



# Earl Shilton and Barwell Area Action Plan Viability and Deliverability Assessment (Draft)

Prepared on behalf of  
**Hinckley and Bosworth Borough Council**  
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# Executive Summary

## *Scope of the report*

This report assesses the viability and deliverability of the two proposed Sustainable Urban Extensions, that form the core of the Earl Shilton and Barwell Area Action Plan.

The report presents and considers the findings of detailed viability appraisal modelling carried out on the two proposed Sustainable Urban Extensions – south east of Earl Shilton (around 1,600 dwellings) and west of Barwell (around 2,500 dwellings).

The modelling draws on a blend of intelligence including: a comprehensive market and policy baseline review, information from the site promoters, infrastructure cost and timing information from Hinckley and Bosworth Borough Council, and DTZ intelligence from working on other SUEs.

The report sets out: the market and overall context of the SUEs, the modelling assumptions behind the SUE appraisals, the results of the benchmark appraisals for the SUEs, and possible development scenarios that might affect viability of the SUEs, and a consideration of these on the viability and deliverability of the SUEs.

The report will be submitted as supporting evidence to the Area Action Plan.

## *Headline Findings*

Both SUE sites present viable and sound propositions, capable of delivering policy compliant affordable housing packages (up to 20%, or the equivalent commuted sums). Both SUEs, we calculate, are also capable of delivering substantial Section 106 packages, consistent with current known education requirements, and comprehensive on site parks and open space works.

Both SUE sites are also capable of delivering the comprehensive highways and public transport packages (based on the current expected costs) required to support them.

## *Policy Context pertinent to the SUEs*

This report has included a review of the current and emerging housing policy and evidence base as it affects development in the SUEs.

Socio and economic drivers of affordable housing demand are expected to include the effects of the continued challenging economic climate i.e. lower earnings growth, rising inflation, job insecurity and increased unemployment, lack of mortgage availability, changing role of the rented sector, and Low levels of house building and therefore affordable housing delivery

Policy drivers of affordable housing demand will include the recent changes to housing benefit (“the bedroom tax”) implying a rising need for smaller (2 bed) homes, increasing role of the private rented sector, and also the introduction of the affordable rent tenure.

### *Housing Markets Generally.*

Demand for property rose to its highest level in over three years during April, as the government's announcement on the *Help to Buy* scheme began to make an impact on the UK's housing market, according to the RICS Housing Market Survey. A key driver of this is the continued very strong performance of London, though nationally it is notable that during April 2013 new buyer enquiries rose to their highest level in over three years, with 25% more chartered surveyors reporting demand for property rose rather than fell. The latest jump in enquiries (from 13% more in March) strongly suggests that along with the existing *Funding for Lending* scheme, *Help to Buy* is attracting interest even if the mortgage guarantee element of the product is not due to come into effect until next year. Newly agreed sales improved too, with 19% more surveyors reporting sales rose rather than fell during April (from 11% more in March). Meanwhile, average sales per surveyor over the past three months were at 17.1. The past two months readings on sales are at their highest levels for three years.

### *The SUE Markets*

By way of their scale, Sustainable Urban Extensions to an extent are able to make their own market, especially in areas of traditionally low to moderate value. In these instances, SUEs are able to create their own high quality environment, widening the geographical residential market for homes in the area by attracting buyers who might not otherwise be attracted to the area. This is certainly the case with regard to Bloor's Fox Meadow development, which essentially represents a first phase of the Earl Shilton Sustainable Urban Extension. Here, buyer activity has reportedly been brisk achieving a rate of around three per month over 2012, and attracting many buyers from outside the area, as far as Coventry and Stratford.

In these instances the wider geographical scope can help raise achievable values to a higher level than might otherwise be achieved in a more geographically constrained "local market". Indeed, traditionally the two towns form their own local submarkets, which are significantly lower priced than the surrounding rural area. For example, the Leicester and Leicestershire HMA identifies the two towns as having their own small, low priced submarkets (amongst the lowest priced in the county), whilst to the immediate east of the built up area of Earl Shilton is the A47/M69 rural corridor, and Stoke Golding to the immediate west of Barwell, both amongst the higher priced market areas of the county.

With good direct access to the A47 corridor, the two SUEs would be considered part of the A47/M69 corridor, and achieve residential sales prices that reflect this position.

## Viability Testing

The DTZ approach has three key stages, to produce an assessment of viability that is consistent with the guidance of the National Planning Policy Framework:

- **Stage One:** Identify the Threshold Land Value of the site. This assists in establishing a base value for the site which must be achieved for the proposed development to be brought forward.
- **Stage Two:** Identify the Residual Value of the site with a level of affordable housing and Section 106 payments in accordance with policy, and suitably phased.
- **Stage Three:** By looking at the difference between the figures calculated in stage one and two above we can determine if the scheme as proposed is viable

Paragraph 173 of the Framework, specifically states that:

*“To ensure viability, the costs of any requirements likely to be applied to development, such as requirements for affordable housing, standards, infrastructure contributions or other requirements should, when taking account of the normal cost of development and mitigation, **provide competitive returns to a willing land owner and willing developer to enable the development to be deliverable.**”*

Our assessment shows that the two SUEs, including substantial benefits packages, are deliverable, whilst providing a competitive return to a willing land owner (over £100,000 / acre) and a willing developer (20% Profit on Value), and hence are consistent with the National Planning Policy Framework.

The £100,000 / acre rate is a fair threshold land value allowance; we have experience whereby landowners are prepared to sell at lower rates subject to overage agreements, in light of difficult and uncertain market conditions, and this is no reason for this not be the case with the two SUEs here.

The benefits packages we have allowed for in our assessment are:-

### For the Barwell SUE

- 10% on site affordable housing
- £12.4 million off site contribution to affordable housing
- £19.9 million Section 106 package
- £6.9 million off-site highways and public transport infrastructure package
- £2.97 million of estimated on-site costs relating to parks, sports facilities and open space

### For the Earl Shilton SUE

- 20% affordable housing on site;
- A £4.72m off site highways and public transport package
- £13.15 million Section 106 contribution
- £2.15 million of estimated on site costs relating to parks, sports facilities and open space

# 1 Introduction

This report assesses the viability and deliverability of the two Sustainable Urban Extensions at the heart of the Earl Shilton and Barwell Area Action Plan.

Following the introduction of the National Planning Policy Framework (NPPF) in March 2012, there is now an increased emphasis on the deliverability and viability of development through national planning policy. This new emphasis applies equally to specific development proposals and to policies within Local Plans.

Ensuring viability and deliverability, paragraphs 173-177 of the Plan Making chapter of the NPPF set out the importance of considering viability when producing local plans. It is imperative that plans are deliverable and that the scale of obligations and policy burdens does not threaten their viability.

Para 173, specifically states that:

*“To ensure viability, the costs of any requirements likely to be applied to development, such as requirements for affordable housing, standards, infrastructure contributions or other requirements should, when taking account of the normal cost of development and mitigation, provide competitive returns to a willing land owner and willing developer to enable the development to be deliverable.”*

The report presents and considers the findings of detailed viability appraisal modelling carried out on the two proposed Sustainable Urban Extensions – at Earl Shilton (around 1600 dwellings, 6.5 hectares of employment land, and neighbourhood centre) and Barwell (around 2500 dwellings, 5.4 hectares of employment land, and neighbourhood centre).

The modelling draws on the following intelligence:

- A market and high level policy baseline review undertaken by (presented in Sections 1-3 of this report)
- Consultation with the SUE promoters, and site specific intelligence including their emerging masterplans and land use budgets,
- Indicative infrastructure costings related to the requirements of the AAP policies have been provided by the Borough Council who have liaised with relevant organisations in the preparation of this information. This includes Education, Health Facilities, Play and Open



Space, Sport and Leisure Facilities, Community Facilities, Community Policing Facilities, Highways, Public Transport, Pedestrian and Cycling infrastructure.

- DTZ intelligence has been used with regards to further costs to the development including affordable housing; broad allowances have been made on-site infrastructure (services, internal spine road and site access) works based on other SUEs we have been involved in.

The report sets out:

- The market and policy context of the SUEs,
- The modelling assumptions behind the SUE appraisals,
- The results of the benchmark appraisals for the SUEs,
- Possible development scenarios that might affect viability of the SUEs, and a consideration of these on the viability and deliverability of the SUEs

This report, and the supporting development appraisals, has been prepared in line with current best practice guidance regarding viability in planning, namely:

- Viability Testing in Local Plans – Advice for planning practitioners (Local Housing Deliver Group – LGA/HBF, June 2012)
- Financial viability in planning, 1<sup>st</sup> edition, guidance note (Royal Institute of Chartered Surveyors, August 2012)

This report will be submitted as supporting evidence to the Area Action Plan.

## 2 Market Context

In considering large scale residential developments of this nature, it is important to understand their potential role in relation to meeting affordable housing need and demand alongside work to establish what the private market will deliver particularly in the current economic, funding and policy climate.

We consider the current national context with regard to market and affordable housing.

### 2.1 NATIONAL RESIDENTIAL LAND OVERVIEW

The slowdown in the residential property market in 2008 and 2009 impacted significantly on the development market. The majority of house builders placed their existing schemes on hold and postponed the commencement of any new development. Many “volume house builders” have seen the value of their existing land holdings reduce significantly since this time, and combined with the cash flow issues presented by lower than expected unit sales have found themselves in an extremely perilous position.

In 2010 there was a marked improvement in conditions and sentiment in the market which was evidenced by plc house builders who restructured their bank debt, recapitalised through rights issues and recruited new land managers. House builders were tasked to actively acquire residential development opportunities, subject to securing planning on appropriately designed housing schemes.

In 2011 however, house-builders were considerably more cautious due to the Coalition Government’s austerity programme, the EU crisis, the impact of further tax rises and the true impact of the public sector cuts. This change in focus from the plc house building industry means they are selectively acquiring land in established residential locations to build traditional low density, two storey houses but will immediately disregard sites with planning permissions with inappropriate designed schemes for the current marketing i.e. three storey houses and apartments. It is this product type which has continued to struggle to sell in the downturn.

This attitude is evidenced by the banks and lending institutions that are prepared to support a limited re-entry into this sub-sector with selected operators and on specific product types. Appetite currently only exists for 'family houses' defined as detached/semi detached properties with a garden in a high quality residential locations where local, professional diligence confirms (and can evidence) strong demand for the product.

Banks currently have very limited appetite to fund flat/apartment developments or high value residential units. With the recommencement of limited lending from banks, we are seeing lending ratios at much more conservative levels of loan to cost and loan to value (i.e. 50% and 60% respectively) with a requirement that customer's cash contributions are injected in full at the start of the development.

## 2.2 NATIONAL RESIDENTIAL SALES OVERVIEW

Demand for property rose to its highest level in over three years during April, as the government's announcement on the *Help to Buy* scheme began to make an impact on the UK's housing market, according to the RICS Housing Market Survey.

The survey reports that during April 2013 new buyer enquiries rose to their highest level in over three years, with 25% more chartered surveyors reporting demand for property rose rather than fell. The latest jump in enquiries (from 13% more in March) strongly suggests that along with the existing *Funding for Lending* scheme, *Help to Buy* is attracting interest even if the mortgage guarantee element of the product is not due to come into effect until next year.

As demand increased so did supply, with new instructions to sell rising in April, albeit more modestly (to a net balance of 8%). With not enough housing to meet increased demand, prices are finally beginning to improve, and the survey recorded its first positive reading for house prices since June 2010.

Newly agreed sales improved too, with 19% more surveyors reporting sales rose rather than fell during April (from 11% more in March). Meanwhile, average sales per surveyor over the past three months were at 17.1. The past two months readings on sales are at their highest levels for three years.

Despite the improving picture for mortgage lending, many are still relying on the private rented sector, with demand for rented property continuing to outstrip supply. The result is that 18% more surveyors expect rental prices to rise rather than fall. That said, respondents to the survey anticipate rents rising by less than 2% over the next year. This plateau may be in part due to a healthier housing market and increased access to mortgage lending.

It is encouraging to see government initiatives are having an impact on the property market. Help to Buy in combination with the *Funding for Lending* scheme appears to be giving the market a shot in the arm. It is suggested by the RICS that sales are expected to pick up over the coming months, albeit from historically low levels.

## 2.3 AFFORDABLE HOUSING

Nationally, there are a number of key factors currently increasing and changing the need and demand for affordable housing, these include:

- The economic climate
  - Lower earnings growth, rising inflation, job insecurity and increased unemployment
  - Lack of mortgage availability
  - Changing role of the rented sector
  - Low levels of house building and therefore affordable housing delivery
  
- Policy
  - Introduction of Affordable Rent
  - Welfare Reform and changes to housing benefit
  
- Demographics
  - The aging population

### 2.3.0.1 The Economic Climate

Structural factors in the housing market, alongside rising living costs, and static household incomes, continue to be a major bearing on the need for affordable housing. Households that were previously able to meet their housing needs in the market are increasingly seeking to access the social housing system.

Although the economic down turn has reduced house prices the corresponding stricter mortgage lending criteria, need for larger mortgages and limited earnings growth has maintained and then widened the gap between the renting and ownership across the board and increased pressure on housing waiting lists and the supply of affordable housing. Better off households/first time buyers who cannot now enter the housing market at its' lower levels now increasingly look to the growing shared ownership sector to meet their aspiration to own or to the social rented sector, particularly where the private rented sector is also under pressure or of a limited size and scope.

Although the SUEs will be developed over approximately 10 - 15 years, covering say two economic cycles, the current and acute pressure to increase the number of affordable homes should not be ignored in considering the role of the SUEs in meeting need. The increasing need is also set in the

context of need outstripping supply even while the economy was performing well and the following low levels of market and affordable house building over the past 5 years meaning that there is an ever increasing backlog of need to be met as well as newly arising need. This is coupled with the general view that mortgage lending is unlikely to return to a time where 100% mortgages are commonplace and so there is a need to provide suitable options for those on the edge of homeownership are likely to continue over the longer term.

### 2.3.0.2 Welfare Reform

A key driver of housing needed is in the changes introduced by the Government through the Welfare Reform Act 2012. This act aims to simplify the benefits and tax credits systems, set in a context of Government austerity measures. One of the main impacts of the Act on the affordable housing sector is the new rules around the size of accommodation which Housing Benefit (and the pending Universal Credit) will cover for working age tenants in the social rented sector.

From April 5 2013 all current and future working age tenants renting from a local authority or housing association received housing support based on the need of their household. The size criteria allows one bedroom for each person or couple living as part of the household with the following exceptions:

- children under 16 of the same gender are expected to share
- children under 10 are expected to share regardless of gender
- a disabled tenant or partner who needs a non-resident overnight carer will be allowed an extra room

This means those tenants whose accommodation is larger than they need lose part of their Housing Benefit (“the bedroom tax”):

- those with one spare bedroom will lose 14 per cent of their Housing Benefit
- those with two or more spare bedrooms will lose 25 per cent.

The impact of this is that households unable to ‘top up’ their rent through other income (by around £15 per extra bedroom per week) will either mount up rent arrears or need to move to smaller accommodation within the social rented sector. So, although this does not directly increase the amount of affordable housing required it does place pressure on smaller units, specifically one and two bedroom units. In the recent past, there has been a move away from developing smaller units as three bedroom homes in particular were seen as meeting aspirations and providing a more sustainable and flexible asset for the Registered Providers.

### 2.3.0.3 Demographics – The Aging Population

In recent years, the impact of the aging population on the housing and care system in the UK has received considerable attention. In relation to this study the issue is may be that the SUEs may need to consider providing 'downsizing' opportunities for older people under occupying family homes in local and wider market area – This may be through specialist providers in the private or affordable sectors.

## 2.4 THE LOCAL RESIDENTIAL MARKETS

### Introduction

By way of their scale, Sustainable Urban Extensions to an extent are able to make their own market, especially in areas of traditionally low to moderate value. In these instances, SUEs are able to create their own high quality environment, widening the geographical residential market for homes in the area by attracting buyers who might not otherwise be attracted to the area. This is certainly the case with regard to Bloor's Fox Meadow development, which essentially represents a first phase of the Earl Shilton Sustainable Urban Extension. Here, buyer activity has reportedly been brisk achieving a rate of around three per month over 2012, and attracting many buyers from outside the area, as far as Coventry and Stratford.

In these instances the wider geographical scope can help raise achievable values to a higher level than might otherwise be achieved in a more geographically constrained "local market". Indeed, traditionally the two towns form their own local submarkets, which are significantly lower priced than the surrounding rural area. For example, the Leicester and Leicestershire HMA identifies the two towns as having their own small, low priced submarkets (amongst the lowest priced in the county), whilst to the immediate east of the built up area of Earl Shilton is the A47/M69 rural corridor, and Stoke Golding to the immediate west of Barwell, both amongst the higher priced market areas of the county.

With good direct access to the A47 corridor, the two SUEs would be considered part of the A47/M69 corridor, and achieve residential sales prices that reflect this position.

### Barwell

#### 2.4.0.1 Marketed

Below, we present an analysis of current marketed prices around Barwell.

**Figure 4.1 Average house prices (marketed) in Earl Shilton (Source: Find a Property / Zoopla.co.uk)**

	Median	Lower Quartile	Higher Quartile
2 bedroom	£115,750	£107,000	£119,950
3 bedroom	£113,975	£109,975	£141,250
4 bedroom	£179,950	£169,950	£227,000
5 bedroom	£242,000 (1)		

Two bedroom houses being marketed in Barwell are slightly higher priced in Earl Shilton due to the smaller sample population consisting of generally larger properties, on a like for like basis the pricing is similar.

The marketing price of 3 bedroom properties in Barwell is significantly less than in Earl Shilton. In part this is due to the absence of new build properties in the sample population, though it is also the case that the lower quartile price for a three bedroom property in Barwell (c. £ 110,000) is also much less than those in Earl Shilton (c £125,000).

Likewise, the median marketing price of 4 bedroom homes in Barwell (c. £180,000) is also significantly less than in Earl Shilton (c. £210,000). In part this is due to the virtual absence of new build properties in the sample population, though it is also the case that the lower quartile price for a four bedroom property in Barwell (c. £ 170,000) is also less than those in Earl Shilton (c £185,000).

#### 2.4.0.2 Achieved

We have also analysed recent actual sales. A number of useful comparable sites do exist. Adjacent to the SUE is the Berrywell Drive (Berrywell Drive and Harvey Close) development (most recent sales listed only). Arguably prices here at Berrywell Drive are constrained by the lack of direct access to the A47.

Address	Type	Bedrooms	Sale Price	Date
18 Harvey Close Barwell Leicester LE9 8JZ	Semi-Detached	2 beds	£110,500	19 April 2012
12 Harvey Close Barwell Leicester LE9 8JZ	End of Terrace (No Garage)	4 beds	£130,000	11 December 2009
22 Berrywell Drive Barwell Leicester LE9 8JW	Terraced	3 beds	£117,000	13 December 2011
30 Berrywell Drive Barwell Leicester LE9 8JW	Terraced		£122,000	28 July 2011
22 Berrywell Drive Barwell Leicester LE9 8JW	Terraced	2 beds	£119,000	12 February 2010



To the north of Barwell, off Stapleton Lane, and to the north of the SUE, is a high quality 1990s development, where there have been recent sales at Cumberland Way.

1990s development, Cumberland Way, off Stapleton Lane

Address	Type	Bedrooms	Sale Price	Date
60 Cumberland Way Barwell Leicester LE9 8HX	Detached	4-bed plus garage	£190,000	25 June 2010
46 Cumberland Way Barwell Leicester LE9 8HX	Detached	5-bed	£240,000	8 May 2009

On the southern rural fringe of Barwell is Garner Close, which enjoys good direct access to the A47, which is reflected in sales prices as high as £270,000.

Garner Close

Address	Type	Bedrooms	Sale Price	Date
34 Garner Close Barwell Leicester LE9 8NG	Detached		£199,995	8 May 2011
17 Garner Close Barwell Leicester LE9 8NG	Detached		£196,995	24 June 2011
32 Garner Close Barwell Leicester LE9 8NG	Detached		£190,000	23 June 2011
2 Garner Close Barwell Leicester LE9 8NG	Detached		£259,995	1 April 2011
21 Garner Close Barwell Leicester LE9 8NG	Detached		£205,000	18 March 2010
19 Garner Close Barwell Leicester LE9 8NG	Detached		£278,495	17 December 2010

26 Garner Close Barwell Leicester LE9 8NG	Detached		£299,995	10 December 2010
14 Garner Close Barwell Leicester LE9 8NG	Detached	4 bed	£213,340	1 October 2010
30 Garner Close Barwell Leicester LE9 8NG	Detached	4 bed	£250,000	24 September 2010
28 Garner Close Barwell Leicester LE9 8NG	Detached		£237,596	24 September 2010
24 Garner Close Barwell Leicester LE9 8NG	Detached		£216,495	27 August 2010
18 Garner Close Barwell Leicester LE9 8NG	Detached		£229,995	27 August 2010
22 Garner Close Barwell Leicester LE9 8NG	Detached	4 Bed	£251,696	25 June 2010
6 Garner Close Barwell Leicester LE9 8NG	Detached	5 bed	£237,096	21 May 2010
8 Garner Close Barwell Leicester LE9 8NG	Detached		£270,995	30 April 2010
12 Garner Close Barwell Leicester LE9 8NG	Detached		£269,995	26 March 2010
10 Garner Close Barwell Leicester LE9 8NG	Detached		£272,995	26 March 2010

The Garner Close development might be considered the most useful comparator for the SUE on the basis of its proximity to the A47 – indeed the SUE proposes a spine road affording more direct access to the A47, avoiding the village centre.

Accessibility to the A47 seems to play an important role - aside from the general price differences between Earl Shilton and Barwell, there is also a notable price gradient relating to access to the

A47 and the wider primary route network, which is exemplified by the differences in achieved prices, particularly in Barwell.

### 2.4.0.3 Overall

On the basis of the marketing and sales evidence, above, and other the market context evidence and research preceding it, we have cautiously factored in an average sales price of £175 per square foot, bearing in mind the need to maintain a good pace of sales, though prices in the region of around £180 – 190 square foot should be achievable.

## Earl Shilton

### 2.4.0.4 Marketed

Below, we present an analysis of current marketed prices

**Figure 4.4 Average house prices (marketed) in Earl Shilton (Source: Find a Property / Zoopla.co.uk)**

	Median	Lower Quartile	Higher Quartile
2 bedroom	£99,950	£91,000	£110,000
3 bedroom	£169,950	£127,500	£185,000
4 bedroom	£212,000	£186,000	£259,000
5 bedroom	£315,000	-	-

Of the two bedroom homes being marketed, half consist of Victorian terraces in the central area of Earl Shilton, and the marketed prices for these houses is generally reflected in the lower quartile figure. The higher quartile figure is reflective of newer housing being marketed in Queens Close (Tobias Property Developments), though here the marketing prices are constrained by the relatively small size of the dwellings and the small size of the overall development. The highest noted marketing price (£124,500) was for a large two bedroom semi detached property to the north of the town in a generally low priced area.

The 3 bedroom homes being marketed occupy a very wide price range, with the lower quartile prices being generally representative of small interwar (ex municipal) semi detached and small 1970s terraced /semi detached properties towards the centre of the town, whilst the higher quartile prices are generally driven by re-sales at the recent David Wilson new build development at Montgomery Gardens, in the north of the proposed SUE. It is this stock which clearly shows the price premium achievable in the SUE over the existing town offer.

Around half of the four bedroom homes (and two of the three five bedroom homes) currently being marketed are also re-sales from either the Montgomery Gardens development or Bloor's

Fox Meadows, to the south west of the SUE, adjacent to the A47 bypass, which demonstrate the importance of this development in widening the range of stock available in the town.

#### 2.4.0.5 Achieved

We have also analysed actual sales. The two key comparators are the new build developments at Fox Meadows (Bloor Homes), and Montgomery Gardens (David Wilson Homes). The later is slightly less well placed in relation to the A47, and is also built at a higher density to the arguably more attractive Fox Meadows development. This is reflected in the achieved prices, with 2.5 / 3 storey homes selling for notably less than similar sized two storey homes.

##### Achieved Prices : Fox Meadows

Address	Type	Bedrooms	Sale Price	Date
6 Beechome Drive Earl Shilton Leicester LE9 7DW	Detached	4 beds	£204,921	30 September 2011
18a Oaklands Avenue, Earl Shilton, Leicester LE9 9JX	Detached		£239,950	31 October 2012
25 Oaklands Avenue, Earl Shilton, Leicester LE9 9JX	Detached		£315,000	27 September 2012
20 Oaklands Avenue Earl Shilton Leicester LE9 7JX	Detached		£273,350	9 July 2012
15 Oaklands Avenue Earl Shilton Leicester LE9 7JX	Detached		£215,000	31 January 2012
3 Oaklands Avenue Earl Shilton Leicester LE9 7JX	End of Terrace		£169,950	8 June 2012
2 Oaklands Avenue Earl Shilton Leicester LE9 7JX	Terraced		£164,995	1 June 2012
17 Oaklands Avenue Earl Shilton Leicester LE9 7JX	Detached		£240,000	8 May 2012
19 Oaklands Avenue Earl Shilton Leicester LE9 7JX	Detached		£288,000	30 April 2012
16 Oaklands Avenue Earl Shilton Leicester LE9 7JX	Detached		£220,000	27 April 2012
15 Oaklands Avenue Earl Shilton Leicester LE9 7JX	Detached		£215,000	31 Jan 2012

2 Oaklands Avenue Earl Shilton Leicester LE9 7JX	Terraced		£164,995	1 June 2012
1 Oaklands Avenue Earl Shilton Leicester LE9 7JX	Terraced		£218,100	25 November 2011
4 Oaklands Avenue Earl Shilton Leicester LE9 7JX	Detached		£246,006	25 November 2011
5 Oaklands Avenue Earl Shilton Leicester LE9 7JX	Detached		£246,006	30 September 2011
2 Oaklands Drive Earl Shilton Leicester LE9 7HT	Semi-Detached	3 beds	£149,295	24 February 2011
3 Oaklands Drive Earl Shilton Leicester LE9 7HT	Semi-Detached	3 beds	£151,500	18 November 2011
4 Oaklands Way Earl Shilton Leicester LE9 7JW	Detached		£205,000	27 February 2012
10 Oaklands Way Earl Shilton Leicester LE9 7JW	Detached		£282,000	31 January 2012
6 Oaklands Way Earl Shilton Leicester LE9 7JW	Detached	4 beds	£225,000	16 December 2011
14 Oaklands Way Earl Shilton Leicester LE9 7JW	Detached	4 beds	£284,000	30 November 2011
2 Oaklands Way Earl Shilton Leicester LE9 7JW	Detached	5 beds	£294,950	14 October 2011
12 Oaklands Way Earl Shilton Leicester LE9 7JW	Detached	4 beds	£260,000	16 September 2011
2 Masfield Drive, Earl Shilton Leicester LE9 7GS	Detached	5 beds	£325,000	29 June 2012
26 Masfield Drive, Earl Shilton Leicester LE9 7GS	Detached		£295,000	30 June 2011
25 Masfield Drive, Earl Shilton Leicester LE9 7GS	Detached		£183,950	30 June 2011
1 Masfield Drive, Earl Shilton Leicester LE9 7GS	Detached		£370,000	31 March 2011

#### Achieved Prices: Montgomery Gardens

<b>Address</b>	<b>Type</b>	<b>Bedrooms</b>	<b>Sale Price</b>	<b>Date</b>
22 Columbus Lane Earl Shilton Leicester LE9 7JR	Semi-Detached		£154,995	23 March 2011
24 Columbus Lane Earl Shilton Leicester LE9 7JR	Semi-Detached		£154,995	23 March 2011
22a Columbus Lane Earl Shilton Leicester LE9 7JR	Semi-Detached		£139,000	16 March 2011
21 Columbus Lane Earl Shilton Leicester LE9 7JR	Detached	4 beds	£211,995	30 September 2011
40 Montgomery Road Earl Shilton Leicester LE9 7AS	Semi-Detached		£166,246	24 February 2011
5 Montgomery Road Earl Shilton Leicester LE9 7AT	Semi-Detached	3 beds	£154,995	30 September 2011
7 Montgomery Terrace Montgomery Road Earl Shilton Leicester LE9 7JT	Semi-Detached		£154,995	25 November 2011
6 Montgomery Terrace Montgomery Road Earl Shilton Leicester LE9 7JT	Semi-Detached		£157,995	11 November 2011
6 Parry Close Earl Shilton Leicester LE9 7JP	Semi-Detached	3 beds	£184,995	30 September 2011

#### **2.4.0.6 Summary**

On the basis of the marketing and sales evidence, above, and other the market context evidence and research preceding it, we have factored in an average sales price of £180 per square foot, bearing though prices in of up to around £190 square foot would be achievable.

Our view on achievable values at the Earl Shilton site has been influenced by prices achieved at the Fox Meadows site, which we are of the view has managed to create its own environment, with good access from the A47. The Montgomery Gardens site is rather less accessible from the A47, and is built to a higher density, with many more 2.5 and 3 storey homes; both these factors serving to constrain achieved prices in comparison to Fox Meadows.

## 2.5 COMMERCIAL SPACE (BOTH SUES)

### 2.5.0.1 Employment Space

The Earl Shilton and Barwell Employment Land Assessment (King Sturge, November 2010) considered the prospects for the development of new industrial and office space at the Sustainable Urban Extensions. The study suggested that the new A47 bypass presented an opportunity, particularly for the Earl Shilton SUE, but that it would not be sufficient to attract large footloose enquiries in the regional distribution market.

Whilst the prospective labour availability from the SUEs might be a locational attribute, this factor, on its own, would not override accessibility weaknesses of this particular location, with the employment land at Hinckley and Burbage and farther afield (eg the Strategic Employment Site at the proposed New Lubbethorpe SUE) presenting a more attractive prospect.

Instead, the principal source of market interest would be from latent demand from existing occupiers in Barwell and Earl Shilton, and its hinterland.

On this basis, the DTZ view is that it is likely the employment land could be marketed at a rate of around £175,000 /acre.

### 2.5.0.2 Local Centres

For the local centres, we have allowed a broad rate of £90,000 / acre, a rate which reflects the “marginal” viability bracket local centre development falls into. Local centres are particularly hard to value at what is, in effect, a masterplanning stage, as the value of a local centre will ultimately depend on the tenant mix the developer is able to put together, which will be sensitive to specific occupier requirements and perceptions of catchment area socio-economic dynamics at the time of development.

## 3 Barwell SUE Benchmark Modelling Assumptions

### 3.1 CORE COST AND PHASING ASSUMPTIONS

Below, we have set out basic cost assumptions for this, and the two SUE development viability appraisals.

**Figure 3.1 Common SUE Appraisal Assumptions**

Cost	Assumption	Comment / Source
New Build Housing	£80 psf	This is a mid range DTZ cost assumption for schemes of this scale  Includes plot externals and estate road infrastructure
Professional Fees (Residential)	0%	New build residential costs include professional fees
Professional Fees (Infrastructure)	10%	Industry Benchmark
Contingency (All infrastructure)	10%	Industry Benchmark for this early stage
Marketing budget	1.5% for residential private sales	A standard market assumption
Sales Agent Fee	1.0% for residential private sales	A standard market assumption
Sales Legal Fee	0.5% for residential private sales	A standard market assumption
Finance Rate	7.00%	Benchmarked to market.
Profit	20% Profit on Value	Developers profit at 20% of Gross Development Value is consistent with the guidance in the HCA Development Appraisal Tool Model and current market evidence, which points to profit requirements having increased from what we would have expected in the market at its height prior to the credit turmoil which commenced in Autumn 2007.  In light of the above, and allowing for the increased development risk inherent in a SUE scheme, we have applied developers profit on the appraisal at 20% on GDV across the entire residential scheme, which allows for a profit on the private sales of over 20%, and for developer overheads of around 6% of costs on the affordable element.  Separate to profit, we have allowed for a £0.8 million site promoters fee
Land Payments	Phased Annually	
Build Out Rates		The Design and Access statement of the submitted outline planning application



		<p>suggests a twelve year development period from 2014 through to 2026, which assumes an average annual build out rate of 208 dwellings per annum, over an average of three sales outlets, which the site promoters have stated is planned.</p> <p>Whilst this rate is typical of similar schemes, we have appraised the scheme over a build period of 14 years, which allows for a more modest build out rate of around 180 dwellings per annum or around 60 per site.</p>
Effective Date of appraisals	n/a	Today

### 3.2 BARWELL SUE LAND USE BUDGET

The assumed land use budget of the SUE is presented below, and corresponds with the land use budget submitted in the Design and Access Statement of the planning application. The net to gross development ratio is in the order of 60%, which is within the typical range for a Sustainable Urban Extension.

**Figure 3.2 Barwell SUE Land Use Budget**

	Land Use Budget	
	Hectares	Acres
Residential	73.35	181.25
Community Hub and Primary School	3.31	8.18
Employment	6	14.83
Green Infrastructure	43.6	107.74
Primary Route	4.4	10.87
<b>Total</b>	<b>130.66</b>	<b>322.87</b>

### 3.3 BARWELL SPECIFIC COSTS

#### General Infrastructure

We have allowed for the following general infrastructure costs, drawn from benchmark analysis and H&BBC.

Utilities infrastructure costs have the potential to present significant development costs to Sustainable Urban Extensions, both by way of the direct cost impact of the infrastructure itself, but also due to the effect of timing; in many cases significant infrastructure investment is required before significant progress has been made in development the residential phases, which can increase the development finance costs significantly. According to the site promoters, no significant abnormal utilities investment is required, and we have made a high level allowance relating to drainage only.

**Figure 3.3 Summary Infrastructure Costs and Phasing**

Element	Total Cost	Phasing	Source
Spine Road	£4m	2014 – 2015	DTZ Benchmark Estimate
Utilities Infrastructure	£4.9m	2014 – 2016	DTZ Benchmark Estimate
Archaeology and Ecology	£1m	2014 – 2016	DTZ Benchmark Estimate
Landscaping, Play and Open Space	£2.47m	2014 – 2022	H&BBC
SUE Pavilion	£0.5m	2020	H&BBC
<b>TOTAL</b>	<b>£12.9m</b>		

## Highways

The scope and phasing of transport infrastructure (£6.9 m) is set out below.

**Figure 3.4 Summary Highways and Transport Costs and Phasing (Source: Hinckley and Bosworth Borough Council)**

Element	Total Cost	Phasing
Improvements to A5 (Longshoot and Dodwells)	£1.632m	2016 – 2017
Improvements to Normandy Way/Ashby Road traffic signal controlled junction	£0.195m	2014 – 2015
Improvements to Ashby Road/Stapleton Lane to incorporate traffic signal control	£0.5m	2014 – 2015
Improvements to Ashby Road/Rogue's Lane Junction	£0.5m	2014 – 2015
Improvements to Rugby Road/Brookside Junction	£0.180m	2015 - 2016
Links to existing urban area for buses (particularly the Railway Station) walking, cycling and local traffic	£0.720m	2014 - 2016
Improvements to A47 Hinckley Northern Perimeter Road and Earl Shilton By-Pass. This will include at least junction improvements, including bus priority, measures as required but may also include some widening of the route.	£1.2m	2014 - 2018
Improvements on linkages to Hinckley Town Centre including alterations to signal operation at Leicester Road/New building junction	£0.120m	2014 – 2019
New Public Transport linkages from new developments to Earl Shilton and Barwell and improved public transport linkages between Barwell, Earl Shilton, Hinckley Town Centre and HNPR employment areas (to provide 10 minute local service and real time information at interconnecting bus stops links for Hinckley and Leicester).	£1m	2014 – 2019
New pedestrian and cycle linkages from the urban extensions into Barwell and Earl Shilton	£0.150m	2014 – 2018
Traffic calming measures in Barwell and Earl Shilton, traffic management measures along The Common	£0.250m	2014 - 2018
Improvements to A447 Ashby Road to facilitate introduction of bus priority measures	£1m	2014 - 2018
<b>TOTAL</b>	<b>£6.9m</b>	

NB. Applied to these costs in the appraisal is a 10% contingency, and 10% fees

## Section 106 Package

A £19.9 million Section 106 package is included within the SUE development appraisal, as below.

**Figure 3.4 Section 106 Costs and Phasing (Source: Hinckley and Bosworth Borough Council)**

Element	Total Cost	Phasing
Capacity Improvements to existing Barwell Primary Schools	£1.319m	2018 – 2018
Barwell SUE Primary School Phase 1	£2.675m	2017 – 2017
Barwell SUE Primary School Phase 2	£2.675m	2020 – 2021
Capacity Improvements to existing secondary schools	£1.902m	2016 – 2017
Capacity improvements to existing upper schools	£0.976m	2016 – 2017
Barwell SUE GP Surgery requirements (at new surgery within Barwell Village Centre or as fallback position within SUE)	£1.779m	2014 – 2015
Neighbourhood Policing	£0.98m	2016 – 2020
Barwell Library	£0.084m	2016 – 2017
Indoor Leisure Facilities to serve the Borough	£0.460m	2015 – 2022
Barwell Community Buildings	£1.2m	2018 – 2019
Barwell District Centre Improvements	£1m	2014 – 2015
Capacity improvements at Barwell Recycling and Household Waste Site	£0.118m	2017 – 2018
Apprenticeships/training opportunities Phase 1	£0.1m	2014 – 2014
Apprenticeships Phase 2	£0.1m	2018 – 2018
Apprenticeships Phase 3	£0.1m	2021 – 2021
Play and Open Space Maintenance	£3.7m	2014 – 2026
<b>Total</b>	<b>£19.9m</b>	

## Parks, Sports Facilities and Open Space

Note, a further £2.97 million of estimated on-site costs relating to parks, sports facilities and open space is included within the on-site development costs of the SUE, and hence are not considered as Section 106 costs.

The £2.97 million on site package is inclusive of the following elements: Play and Open Space, and a Pavilion.

## 3.4 BARWELL SUE DEVELOPMENT AND SALES

### Development Trajectory

It is envisaged by the site promoters that the SUE development will proceed from three individual development points across the SUE. On this basis we anticipate the following development trajectory.

**Figure 3.5 Development Trajectory - Barwell SUE**

Phase	Timing
Pre Development (initial infrastructure)	Year 1
Cumulative Completion of 100 dwellings	Year 3
Cumulative Completion of 500 dwellings	Year 5
Cumulative Completion of 1000 dwellings	Year 8
Cumulative Completion of 1500 dwellings	Year 10
Cumulative Completion of 2500 dwellings	Year 15

### Residential Sales Values and Development Mix

Relating to the market overview in Section 2, an overall development mix and pricing structure is presented below.

The appraisals allow for the following overall housing mix at the site, based on 2500 dwellings and with 10% of these dwellings being affordable tenures. This is an important assumption given that two of the house types (apartments and bungalows) are not assumed to be for private sale.

**Figure 7.7 Development Mix and Pricing Structure (Source: DTZ)**

	Share	Net Area	£ psf	Value
1 bed flat	2.4%	500	130	£65,000
2 bed flat	0.4%	650	126	£82,000
Bungalow (2 bed)	0.8%	721	153	£110,000
2 bed house	18%	775	165	£127,000
3 bed house	60%	900	172	£155,000
4 bed house	18%	1250	188	£235,000

1

A development mix for the private housing is presented below.

	Share
1 bed flat	0%
2 bed flat	0%
Bungalow (2 bed)	0%
2 bed house	16%
3 bed house	64%
4 bed house	20%

## Affordable Housing Assumptions

### 3.4.2.1 Tenure Mix

We have modelled a tenure mix for the affordable housing as split 75% Social Rent / 25% Shared Ownership, as set out in the current Affordable Housing Supplementary Housing Document. This mix excludes the Affordable Rent tenure.

### 3.4.2.2 Values

We have factored in Social Rented housing at 40% of Open Market Value (OMV), and Shared Equity at 65% of OMV.

### 3.4.2.3 Affordable Housing Mix

Following consultation with the Housing Strategy and Enabling Officer, the following affordable housing mix has been factored into the appraisal.

**Figure 7.7: Affordable Housing Mix (Within Viability Model)**

	Share	Quantity
1 bed flat	24%	60
2 bed flat	4%	60
Bungalow (2 bed)	8%	10
2 bed house	40%	20
3 bed house	20%	100
4 bed house	4%	50

	Social Rent		Shared Ownership	
	Share of Type within Tenure	Quantity	Share of Type within Tenure	Quantity
1 bed flat	100%	60	0%	-
2 bed flat	100%	10	0%	-
Bungalow (2 bed)	100%	20	0%	-
2 bed house	75%	75	25%	25
3 bed house	25%	12	75%	37
4 bed house	100%	10	0%	-

#### 3.4.2.4 Commercial Development Assumptions

We have allowed for the following rates at this stage (Refer to Section 2.5)

Local Centre: £90,000 / acre (Source: DTZ)

Employment Sites: £175,000 / acre (Source: DTZ)

## 4 Barwell SUE Viability Testing

### 4.1 INTRODUCTION

This section brings the evidence and assumptions of the previous sections together, in the form of a series of summarised development viability appraisals relating to the SUE sites. The results of these appraisals are interpreted, and their meaning for the SUEs and Hinckley and Bosworth Borough Council in terms of policy approach, are set out.

The Sustainable Urban Extension sites are significant development opportunities, reflected in the financial and time resources expended by competing landowner and developer consortiums in promoting their sites.

Notwithstanding this, the large scale nature of SUEs also pose significant development risk, relating particularly to the significant infrastructure requirements they require, not just in terms of transport but also the community, green and social infrastructure that they need to function as Sustainable Urban Extensions.

In this context, there is a risk that an SUE may not be able to deliver this crucial infrastructure whilst also delivering policy compliant affordable housing and section 106 packages. The purpose of viability testing is to explore this risk.

The DTZ Methodology for assessing development viability, and the level of affordable housing and infrastructure contributions that are viable is in line with the principles set out in National Government Guidance provided in a Circular entitled Delivering Affordable Housing, and also the National Planning Policy Framework. The DTZ approach is also in line with the HCA's guidance for its Development Appraisal Tool (DAT) Model, and the National Planning Policy Framework.

The DTZ approach has three key stages:

- **Stage One:** Identify the Threshold Land Value of the site. This assists in establishing a base value for the site which must be achieved for the proposed development to be brought forward to the market by the landowner.
- **Stage Two:** Identify the Residual Value of the site with a level of affordable housing and Section 106 payments in accordance with policy, and suitably phased.
- **Stage Three:** By looking at the difference between the figures calculated in stage one and two above we can determine if the scheme as proposed is viable

This approach is consistent with the advice of Paragraph 173 of the National Planning Policy Framework , which specifically states that the consideration of viability should allow for :

*“competitive returns to a willing land owner and willing developer to enable the development to be deliverable.”*

We first explore a number of important development viability concepts that must be understood.

## 4.2 THRESHOLD LAND VALUE

The issue of Threshold Land Value is critical to assessing development viability. The recent cross industry report - (Viability Testing Local Plans, Advice for Planning Practitioners; Local Housing Delivery Group; June 2012) provides useful thoughts on the issue. The Threshold Land Value should represent the value at which a typical willing landowner is likely to release land for development, before payment of taxes (such as capital gains tax), allowing for a certain premium over the existing/alternative use value.

A critical consideration is as to the allowable size of the premium over the existing/alternative use value, and the guidance makes several pertinent observations relating to how a view on value might be taken with regard to agricultural land, which evidence suggests is valued in the region of up to £7,500 - £10,000 / acre in Leicestershire. Anecdotal evidence suggests that land owners are asking for significant premiums with regard to residential development land, with rates in region of £100,000 / acre being suggested.

A key factor at play at the SUE sites, highlighted in the report, and supporting such a premium is the need for the premium to take account of the composition of key landowners within the area and their interests.

The report notes that for nonurban sites or urban extensions, where land owners are rarely forced or distressed sellers, the owner generally takes a much longer term view over the merits or otherwise of disposing of their asset, which will push the premium up. This is particularly the case in relation to large greenfield sites where a prospective seller is potentially making a once in a lifetime decision over whether to sell an asset that may have been in the family, trust or institution’s ownership for many generations.

Notwithstanding this, there are also factors at play, highlighted in the document, which may serve to reduce the premium:



- For smaller, edge-of-settlement greenfield sites, landowners’ required returns are likely to be higher than those associated with larger greenfield sites (which will include SUEs), as landowners will be aware of the prospects of securing a beneficial permission at some point in the future and may therefore choose to defer bringing forward such land until they perceive market conditions have improved and/or the planning system is more conducive to an improved return. This is arguably not the case for landowners in SUEs, which are major strategic allocations where the case for development is part made on viability and deliverability within a given timeframe, and where there is little scope for individual land owners to bring land forward independent of the SUE.
- Abnormal costs of development, and other abnormal development factors.
  - SUEs can incur significant upfront infrastructure costs relating to development enabling infrastructure, such as utilities and transport infrastructure, which can legitimately serve to reduce the price paid for land in such a situation.
  - Within certain SUE sites there can be significant development constraints serving to constrain the developable land as a proportion of the gross site area of the SUE to such a level that it would not be appropriate to allow a residential development “hope” guided by a notion of “more favourable” development ratios that may be achievable on smaller Greenfield sites

We have borne the above factors in mind when considering appropriate threshold land values for the two SUE sites.

### Threshold Land Value for Barwell SUE

We have adopted a threshold land value of £100,000 / acre for the Barwell SUE. This is applied to the 323 acre gross area of the SUE.

### Residual Land Value

The residual land value calculation calculates the total revenue (allowing for affordable housing) and deducts from that all costs associated with delivering the development including the required level of Section 106 payments and an element of developer profit, in order to determine what value is left to pay for the land (The residual land value or land receipt). In this way, the residual land value can be used as a proxy for development viability.

## Developer Profit

Whilst the previous section regarding appraisal assumptions set out our assumption of 20% Profit on Value for the SUE schemes, it is important to briefly revisit this development cost here, in the context of considering overall viability. A viable scheme is one that delivers both a land value return to the land owner equal or in excess of the Threshold Land Value whilst also delivering a level of profit to the developer that is proportionate to the development risk incurred.

## Interpreting Viability

In line with the stages outlined at the start of this section, we have considered the viability of the SUEs.

Ostensibly, the viability consideration is simply a case of checking that the residual land value of the SUE development (allowing for 20% affordable housing, required Section 106 payments and infrastructure costs) equals or exceeds the threshold land value. If residual land value equals or exceeds threshold land value, then the development is viable, if the residual land value falls short of the threshold land value then the development is not viable.

The reality is slightly more complicated than this concept, especially for developments of the scale of SUEs, in that a relatively small residual margin on either side of the threshold land value can be deemed insignificant in a development scheme of around £0.4 billion. Relatively modest changes in cost allowances, sales rates and timings, Section 106 trigger points, affordable housing mix (tenure and type), can have a significant cumulative impact.

Indeed, particular factors to note in relation to the Barwell SUE appraisal assumptions we have used include for:

- Relatively conservative development periods (so increasing finance costs). e.g. we have anticipated a development period of fifteen years for the Barwell SUE, whilst the site promoters have previously suggested 12 years; and an average completion rate of c 180 dwellings per annum compared with the promoter proposed 208 dwellings / annum

On this basis, we must consider two factors:

- i. How does the financial differential between threshold land value of the land for the proposed SUE site and the residual value of the proposed SUE development, compare proportionately to the overall projected development costs of the SUE?

- ii. How does the viability of the SUE react to sensitivity testing based on a number of different, plausible, development scenarios? This testing is critically important for SUEs whereby their large scale and long development time periods make them particularly sensitive to relatively small changes in development costs and values. A view on viability cannot be gleaned by considering one scenario in isolation. We have considered scenarios later in this section.

For each development scenario (ii), we have graded viability on the basis of the residual/threshold differential (i), enabling a reasoned approach to be taken to viability of each SUE in the round, having consideration of the performance of the SUE under the different development scenarios.

For example, the three figures in each cell of the viability tables presented later in this report, represents:

- The residual value shortfall (if any) against the threshold land value.
  - The shortfall (if any) as a % of the overall development costs.
  - The approximate profit on value of the scheme (PoV), if the land value cost in the scheme is fixed at the threshold land value.
- A green grading is indicative of a viable scheme, whereby the residual land value of the SUE exceeds the threshold land value of the land.
  - An amber grading is indicative of a marginally viable scheme, whereby the projected shortfall of residual land value against threshold land value is deemed not to be significant enough in size for the scheme to be considered unviable (the shortfall representing 3% or less when considered as a % of the overall development costs, and the profit on value of the scheme, if land cost is fixed at threshold land value, being 18% or over).
  - A red graded scheme is indicative of a scheme where the projected shortfall of residual value against threshold value is of such a magnitude that viability may prove challenging, either the projected shortfall of residual land value against threshold land value represents over 3% of the overall development costs, or the profit on value of the scheme, if land cost is fixed at threshold land value, is under 18%.

e.g. £12.5 m (-3.5%) 17% PoV	Indicates a potentially unviable scheme under the specific scenario
e.g. £6m (-1.5%)	Indicates a marginally viable scheme, where the residual value shortfall against the threshold land

<b>18% PoV</b>	value represents a shortfall 3% or less of overall project cost.
<b>e.g. £2.5m (1%) 20% PoV</b>	Indicates a viable scheme under the specific scenario

## 4.3 BARWELL SUE DEVELOPMENT APPRAISAL

### Benchmark Appraisal

In line with the approach set out above, we first set out initial “benchmark appraisals” based on:

- Today’s development costs and values, as set out in Section 3
- The Transport and Infrastructure Packages (costed and phased) as previously set out.
- Affordable Housing Tenure Mix as set out in the current Affordable Housing SPD (i.e. 75% Social Rent, 25% Shared Ownership), with 10% being on site, and a commuted sum of £12.5 million for off site housing

The results are as follows.

Scheme	Barwell
Total Costs	<b>£349.2m</b>
<b>Build (inc. Fees and Contingency)</b>	£191.6m
<b>Infrastructure and Section 106</b>	£51.9m
<b>Finance Costs</b>	£16.2m
<b>Marketing and Sales</b>	£11.5m
<b>Profit</b>	£78.1m
Total Receipts	<b>£390.5m</b>
Residual Land Value (net)	<b>£37.9 m</b>
SUE Area (acres)	323
Threshold Land Value / acre	<b>£100,000</b>
Estimated Residual Land Value /acre	<b>£118,000</b>
Deficit / Surplus as a % of Overall Costs	<b>3%</b>

Based on the approach regarding assessing viability as set out previously, the SUE is viable, in that the estimated residual land value exceeds the target threshold land value. We must also be aware that the threshold land value used in the viability calculation is itself a benchmark, and in the current market environment we are aware of land owners being prepared to sell land to developers at rates in the region of £50,000/acre, subject to overage agreements, which further supports the view that the schemes are deliverable.

To recap, drawing on the modelling assumption sections (Section 3), it is important to note that the scheme appraised above, and assessed as being viable, includes:

- 10% on site affordable housing
- £12.4 million off site contribution to affordable housing
- £19.9 million Section 106 package
- £6.9 million off-site highways and public transport infrastructure package

- £2.97 million of estimated on-site costs relating to parks, sports facilities and open space

#### 4.3.0.1 Sensitivity Testing

The second stage of the viability testing tests how the SUEs react to sensitivity testing based on a number of different, plausible, development scenarios. As set out at the start of this section, this testing is critically important for SUEs whereby their large scale and long development time periods make them particularly sensitive to relatively small changes in development costs and values. A view on viability cannot be gleaned by considering one scenario in isolation.

On this basis we have carried out a series of sensitivity testing to test the performance of the SUEs against a variety of plausible development scenarios. We have applied the sensitivity testing in layers, so as to make the sensitivity testing as fine grained as possible, enabling an overall picture of viability to be made.

The scenarios we have tested are as follows:

- *Net Cost / Value Inflation:* We have included a more pessimistic market scenario to test the robustness of the appraisals.

#### 4.3.0.2 Layer One: Net Cost / Value Inflation

The large scale of the SUE, and its long delivery timeframe exposes the appraisals to factors that may have a bearing on overall viability. Prime amongst these factors is how the residential property market will behave over the next fifteen years, a time period that has the potential to encapsulate several property cycles, with all the implications this will have on sales values, delivery rates, development costs, funder and developer perception of risk, and hence viability. The past few years have seen periods of tentative growth followed by contraction, and underlying this is the fundamental structural concern that there is no end in sight to the problems of mortgage availability. This not only makes it difficult to model meaningful “growth” scenarios, but also modelling the base point from which a sustained period of even modest growth might begin. The scale of the proposed SUEs will magnify even slight variations in assumed growth rates and the point at which growth begins, which would compromise the practical use of modelling such scenarios.

An alternative, and arguably more robust, approach is to undertake modelling based on perceptions of overall risk as to how cost and sales inflation over the development period of the SUEs will play out. The long development period of SUEs exposes them to cost inflationary pressures relating to progressive revisions in building regulation standards relating to the Code for Sustainable Homes. Our recent experience is that SUE developers and promoters consider that

modest net sales revenue growth, together with the ability of the volume housebuilders to control the costs of increased build specifications through their procurement processes is enough to render the effect of potential CSH cost inflation neutral, and this is not included in their appraisals.

On this basis, our approach to modelling a less favourable development scenario is to set out an additional higher cost build scenario to the £80/sq ft we have used in our base appraisals:

- £82/sq ft: to represent a scenario whereby build cost inflation relating to CSH exceeds revenue inflation

This modelling of net overall build cost / sales value inflation forms the first layer of our sensitivity testing.

#### 4.3.0.3 Sensitivity Testing Viability Matrix

Below, we have set out the results of the sensitivity testing exercise for the SUE, which sets out viability by each layer of sensitivity analysis.

To recap:

The three figures in each cell of the viability tables presented, represents:

- The residual value shortfall (if any) against the threshold land value.
- The shortfall (if any) as a % of the overall development costs.
- The approximate profit on value (PoV) of the scheme, if the land value cost in the scheme is fixed at the threshold land value.
- A green grading is indicative of a viable scheme, whereby the residual land value of the SUE exceeds the threshold land value of the land.
- An amber grading is indicative of a marginally viable scheme, whereby the projected shortfall of residual land value against threshold land value is deemed not to be significant enough in size for the scheme to be considered unviable (the shortfall representing 3% or less when considered as a % of the overall development costs, and the profit on value of the scheme, if land cost is fixed at threshold land value, being 18% or over).

- A red graded scheme is indicative of a scheme where the projected shortfall of residual value against threshold value is of such a magnitude that viability may prove challenging, either the projected shortfall of residual land value against threshold land value represents over 3% of the overall development costs, or the profit on value of the scheme, if land cost is fixed at threshold land value, is under 18%.

<b>e.g. £12.5 m</b> <b>(-3.5%)</b> <b>17% PoV</b>	Indicates a potentially unviable scheme under the specific scenario
<b>e.g. £6m</b> <b>(-1.5%)</b> <b>18% PoV</b>	Indicates a marginally viable scheme, where the residual value shortfall against the threshold land value represents a shortfall 3% or less of overall project cost.
<b>e.g. £2.5m</b> <b>(1%)</b> <b>20% PoV</b>	Indicates a viable scheme under the specific scenario

Under each scenario layer the less favourable scenario is presented on the left, the more favourable on the right.



<b>Barwell SUE</b>		
<b>CSH Cost Inflation Scenario</b>	<b>Code for Sustainable Homes Cost Inflation Exceeds Sales Value Inflation (Less Likely)</b>	<b>Code for Sustainable Homes Cost Inflation and Sales Value Inflation in Equilibrium (Benchmark Scenario) (More Likely)</b>
	<b>£105,000 / acre (£0.8 million)</b>	<b>£117,000 / acre (£4.9 million)</b>

## 4.4 BARWELL SUE VIABILITY SUMMARY

The results of the scenario testing must be considered in the round.

We first consider the result on the right half of the sensitivity testing matrix, which considers a cost /value in balance with the assumptions of “today’s market”, where we would assume that any growth in costs due to increased Code for Sustainable Homes requirements will be offset by sales value inflation. These results are encouraging in that a viable scheme is suggested, which is capable of providing a landowners return of over £100,000 acre, a developers profit of 20% on value, and also allowing for land promoters costs of some £800,000.

It is also encouraging in that the results on the left half of the sensitivity testing matrix, which is based on a cost/value scenario which we think is less likely, but still must be considered, also shows a viable scheme. This scenario is one where build cost inflation due to increasing Code for Sustainable Homes requirements outpaces value inflation.

We suggest the scheme, with the package of benefits presented, is a viable and sound proposition for including in the Core Strategy.

To conclude, we relate the consideration of viability back to paragraphs 173-177 of the Plan Making chapter of the NPPF. Para 173, specifically states that:

*“To ensure viability, the costs of any requirements likely to be applied to development, such as requirements for affordable housing, standards, infrastructure contributions or other requirements should, when taking account of the normal cost of development and mitigation, **provide competitive returns to a willing land owner and willing developer to enable the development to be deliverable.**”*

To recap, drawing on the modelling assumption sections (Section 3), it is important to note that the scheme appraised above, and assessed as being viable, includes:

- 10% on site affordable housing
- £12.4 million off site contribution to affordable housing
- £19.9 million Section 106 package
- £6.9 million off-site highways and public transport infrastructure package
- £2.97 million of estimated on-site costs relating to parks, sports facilities and open space

The appraisals show that the Barwell Sustainable Urban Extension, including this benefits package, is deliverable, whilst providing a competitive return to a willing land owner (c. £118,000

/ acre) and a willing developer (20% Profit on Value), and hence is consistent with the National Planning Policy Framework.

## 5 Earl Shilton SUE Benchmark Modelling Assumptions

### 5.1 CORE COST AND PHASING ASSUMPTIONS

Below, we have set out basic cost assumptions for this SUE development viability appraisal.

**Figure 5.1 Common SUE Appraisal Assumptions**

Cost	Assumption	Comment / Source
New Build Housing	£80 psf	This is a mid range DTZ cost assumption for schemes of this scale Includes plot externals and estate road infrastructure
Professional Fees (Residential)	0%	New build residential costs include professional fees
Professional Fees (Infrastructure)	10%	Industry Benchmark
Contingency (All infrastructure)	10%	Industry Benchmark
Marketing budget	1.5% for residential private sales	A standard market assumption
Sales Agent Fee	1.0% for residential private sales	A standard market assumption
Sales Legal Fee	0.5% for residential private sales	A standard market assumption
Finance Rate	7.00%	Benchmarked to market.
Profit	20% Profit on Value	Developers profit at 20% of Gross Development Value is consistent with the guidance in the HCA Development Appraisal Tool Model and current market evidence, which points to profit requirements having increased from what we would have expected in the market at its height prior to the credit turmoil which commenced in Autumn 2007.  In light of the above, and allowing for the increased development risk inherent in a SUE scheme, we have applied developers profit on the appraisal at 20% on GDV across the entire residential scheme, which allows for a profit on the private sales of over 20%, and for developer overheads of around 6% of costs on the affordable element.  Separate to profit, we have allowed for a £0.8 million site promoters fee
Land Payments	Phased Annually	
Build Out Rates		We have appraised the scheme over a build period of 13 years, which allows for a build out rate of around 120 dwellings per annum or around 60 per site, assuming 2 sites operating over the build out period

Effective Date of appraisals	n/a	Today

## 5.2 EARL SHILTON SUE LAND USE BUDGET

The assumed land use budget of the SUE is presented below, and is based on the known gross area of the SUE (excluding the Severn Trent land; including the Persimmon land), the AAP Masterplan, and further information provided by the SUE promoters.

**Figure 5.2 Earl Shilton SUE Land Use Budget**

	Land Use Budget	
	Hectares	Acres
Local Centre	2.5	6.2
Employment	5.5	13.6
Residential	44	108
Other	17	41.5
<b>Total</b>	<b>68.58</b>	<b>169</b>

## 5.3 EARL SHILTON SPECIFIC COSTS

### General Infrastructure

We have allowed for the following general infrastructure costs, drawn from benchmark analysis and H&BBC.

Utilities infrastructure costs have the potential to present significant development costs to Sustainable Urban Extensions, both by way of the direct cost impact of the infrastructure itself, but also due to the effect of timing; in many cases significant infrastructure investment is required before significant progress has been made in development the residential phases, which can increase the development finance costs significantly. According to the site promoters, no significant abnormal utilities investment is required, and we have appropriated benchmark costs relating to drainage only.

**Figure 5.3 Summary Infrastructure Costs and Phasing**

Element	Total Cost	Phasing	Source
Spine Road	£5.2m	2014 – 2015	DTZ Benchmark Estimate
Utilities Infrastructure	£3.1m	2014 – 2016	DTZ Benchmark Estimate
Archaeology and Ecology	£1m	2014 – 2016	DTZ Benchmark Estimate
Landscaping, Play and Open Space	£1.65m	2015 – 2022	H&BBC
SUE Pavilion	£0.5m	2020	H&BBC
<b>TOTAL</b>	<b>£11.45m</b>		

## Highways

The scope and phasing of transport infrastructure is set out below

**Figure 5.4 Summary Highways and Transport Costs and Phasing**

Element	Total Cost	Phasing
Improvements to A5 (Longshoot and Dodwells)	£1.088m	2016 – 2017
Improvements to Normandy Way/Ashby Road traffic signal controlled junction	£0.195m	2014 – 2015
Improvements to Desford Crossroads	£0.605m	2015 – 2016
Improvements to Rugby Road/Brookside Junction	£0.120m	2015 – 2016
Links to existing urban area for buses (particularly the Railway Station) walking, cycling and local traffic	£0.432m	2014 – 2016
Improvements to A47 Hinckley Northern Perimeter Road and Earl Shilton By-Pass. This will include at least junction improvements, including bus priority, measures as required but may also include some widening of the route.	£0.800m	2014 – 2018
Improvements on linkages to Hinckley Town Centre including alterations to signal operation at Leicester Road/New building junction	£0.080m	2014 – 2019
New Public Transport linkages from new developments to Earl Shilton and Barwell and improved public transport linkages between Barwell, Earl Shilton, Hinckley Town Centre and HNPR employment areas (to provide 10 minute local service and real time information at interconnecting bus stops links for Hinckley and Leicester.	£1m	2014 – 2019
New pedestrian and cycle linkages from the urban extensions into Barwell and Earl Shilton	£0.150m	2014 – 2018
Traffic calming measures in Barwell and Earl Shilton, traffic management measures along The Common	£0.250m	2014 – 2018
<b>TOTAL</b>	<b>£4.72m</b>	

## Section 106 Package

A £13.15 million Section 106 package is included within the SUE development appraisal, as below.

**Figure 5.5 Section 106 Costs and Phasing**

Element	Total Cost	Phasing
New Primary School	£5.350m	2015 – 2016
Improvements to existing secondary and upper schools	£1.919m	2015 – 2016
Healthcare Facilities	£0.976m	2017 – 2018
Open Space Maintenance	£2.29m	2015 – 2026
Neighbourhood Policing Base	£0.064m	2016 – 2020
Community Buildings	£0.706m	2018 – 2019
Library	£0.054m	2015 – 2022
Indoor Leisure Facilities	£0.328m	2015 – 2022
Earl Shilton District Centre Improvements	£1.100m	2015 – 2022
Waste disposal – Facility Improvements and Receptacles	£0.075m	2015 – 2022
Employment and Skills	£0.300m	2020 – 2021
<b>Total</b>	<b>£13.15m</b>	

## Parks, Sports Facilities and Open Space

Note, a further £2.15 million of estimated on-site costs relating to parks, sports facilities and open space is included within the on-site development costs of the SUE, and hence are not considered as Section 106 costs.

The £2.15 million on site package is inclusive of the following elements: Play and Open Space, and a Pavilion.

## 5.4 EARL SHILTON SUE DEVELOPMENT AND SALES

### Development Trajectory

Given the scale of the SUE development we would envisage that the SUE development will proceed from around two individual development points across the SUE. On this basis we anticipate the following development trajectory.

**Figure 5.6 Development Trajectory - Earl Shilton SUE**

Phase	Timing
Pre Development (initial infrastructure)	Year 1
Cumulative Completion of 100 dwellings	Year 3
Cumulative Completion of 500 dwellings	Year 7
Cumulative Completion of 1000 dwellings	Year 10
Cumulative Completion of 1600 dwellings	Year 14

## Residential Sales Values and Development Mix

Relating to the market overview in Section 2, an overall development mix and pricing structure is presented below.

The appraisals allow for the following overall housing mix at the site, based on 1600 dwellings and with 20% of these dwellings being affordable tenures. This is an important assumption given that

**Figure 5.7 Development Mix and Pricing Structure (Source: DTZ)**

	Share	Net Area	£ psf	Value
1 bed flat	4.8%	500	134	£67,000
2 bed flat	0.8%	650	131	£85,000
Bungalow (2 bed)	1.6%	721	160	£115,000
2 bed house	15%	775	168	£130,000
3 bed house	60%	900	178	£160,000
4 bed house	18%	1250	192	£240,000

1

A development mix for the private housing is presented below.

	Share
1 bed flat	0%
2 bed flat	0%
Bungalow (2 bed)	0%
2 bed house	9%
3 bed house	71%
4 bed house	22%

## Affordable Housing Assumptions

### 5.4.2.1 Tenure Mix

We have modelled a tenure mix for the affordable housing as split 75% Social Rent / 25% Shared Ownership, as set out in the current Affordable Housing Supplementary Housing Document. This mix excludes the Affordable Rent tenure.

### 5.4.2.2 Values

We have factored in Social Rented housing at 40% of Open Market Value (OMV), and Shared Equity at 65% of OMV, which are rates we have previously applied for viability work in Leicestershire taking into consideration the views of Registered Providers.

### 5.4.2.3 Affordable Housing Mix

Following consultation with the Housing Strategy and Enabling Officer of Hinckley and Bosworth Borough Council, the following affordable housing mix has been factored into the appraisal.



**Figure 5.8: Affordable Housing Mix (Within Viability Model)**

	Share	Quantity
1 bed flat	24%	77
2 bed flat	4%	13
Bungalow (2 bed)	8%	26
2 bed house	40%	128
3 bed house	20%	64
4 bed house	4%	13

**Figure 5.9: Affordable Housing Mix (Within Viability Model)**

	Share of Type within Tenure	Social Rent	Shared Ownership	
		Quantity	Share of Type within Tenure	Quantity
1 bed flat	100%	77	0%	0
2 bed flat	100%	13	0%	0
Bungalow (2 bed)	100%	26	0%	0
2 bed house	75%	96	25%	32
3 bed house	25%	16	75%	48
4 bed house	100%	13	0%	0

#### 5.4.2.4 Commercial Development Assumptions

We have allowed for the following rates at this stage (Refer to Section 2.5)

Local Centre: £90,000 / acre (Source: DTZ)

Employment Sites: £175,000 / acre (Source: DTZ)

## 6 Earl Shilton SUE Viability Testing

### 6.1 INTRODUCTION

This section brings the evidence and assumptions of the previous sections together, in the form of a series of summarised development viability appraisals relating to the SUE sites. The results of these appraisals are interpreted, and their meaning for the SUEs and Hinckley and Bosworth Borough Council in terms of policy approach, are set out.

The Sustainable Urban Extension sites are significant development opportunities, reflected in the financial and time resources expended by competing landowner and developer consortiums in promoting their sites.

Notwithstanding this, the large scale nature of SUEs also pose significant development risk, relating particularly to the significant infrastructure requirements they require, not just in terms of transport but also the community, green and social infrastructure that they need to function as Sustainable Urban Extensions.

In this context, there is a risk that an SUE may not be able to deliver this crucial infrastructure whilst also delivering policy compliant affordable housing and section 106 packages. The purpose of viability testing is to explore this risk.

The DTZ Methodology for assessing development viability, and the level of affordable housing and infrastructure contributions that are viable is in line with the principles set out in National Government Guidance provided in a Circular entitled Delivering Affordable Housing, and also the National Planning Policy Framework. The DTZ approach is also in line with the HCA's guidance for its Development Appraisal Tool (DAT) Model, and the National Planning Policy Framework.

The DTZ approach has three key stages:

- **Stage One:** Identify the Threshold Land Value of the site. This assists in establishing a base value for the site which must be achieved for the proposed development to be brought forward to the market by the landowner.
- **Stage Two:** Identify the Residual Value of the site with a level of affordable housing and Section 106 payments in accordance with policy, and suitably phased.

- **Stage Three:** By looking at the difference between the figures calculated in stage one and two above we can determine if the scheme as proposed is viable

This approach is consistent with the advice of Paragraph 173 of the National Planning Policy Framework , which specifically states that the consideration of viability should allow for :

*“competitive returns to a willing land owner and willing developer to enable the development to be deliverable.”*

We first explore a number of important development viability concepts that must be understood.

## 6.2 THRESHOLD LAND VALUE

The issue of Threshold Land Value is critical to assessing development viability. The recent cross industry report - (Viability Testing Local Plans, Advice for Planning Practitioners; Local Housing Delivery Group; June 2012) provides useful thoughts on the issue. The Threshold Land Value should represent the value at which a typical willing landowner is likely to release land for development, before payment of taxes (such as capital gains tax), allowing for a certain premium over the existing/alternative use value.

A critical consideration is as to the allowable size of the premium over the existing/alternative use value, and the guidance makes several pertinent observations relating to how a view on value might be taken with regard to agricultural land, which evidence suggests is valued in the region of up to £7,500 - £10,000 / acre in Leicestershire. Anecdotal evidence suggests that land owners are asking for significant premiums with regard to residential development land, with rates in region of £100,000 / acre being suggested.

A key factor at play at the SUE sites, highlighted in the report, and supporting such a premium is the need for the premium to take account of the composition of key landowners within the area and their interests.

The report notes that for nonurban sites or urban extensions, where land owners are rarely forced or distressed sellers, the owner generally takes a much longer term view over the merits or otherwise of disposing of their asset, which will push the premium up. This is particularly the case in relation to large greenfield sites where a prospective seller is potentially making a once in a lifetime decision over whether to sell an asset that may have been in the family, trust or institution’s ownership for many generations.

Notwithstanding this, there are also factors at play, highlighted in the document, which may serve to reduce the premium:

- For smaller, edge-of-settlement greenfield sites, landowners' required returns are likely to be higher than those associated with larger greenfield sites (which will include SUEs), as landowners will be aware of the prospects of securing a beneficial permission at some point in the future and may therefore choose to defer bringing forward such land until they perceive market conditions have improved and/or the planning system is more conducive to an improved return. This is arguably not the case for landowners in SUEs, which are major strategic allocations where the case for development is part made on viability and deliverability within a given timeframe, and where there is little scope for individual land owners to bring land forward independent of the SUE.
- Abnormal costs of development, and other abnormal development factors.
  - SUEs can incur significant upfront infrastructure costs relating to development enabling infrastructure, such as utilities and transport infrastructure, which can legitimately serve to reduce the price paid for land in such a situation.
  - Within certain SUE sites there can be significant development constraints serving to constrain the developable land as a proportion of the gross site area of the SUE to such a level that it would not be appropriate to allow a residential development "hope" guided by a notion of "more favourable" development ratios that may be achievable on smaller Greenfield sites

We have borne the above factors in mind when considering appropriate threshold land values for the two SUE sites.

## Threshold Land Value for Earl Shilton SUE

We have adopted a threshold land value of £100,000 / acre for the Earl Shilton SUE. This is applied to the 169 acre gross area of the SUE.

## Residual Land Value

The residual land value calculation calculates the total revenue (allowing for affordable housing) and deducts from that all costs associated with delivering the development including the required level of Section 106 payments and an element of developer profit, in order to determine what

value is left to pay for the land (The residual land value or land receipt). In this way, the residual land value can be used as a proxy for development viability.

## Developer Profit

Whilst the previous section regarding appraisal assumptions set out our assumption of 20% Profit on Value for the SUE schemes, it is important to briefly revisit this development cost here, in the context of considering overall viability. A viable scheme is one that delivers both a land value return to the land owner equal or in excess of the Threshold Land Value whilst also delivering a level of profit to the developer that is proportionate to the development risk incurred.

## Interpreting Viability

In line with the stages outlined at the start of this section, we have considered the viability of the SUEs.

Ostensibly, the viability consideration is simply a case of checking that the residual land value of the SUE development (allowing for 20% affordable housing, required Section 106 payments and infrastructure costs) equals or exceeds the threshold land value. If residual land value equals or exceeds threshold land value, then the development is viable, if the residual land value falls short of the threshold land value then the development is not viable.

The reality is slightly more complicated than this concept, especially for developments of the scale of SUEs, in that a relatively small residual margin on either side of the threshold land value can be deemed insignificant in a development scheme of around £200 million in development costs. Relatively modest changes in cost allowances, sales rates and timings, Section 106 trigger points, affordable housing mix (tenure and type), can have a significant cumulative impact.

On this basis, we must consider two factors:

- i. How does the financial differential between threshold land value of the land for the proposed SUE site and the residual value of the proposed SUE development, compare proportionately to the overall projected development costs of the SUE?
- ii. How does the viability of the SUE react to sensitivity testing based on a number of different, plausible, development scenarios? This testing is critically important for SUEs whereby their large scale and long development time periods make them particularly sensitive to relatively small changes in development costs and values. A view on viability cannot be gleaned by considering one scenario in isolation. We have considered scenarios later in this section.

For each development scenario (ii), we have graded viability on the basis of the residual/threshold differential (i), enabling a reasoned approach to be taken to viability of each SUE in the round, having consideration of the performance of the SUE under the different development scenarios.

For example, the three figures in each cell of the viability tables presented later in this report, represents:

- The residual value shortfall (if any) against the threshold land value.
  - The shortfall (if any) as a % of the overall development costs.
  - The approximate profit on value of the scheme (PoV), if the land value cost in the scheme is fixed at the threshold land value.
- A green grading is indicative of a viable scheme, whereby the residual land value of the SUE exceeds the threshold land value of the land.
  - An amber grading is indicative of a marginally viable scheme, whereby the projected shortfall of residual land value against threshold land value is deemed not to be significant enough in size for the scheme to be considered unviable (the shortfall representing 3% or less when considered as a % of the overall development costs, and the profit on value of the scheme, if land cost is fixed at threshold land value, being 18% or over).
  - A red graded scheme is indicative of a scheme where the projected shortfall of residual value against threshold value is of such a magnitude that viability may prove challenging, either the projected shortfall of residual land value against threshold land value represents over 3% of the overall development costs, or the profit on value of the scheme, if land cost is fixed at threshold land value, is under 18%.

<b>e.g. £12.5 m</b> <b>(-3.5%)</b> <b>17% PoV</b>	Indicates a potentially unviable scheme under the specific scenario
<b>e.g. £6m</b> <b>(-1.5%)</b> <b>18% PoV</b>	Indicates a marginally viable scheme, where the residual value shortfall against the threshold land value represents a shortfall 3% or less of overall project cost.
<b>e.g. £2.5m</b> <b>(1%)</b> <b>20% PoV</b>	Indicates a viable scheme under the specific scenario

## 6.3 EARL SHILTON SUE APPRAISAL

### Benchmark Appraisal

In line with the approach set out above, we first set out initial “benchmark appraisals” based on:

- Today’s development costs and values, as set out in Section 3
- The Transport and Infrastructure Packages (costed and phased) as previously set out.
- Affordable Housing Tenure Mix as set out in the current Affordable Housing SPD (i.e. 75% Social Rent, 25% Shared Ownership)
- The propose residential Development Quantum of 1600 dwellings

The results are as follows:

Scheme	Earl Shilton
Total Costs	<b>£224.6 m</b>
<b>Build (inc. Fees and Contingency)</b>	£124m
<b>Infrastructure and Section 106</b>	£31.3m
<b>Finance Costs</b>	£12.3m
<b>Marketing and Sales</b>	£7m
<b>Profit</b>	£49.9m
Total Receipts	<b>£249.2m</b>
Residual Land Value (net)	<b>£22.7m</b>
SUE Area (ac)	169
Threshold Land Value / acre	£100,000
Estimated Residual Land Value /acre	<b>£134,000</b>
Deficit / Surplus as a % of Overall Costs	4%

Based on the approach regarding assessing viability as set out previously, the SUE is viable, in that the estimated residual land value exceeds the target threshold land value. We must also be aware that the threshold land value used in the viability calculation is itself a benchmark, and in the current market environment we are aware of land owners being prepared to sell land to developers at rates in the region of £50,000/acre, subject to overage agreements, which further supports the view that the schemes are deliverable.

To recap, drawing on the assumption section, it is important to note that the schemes appraised above, and assessed as being viable, includes:

- 20% affordable housing on site;
- A £4.72m off site highways and public transport package
- £13.15 million Section 106 contribution
- £2.15 million “on site” package of parks and open space works

### 6.3.0.1 Sensitivity Testing

The second stage of the viability testing tests how the SUEs react to sensitivity testing based on a number of different, plausible, development scenarios. As set out at the start of this section, this testing is critically important for SUEs whereby their large scale and long development time periods make them particularly sensitive to relatively small changes in development costs and values. A view on viability cannot be gleaned by considering one scenario in isolation.

On this basis we have carried out a series of sensitivity testing to test the performance of the SUEs against a variety of plausible development scenarios. We have applied the sensitivity testing in layers, so as to make the sensitivity testing as fine grained as possible, enabling an overall picture of viability to be made.

The scenario we have tested is as follows:

- *Net Cost / Value Inflation*: We have included a more pessimistic market scenario to test the robustness of the appraisals.

### 6.3.0.2 Layer One: Net Cost / Value Inflation

The large scale of the SUE, and its long delivery timeframe exposes the appraisals to factors that may have a bearing on overall viability. Prime amongst these factors is how the residential property market will behave over the next fifteen years, a time period that has the potential to encapsulate several property cycles, with all the implications this will have on sales values, delivery rates, development costs, funder and developer perception of risk, and hence viability. The past few years have seen periods of tentative growth followed by contraction, and underlying this is the fundamental structural concern that there is no end in sight to the problems of mortgage availability. This not only makes it difficult to model meaningful “growth” scenarios, but also modelling the base point from which a sustained period of even modest growth might begin. The scale of the proposed SUEs will magnify even slight variations in assumed growth rates and the point at which growth begins, which would compromise the practical use of modelling such scenarios.

An alternative, and arguably more robust, approach is to undertake modelling based on perceptions of overall risk as to how cost and sales inflation over the development period of the SUEs will play out. The long development period of SUEs exposes them to cost inflationary pressures relating to progressive revisions in building regulation standards relating to the Code for Sustainable Homes. Our recent experience is that SUE developers and promoters consider that modest net sales revenue growth, together with the ability of the volume housebuilders to control the costs of increased build specifications through their procurement processes is enough



to render the effect of potential CSH cost inflation neutral, and this is not included in their appraisals.

On this basis, our approach to modelling a less favourable development scenario is to set out an additional higher cost build scenario to the £80/sq ft we have used in our base appraisals:

- £82/sq ft: to represent a scenario whereby build cost inflation relating to CSH exceeds revenue inflation

This modelling of net overall build cost / sales value inflation forms the first layer of our sensitivity testing.

### 6.3.0.3 Sensitivity Testing Viability Matrix

Below, we have set out the results of the sensitivity testing exercise for the SUE, which sets out viability by each layer of sensitivity analysis.

To recap:

The three figures in each cell of the viability tables presented, represents:

- The residual value shortfall (if any) against the threshold land value.
- The shortfall (if any) as a % of the overall development costs.
- The approximate profit on value (PoV) of the scheme, if the land value cost in the scheme is fixed at the threshold land value.
- A green grading is indicative of a viable scheme, whereby the residual land value of the SUE exceeds the threshold land value of the land.
- An amber grading is indicative of a marginally viable scheme, whereby the projected shortfall of residual land value against threshold land value is deemed not to be significant enough in size for the scheme to be considered unviable (the shortfall representing 3% or less when considered as a % of the overall development costs, and the profit on value of the scheme, if land cost is fixed at threshold land value, being 18% or over).
- A red graded scheme is indicative of a scheme where the projected shortfall of residual value against threshold value is of such a magnitude that viability may prove challenging, either the projected shortfall of residual land value against threshold land value represents

over 3% of the overall development costs, or the profit on value of the scheme, if land cost is fixed at threshold land value, is under 18%.

<b>e.g. £12.5 m</b> <b>(-3.5%)</b> <b>17% PoV</b>	Indicates a potentially unviable scheme under the specific scenario
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<b>e.g. £2.5m</b> <b>(1%)</b> <b>20% PoV</b>	Indicates a viable scheme under the specific scenario

The less favourable scenario is presented on the left, the more favourable on the right.

Earl Shilton SUE		
CSH Cost Inflation Scenario	Code for Sustainable Homes Cost Inflation Exceeds Sales Value Inflation (Less Likely)	Code for Sustainable Homes Cost Inflation and Sales Value Inflation in Equilibrium (Benchmark Scenario) (More Likely)
	£118,000 (2%)	£134,000 (4%)

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## 6.4 EARL SHILTON VIABILITY SUMMARY

The results of the scenario testing must be considered in the round.

We first consider the result on the right half of the sensitivity testing matrix, which considers a cost /value in balance with the assumptions of “today’s market”, where we would assume that any growth in costs due to increased Code for Sustainable Homes requirements will be offset by sales value inflation. These results are encouraging in that a viable scheme is suggested, which is capable of providing a landowners return of over £100,000 acre, a developers profit of 20% on value, and also allowing for land promoters costs of some £800,000.

It is also encouraging in that the results on the left half of the sensitivity testing matrix, which is based on a cost/value scenario which we think is less likely, but still must be considered, also shows a viable scheme. This scenario is one where build cost inflation due to increasing Code for Sustainable Homes requirements outpaces value inflation.

We suggest the scheme, with the package of benefits presented, is a viable and sound proposition for including in the Core Strategy.

To conclude, we relate the consideration of viability back to paragraphs 173-177 of the Plan Making chapter of the NPPF. Para 173, specifically states that:

*“To ensure viability, the costs of any requirements likely to be applied to development, such as requirements for affordable housing, standards, infrastructure contributions or other requirements should, when taking account of the normal cost of development and mitigation, **provide competitive returns to a willing land owner and willing developer to enable the development to be deliverable.**”*

To recap, the benefits package includes:

- 20% affordable housing on site;
- A £4.72m off site highways and public transport package
- £13.15 million Section 106 contribution
- £2.15 million “on site” package of parks and open space works

The appraisals show that the Earl Shilton SUE, including this benefits package, is deliverable, whilst providing a competitive return to a willing land owner (c. £134,000 / acre) and a willing developer (20% Profit on Value), and hence is consistent with the National Planning Policy Framework.