, Summer 2010 London.

Worpole, K. (2006) 'The social dimension of urban design, in Moor, M. and Rowland, J. eds. *Design Futures*, Oxon: Routledge.

## APPENDICES

### A. Case studies: developments that did not use Building for Life

#### A.1 Station Road, Castle Donington (PPG3)

Classified as a ‘poor’ development in CABE’s housing audit with a score of 37% (2007a, p.60), Station Road was a development by Barratt Homes. The development achieved the higher densities required by PPG3 by building apartment buildings next to typical two storey suburban scaled homes. It is the rather awkward relationship between these two building typologies that first strikes the visitor to this development – the uneasy relationship rather exaggerated by the different architectural styles adopted by the apartment buildings versus the more traditionally styled suburban homes.

The compact development provides a simple and legible layout with homes facing the street and a generally robust perimeter block structure created. The robustness of perimeter blocks is slightly compromised by the definition of street corners, where parking spaces, garages and boundary walls sit on street corners in often prominent locations. Where buildings are located on or close to street corners with the exception of some ‘cranked’ or angled house types, they ignore the need to offer ‘two aspects’ – one to each street. As such, it is not uncommon for blank<sup>178</sup> gable ends to face the public realm.

Landscaping has matured well, with evidence of residents tending to and taking pride in their front gardens. Despite the engineered approach to highways design with space consuming ‘forward visibility splays’ on corners edged with concrete bollards, it is a development that I have visited on multiple occasions and found children playing in the street, cycling around on their bikes. As such, its streets are fulfilling more than a movement function and are instead offering a social (or place) function. Despite an unimaginative approach to the design of the play area and surrounding open space, the estate is well maintained with no evidence of crime or anti-social behaviour.

Displaced parking is an issue with cars parked close to the junction of Station Road, residents clearly resistant to using allocated spaces within a rear courtyard located some distance from the front

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<sup>178</sup> Blank by virtue of a solid masonry elevation or by virtue of windows serving non-habitable rooms such as toilets and bathrooms.

doors to their homes. Elsewhere cars are parked on the street, in places ‘half on’ and ‘half off’ the pavement.

Despite the scheme being rated a ‘poor’ by CABE, it is difficult to find substantial evidence that the development is an undesirable place to live. Whilst there are obvious areas for improvement, unlike Waterworks Road, Coalville there are few signs of neglect, the misuse of space or neighbour conflict. Public and private spaces are generally well demarcated, with no substantial pieces of ‘left over space’ with no clear public or private ownership or function. Streets feature a good amount of landscaping, helping to soften and humanise the street environment with a greater sense of space created when compared to Waterworks Road.

Under CABE’s scoring regime for BfL20 it would seem more appropriate to classify the development as being of ‘average’ (i.e. borderline ‘good’) quality thereby providing a clear distinction between Station Road and Waterworks Road which are not of the same standard.

## A.2 Birch Road, Ashby de la Zouch (PPG3)



Figure 121: **Streets that could be anywhere** dominated by overly engineered streets and car parking.

Located along Nottingham Road and the eastern approach into Ashby de la Zouch, a particularly distinctive characteristic of this street is the loosening of built form as the edges of the town slowly

begin to give way to the surrounding open countryside. Despite the loosening of built form, there is an underlying regularity evident in the town's pre- and inter-war peripheral housing growth. This regularity is found in the rhythm of detached, semi-detached buildings, the spaces between buildings and the street; and the deeper character of the place exhibited through its urban grain – particularly the long, narrow and regular plots on which individual homes sit.

In contrast, post war growth dispensed with this character – albeit in a rather ironic cloak of 'Tudorbethan' styling - most obviously through a stark break in the street to building relationship. This is an inevitable consequence of complying with highways regulations that prevent homes from benefitting from frontage access on more heavily trafficked routes, i.e. no direct vehicle or pedestrian access from the street. This break in the building to street relationship has served to erode the character of the street more than any architectural styling can or has.

Further eastwards along Nottingham Road, the Birch Road development continues the post-war trend of designing out frontage access. However, the lack of a positive relationship between buildings and the street has been reinforced further by removing front doors along the Nottingham Road frontage - instead placing these around the back of the building.

Along the development's frontage, individual detached homes that ignore its immediate context (characterised by semi-detached, hipped roof buildings), give way to a more dominant three-storey apartment building. Set back from the street, the apartment building is rather 'expressionless' or monolithic in appearance, sat within a large expanse of occasionally mown grass – a space that serves no practical public or private function. The eye is drawn to the externally fixed copper gas pipes and utility meter boxes that in the absence of defined plots, front gardens and front doors, have become significantly more prominent than they normally would. A more successful design solution would have been to create an apartment building that reflected the form, proportion and appearance of town houses, set deep within semi-private spaces conveyed to ground floor apartments.

Whilst the scheme's frontage buildings offer a 'face' to Nottingham Road they are 'two-faced' buildings in that they offer an elevation to the front; a second to the back - yet they fail to offer a third elevation where they are located adjacent alongside the street corner. As such, the entrance to the development is characterised by two oppressive blank elevations either side of the street.

Within the development itself, parking is a dominant feature within the street environment. Little structural landscaping has been used to help soften the visual impact of parked cars. The visual intrusion of parked cars within the street is further exaggerated using harsh white paint surface markings (lines and numbers) to delineate and allocate parking bays.

Internal vistas are poorly resolved, presumably not even considered during the design process, with ‘two faced’ buildings creating large, two storey blank expanses of brickwork throughout the development. The edges of the development’s ‘streets’ are further eroded by the placement of garages, surface car parking and boundary enclosures to rear gardens that back onto – or side onto – the public realm; serving to create a fragmented perimeter block structure.

Perhaps the most significant design flaw within the development is the failure to respond to a new pedestrian desire line created by the layout of the development and the location of the nearest bus stop. Created by a break between two buildings and a visual connection between an internal street within the development and the bus stop on Nottingham Road, a potentially convenient link exists for residents. Yet, the footway between these two buildings is a privately-owned footpath between two of the homes and their allocated car parking spaces located towards the back of their homes. Nevertheless, there is evidence that attempts have been made by some residents to create an informal footpath seeing a handy short cut to and from the bus stop and their homes. Signs erected by residents of the private footpath notify other residents that the land between the buildings is private and not a public right of way. A noticeable gap in the clipped hedgerow running along the development’s Nottingham Road frontage adjacent to the bus stop suggests that an informal route has been established – and remains a source of neighbour dispute.

As with Station Road, Castle Donington, the fundamental failures of the scheme are not primarily associated with the architectural appearance of the buildings themselves. Whilst the buildings are standard house types and entirely indifferent to the positive characteristics of the town, the principal failings are associated with layout, the relationship between buildings and the streets around them and the resolution of spaces between buildings.

### A.3 Meredith Road, Ashby de la Zouch (PPG3)

Located on the site of a former biscuit factory and built by Bloor Homes, the development is located adjacent to Hood Park. Whilst the development offers good levels of pedestrian and cycle connectivity (more recently in 2016, linking up with the adjacent (former) Soap Factory site), the scheme has a series of design weaknesses. As with the previous two examples, these failings are less to do with the use of standard house types per se and instead their poor relationship with the streets and (in the case of the site's principal entrance) buildings around them, layout and the resolution of spaces between buildings.

The development is accessed off Smisby Road that leads northwards from Market Street and The Callis. The distinctive character of Smisby Road is defined by its proud Victorian villas which frame either side of the site's entrance. A carefully considered and sympathetic design response would have been to integrate the development into Smisby Road, reflecting the positive contribution that Victorian proportions to the memorable identity of the place. Such a considered and sympathetic design response would have also recognised Smisby Road as the principal street; thereby orientating new buildings to face onto it. Yet, the development is remarkable in its indifference to its immediate context. Instead of fronting onto Smisby Road, the two houses located either side of development's entrance turn away from it – offering a pair of two storey blank gable ends to the street: one of the town's principal gateways. This urban design faux pas is made even more unpalatable by these gable ends forming the end to a prominent vista when approaching the town from the A42. The example of Meredith Road draws attention to the need for schemes to carefully consider how best they might integrate into and respect their surroundings. This is not a matter of stylistic preference as had the scheme created buildings that were orientated to face onto Smisby Road, with Victorian form and proportions, a more successful interface between the new and the old would have been achieved; without necessarily adopting the embellishments and detailing associated with Victorian architecture and styling.

Comprised of standard house types and largely devoid of any architectural detail or interest – neither traditional nor contemporary, the only 'nods' or concessions made to the locality are a few tokenistic glass-reinforced plastic porches and brick slip clad faux chimney stacks. The colour and

texture of bricks, as with the sparse and mean landscaping have served to create a place that fails to relate positively to its surroundings.

Characteristic of what has been termed by some within the industry as the ‘Poundbury effect’ and the strong influence of the Essex Design Guide on turn of the century planning thinking, requirements for higher densities not only saw parking provision reduced (and in turn, high levels of displaced car parking), buildings were drawn closer to the street and isolated car parking courtyards with limited surveillance opportunities were created. The use of rear car parking courtyards has served to ‘pull open’ the structure of the perimeter block. The weakness of perimeter blocks is further eroded by the way in which buildings address street junctions with the typical solution being a run of houses stopping. As such, one street interface is defined by a blank gable end and the side enclosure to the property’s rear garden.

The interface between buildings and the street is unresolved in places, with internal vistas poorly resolved – a ‘tell tail’ sign of plotting houses on a road plan, as opposed to creating streets and spaces in three dimensions where a meaningful whole is produced by stitching together the various component parts.

By pulling buildings closer to the street and removing the space for any meaningful landscape infrastructure, a heavy onus is placed on the ‘architecture’ to create a sense of memorable character and identity. Without a strong landscape character, the plain and ‘stripped back’ buildings are brought to the fore – and have little if nothing to say. By comparing the development to the new suburban prototypes explored in Chapter 4 it has become apparent that there is an important distinction to be made between the standard house types of different developers, with the architectural breadth and quality of some house builders standard house types considerably more adept at fulfilling certain spatial functions whilst also offering a stronger sense of architectural interest that in turn enables buildings to ‘carry’ the character of a new development more successfully than those used at Meredith Road.

#### **A.4 Waterworks Road, Coalville (PPG3)**

Built by two volume house builders, Waterworks Road is well known amongst the house builders with offices a few miles from the development; reportedly used to show new staff what ‘bad design’

looks like. Comprised of 269 homes, the development is located on a relatively level, rectangular site. Constructed to a considerably higher density than its surroundings (a 1990s two storey residential development and a 1950s Council estate built loosely to Corporation Suburb ideals), Waterworks Road was also very loosely influenced by the Poundbury and Essex Design Guide thinking described in the previous sub-chapter. As a result, the development is characterised by a high level of displaced parking, isolated, unattractive and under-used rear parking courts; with buildings pulled closer to the edge of the street.



Figure 122: **Neither organic nor planned in character.** Extract from Waterworks Road development layout (2004).

As with the previous examples, Waterworks Road exhibits the spatial deficiencies associated with developments where the layout and the resultant relationships between buildings to buildings and buildings to spaces is driven more by the arrangement of a prescribed housing mix (and their respective parking arrangements, for example, on plot, off plot, in front of or behind the building line) than a considered approach to how the ‘whole’ works.



Figure 123: **The poor relationship between buildings and open spaces** is evidence to two dimensional ‘plotting’ as opposed to three-dimensional thinking about how buildings and spaces work. Please cross reference image to the ‘play space’ towards the bottom and centre of the layout plan shown in Figure 122.

For what should be an easy place to find your way around, legibility is hampered by poor internal connectivity, with a disconnected and disorientating street network. A sense of disorientation is further exacerbated by a division (fence) created along the line marking the dividing line between the two developers’ respective land holdings. Wider connectivity is also frustrated by the absence of a pedestrian connection between the development and the woodland (including public footpath) to site’s southern boundary, although over time fence panels have been removed to provide an informal access way into the woodland beyond.

Buildings regularly fail to relate well to one another, with awkward relationships between buildings located next to each other. Larger buildings have been placed adjacent to those that are considerably smaller – an inevitable impact when designing largely in plan, and little or no consideration of how buildings relate to one another. These awkward relationships are further exaggerated by buildings sitting on an inconsistent building line creating a ‘broken row of teeth’; blank gable ends punctuating the street. This lack of three-dimensional coherence in the creation of streets has created a place where there are no unifying features, either through architecture (form, arrangement or appearance) or through structural landscaping.

Internal vistas and viewpoints are poorly resolved, with garages, walls, fences and blank gable ends sitting prominently within the public realm. Perimeter block formation is weak and further diluted through the extensive use of large, isolated, poorly overlooked and unlit parking courtyards.



**Figure 124: A poorly overlooked car parking courtyard.** Note the poor level of general maintenance, lack of lighting, abandoned building materials and garden equipment. The plan extract (Figure 125) shows this courtyard behind the rear of plots 46-49. Note the distinct lack of landscaping within the courtyard compared to the clear suggestion of generous tree planting within this space.



**Figure 125: Plans for parking courtyards** were rudimentary and suggested places that would be much more attractive (note the tree edged parking courts. It is unclear why courts were shown as being tree edged when this was an impossible feature to integrate into these small spaces).

Enclosed by close boarded fencing to the back gardens of properties, their condition not only indicates issues relating to their maintenance and management (who is responsible for weeding, sweeping and minor repairs?) but also show signs of crime (with residents erecting their own security cameras, lighting and ‘drop-down’ bollards) and commonly, a resistance of residents to use their allocated spaces. This resistance is evidenced by car parking spaces becoming areas for vehicle repairs or temporary (or semi-permanent) storage spaces for items, such as old fridges, intended for disposal.

The absence of a clear demarcation between public and private spaces within the courtyards is also seen within the street environment, where pieces of grass that serve no clear public or private function can be frequently seen across the development. Often unkempt and ‘collectors’ of litter, these spaces contribute towards creating an air of neglect across the development.

The political ramifications of Waterworks Road and the preceding schemes are interesting. Firstly, the development was instrumental in the creation of a (shared service) urban designer post with South Derbyshire District Council, as such these schemes could be considered to have had an indirect value to the wider community. Secondly, they have resulted in strong political resistance to higher density schemes, with low levels of car parking, parking courtyards (no matter how well – or poorly – designed) and problematically, three storey residential buildings. This political resistance still exists today (2018) - well over a decade since these developments were completed.

In contrast to the Station Road scheme - rated as ‘poor’ by CABE, Waterworks Road is much less well designed. With CABE’s audit methodology having four ‘tiers’ (2007b, p.63): excellent, very good, good, average and poor – Waterworks Road was scored against BfL20 by the researcher. It was subsequently rated as ‘poor’ – the same tier as Station Road. Yet there is a marked quality difference between the two developments. This therefore begs a question: was Station Road underscored by CABE, or did Waterworks Road mark a new low – should it have been classed as ‘very poor’? Whatever the answer to this question might be, a trend begins to emerge after analysing Waterworks Road and comparing the development with the preceding schemes where the fundamental weaknesses are primarily spatial – not architectural.

## A.5 Weavers Close, Whitwick

Exhibiting many of the same design deficiencies of the previously discussed developments, Weavers Close merits recognition in that some of its key failings can be directly attributed to the assumptions made by the developer at the stage at which a judgement was made relating to the amount and form of development on the site. Critically, these judgements were made ahead of any discussion that was held with the local planning authority as part of pre-application advice. To achieve a scheme on this site that respected the most basic design considerations, namely facing homes onto the park (as opposed to backing onto it) and limiting the height of new buildings to two stories in a visually sensitive location; would have had significant financial implications on both development cost and development income (on the basis that the amount of saleable square footage would likely have been reduced).

As with the previous examples, Weavers Close reflected a trend to draw buildings closer to the street, whilst also attempting to remove cars from the street environment – placing these within shared parking courtyards. All the developments discussed in this chapter share a distinctive characteristic in that they are neither urban nor suburban, their buildings are neither traditional nor contemporary in appearance and they lack any sense of local or otherwise distinctive character: whether afforded by the appearance of buildings, the use of structural landscaping (or a combination of the two).

## B. ORGANIC APPROACH

### B.1 Station Road, Melbourne - 'Millbrook' (Davidsons Homes)

Located on the outskirts of the market town of Melbourne, the development of Station Road marked the first major development in the town for over ten years. Whilst small infill developments have been commonplace across the town, largely built by a local developer Alexander Bruce, the release of the green field site towards the northern end of the town for 130 homes following the approval of an outline consent (9/2006/0305/OUTM) marked the inevitable return of a larger house builder to the town. The prospect of this caused the Council, local Parish council and Civic Society a degree of trepidation. Despite widespread resistance to development in the town, there was a recognition that if development *had* to happen it needed to set a higher quality benchmark than had been left by the last volume built housing development.

As with many other well-established settlements, Melbourne comprises of a tightly drawn village core, with a fine urban grain. Buildings sit up against the edge of the street and abut one another, creating a strong sense of spatial enclosure. Commercial uses sit alongside and underneath residential properties, contributing towards the vibrancy of the town and a reason for people to be on its streets. Its connected network of streets leads to the distinctive, triangular shaped market place. From the town's main streets lead intimate lanes, mews and yards with memorable buildings and groupings such as the Thomas Cook Almshouses (1891: Grade II).

The town has predominantly grown along its northern and western edges of the town. Distinctive Victorian streets with their simple grid like street patterns lined with buildings gave way to the volume built estates of the post war years. The difference between house building trends is particularly noticeable along Station Road where a row of Victorian terraces sits across from properties inspired by Corporation and Garden Suburb ideals: wide fronted, hipped roofed, semi-detached properties set into deep front gardens.

The volume built estates are blind to the distinctive characteristics of the town: its organic and connected street patterns, building forms and typologies, proportions, materials and detailing; the extensions to the town are increasingly defined by a snake like network of unconnected cul de sacs dominated by detached family homes, garages and driveways. Designed to reduce vehicle speeds, the subtle cranks and curves of the more recent developments create a sense of disorientation in contrast to sharper changes in street alignment where it is easier to retain a sense of direction. Streets look alike, with no distinction between them, cul de sacs appearing the same as through or connecting streets. The influence of highways regulations is evident particularly along Cockshut Lane where restrictions on frontage access result in buildings turning their back against the lane (and as such, does not feel or look like the type of lane one would expect to find along the outskirts of the built up edge of a settlement). Requirements for forward visibility at junctions has seen triangular grassed 'wedges' protected from visual obstructions such as buildings, trees and hedges – a somewhat ironic feature in a town where the older urban grain functions without such features.

With outline planning consent previously granted the land was put forward for sale to developers. Prior to the land being sold, the Council had sight of proposals from a large volume house builder seeking to place a bid on the site. Dismayed at the lack of imagination it looked as though the

development of the site would be a case of improving a rather mundane scheme: a gently curving network of streets and cul de sacs around which a series of standard house types had been arranged; their arrangement designed to offer sales teams a constant trickle of their desired 'product mix' as opposed to creating a more meaningful composition. If this developer secured the site, it was known that a Design and Access Statement would shortly follow, offering a tenuous narrative between the design of the development and a contemporary, abstract interpretation of the more distinctive parts of the town. Whilst the Council would most certainly be able to improve the scheme through negotiation - or even have the option to refuse a future planning application - the potential frustration was having a major development site where the developer had little or no interest in raising design standards.

The Council then learnt that a developer called Davidsons<sup>179</sup> had acquired the site. Davidsons was a privately-run family company recently established by the Wilson family following the sale of David Wilson Homes to Barratt. The development of the site would represent the company's first major development following the completion of a small scheme at Wymeswold comprising of five homes. An initial pre-application meeting was held on site<sup>180</sup> with representatives from Davidsons, Pegasus Planning Group and the District Council to consider how the site should be developed. At this first meeting, a series of decisions were made: 1. That BfL20 would be used to structure pre-application discussions relating to design matters (a tool that was known to all involved, but no-one had used it before on a proposed development), 2. That a minimum score of 14 out of 20 would be required to secure support of the Council, 3. That the development would positively address the brook that ran along the eastern edge of the site, 4. That a glimpse view of the church in the town should be framed by the alignment of a street, 5. That the development would create a sense of distinctive character by reflecting the traditional characteristics of the town in the type and arrangement of streets and spaces, building to street relationships, building forms, proportions, materials, detailing, colour, boundary schemes and landscaping.

Tim Peach, Design Director for Davidsons explained that he had been given a brief for the site by his Managing Director, James Wilson. Tim later recalled,

*"James came into the office and on the white board wrote two words: memorable and unexpected. This is what he wanted the Melbourne development to be. We were just setting up as a company,*

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<sup>179</sup> Its name derived from David as Chairman, but run on a day to day basis by his eldest son.

<sup>180</sup> The meeting has since been referred to as the 'meeting in the mud' as the rain poured that day. Those attending had their boots ankle deep in mud.

*at first it was just me and James. We had no house types, we were unknown. We had no brand, so this was about setting out what Davidsons was going to be about".*

The unique opportunity presented was that a portfolio of house types would be created specifically for the development that could (potentially) reflect the architectural and spatial characteristics of the town - rather than attempting to retrofit existing standard house types where there is always an inbuilt resistance amongst house builders to limit the extent of modification. The design team collected photographs from the town and a series of street scenes that were pinned up on the wall in their offices, enabling them to better appreciate how different buildings related to one another along the street.

### Scheme evolution

As the scheme evolved, the Council's urban designer provided feedback to the design team, structuring comments against the BfL20 questions. The relationship between the brook and the development proved to be the most problematic - with the width of the site, its internal streets and development blocks preventing the development from facing onto the brook rather than backing onto it. The need to ensure that the positive aspect of the brook was capitalised upon and a safe, well overlooked public open space was provided was a concern under Question 7: Does the scheme exploit existing buildings, landscape or topography and Question 15: Are public spaces and pedestrian routes overlooked and do they feel safe? A creative solution was found whereby the garages to the large detached properties that backed onto the brook would be pushed deep into the back of the plots. Above these garages, option rooms would be placed providing additional space for home offices, granny flats or hobby rooms – with generous windows orientated towards the brook. The boundaries to rear gardens would be more softly enclosed with low fences and hedging instead of the typical 1.8m high close boarded fencing.

The scheme proposals progressed positively with the scheme achieving a BfL20 score more than 14.5. A three-dimensional Sketch Up model was also developed for the scheme. The model enabled Tim Peach to show the scheme to the Council – streets and spaces were ‘walked’ and despite the basic detailing to the model<sup>181</sup> it was possible to appreciate the spatial qualities of the scheme and the attention afforded to what Cullen (1961) described as a sense of serial vision – the sense of

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<sup>181</sup> In 2007, the Sketch Up model had the appearance of a white foam model, with the outline of doors and windows shown.

moving through space. The model enabled the parking courtyards to be explored, with surveillance opportunities improved by making modest modifications to the positioning of windows and doors. What was being proposed was a scheme that was remarkably different to what had been built before in either the town or the District: a more meaningful piece of townscape was to be created.

On 4 November 2008 after seeing a three minute<sup>182</sup> 'fly through' (film) of the Sketch Up model, the Council's planning committee unanimously supported the proposals and approved Phase One. As part of the planning application an indicative masterplan was submitted to illustrate how development in subsequent phases was envisaged to come forward.



Figure 126: The original concept design for the development.

### Phase One

The most successful phase of the development, Phase One is centred on a triangular space with the same plan dimensions as the market place within the town. Framed towards the western facing side by a row of three, three storey town houses inspired by the Thomas Cook Almshouses, the square has a good sense of spatial enclosure with a mix of terraced, semi-detached and detached

<sup>182</sup> The standard allotted time for a planning applicant to present their proposals/case to a planning committee.

properties. Properties are afforded a close relationship with the street with generally modest setbacks: enclosed front gardens for larger townhouses, whilst cottage scaled dwellings have a smaller set back with a change in surface material offering a subtle distinction between the pavement and semi-private spaces. In some places residents have personalised these spaces, placing colourfully planted pots.

### **Car parking**

Careful thought was afforded to minimising the impact of parking and garaging within the street environment. At the time national and local planning policy restricted parking spaces to an average of 1.5 spaces per dwelling, although many authorities were increasingly relaxing enforcement of this policy following earlier PPG3 developments beset with parking problems<sup>183</sup>. The parking strategy relies on some remote, rear of plot car parking (for instance, the three storey houses have an allocated parking space and garage at their rear) – an approach that has had mixed success, with residents occupying homes with remote parking often preferring to park within the square itself. Whilst this was anticipated in the design, with unallocated on street parking provided, the level of demand for parking in the square is such that the space is often over run with cars parked half on pavements.

### **Street design**

A change in surface materials within the triangular space provides a strong legible feature to the development from which three streets lead: one back to the vehicular access off Station Road and two additional streets that serve the rest of the development before connecting back with each other. The change in surfacing also attempts to calm vehicle speeds as part of an effort to encourage streets to function more as social spaces. This has had mixed success, partly due to the limitations imposed by the requirements of the Highways Authority; though some notable successes are the: non-standard materials palette for adopted areas, including the planting of street trees, adopted on street and unallocated parking bays and a reduced forward visibility corner along the site's north-eastern boundary.

### **Connectivity**

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<sup>183</sup> NWLDC Waste Manager often cited the number of 'failed collections' on PPG3 schemes where the level of displaced parking made streets impassable for refuse vehicles. Refuse staff had to attempt to collect waste at a later date, sometimes on overtime with additional expense to the authority.

A connected network of streets thread through whole development with a pedestrian connection towards the south-western end of the site providing a convenient and direct connection into the centre of the town. Despite the Police Architectural Liaison Officer requesting that this link be removed from the scheme, the resistance of the Council's Urban Designer to the removal of the link was supported by the Planning Officer and the link was retained. The link is well used by residents and properties adjacent to the footpath link offers a good level of natural surveillance opportunity, though the length and narrow width of the link that passes from the site and between adjacent land ownerships prevents properties providing full surveillance opportunity.

### **Character**

Whilst in practice, many house types had base floor plans like those the family had been building for many years<sup>184</sup>, several new house type plans were created at Melbourne with new internal living spaces such as double height void spaces<sup>185</sup>. Newly created building elevations were created with variations in proportions reflecting the traditional fabric of the town. Buildings offer a variety of plan shapes that reflect<sup>186</sup> the traditional, organic characteristics of the town, with a range of cranked house types developed that could follow different street alignments. The most distinctive of these plan shapes is the curved house that sits towards the northern end of the triangular space and elegantly follows the line of the street. Despite the considerable additional time and cost expended in building this dwelling, it was considered by Davidsons to be a valuable addition to the townscape both from a legacy and sales perspective; forming part of a showpiece space for the development that all potential purchasers saw on arrival.

Externally, elevations were designed to reflect local sources of inspiration with a high level of attention afforded to materials, traditional craftsmanship and detailing, verge and eaves detailing, paint colours and roofscape features, particularly the scale and appearance of chimney stacks some of which were constructed on site<sup>187</sup>, corbelled out from the internal and external faces of gable

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<sup>184</sup> Similar house types can be seen at Towles Pastures, Castle Donington.

<sup>185</sup> Whilst a number of the Melbourne house types have not been used again, many have become part of one of the two house type ranges used by the company. With the range largely modelled on a traditional English town, unlike many other volume house builders, Davidsons has a 'kit of parts' that makes it partly suited to creating organic inspired developments.

<sup>186</sup> As opposed to copy.

<sup>187</sup> As opposed to factory produced glass reinforced faux chimney stacks. Clad in brick slips to match the face of the building, these are hoisted into position. Sitting atop 'saddles' stacks are affixed to roof trusses. The saddle is then hidden with tiles and brick layers in fill the gaps between brick slips with the same mortar used on the external facing walls.

ends. Attention was afforded to minimising the use of plastic features and detailing where it was financially viable to do so – however windows are fabricated from UPVC<sup>188</sup>.

Davidsons were keen to reflect the appearance and character of small shops within the town, some of which have since been converted into residential accommodation. The developer's sale office took the guise of a corner shop complete with hand painted signage and available plots displayed in its shop windows.



Figure 127: Street scenes from the Design and Access Statement illustrate the relationship between Melbourne and the proposals (Davidsons (2008), p.38).

### Bluebell Walk and the park

Located alongside the brook, Bluebell Walk is a linear piece of public open space that runs alongside the water course. Despite the intention to create a well overlooked space with option rooms provided above garages, and a softer boundary enclosure to rear gardens, proposals were redrawn by Davidsons as the early years of the development's build out were hit by the wider economic conditions because of the global credit crisis. As sales slowed as mortgage finance became increasingly difficult to obtain, the company sought to reduce its exposure to risk by removing more costly elements of the development that were not guaranteed to secure a higher sales price in what

<sup>188</sup> Davidsons cited the reasons for retaining UPVC as: cost, issues associated with the drying and movement of wood during the warranty period and purchaser resistance to features that required regular maintenance. There was also no justifiable reason for the authority to insist on timber windows as the site was neither in nor adjacent to a Conservation Area (unlike Towles Pastures, Castle Donington).

was a highly distressed market environment. There was also sales resistance to the softer boundary treatments (along Bluebell Walk) that had been discussed with the Council with home buyers reportedly preferring the typical 1.8m close boarded fence enclosure. As a result, Bluebell Walk lacks the high degree of surveillance opportunity it should have had and properties that do not fully capitalise on their attractive rear aspect.



Figure 128: Extract from original proposals for the relationship between buildings and Bluebell Walk show Plots 43 and 46 having a habitable room above a double garage. This was specifically in response to my insistence that if the development were to back onto the brook, this would need to be compensated by providing opportunities for natural surveillance. Despite being approved, the developer successfully secured planning consent to replace these buildings for ordinary double garage structures. Source: South Derbyshire District Council, Planning Application Reference: 2010/1036.

Along the site's southern boundary, a challenging relationship exists between the development and neighbouring industrial uses including a breaker's yard. Recognised as potentially the most challenging part of the site to sell homes in the future, a decision was made to ensure trees were planted early in the build programme of Phase One; allowing trees two to three years to mature before the last phase was built. As part of the design of the open space, a more creative approach was encouraged by the Council whereby the sustainable urban drainage would be designed to appear as an extension of the brook. Despite the occasional head walls and surface pumping station compound, the scheme has been successful in this regard. Pathways thread through the remainder of the space with pockets of children's play equipment. With landscaping now maturing well, the open space is a particularly successful part of the development and helps to counter some of the dilution that affected the later phases.

### **Later phases**

The impact of the credit crisis on the house building industry led to a more conservative approach and where possible a programme of cost minimisation. The most obvious illustrations of this are seen by comparing the:

- External facing elevations of Phase One with later phases, with a noticeable lack in variation of styles, materials and detailing; with a more simplistic vernacular adopted.
- Phase One parking courtyard to two later parking courtyards. The largest and southern-most courtyard lacks surveillance opportunity (following the removal of a 'sentinel' unit within it, as can be seen in Phase One), with poor levels of lighting, maintenance and management of landscape features. Bitumen dominates the space and the little relief offered by pocket trees is being lost as some residents have opted to remove soft landscaping to create additional parking spaces.

### **Summary**

Despite the impact of wider economic conditions, the overall quality of the development is very good – although the pre-credit crisis phase is much better than the post-credit crunch phase. The development bears the 'marks' of the two distinct economic worlds the development straddled. Nevertheless, the development remains an example of good practice and remains a regional source of reference for local planning authorities within the region seeking a more convincing approach to organically inspired development (and the potential pitfalls).



**Figure 129: Extracts from planning applications** showing the original concept design for the southern part of the Station Road site (top) and the subsequent detailed design proposals (bottom). What was conceived as a Poundbury style courtyard space with homes located within the centre of the block and two points of access was replaced with a basic rear parking court. The overall number of units remained the same across the development block (27), the changes were therefore made not to increase the number of units (which was fixed at the outline stage) but to reduce exposure to cost and maximise the amount of saleable square footage across the block in response to more challenging economic and market conditions following the global credit crisis. Source: South Derbyshire District Council, Planning Application Reference: 2008/0811 and 2014/0287.

Whilst Davidsons have not repeated the Melbourne model – perhaps somewhat ‘stung’ by the impact of the credit crisis - it did provide a direction for the company’s design approach that is predominantly inspired by the traditional (or organic) layout, form and appearance of the towns and villages where it operates. It was inevitable that as the company grew and began to build

multiple sites that builds have become simplified, lacking the nuances and attention to detail that can be seen at Melbourne.

Melbourne is a particularly interesting case study in understanding the relationship between development types (organic or planned) and a company's range of house types. Davidsons continue to design and build more successful organic developments as unlike their competitors, their house type portfolio (despite amendments and modification) was based on a core range where the buildings were not designed in isolation but as part of a meaningful and coherent whole. It is this that has made their house type range particularly adaptable and suited to organically inspired development forms.

### **B.2 Battleflat Drive extension, Ellistown (David Wilson Homes)**

One of the first developments that was required to meet the Council's new design expectations was the extension to Battleflat Drive. Located on the outskirts of Ellistown, Battleflat Drive was the final land parcel to be incrementally developed by David Wilson Homes on a land holding built out from the 1990s.

Typical of many suburban estates built in the post war period, the estate had no overarching masterplan – not even a basic spatial framework that established a street network and hierarchy. This piecemeal approach combined with an adjacent site being developed in isolation has resulted in a street network that fails to establish critical connections between new homes and local facilities, excessive use of turning heads at the end of cul de sacs (as opposed to creating connected streets across different land ownerships). This incremental approach has also resulted in a fragmented perimeter block structure and a lack of coordination in the provision of new public open space, with two play areas having been provided next to each other – separated by a single line of houses. A further characteristic feature of such estates was the failure to sensitively integrate existing landscape features, such as mature trees.

The design ethos at Battleflat Drive was to introduce design qualities that were absent in the District's new volume built housing developments, principally:

- Stronger perimeter block structure.
- Better overlooked streets, spaces and pedestrian routes.

- Stronger demarcation between public and private spaces.
- Capitalising on existing site features (in this case, two mature trees).
- A sense of being 'of the place' (even if standard house types are used).
- Buildings that related better to the street creating a greater sense of spatial enclosure.
- Buildings that contributed towards creating a more legible environment using marker buildings and the appropriate placement of buildings in relation to one's unfolding vistas as experienced on foot.
- Improved car parking arrangements by guarding against anti-social parking whilst carefully limiting the visual dominance of parked cars.

As part of efforts to improve car parking arrangements, the design of courtyards was afforded attention to ensure that they benefitted from high levels of surveillance opportunity, with other design features to help residents feel more comfortable leaving their cars within them.

The completed scheme is markedly different from what was previously built across the developer's land holding in this location. This shift in design approach is most evident when the scheme is accessed from the older part of the estate where the new and old abut one another. Immediately the change is evident in the relationship between buildings and the street, with buildings on the new pulled forward creating a stronger sense of enclosure and a more enclosed feel of a street.

### **B.3 Chiswell Drive, Coalville (David Wilson Homes)**

A small infill scheme on a former brownfield site adjacent to the Snibstone Colliery in Coalville, this development is notable for the adaptation of standard house types along the site's Ashby Road frontage. With highways restrictions preventing frontage access, an opportunity to reflect the Victorian terraced character of Coalville was created. The use of locally referenced materials and detailing are complemented by passageways that allow occupiers to move easily through the continuous terrace block. Brick boundary walls with blue bull nose bricks further reinforce a sense of local character whilst also clearly demarcating the edge of the street. The positive impact of the brick type and the proportions of the terraces is best appreciated when comparing the scheme to modern developments located opposite the site (All Saints Close and Discovery Gardens).

The lack of frontage access required a large courtyard to be created behind the terrace block to Ashby Road. The courtyard benefits from high levels of surveillance opportunity, with good hard and soft landscaping creating a more pleasing area of semi-public realm. Whilst the courtyard has open access from its southern side, a gate and railing on the courtyards western side (adjacent to Chiswell Drive) is particularly effective in defining the space as semi-private.

#### **B.4 Affordable housing schemes: Coalville, Diseworth and Long Whatton (Registered Social Landlords)**

Four small affordable housing schemes in Coalville (2 no.) and the villages of Diseworth and Long Whatton were designed to reflect traditional local vernacular influences. Each scheme is modest in terms of scale and appearance, but all successfully address urban design considerations by reflecting locally distinctive architectural characteristics, the clear distinction between public and private space and the creation of good quality, public realm areas.

At Langley Close, Diseworth six homes based on traditional vernacular forms, proportions and detailing frame a shared green space, with a softer approach to carriageway design complemented by the tracking for larger vehicles accommodated by granite sett ‘overrun’ areas, avoiding the need for large expanses of tarmacadam. Simple but appropriately proportioned non-functioning chimney stacks punctuate the roof line, with soft boundaries to front and rear gardens settling the scheme into its rural setting. A similar design approach at Paddock Close, Long Whatton ensures a harmonious relationship of new homes within a village setting.

By reflecting traditional building proportions and the characteristic building line, the scheme along Ashby Road (Coalville) settles well into the street, despite a more contemporary appearance. Extruded sun tubes offer a contemporary interpretation of chimney stacks that typify the town’s roofscapes. The careful attention to the way in which apartment buildings relate to the street and the buildings around them has enabled a new and larger housing typology to be integrated into the street environment successfully. Exposed reinforced steel joint lintels above front doors were introduced by the architect as a subtle reference to the town’s industrial heritage. The characteristic ginnels of the town’s Victorian terraces (also seen at Chiswell Drive) further reinforce a sense of local character, their arched brick headers more reflective of this traditional feature. A softer, hedgerow boundary treatment was replaced by a less maintenance intensive boundary

treatment. Despite the weakness of the boundary treatment, the overall quality of the scheme is good.

These three schemes are notable in that despite their simplicity and constrained cost parameters, it has been possible to create schemes with quality achieved through simplicity.

#### **B.5 Usbourne Way, Ibstock (Bellway Homes)**

Built by Bellway Homes, the development is the weakest and least successful of the volume built schemes within the district highlighting the pitfalls of the organic inspired design approach. Usbourne Way consists of two major developments to the western side of Ibstock. Designed by the same master planner, both schemes offer of a well-connected street network and a good perimeter block structure – outward facing along their open countryside edges. From a layout perspective, the two schemes offer similarities to the neighbouring Davidsons development located to the north west of the village, with differences in street types created by varying widths. Yet this is where the similarities end.

The Bellway schemes emphasise the inherent weaknesses associated with an organic approach where a house builder's product has been heavily value engineered. Despite the Council's efforts to secure enhanced elevations and detailing that are consistent with more traditionally styled homes, the effectiveness of these efforts was significantly compromised by the cheapening of materials and detailing (by way of cost minimisation and a failure to fully appreciate traditional architectural styling and craftsmanship); but most significantly by limited modifications to standard house types that were not reflective of more organic, or traditional architecture. Base proportions and details of these standard house types were inconsistent with the organic approach adopted and the limitations of the developer's portfolio is particularly evident where individual buildings are required to fulfil a function within the street environment.

Insistence by the Council that required windows to be added to prominent side elevations (to make some buildings 'dual aspect') in retrospect appear contrived and awkward rather than an integral part of the building's internal and external design. The architectural understanding, craftsmanship and above all, passion – for organically grown places is the 'missing piece' of the jigsaw and results in a place that seems in some way incomplete or unfinished. There is a lack of authenticity across the finished development, with features such as mock chimneys failing to have the correct position

on the ridgeline, height, width and pots. It looks contrived and the quality of the finished scheme is far outweighed by the amount of time and effort expended by the local authority as it attempted to create a better designed and more meaningful place.

The Council's hand was also somewhat coerced by the developer's use of BfL20. The first assessment conducted by the Council produced a score of 12 out of 20; below the minimum required score of 14. The applicant contested that by making minor modifications to the scheme additional points were merited, which when combined with improved insulation above Building Regulations would see the scheme achieve the required minimum score.



Figure 130: The character of the development was heavily reliant on buildings and despite a good layout and block structure, the quality of the development has been compromised by value engineering in the design of individual house types and the quality of spaces between buildings. Source: [ashberryhomes.co.uk/woodhurst](http://ashberryhomes.co.uk/woodhurst). Date accessed 28 July 2017.

Bellway's sister company, Ashberry Homes acquired the land south of Usbourne Way and a markedly more minimalist approach to elevation design and landscape was adopted than the earlier phase built by Bellway. However, the less authentic architectural styling and the considerably less generous and lush landscaping scheme (when compared to the neighbouring Davidsons development) neither seemed to dampen sales nor negatively affect sales prices. Both Ashberry and Bellway commanded similar sales prices per square foot to Davidsons: a dilemma highlighted by Saunders (2014) whose research (albeit focused on a single case study) highlighted that whilst there was a marginal increase in Davidsons sales price per square foot, the potential additional profit (in return for the time and energy incurred) was offset by increased build costs. As a result, Bellway secured a higher profit margin in Ibstock than Davidsons.

It has not been possible to obtain any detailed data from either developer relating to sales rates and the extent to which discounting (including incentives) was used to secure sales at the Ibstock developments. Davidsons comment that discounting is rarely used, with sales advisors trained to show prospective purchasers the difference in elevational and street quality.

It has not been possible to ascertain whether when Davidsons compares its sales revenue and profit with those of its competitors, whether the impact of competitor discounting is either known or considered; thereby offering a more accurate comparison of sales price per square foot<sup>189</sup>. It is assumed the company does not or cannot capture the extent and degree of discounting<sup>190</sup> as the commercial performance of its peers remains a constant source of pressure on its costly and more time-consuming construction detailing and overall build costs. In the absence of a suitably compelling financial argument, persistent internal pressures exist to reduce build costs (simplify builds) and challenge the value of construction details that increase construction timescales. Despite these pressures, the Managing Director of Davidsons is committed to retaining design quality standards as a part of the company's brand and product differentiation alongside a sense of social responsibility.

Usbourne Way – along with Park Lane – highlight the potential pitfalls of a local planning authority seeking to encourage developments to create character by adopting an organic approach where

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<sup>189</sup> For instance, if both developers were selling a four bedroom, 1210 sq/ft home at £200 sq/ft (£242,000) and one had discounted the price by way of offering a 5% deposit incentive (worth £12,100), would both house builders still regard the sales price per square foot as £200 with the discount captured within a different part of the site budget? Or, would the more accurately price per square foot be cited, i.e. £190? This is an area identified for future research.

<sup>190</sup> For instance, due to a competitor withholding information.

the house builder does not have a proven track record in successfully applying this design approach. When compared to more successful examples, most notably Melbourne, a series of key differences between these schemes are evident:

- Standard house types are to varying degrees based on traditional building shapes (footprints, forms, height, proportions).
- Developers place varying degrees of emphasis on quality, place making and legacy – balancing these with development viability considerations.
- Designers have a varying degree of understanding and interest in traditional settlement design and, for example reflect this in the arrangement of streets and spaces, street to building relationships and building to building relationships.

The most successful organic inspired schemes are those where house types are strongly based on traditional building shapes, where developers place a high degree of importance on quality, place making and legacy and where designers possess a high level of skill and knowledge of traditional settlement characteristics and design.

Usbourne Way also highlights a further factor in role and impact on standard house types on creating a place with a sense of character. Had Usbourne Way's design approach been different and instead been landscape led, i.e. properties set further back away from the street with space afforded to structural landscaping in the form of trees and hedgerows, the landscape would have provided a sense of character. Landscape as opposed to buildings would sit in the foreground – one's attention and eye drawn to the former, not the latter. Instead, without any meaningful landscape infrastructure, boundary scheme or good-quality architecture (for example, form, proportions, materials, colour and detailing), the eye is drawn to the simplicity of the buildings and the mock traditional detailing that is typically glass reinforced plastic porches, door surrounds and canopies. As such, the houses are neither traditional nor contemporary.

Conversely, if one placed a more authentic, traditionally styled home on the Usbourne Way layout and complemented this with a strong boundary scheme a considerably better development would have been produced. As such, the Council learnt that when a potential development is presented to it, it is essential for officers to carefully consider the type of house builder they are working with, their motivations (profit or profit balanced with wider design quality and corporate social responsibility considerations?) and the attributes (or deficiencies) of their proposed (usually

standard) house types. These attributes will inform whether an organic or a planned approach would be more appropriate and more effective. However, if a planned approach is required a strong emphasis will need to be placed on landscape infrastructure<sup>191</sup> - the amount, the costs and the space required to accommodate this infrastructure. Critically, these considerations will have a significant impact on development viability both in terms of the capital cost associated with buying trees and hedgerows for instance. These features would consume developable land and would therefore only have been achievable had these been considered at viability appraisal stage.

#### **B.6 Frances Way, Ibstock (Davidsons Homes)**

Located adjacent to the Usbourne Way development, Frances Way is a development comprising of 130 predominantly detached two storey homes built by Davidsons Homes. The site was a greenfield, with a strong hedgerow running across it. With the County Ecologist allowing only one 'break' across the hedgerow, the hedgerow now forms a distinctive part of the development's open space.

Adopting an organic inspired approach, the most successful pieces of townscape the street between Melbourne Road and the 'village green'. A series of buildings line the street, with much of its eastern side of the street reading as a continuous unbroken frontage – despite a predominance of detached buildings.

In contrast to Usbourne Way, a more convincing traditionally inspired scheme has been created with building shapes, proportions, materials and colours offering a place with a more authentic appearance. However, the strength of spatial composition is undermined in places by the dominance of car parking and (integral) garaging. Internal connectivity, the ability of someone to walk along the site's outward facing edges is also frustrated using private driveways.

Despite the marked difference in public realm quality at Frances Way compared to Usbourne Way, Davidsons cited no enhanced profit on their development compared to their competitor.

#### **B.7 Pottery Lane, Lount (Bellway Homes)**

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<sup>191</sup> Which inevitably would unless high quality contemporary dwellings were proposed.

Following the development of Usbourne Way, the Council placed additional pressure on Bellway following the acquisition of a site in the village of Lount. In contrast to Ibstock and despite the scheme consisting of standard (with some partly modified) house types, the authenticity of the (modified) proportions, detailing, materials and landscape is such that the organically inspired design approach is convincing and credible. The frontage along Nottingham Road has been carefully designed and built, sitting well alongside existing buildings.

The scheme at Lount was planned and completed before the Ashberry Homes scheme at Ibstock broke ground. The marked difference in quality therefore suggests not an absence of design skills but instead an absence of a commercial imperative to invest in higher quality in some locations – or the need to invest in higher quality in certain locations to secure target profit margins. Despite the scheme at Lount demonstrating that the developer could build to a higher standard, a recent development by the builder at Ashby de la Zouch has been built to a lower standard. It therefore appears that despite the desirability of the town to home buyers it has not been necessary to ‘repeat’ the Lount approach to secure sales.

### **B.8 Park Lane, Castle Donington (Bloor Homes)**

Located on green fields along the west of Castle Donington and designed by Bloor Homes, the completed development was also partly built out by David Wilson and Miller<sup>192</sup>, though the bulk of the site was built by Bloor. Construction works completed in 2016. The Park Lane extension on green fields to the west of the site were approved in 2017.

Reviewed by OPUN, the development was intended to reflect the organic character of Castle Donington’s historic core with key influences being: the relationship between buildings, the relationship between buildings and the street, building proportions and architectural references. The ability to reflect the traditional street and spatial characteristics of Castle Donington was severely restricted by modern highways standards; an increasing resistance to ‘standard’ adoptable highways designs: black surfaced pavements and carriageways of generally non-varying widths with concrete kerb edging.

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<sup>192</sup> There is no discernible difference between the Bloor and Miller built homes as after pre-application discussions, Miller built the Bloor designed house types under a licence agreement.

In practice, the true character of the town was not fully understood, captured or interpreted. Elsewhere value engineering has further downgraded quality, the materials palette (a much softer, less engineered range of bricks were required across the development), craftsmanship and detailing; boundary schemes including the resolution of levels.

Despite the considerable energy put into the scheme by both the Council and the designers at Bloor Homes, the development fails to create a convincing interpretation of the town with features and detailing of varying quality; combined with a failure of the developer to implement the approved soft landscaping scheme. Upon critical reflection, the quality ‘pay back’ in exchange for the considerable time put into the application by officers has been limited.

A characteristic feature of organically inspired developments is that buildings are drawn closer to the street to reflect the intimacy of historic streets and lanes. This in turn places buildings at ‘centre stage’ exposing them to observer appreciation – or criticism. The quality of architectural design and detailing is therefore subject to attention and scrutiny – more so than when a more landscape led approach is adopted; where structural landscape features (trees and hedges) dominate the foreground. In contrast, buildings fall into the background and the need for them to provide a sense of (meaningful) character is substantially reduced.

Aside from the implications of highways standards on street and spatial characteristics, a key challenge with creating a place that is convincing as an organically inspired development is associated with time - and the absence of multiple designers and builders. In contrast with a place that has grown over multiple decades, new developments are built within a fraction of the time, typically over a couple of years; and designed by one person and one developer. The variety and depth that time can bring to a place is therefore exceptionally difficult to capture - and must instead be replaced by something else.

The subtle ageing of materials (that can be replicated through the use of reclaimed materials); the nuances of architectural detailing and landscaping associated with organic settlements can help substitute what is otherwise lost; and in the case of Millbrook and more so, Waterside and The Pingle by Blackhawk, it is the degree of attention afforded to materials, detailing, colour, texture, hard and soft landscaping that help substitute and detract from the missing elements created by time.

A further missing element is the absence of different building uses that bring the places to life from which inspiration is drawn. This mixing of uses is a characteristic feature of the older parts of the settlement that the Park Lane development drew inspiration – but are perhaps a less obvious omission.

The Park Lane development highlights the inherent challenges associated with volume house builders adopting an organic design approach. Volume house builders whose business and operational models typically rely on speed and the repetition of standard house types (with little or no alteration) struggle to inject the creative and architectural ingenuity needed to create a convincing reflection of organic character. Furthermore, constrained land and housing supply combined with local market conditions<sup>193</sup> create an environment where the additional costs associated with an enhanced design and build operation is difficult to sustain; unless these costs can be accommodated within the land price.

However, Park Lane does exhibit some distinct qualities that differentiate it from earlier post war residential development located around the western edges of Castle Donington:

- Improved pedestrian and cycle connectivity with more direct routes offered connecting new homes with existing development to the east and undeveloped land to the west<sup>194</sup>.
- A more legible environment where a level of differentiation in street types and the placement of marker buildings and spaces; combined with a more linear street pattern help to create a place that is harder to get lost within.
- A more sensitive response to stitching in with existing properties fronting onto Park Lane through the less intense development of the site frontage<sup>195</sup>.

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<sup>193</sup> Ceiling prices.

<sup>194</sup> At the Council's insistence and in contrast to previously constructed developments located to the north of Park Lane that were built as isolated parcels, with 'lollipop' road networks; Park Lane included two street connections to offer the opportunity to create future links with undeveloped land to the west. Whilst the land was not earmarked for development in the short term, the aspiration for creating a more connected street network was strongly resisted by the Parish Council that regarded the provision of future potential connections as exposing the village to further housing development.

<sup>195</sup> This has been achieved despite highways standards preventing frontage access. The Council successfully secured front doors and paths to visually and physically connect Park Lane facing homes to the street; whilst hedges along the frontage and between plots reflect the strong rhythmic and green character of Park Lane. The angled building line of the two Park Lane facing homes located to the west of Spitfire Road is a vestige of a mini roundabout that was due to be constructed to serve the development but later replaced with a right-hand turn lane.

- Homes facing out onto the western hedgerow boundary creating the opportunity for the hedgerow to be retained in the longer term (as opposed to being ‘sandwiched’ between back garden fences).

The Park Lane experience has resulted in the Council requiring a different approach (planned as opposed to organic) to be adopted for the continued extension of Castle Donington on land to the west and south of the Park Lane development.

#### **B.9 Towles Pastures, Castle Donington (David Wilson Homes)**

Comprising of 13 homes, this small rectangular site was intersected by a stone boundary wall. Whilst in a state of disrepair, the wall was concluded to be of historical significance by the County Archaeologist creating a unique constraint and opportunity for development.



Figure 131: **Towles Pastures, Castle Donington**. A computer-generated image looking east shows how the historic wall was to be integrated into the development. Source: [www.builtforlifehomes.org/schemes/go/31](http://www.builtforlifehomes.org/schemes/go/31). Date accessed 31 July 2017.

The historic wall was required to be restored and retained, with the height of the wall as uninterrupted as possible, with as few ‘breaks’ made through the wall to create accesses into individual dwellings and driveways. The wall forms a strong and distinctive front boundary wall to over half of the properties, whilst forming a base to one house that sits on the line of the wall. Where breaks have been made in the wall, the memory of the wall line has been retained with a flush line of stone connecting the broken sections.

By not offering the street forward for adoption by the local highways authority and instead retaining it as a private road, a softer, more village inspired lane has been created. The use of high quality surface materials and shallow kerb faces is further complemented by non-standard street lighting columns.



**Figure 132: Parking provision.** Unusually for a planning application a layout plan was prepared by the applicant with parked cars following the Parish Council's objection to the scheme. The Parish Council was concerned that the site was over developed on the basis that individual plots were not afforded sufficient car parking provision – this was despite one plot (10) having up to eight car parking spaces. Today, the scheme is one of the few developments within the District not to have problems associated with displaced parking. Source: <http://www.builtforlifehomes.org/schemes/go/31>. Date accessed 3 July 2017.

Standard house types were used across the development, though with elevational modifications to reflect the traditional and more distinctive characteristics of the village. Higher materials and detailing specification was used with timber windows, painted brickwork and garage doors.

An employee of David Wilson Homes commented that the increased in build costs and sales prices was frustrated by valuations that ‘undervalued’ houses. However, despite these ‘down valuations’ target sales prices were achieved by the purchasers not being as reliant on high loan to value ratios on their mortgages.

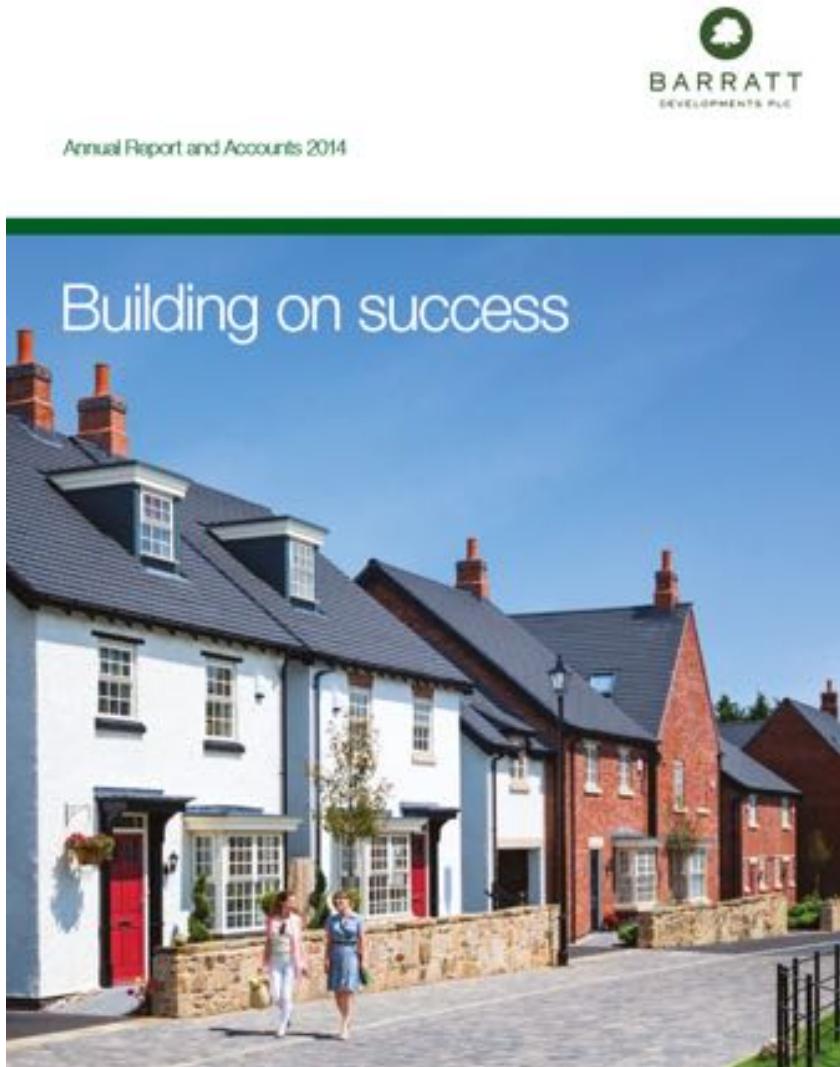


Figure 133: **A showcase scheme.** The development received one of the first Built for Life™ Commendations and was visited by former Planning Minister, Nick Boles.

## B.10 Summary

The case studies demonstrate that the most successful organic inspired schemes are those where:

- A developer's house types are based on traditional building shapes (footprints, forms, height, proportions) and where viability appraisals accommodate appropriate materials and detailing.
- Developers balance commercial motivations with quality, place making and legacy – accommodating these considerations within development viability.

- Designers working for a house builder understand and have an interest in traditional settlement design and can reflect traditional characteristics in the arrangement of streets and spaces, street to building relationships and building to building relationships.

It therefore follows that if a developer does not satisfy these prerequisites then a ‘non-organic’ or planned design approach will be more appropriate and result in a better-quality outcome.

## C. NON - ORGANIC OR PLANNED

### C.1 Hastings Park, Ashby de la Zouch (David Wilson Homes)

An extension of Dunbar Way, the development was one of the last PPG3 schemes to be approved in NWL. Extending a typical 1990s residential area that grew incrementally on the outskirts of the town with no overarching masterplan to guide or co-ordinate growth Hastings Park contrasts with its immediate surroundings.

Located along the eastern side of Ashby de la Zouch, the earlier residential developments belie their proximity to the architectural distinctive market town and make no references to its distinctive and characteristic features. One could indeed be anywhere.

The researcher can claim little credit for the masterplan of Hastings Park as work was already well advanced by the time he joined the Council. However, the researcher was involved in securing minor design modifications in the form of more locally inspired elevational treatments for a ‘marker buildings’ and improving the design of public spaces. He also negotiated improvements to many though not all the car parking courtyards, however the marked difference in the quality of courtyards varies considerably across the development – some benefitting from very good levels of surveillance opportunity, with others benefiting from little or none.

Hastings Park was designed by David Wilson Homes in house urban design consultancy – a small team that ‘bid’ for work from the company’s various divisions alongside external consultants. Based upon the idea of a more planned suburb, the development is anchored along a tree lined avenue; forming the basis of what has become an easy place to navigate. From this tree lined avenue run streets; off which lead lanes and a series of intimate housing courtyards or mews type spaces.

The relative formality of building lines and the sense of space created are qualities that are not commonly associated with new build, suburban developments and contrast with the questionable organic character of developments such as Usbourne Way and Park Lane. The scheme's most notable quality relates to its internal and external connectivity, with a pedestrian and cycle 'spine' running approximately diagonally across the site (north west to south east) providing a direct, attractive and well overlooked route across the entire development. The route connects into the northern end of Leicester Road, providing a well-used route between people's homes, local schools and the town centre.

It is particularly interesting to note that the scheme relies heavily on standard house types and the qualities associated with the development's street pattern, footpath network, structural landscaping, street hierarchy and open spaces significantly outweigh the use of these standard types.

### **C.2 Philip Bent Road, Ashby de la Zouch (Bloor Homes)**

The success of Hastings Park led to a more planned approach being adopted across new schemes coming forward. Despite its traditional styling this Bloor Homes development has planned undertones and represents a change in design approach reflecting both the Council and developer's frustrations with Park Lane, Castle Donington.

Streets are as linear (or straight) as possible, only gently curving to negotiate changes in level across the site rather than to create a place that seeks to reflect organic settlement growth. The more planned approach is particularly evident in the selection and positioning of house types, with the use of the same house types in small groups to create a sense of formality and repetition. Although the visual impact would have been more effective had longer 'runs' been created, the impact is nevertheless effective particularly looking northwards along Bernard Vann Crescent.

This 'repeat plotting' is generally resisted by house builders in the area on the basis that sales teams require a mix of 'product' to be provided throughout all stages of a development's build programme, however the visual impact of this approach has proven particularly effective. This 'repeat plotting' approach is well used in the south east of England, where the uniformity of building forms and elevational treatments disguises different house sizes and internal layouts.

### C.3 Other non-organic or planned schemes

The planned approach has been subsequently adopted on other schemes across the District:

- Southworth Avenue, Breedon (Registered Social Landlord).
- Land off Nottingham Road, Ashby de la Zouch (Miller Homes).
- Western expansion, Ashby de la Zouch (Davidsons Homes).
- Land north of Park Lane, Castle Donington (Miller Homes).
- Land south of Park Lane, Castle Donington (Redrow Homes).
- Land south of Bardon Road, Coalville (David Wilson Homes).
- Land off Greenhill Road, Coalville (Avant Homes).
- Slack and Parr site, Kegworth (Davidsons Homes).
- Former Pickering's Nursery, Measham (David Wilson Homes).
- Moira (Peveril Homes).

In the interests of brevity, only a brief reference is offered here to these schemes. However, as with the previous schemes they demonstrate that non-organic or planned design approaches are a particularly successful technique for local planning authorities seeking to secure better designed residential led developments, particularly with developers that cannot demonstrate a skill or interest in an organic inspired approach.