

Report for Surrey County Council

Surrey Net Zero – Economic Viability Assessment

Assessment of policy delivery – May 2024

Three Dragons

Document control sheet	
Project name	Surrey Viability Toolkit
Project reference	1227
Report title	Surrey Net Zero Economic Viability Assessment
Doc ref	DRAFT
Date	May 2024
Prepared by	Laura Easton, Tom Marshall, Dominic Houston
Reviewed by	Lin Cousins
Quality statement	In preparing this report, the authors have followed national and professional standards, acted with objectivity, impartially, without interference and with reference to appropriate available sources of information. No performance-related or contingent fees have been agreed and there is no known conflict of interest in advising the client group.
Use of this report	<p>This report is not a formal land valuation or scheme appraisal. It has been prepared using the Three Dragons toolkit and is based on local authority level data supplied by the Surrey planning authorities, consultant team inputs and quoted published data sources. The toolkit provides a review of the development economics of illustrative schemes and the results depend on the data inputs provided. This analysis should not be used for individual scheme appraisal.</p> <p>No responsibility whatsoever is accepted to any third party who may seek to rely on the content of the report unless previously agreed.</p>

CONTENTS

EXECUTIVE SUMMARY.....	5
Chapter 1 Introduction.....	7
Context	7
Viability in plan making	7
Chapter 2 Policy context.....	9
National policy	9
Local policy	9
Summary of policies taken into account	10
Consultation.....	11
Chapter 3 Viability testing process and assumptions	12
Overall approach.....	12
Typologies.....	12
Housing mix	13
Values and value areas	14
Affordable housing values	16
Benchmark land values.....	17
Residential cost assumptions used in the testing	18
Additional costs to support net zero carbon development.....	20
Chapter 4 Results of the viability testing	23
Value area 1 – results	23
Value area 2 – results	25
Value area 3 – results	27
Sensitivity testing using a 5-year forecast	29
Summary of the residential viability modelling	30
Chapter 5 Non residential development.....	31
Approach	31
Context	31
Non-residential archetypes	32
Conclusions.....	34
Chapter 6 Summary and conclusions	35
Appendix I National policy and guidance	37

EXECUTIVE SUMMARY

1. The planning authorities across Surrey¹, co-ordinated by Surrey County Council, are seeking to develop planning policies that deliver buildings which exceed minimum national standards and meaningfully address the climate emergency.
2. The viability study has quantified the impact on development viability of alternative net zero carbon, low energy and ultra-low energy pathways on residential and non residential development.
3. **For the residential development**, the study modelled the costs of developing schemes/units to these standards and tested the viability of a series of five development scenarios reflective of the Surrey built environment. These included schemes of different numbers of dwelling (from 6 to 260 dwellings) and of house and flatted schemes and modelled as greenfield and/or brownfield developments.
4. Testing has taken into account a full range of policies (local and national) that development has to meet. This includes affordable housing targets and environmental measures e.g. achieving biodiversity net gain percentages. It is acknowledged that this process has been necessarily high-level and is not intended to replace the evidence necessary to support future local plan reviews, as they are undertaken. The central question addressed by the Surrey-wide viability testing is whether ambitions to achieve net zero carbon development are generally achievable across the county or if some trade-offs with other policy objectives may need to be considered.
5. The testing has been undertaken in accordance with national policy and guidance - including the December 2023 National Planning Policy Framework and Planning Practice Guidance. This includes consultation with the development industry active in Surrey.
6. Importantly, analysis of market values in Surrey identified three broad market value areas – the lowest at value area 1 (VA1) through to the highest at value area 3 (VA3). The modelling also took account of three development land types that were identified, small greenfield (less than 1 ha), large greenfield (1ha and above) and brownfield. For each land type an upper and a lower benchmark land value or BMLV was used in the testing, in order to capture the full range of land values that may be applicable across Surrey.
7. The results of the residential viability modelling demonstrate good general viability and that most development in Surrey will be able to absorb the additional costs of achieving net zero. Positive residual values were found for all the scenarios tested (including all net zero scenarios) and all the development typologies on **greenfield** land.

¹ There are eleven district and borough councils in Surrey - Elmbridge, Epsom and Ewell, Guildford, Mole Valley, Reigate and Banstead, Runnymede, Spelthorne, Surrey Heath, Tandridge, Waverley, Woking

8. In the highest value area, **value area 3**, all development, including on **brownfield** sites whether housing led or flatted schemes, is viable and able to meet the costs of all net zero scenarios. The picture is more mixed for the other two value areas.
9. In **value area 2**, house-led development is viable on **brownfield** typologies and able to meet the costs of the net zero scenarios but mid-rise and high-rise flatted development is not viable at the higher BLMV (BMLV 2). At the lower benchmark land value tested, of the flatted typologies, only the 60 unit flatted typology is viable with the 240 unit flatted typology remaining unviable. Blocks of flats were already marginal or not viable at the base position and the additional costs of meeting net zero exacerbates the poor outcome.
10. In **value area 1**, the lowest value area, only the 6-unit typology without affordable housing is able to meet the additional net zero policy costs on **brownfield** land and at the higher benchmark land value (BMLV 2). At the lower benchmark land value the house-led typologies are able to meet the additional costs of all the 5 scenarios tested but the flats are not. The introduction of higher carbon reduction standards in value area 1 does not determine, on the assumptions used for this study, whether a typology is viable or not. However, it does reduce the residual value and could reduce the options open to the LPAs to achieve other planning objectives.
11. In addition to the main testing, a 5 year forecast for values and costs was adopted and the results are much more encouraging especially for the house led typology of 35 units, but still show relatively poor viability in value zone 1. However, if the forecasts became reality, they could make a material difference. For example, in value area 2, whereas at current costs and values, the 60 unit flatted scheme produced a marginal or negative residual value for scenarios 4 and 5 – with the 5 year forecast, there is a positive residual value.
12. **For non residential development**, the requirement for higher standard non-residential buildings was found not to have an impact on the delivery, except in the most marginal of circumstances. However, there is a case for considering separate standards for industrial buildings in order to reduce the risk to delivery.
13. To adopt net zero policies local authorities will need to carry out their own area-wide viability assessment taking into account specific local costs, land values, variances in house prices and local policy objectives. Where development is marginal or not viable policy trade off may be required unless flexibilities can be found within land values or other development costs. In doing so, it will be worth bearing in mind the potential for future changes in costs and values to improve the position.
14. As part of this process, it will be important for the Surrey authorities to monitor changes in the technology used to achieve net zero development and their associated costs and to keep the development industry abreast of changes.

Chapter 1 Introduction

Context

- 1.1** The planning authorities across Surrey², co-ordinated by Surrey County Council, are seeking to develop planning policies that deliver buildings which exceed minimum national standards and meaningfully address the climate emergency.
- 1.2** Using a range of building archetypes, reflective of the Surrey built environment, the project has quantified net zero carbon, low energy and ultra-low energy pathways for each archetype, modelled the costs of developing schemes/units to these standards and tested the viability of development to these standards. The aspect of the work covered in this report is that of viability testing. The testing has been high level and is not intended to replace the evidence necessary to support future local plan reviews, as they are undertaken. The central question addressed by the Surrey-wide viability testing is whether ambitions to achieve net zero carbon development are generally achievable across the county or if some trade-offs with other policy objectives may need to be considered.
- 1.3** The testing has not analysed the viability of net zero carbon requirements in isolation but has taken into account the full range of policies (local and national) that development has to meet. This includes affordable housing targets and environmental measures e.g. achieving biodiversity net gain percentages.
- 1.4** The viability analysis has been undertaken in accordance with national policy and guidance - including the December 2023 National Planning Policy Framework and Planning Practice Guidance. This includes consultation with the development industry active in Surrey.
- 1.5** Underlying the assessment is a series of tests that calculate the viability of a set of notional sites, representative of the types of development likely to come forward over the next 10 to 15 years.

Viability in plan making

- 1.6** A development can be said to be viable if, after taking account of all costs, including central and local government policy and regulatory costs and the cost and availability of development finance, the scheme provides a competitive return to the developer to ensure that development takes place and generates a land value sufficient for the landowner to sell the land for the development proposed. If these conditions are not met, a scheme will not be viable.

² There are eleven district and borough councils in Surrey - Elmbridge, Epsom and Ewell. Guildford, Mole Valley, Reigate and Banstead, Runnymede, Spelthorne, Surrey Heath, Tandridge, Waverley, Woking

1.7 This report sets out the typologies and assumptions used to inform the viability testing, reflecting latest available information.

1.8 The testing has drawn on the following evidence:

- a review of the types of sites likely to be developed in Surrey over the next 10-15 years
- a review of the policies typical of the 11 local planning authorities in Surrey and central government guidance that may have implications for development viability
- consultation with the 11 local planning authorities in Surrey to discuss and agree the approach to be adopted for the testing, including the site typologies, the percentage and type of affordable housing, the assumptions to use for typical costs of s106 agreements and Community Infrastructure Levy payments
- desk research to form initial views on the values and costs of residential development in Surrey
- consultation with the development industry.

Chapter 2 Policy context

National policy

- 2.1** National policy and guidance on viability for plan making is set out in National Planning Policy Framework (NPPF³) and the Planning Practice Guidance (PPG⁴), the details of which are set out in Appendix I. There is also useful guidance contained within 'Viability Testing Local Plans - Advice for planning practitioners' (Harman 2012⁵) and 'Assessing Viability in Planning' (RICS 2021). The viability testing undertaken for this study complies with this policy guidance.
- 2.2** There are a number of other national policies recently introduced that have a bearing on development costs and which have been included in the viability testing undertaken. These include:
- More stringent requirements to improve building standards, including to reduce carbon emissions in new homes (Building Regulations Part L 2021 update), Part F (ventilation) and Part O (overheating). These standards have been included as a baseline for the testing with other (higher) standards defined and costed as part of this study (including the Future Homes Standard about which the government issued a consultation document in December 2023)
 - Building Regulations Part S - Infrastructure for Charging Electric Vehicles which requires new development to provide electric vehicle charging points where a parking space is provided or cabling elsewhere
 - Provision for biodiversity net gain introduced through the Environment Act 2021, with 10% net gain a mandatory requirement for most development types from April 2024
 - The introduction of First Homes, providing a nationally defined low cost home ownership option.

Local policy

- 2.3** The NPPF is clear that viability testing should take into account the costs of any requirements likely to be applied to development. To meet this requirement, the most recent adopted local plan of each of the Surrey local planning authorities (LPAs) was reviewed. Where the local plan was being updated, the latest version of the newly emerging plan was assessed.

³ <https://www.gov.uk/government/publications/national-planning-policy-framework--2>

⁴ <https://www.gov.uk/government/collections/planning-practice-guidance>

⁵ <https://www.local.gov.uk/sites/default/files/documents/viability-testing-local-p-42b.pdf>

Summary of policies taken into account

2.4 Table 2.1 below sets out the policies which have an implication for development viability and were common to the local plans and/or the policies typical of the newly emerging plans and/or are national policy. The list of policies was discussed with a workshop of planning officers and were agreed as a reasonable starting point for the viability analysis.

Table 2.1 'Local plan' policies that have viability implications

Policy	Information sources
Affordable housing	LPA local plans (adopted and emerging where this provides a more up to date approach) Meeting with the LPAs
Affordable housing thresholds	LPA local plans (adopted and emerging where this provides a more up to date approach) Meeting with the LPAs
Accessible housing	Building Regulations Part M, local plan policies and meeting with the LPAs
Habitat Regulations/nutrient mitigation	Government impact assessment re biodiversity net gain, mitigations required by the different LPAs as set out in policy and subsequent meeting with the LPAs
S106 costs	LPA local plans (adopted and emerging where this provides a more up to date approach) Meeting with the LPAs.
Community Infrastructure Levy	LPA charging schedules Meeting with the LPAs.
Electric vehicle charging	Building Regulations Part S and Government impact assessment
Building regulations	Building Regulations Part L, Part O and Part F Costs from BCIS newsletter 2023
Carbon reduction	See the main report for a description of the different testing scenarios.
Residential space standards	Nationally described space standards
Self and custom housebuilding	LPA local plans (adopted and emerging where this provides a more up to date approach)

2.5 The costs of the policies used in the testing are set out in the next chapter.

Consultation

2.6 The PPG sets out that:

“Plan makers should engage with landowners, developers, and infrastructure and affordable housing providers to secure evidence on costs and values to inform viability assessment at the plan making stage.”

2.7 Although this is a high-level viability assessment, not at plan making stage, consultation was undertaken for this assessment involving a range of activities to provide opportunities for engagement with the process. The activities were:

- A workshop consultation exercise with developers and agents active in Surrey in February 2024
- A workshop with LPAs, also during February 2024, and a follow up workshop in March 2024.

2.8 Additional case studies were included as a direct outcome of the workshops. Otherwise stakeholders were broadly supportive or raised no issues with the viability assumptions and approach the consultant team put forward.

Chapter 3 Viability testing process and assumptions

Overall approach

- 3.1** The testing process is based on a series of development typologies, typical of the types of development found across Surrey. Typologies were tested on greenfield and brownfield land and in three overarching value areas, identified using Land Registry sales data.
- 3.2** The Surrey-wide scope of this study means that for viability, it is necessary to derive a set of viability testing assumptions that are robust enough to enable interpretation of the impact of net zero carbon on local development but, at the same time, can be applied across the county. To achieve this, we have relied on published locally based information sources, sense checked with council officers and developer stakeholders – these are referenced in the paragraphs below.

Typologies

- 3.3** Five main typologies were identified with reference to the available Surrey local plans and discussion with the 11 Surrey LPAs. The typologies were designed to test development types that represented the most common forms of development likely to come forward over the next 10 to 15 years i.e. the life of a local plan if adopted now. The draft set of typologies was presented to both the LPA and development industry workshops and refined in light of comments received at the workshops. Importantly, the LPA workshop explained the need to include a typology of less than 10 dwellings, with and without affordable housing – which was provided for in Res 1a and 1b with 6 dwellings. The final set of typologies is set out in the table below.

Table 3.1 Residential typologies

	Number units	Development type	Land use	Density (dwellings per hectare)
Res 1a	6	Houses (tested with and without affordable housing)	Greenfield	30dph
Res 1b	6	Houses (tested with and without affordable housing)	Brownfield	30dph
Res 2a	35	Mixed (houses and flats)	Greenfield	35 dph
Res 2b	35	Mixed (houses and flats)	Brownfield	35 dph
Res 3	60	Flats - 4 storey	Brownfield	120 dph
Res 4	260	Mixed (houses and flats)	Greenfield	40 dph
Res 5	240	Flats - 15 storeys	Brownfield	343 dph

3.4 Not all typologies would likely to be developed on both brownfield and greenfield sites and this is reflected in the typology table above. Again, this distribution of development types was discussed at the two workshops held.

Housing mix

3.5 The dwelling mixes and unit sizes used in the testing were based on an interrogation of sales data found in Land Registry and discussion with the LPAs. These are shown in the table below. Flatted only schemes were modelled as 100% flats, with allowances for circulation space.

Table 3.2 Dwelling mix and size (NIA) – mixed development

Dwelling type	Market sqm	Market mix	AH sqm	AH mix
Detached	140	40%		
Semi-detached	102	40%		
Terraced	93	10%	79	75%
Flats	64	10%	61	25%

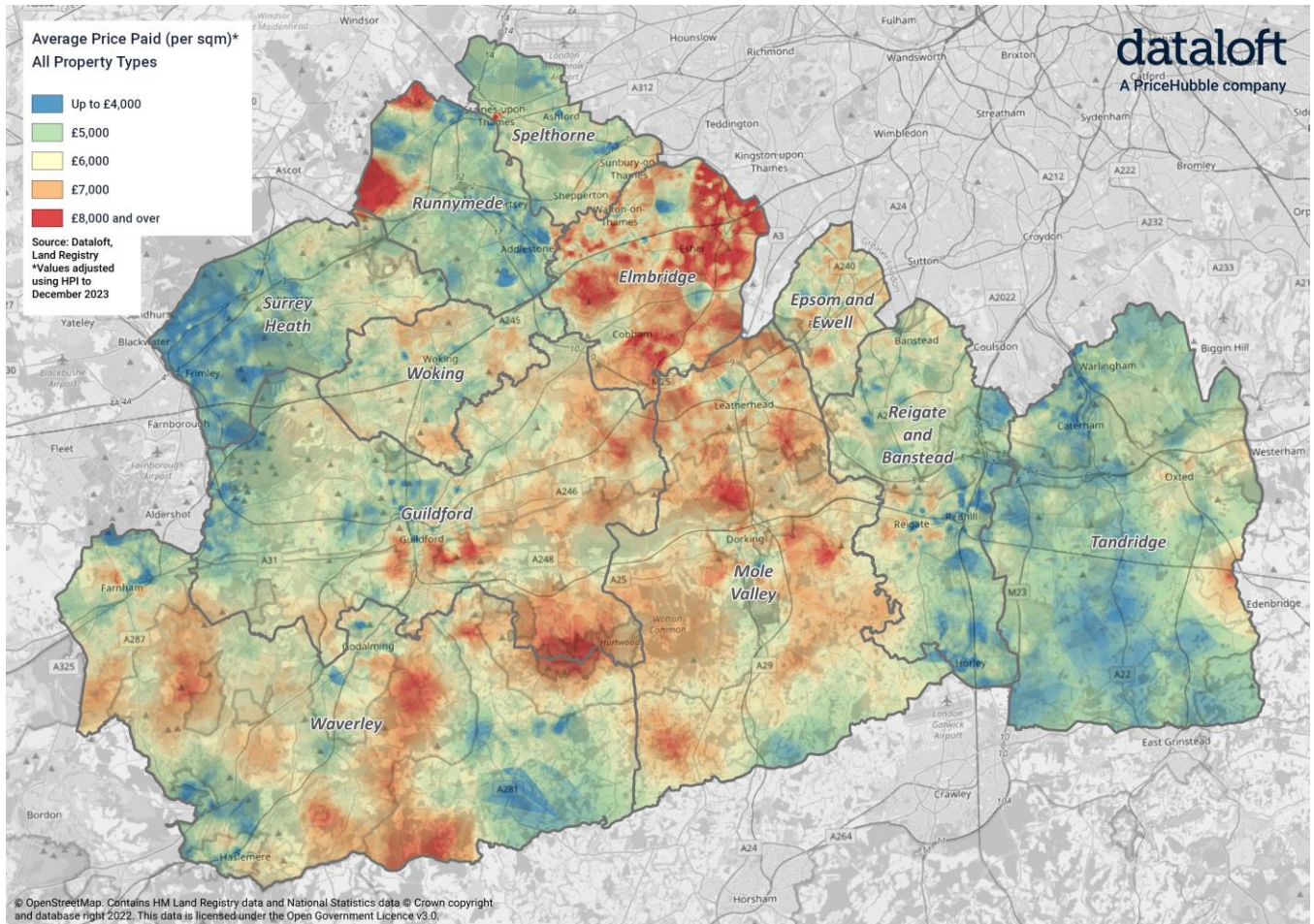
AH – affordable housing

NIA – net internal area

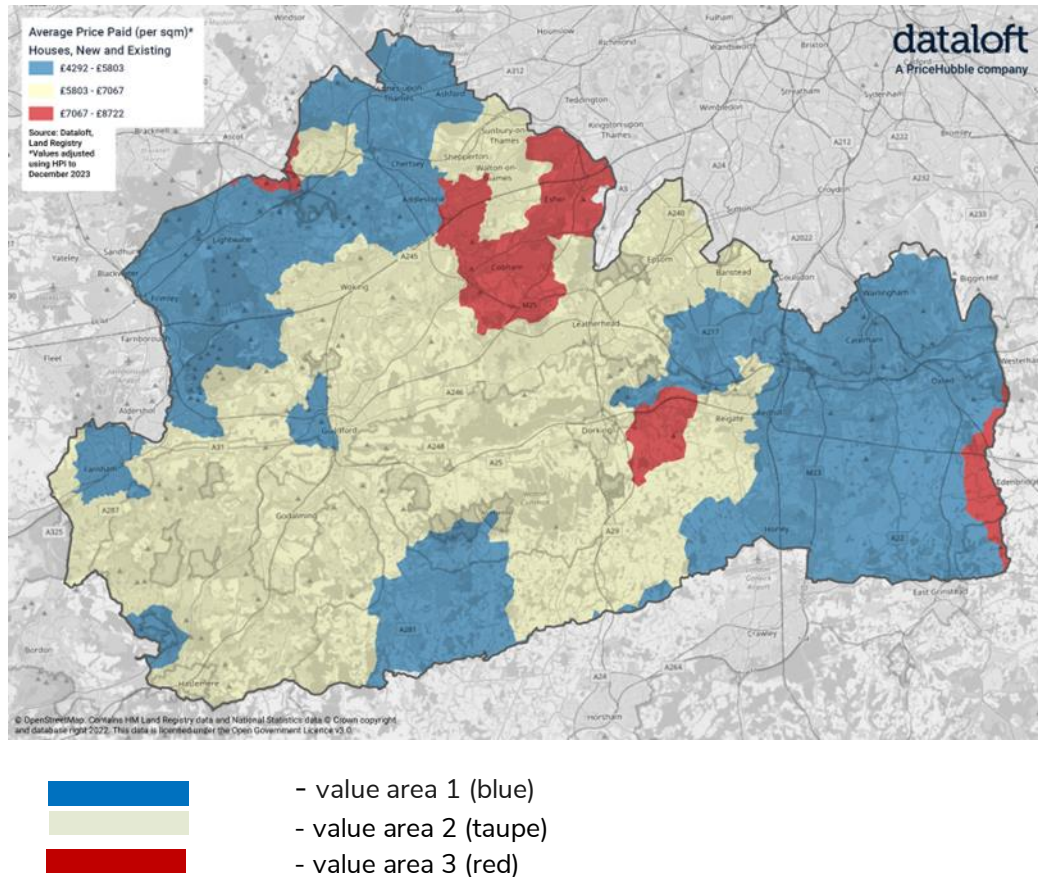
Values and value areas

- 3.6** There is considerable variation in house prices across Surrey and the heat map below demonstrates the range of values, adjusted to the House Price Index at December 2023. The map is based on analysis at ward level.

Figure 3.1 Surrey property values 'hotspot' map



- 3.7** To allow for high-level testing across Surrey, the analysis of Land Registry data has identified three broad market value areas operating in Surrey, although, as the previous map demonstrates, there will be a range of prices within each area. Each local authority will, of course, have its own subset of market value areas which will have been used for local plan viability testing but to avoid an overly complex set of results, we have taken the Surrey-wide approach shown on the map below.

Figure 3.2 Value areas map - Surrey

3.8 Each of the typologies has been tested in all 3 value areas. The sales values used were the median point (rounded) of the range identified in each value area. Value area 1 is the lowest value area in Surrey and value area 3 the highest. This gives a value for a 3-bed semi detached house of 102 sqm as shown in the table below.

Table 3.3 Value of a 3-bed semi at 102sqm by value area

Value area	Value of 3-bed semi 102sqm (rounded)
Value area 1	£540,600
Value area 2	£673,200
Value area 3	£724,200

Affordable housing values

3.9 The affordable housing values are based on a review of values used in (recent) LPA viability studies and shared during consultation. For this high-level study they have been translated into percentages of open market value and are shown in the table below.

Table 3.4 Values for affordable dwellings – shown as a percentage of open market value

Tenure	Transfer values as % of OMV
Social rent	30% of OMV
Affordable rent	50% of OMV
Shared ownership	70% of OMV
First Homes	70% of OMV

3.10 First Homes were modelled as flats, so as to ensure that they fall below the maximum discounted value of £250,000⁶.

Benchmark land values

3.11 Planning Practice Guidance sets out the principles that area wide viability studies should follow when taking land values into account including that benchmark land value should:

“be based upon existing use value

allow for a premium to landowners (including equity resulting from those building their own homes)

reflect the implications of abnormal costs; site-specific infrastructure costs; and professional site fees.⁷”

3.12 Benchmark land values (BMLVs) for this study were derived from an analysis of LPAs local plan viability studies and sense checked with the development industry. Three development land types were identified, small greenfield (less than 1 ha), large greenfield (1ha and above) and brownfield. For each land type an upper and a lower benchmark was used in the testing, in order to capture the full range of land values that may be applicable across Surrey. The BMLVs used are shown in the table below.

⁶ PPG Paragraph: 001 Reference ID: 70-001-20210524 specifies that “after the discount has been applied, the first sale must be at a price no higher than £250,000 (or £420,000 in Greater London)”.

⁷ PPG Paragraph: 013 Reference ID: 10-013-20190509 and Paragraph: 014 Reference ID: 10-014-20190509

Table 3.5 BMLVs used in the study (including premium)

Land use	BMLV 1	BMLV 2
Small greenfield (up to and incl 1 ha)	£0.4m	£2.0m
Large greenfield	£0.25m	£1.2m
Brownfield	£1m	£4m

Residential cost assumptions used in the testing

3.13 To arrive at the general cost assumptions for Surrey wide economic viability testing we have drawn on a number of data and other sources including:

- Published indexes, including the RICS Building Cost Information Service (BCIS), Land Registry values and House Price Index (HPI), Energy Performance Certificates (EPCs) for dwelling size
- Published local viability studies for the Surrey LPAs
- Discussion with Surrey County Council and the Surrey LPA officers
- Stakeholder workshops and follow up discussion
- Industry norms and standard practice.

3.14 The testing has taken account of plan policies with Surrey-wide application including, for affordable housing, where we have assumed that 40% of development is for this purpose. We are aware that some district councils require a higher contribution and for others, it is lower. However, 40% is the most representative of the county and was agreed at the workshop with the LPA officers. To this we have applied the following tenure mix (again, as discussed with the LPA officers):

- 25% as First Homes
- Of the remainder
 - 70% as affordable rented units (split 50:50 as Affordable Rent / social rent)
 - 5% as shared ownership.

3.15 The threshold above which affordable housing is sought in Surrey is generally 10 units but for some local authorities, a lower threshold is used. To reflect this in the modelling, a 6 dwelling scheme is included in the list of typologies and which is tested with and without affordable housing.

3.16 Building costs are based on BCIS, rebased to the local indexes, and using the mean to lower quartile build costs. We have also included an allowance for site infrastructure and potential

higher costs associated with meeting electric vehicle charging, biodiversity net gain and accessible housing.

3.17 Other costs used in the modelling are shown in the following table, along with their information sources.

Table 3.6 Other development costs

Type	Cost	Source
Site costs		
Build costs - houses	£1,733sqm for fewer than 10 units to £1,475sqm for sites of more than 250 dwellings	BCIS Surrey – using 5-year mean index, q4 2023, estate housing generally, for fewer than 10 houses, then sliding scale to LQ at 250 houses.
Build costs flats	1-2 storeys - £1,930 sqm 3-5 storeys - £2,019 sqm 15+ storeys - £2,650 sqm	BCIS Surrey – using 5-year mean index, q4 2023, flats For tall flatted blocks of 15+ storeys, the cost is supplied by cost consultant
Circulation space flats	1-2 storeys - 10% 3-5 storeys – 15% 6+ storeys – 20%	Standard allowance
Plot costs, site infrastructure works	Up to 100 units – 15% 101-250 units – 20% 250+ units - 25% Flats 15+ storeys – 3%	Standard allowance On build cost
2021 updates to Building Regulations ⁸	3.9%	BCIS newsletter June 2023
Garages	£8,100 per single garage Detached units	Consultation
Fees and finance costs		
Professional fees	1 – 9 units – 10% 10 – 100 units – 8% 101 plus units – 6%	Standard allowance
Finance	7%	
Marketing/legal/sales fees	3% of market GDV	Standard allowance
Affordable home legal fee	£500 per unit	Standard allowance
First Home eligibility costs	£150 per unit	Standard allowance
Developer return	17.5% - market 6% - affordable 10% - First Homes	Market GDV (mid point of the range set out in the PPG)
Agents and legal	1.75%	Standard allowance

⁸ 2021 updates to Part L, F and O not yet fully filtered through to main BCIS indices – 3.9% allowed as indicated by BCIS – in a news article from June 2023

Type	Cost	Source
Stamp duty	prevailing rate	Standard allowance
Policy and mitigation costs		
Habitat mitigation	£5,000 per unit	Review of local policies and viability studies (this is an average cost that could be higher in some areas but lower in others)
Biodiversity net gain (10%)	£948 per unit - greenfield £247 per unit - brownfield	Government impact assessment 2019 (figure is for South East region)
EV charging points Part S	£865 per dwelling	DfT/MHCLG, 2021, Residential charging infrastructure provision impact assessment
Accessibility M4(2)	£1,400 per unit except for those with M4(3)	Cost consultant advice
Accessibility M4(3)(a)	On 5% units Flat £10,000 Flat high rise £3,500 House £14,500	
Sprinklers	£1,500	per unit on 5+ storey flats
General s106	£2,500 per unit £10,000 per unit larger schemes	Consultation
Community Infrastructure Levy	£200 sqm	Levies across Surrey range from zero to £540 sqm and these do not necessarily correlate with local values. £200 per sqm is taken as a broad average levy.
Self & custom build	Additional 5% build costs	Guidance Right to Build Task Force July 2023

3.18 Sales are assumed to lag after completion by 6 months. Build rates are 4 per month on schemes up to 100 units and 8 per month on schemes above this. For flatted blocks we assumed 60 dwellings per annum.

Additional costs to support net zero carbon development

3.19 The assumptions set out above were used to construct a base case for viability modelling. The additional costs of meeting a set of scenarios for net zero carbon development were then added

to the base case to examine their impact. The five scenarios modelled are described in full in Part B: Energy modelling and technical feasibility report⁹ and repeated here for reference.

Scenario 1 – The Future Homes Standard Option 1. Costings are based on the specifications in the government consultation (December 2023) for option 1.

Scenario 2 – The Future Homes Standard Option 2. Costings are based on the specifications in the government consultation (December 2023) for option 2.

Scenario 3 – 100% improvement on the building regulations Target Emissions Rate. Costings are based on the Future Homes Standard consultation specification Option 2 for fabric and services with added solar PV (photovoltaics) to achieve a 100% reduction in carbon emissions as calculated by the building regulations methodology SAP 10.

Scenario 4 - Net Zero (Low energy). Space heating demand less than 30 kWh/m²/yr.

Scenario 5 - Net Zero (Ultra low energy). Space heating demand less than 15-20 kWh/m²/yr.

3.20 The Part B: Energy modelling and technical feasibility report¹⁰ sets out two broad policy options for local authorities wishing to translate their climate ambitions into requirements for new buildings. Policy option 1 is based Target Emission Rates (TER) for carbon and adaptation to the Part L framework, it does not deal with unregulated energy. Policy option 2 is based on absolute energy targets and deals with both regulated and unregulated energy. Of the scenarios tested, scenarios 1-3 fall under policy route 1, Scenarios 4 and 5 fall under policy route 2.

3.21 The technical specifications for each scenario are set out in the Part B: Energy modelling and technical feasibility report¹¹. Costs for these specifications, for each development archetype, were estimated by the team's cost consultant and these were then scaled to meet the specifications of the development typologies used in this viability assessment.

3.22 The costs used to model the five scenarios are set out below. The costs for houses are shown as a total cost for a house of between 100 and 120 sqm¹². For flats the costs are shown on a sqm basis.

⁹ Page 34 Part B: Energy modelling and technical feasibility report⁹

¹⁰ Page 17/18 Part B: Energy modelling and technical feasibility report

¹¹ Sections 2.2 and 2.3 3.22 The Part B: Energy modelling and technical feasibility report

¹² To account for economies of scale, for smaller houses the cost increases by around 10% and for larger houses the costs decrease by around 10%

Table 3.7 Additional costs for residential net zero carbon scenarios¹³

Scenario	Scenario Description	House 100 - 120m ² Total additional cost per house (rounded)	Low - mid rise blocks of flats (up to 8 storeys) Additional cost per sqm	High rise blocks of flats (more than 8 storeys) Additional cost per sqm
0	Building Regulations Part L 2021 (base)	0	0	0
1	Future Homes Standard - Option 1	£5,600	£14	£4
2	Future Homes Standard - Option 2	-£6,400	£152	-£20
3	100% better than FHS	£6,300	£192	-£11
4	Net Zero (Low Energy)	£4,600	£214	£17
5	Net Zero (Ultra Low Energy)	£13,400	£237	£44

3.23 It is noted that some scenarios represent a cost saving to the base case.

¹³ Prelims and overheads and profits were added to the figures in this table

Chapter 4 Results of the viability testing

4.1 This chapter summarises results of the economic viability testing for the residential typologies. Results are shown by value area, starting with value area 1 which has the lowest values. There are 3 charts for each value area, the first showing the results for greenfield sites, the second for brown field sites using benchmark land value 1 (BMLV 1) which is the lower benchmark land value, and the third for brownfield sites using BMLV 2.

Value area 1 – results

4.2 The results for value area 1 (VA1) are shown in the charts below. The base result and the 5 scenario tests applied are shown by the differing coloured bars. Results are on a per unit basis at net residual value, i.e. after all costs including land purchase and developer return have been accounted for. A similar approach to the presentation of the results is adopted across all the residential viability testing reported in this chapter.

Table 4.1a VA1 – net residual value per unit (greenfield BMLV 2)

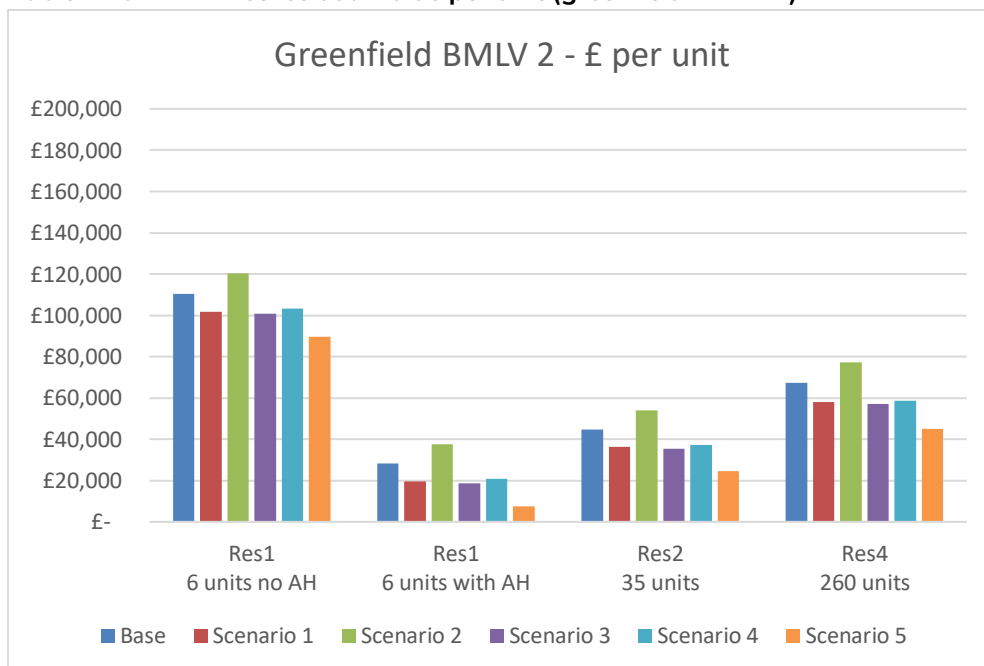


Table 4.1b VA1 – net residual value per unit (brownfield BMLV 1)

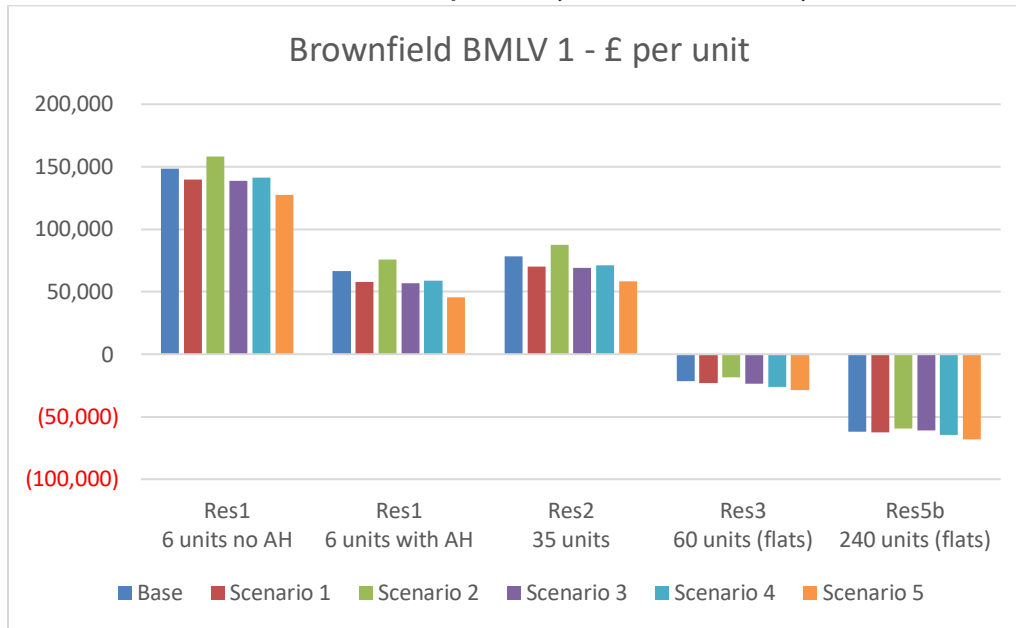
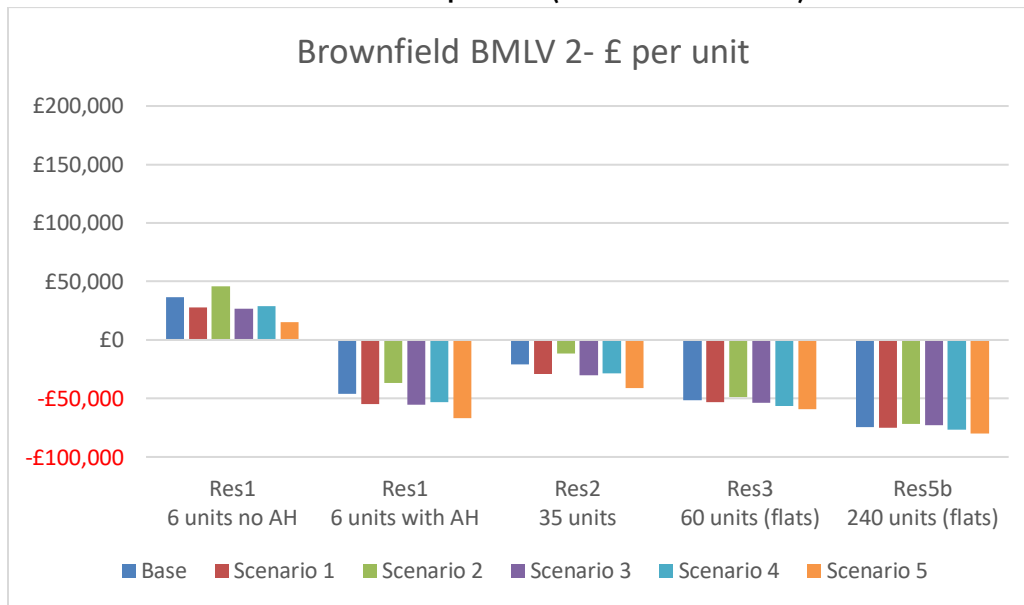


Table 4.2c VA1 – net residual value per unit (brownfield BMLV 2)



- 4.3** On greenfield land in value area 1, all scenarios tested are viable and financially deliverable.
- 4.4** On brownfield land the flats are not viable for any scenario, including the base case and this is so for both BMLVs. At the lower BMLV (BMLV1) the three house-led typologies are viable across all the typologies but, at the higher BMLV (BMLV2), only the 6-unit typology without affordable housing is viable.
- 4.5** It can be seen that moving across the different standards (from the base case through to scenario 5 – ultra low carbon) there are different impacts on scheme viability but with the general

trend that residual values decrease with scenario 5 showing the biggest reduction in residual values. This pattern is not universal however, and scenario 2 (the Future Homes Standard Option 2) shows an improvement against the base case (especially for houses).

- 4.6** Importantly, the introduction of higher carbon reduction standards in value area 1 does not determine, on the assumptions used for this study, whether a typology is viable or not. However, it does reduce the residual value in the typologies used for this study and, in particular cases, could reduce the options open to the LPAs to achieve other planning objectives e.g. delivery of a higher than tested percentage of affordable housing, alternative affordable housing types and/or other environmental benefits.

Value area 2 – results

- 4.7** The results for value area 2 (VA2) are shown in the charts below, again showing the results for a greenfield site first, followed by a brown field site using benchmark land value 1 (BMLV 1) which is the lower benchmark land value and lastly for a brownfield site using BMLV 2. The results are net residual value per unit.

Table 4.2a VA2 – net residual value per unit (greenfield BMLV 2)

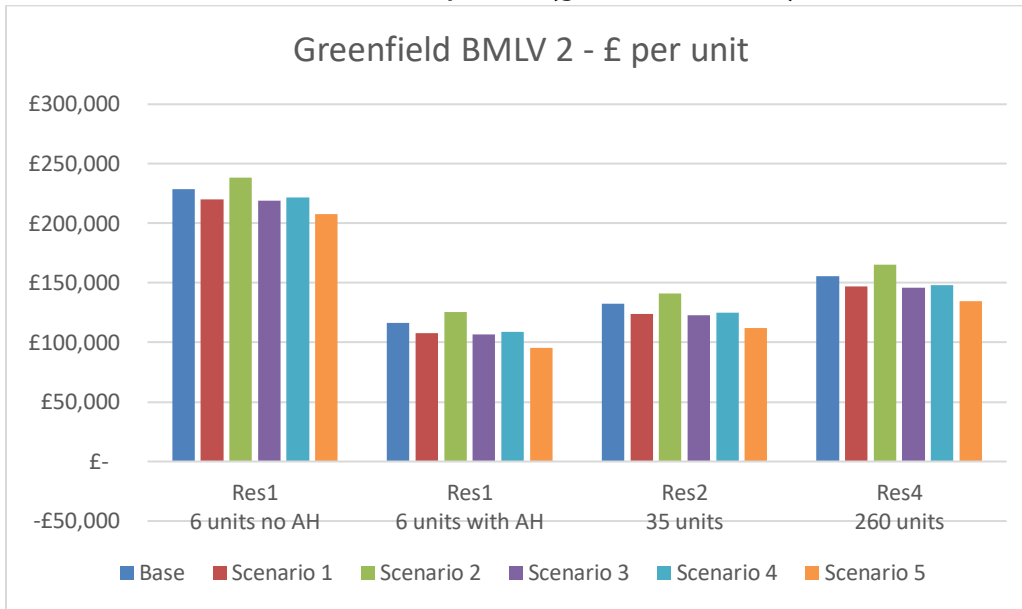


Table 4.2b VA2 – net residual value per unit (brownfield BMLV 1)

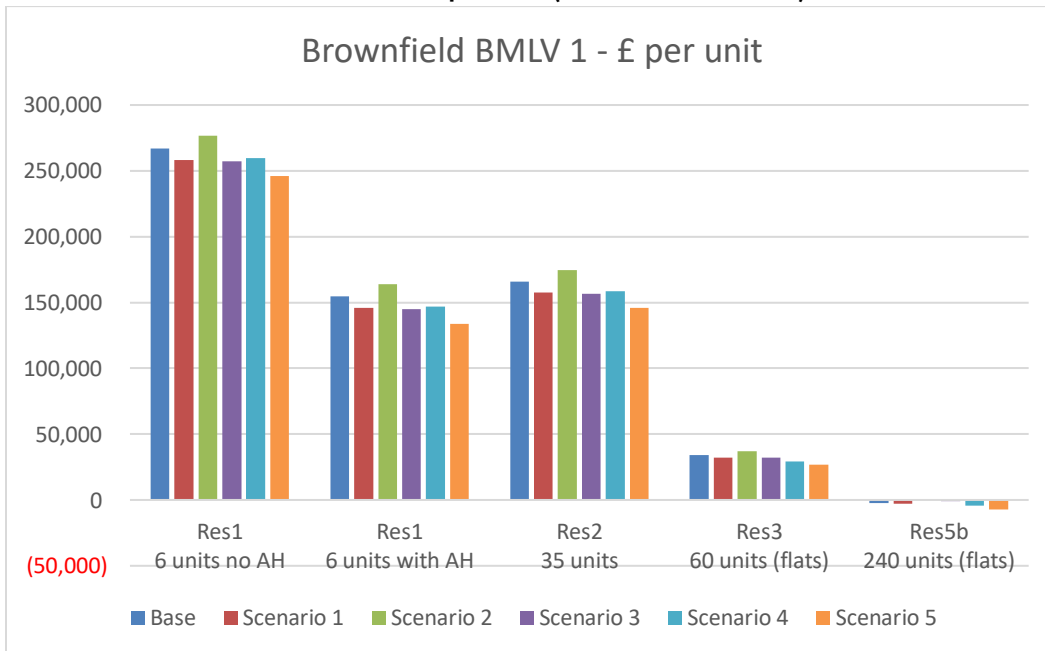
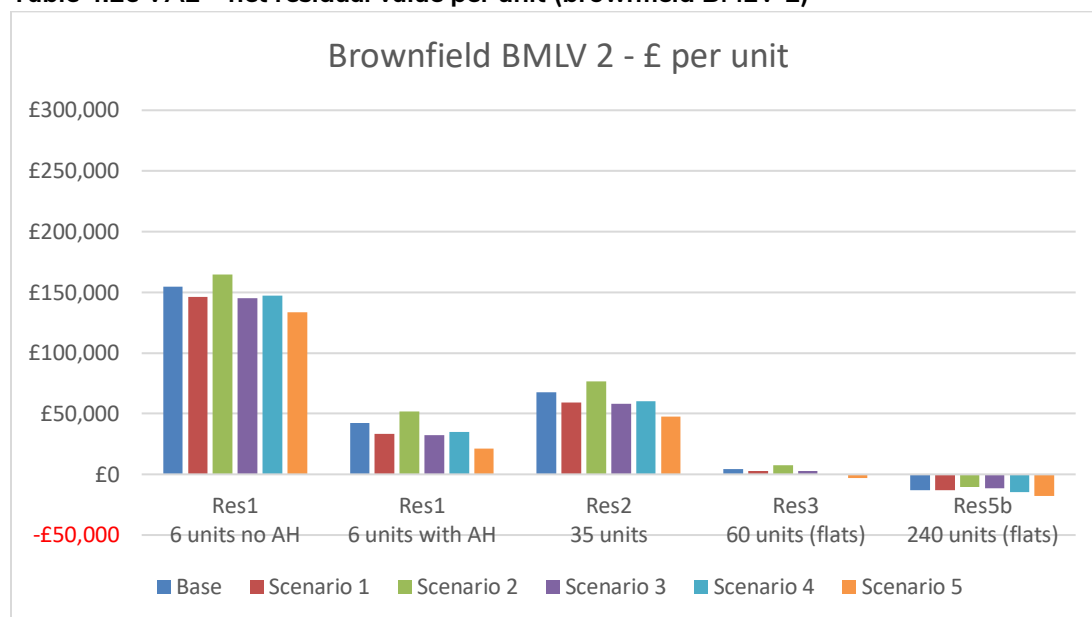


Table 4.2c VA2 – net residual value per unit (brownfield BMLV 2)

4.8 With the higher market values in value area 2, residual values are higher than with value area 1. On greenfield land in value area 2, all scenarios are viable and, for the typologies used in this study, are deliverable financially.

4.9 On brownfield land the delivery of flats becomes marginal to non-viable, especially at the higher BMLV (BMLV2). The 60 flat typology at brownfield BMLV 2, whilst marginally viable at the base scenario, is not viable at scenarios 4 and 5. The larger flat typology – 240 units is again not viable at either BMLV and for all scenarios.

4.10 Again, it is apparent that moving across the different standards (from the base case through to scenario 5 – ultra low carbon) impacts on viability, with scenario 2 showing an improvement against the base case (especially for houses) and scenario 5 showing the biggest viability reduction. In value area 2, for flatted schemes, the introduction of higher carbon reduction standards could make the difference between viable and non-viable schemes and/or limit the flexibility for LPAs to achieve other planning objectives. The sensitivity of the viability of flatted schemes to the additional costs of meeting net zero standards could also have implications for 'combination' developments with both houses and flats. These would need to be investigated at the local level when LPAs bring forward local plan updates.

Value area 3 – results

4.11 The results for value area 3 (VA3) are shown in the charts below, again showing the results for a greenfield site first, followed by a brownfield site using benchmark land value 1 (BMLV 1) which is the lower benchmark land value and lastly for a brownfield site using BMLV 2. The results are net residual value per unit.

Table 4.3a VA3 – testing results for residential typologies – net residual value per unit (greenfield BMLV 2)

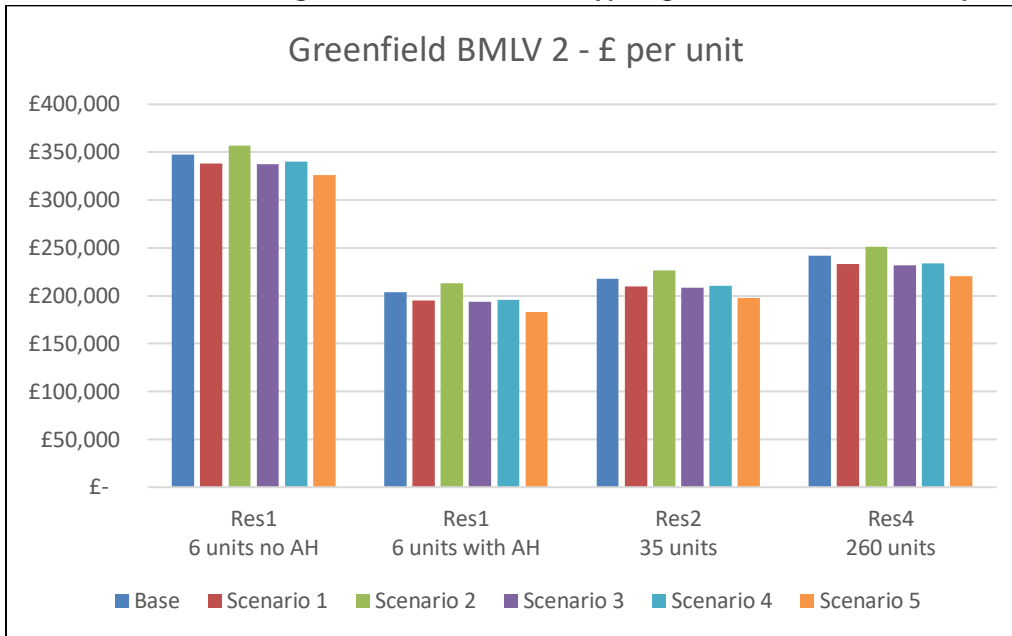


Table 4.3b VA3 – testing results for residential typologies – net residual value per unit (brownfield BMLV 1)

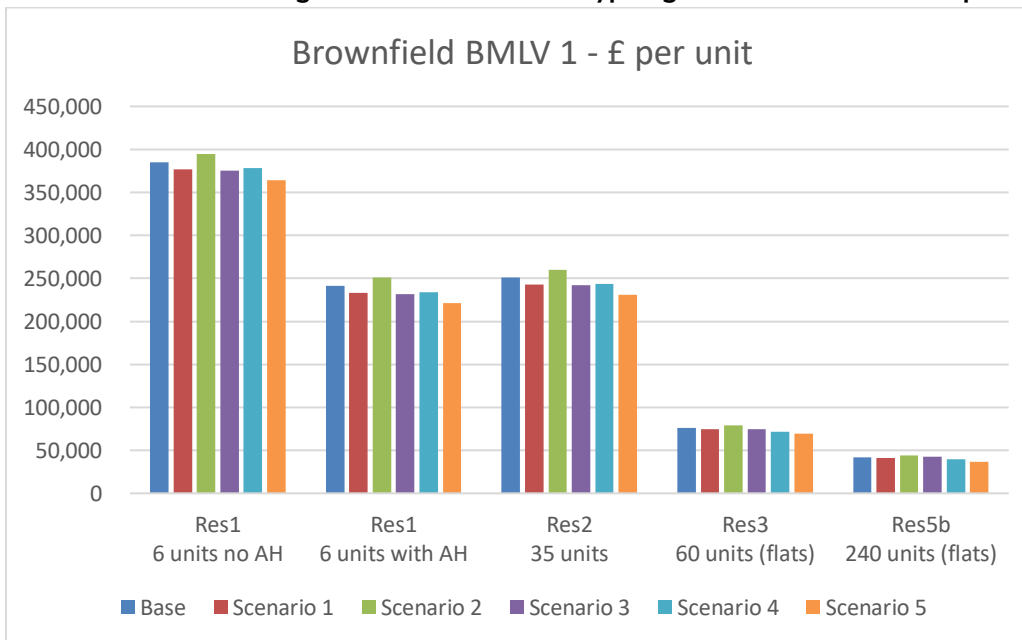
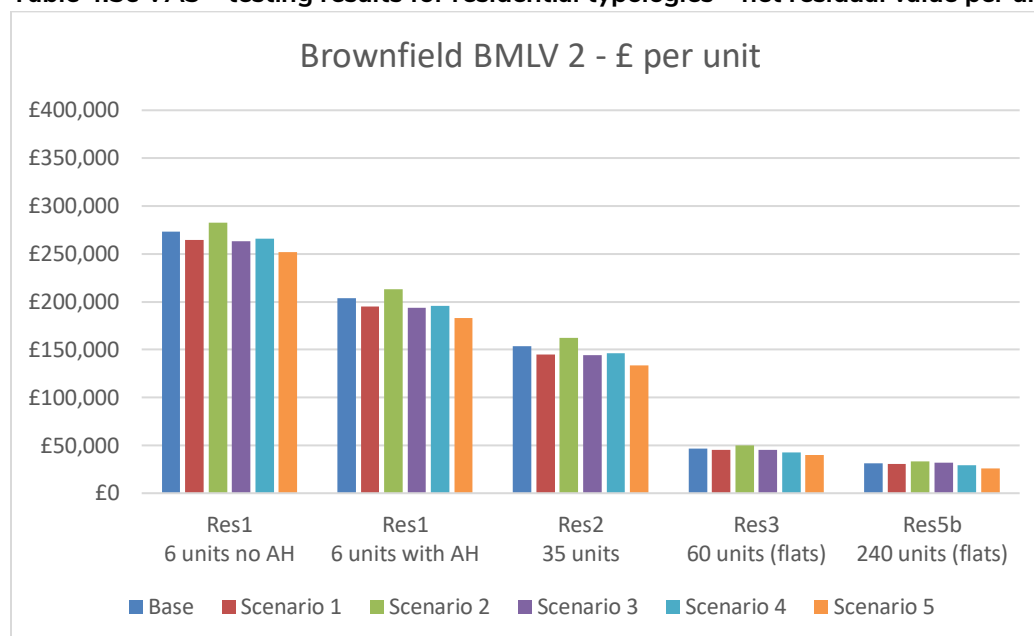


Table 4.3c VA3 – testing results for residential typologies – net residual value per unit (brownfield BMLV 2)

4.12 On the basis of the assumptions used for this study, the higher market values assumed for value area 3 produce viable development across all the typologies and scenarios tested but again with scenario 5 showing the biggest reduction in residual values. In value area 3, although viability is reduced for the flatted schemes there is still headroom after the costs of meeting the net zero carbon scenarios.

Sensitivity testing using a 5-year forecast

4.13 Further modelling was undertaken to explore whether potential changes in costs and values over the next five years would improve or worsen viability and the ability of development in Surrey to meet the highest net zero standards. It is recognised that forecasts do not necessarily become reality but they are a useful way of taking a longer term view of development viability. Using the best available evidence it has been assumed that over the next 5 years, house prices will increase by 18%¹⁴ and build costs by 16.5%¹⁵.

4.14 Two of the development typologies have been taken to illustrate the impact of the 5 year forecasts on development viability – one with housing and the other, a flatted scheme. Both at brownfield BMLV 2, where results are the weakest. The results are shown in the two tables below.

¹⁴ Savills residential market forecast November 2023 and Knight Frank UK House Price Forecasts January 2024

¹⁵ AITPI BCIS quarterly briefing March 2024

Table 4.4a results of modelling with 5-year forecast – all value areas – 35 unit typology on brownfield land BMLV 2 – net residual value per unit

RES2 35 units B/Field	Value area 1	Value area 2	Value area 3
Base	£7,255	£107,399	£207,930
Scenario 1	-£2,542	£97,764	£198,311
Scenario 2	£17,892	£117,861	£218,362
Scenario 3	-£3,673	£96,651	£197,200
Scenario 4	-£1,468	£98,820	£199,396
Scenario 5	-£16,442	£88,038	£184,696

Table 4.4b results of modelling with 5-year forecast – all value areas – 60 unit flatted typology on brownfield land BMLV 2 – net residual value per unit

RES3 60 flats B/Field	Value area 1	Value area 2	Value area 3
Base	-£46,998	£14,897	£64,589
Scenario 1	-£48,960	£12,967	£62,676
Scenario 2	-£43,419	£18,417	£68,078
Scenario 3	-£49,191	£12,740	£62,451
Scenario 4	-£52,430	£9,561	£59,299
Scenario 5	-£55,717	£10,389	£56,148

4.15 The results are much more encouraging especially for the house led typology of 35 units, but still show relatively poor viability in value zone 1. For the house-led typologies in value area 1, the results could be said to be marginal for all but scenario 5. For value area 2, whereas at current costs and values, the 60 unit flatted scheme produced a marginal or negative residual value for scenarios 4 and 5 – with the 5 year forecast for costs and values, there is a positive residual value.

Summary of the residential viability modelling

4.16 The results of the viability modelling demonstrate good general viability and that most development can meet the additional costs of achieving net zero and remain viable. Greenfield sites, with an average CIL, are consistently able to meet the policy costs associated with all net zero scenarios.

4.17 However in lower value areas and on brownfield sites there are exceptions to this positive picture and the outcomes are more varied.

Chapter 5 Non residential development

Approach

- 5.1** The approach to non-residential development differs from the residential development both in terms of the energy modelling on the example archetypes and the way that this is handled in viability terms:
- The energy modelling and cost analysis for non-residential development is based upon recent work undertaken by a consortium led by Etude for 18 London Boroughs¹⁶
 - The impact on viability is based upon commentary on the estimated cost increases rather than through undertaking a full viability exercise.
- 5.2** Non-residential development in Surrey and elsewhere is less homogeneous than residential development. In many cases, new premises are brought forward on a design and build basis, where needs are identified by an occupier and the values will accrue from the commercial activities that then take place within the premises (as opposed from the development value of the premises themselves). Although speculative development will take place and it is possible to assess the values¹⁷, a broader approach is more useful in considering the impact of higher development standards.

Context

- 5.3** Non-residential development has been considered in many of the local plan and CIL viability evidence studies reviewed as part of this work. The clear conclusion from the reviewed work was that only retail development was consistently viable on a speculative basis, but that development was still likely to come forward to meet occupiers' commercial needs. The findings from the non-residential viability studies in Surrey echo those seen elsewhere.
- 5.4** Historically, BREEAM has been commonly used to categorise non-residential building standards, with five categories – Pass; Good; Very Good; Excellent and Outstanding. Where BREEAM standards have been set as a requirement in planning policy these have typically been for BREEAM Very Good or BREEAM Excellent. Work undertaken by BRE¹⁸ suggests that the uplift over base construction costs varies between 0.1% and 0.2% for BREEAM Very Good and between 0.4% and 1.8% for BREEAM excellent. Generally, it has been considered that where applicable, these requirements are not unreasonable for non-residential development and that this order of magnitude cost uplift has not unduly jeopardised development.

¹⁶ [Climate change : Buildings and energy | Merton Council](#)

¹⁷ For example, this speculative approach is typically used to assess whether non-residential development might support CIL

¹⁸ Building Research Establishment, 2016, The value of BREEAM

5.5 It is likely that the nature of the activities being accommodated within non-residential buildings will have an impact on the emissions/energy metrics for a given building, and that these might dwarf the impacts of standard occupation e.g. high energy uses such as food processing or data centres.

Non-residential archetypes

5.6 The non-residential commercial archetypes are:

- 7-storey office block of 4,000 sq m
- 2-storey industrial building of 9,000 sq m
- 11-storey hotel of 3,900 sq m

5.7 The energy modelling and cost analysis also included a 3-4 story primary school of 6,000 sq m.

5.8 The energy modelling work was based around a set of fabric and ventilation specifications, heating systems and renewable energy specifications, and considered two approaches:

- Target emissions rate (TER), which forms Policy route 1
- Energy use, which forms Policy route 2

5.9 The modelling suggested that achieving net zero on site was not possible for these building archetypes and offsetting would be required.

5.10 The costs of higher building standards depended on the combination of specifications and including PV but without gas boilers, varied between -3.1% of base build costs to +7.3% of base build cost¹⁹.

¹⁹ The cost uplifts over base build costs have been reviewed by specialist members of the study team and are considered to be broadly appropriate for development in Surrey.

Table 5.1 Costs of higher building standards over base non-residential build costs

Office with £4,050/m2 baseline construction cost - % cost uplift	With PV			
Fabric & ventilation		VRF ²⁰	Heat pump less efficient	Heat pump more efficient
	Business as usual	-2.9%	-0.2%	3.0%
	Good practice	-1.6%	0.4%	2.7%
	Ultra-low energy	0.6%	2.0%	3.7%
Industrial with £1,300/m2 baseline construction cost - % cost uplift	With PV			
Fabric & ventilation		VRF	Four pipe chiller	Heat pump more efficient
	Business as usual	3.8%	5.2%	7.1%
	Good practice	3.8%	4.7%	5.8%
	Ultra-low energy	5.5%	6.2%	7.3%
Hotel with £4,250/m2 baseline construction cost - % cost uplift	With PV			
Fabric & ventilation		Heat pump (220)	Heat pump (400/300)	Heat pump (450- 300)
	Business as usual	-2.2%	-0.3%	0.8%
	Good practice	-1.3%	0.5%	1.6%
	Ultra-low energy	-0.8%	1.9%	2.8%
School with £3,400/m2 baseline construction cost - % cost uplift	With PV			
Fabric & ventilation		Direct electric	Heat pump less efficient	Heat pump more efficient
	Business as usual	-3.1%	0.0%	3.3%
	Good practice	-1.0%	1.1%	2.9%
	Ultra-low energy	-1.4%	2.9%	3.6%

5.11 The cost uplifts over base build costs for good practice combined with the use of heat pumps are generally within the scale of the costs uplifts historically considered acceptable for BREEAM planning policy requirements. The exception for this is the industrial archetype, where achieving

higher standards is constantly more expensive. Achieving ultra-low energy building standards with the most efficient heating/ventilation systems is typically more than the costs of common BREEAM requirements.

5.12 The implications of the higher building standards on delivery of non-residential development will depend on a variety of circumstances. As already noted, many forms of non-residential development are already not viable on a speculative basis and therefore the extent that future occupiers will accept the higher costs for better buildings will vary around the profitability of the intended uses, the CSRT policies of the occupier, and a view on the long-term operational costs implications of higher standard buildings.

5.13 Schools are typically delivered by the public sector, who will commission and then operate these buildings. Individual authorities will be seeking to balance higher initial capital costs with longer term running costs as well as their individual policies relation to the climate emergency.

Conclusions

5.14 In many situations the requirement for higher standard non-residential buildings will not have an impact on the delivery, except in the most marginal of circumstances. However, there is a case for considering separate standards for industrial buildings in order to reduce the risk to delivery – this might be considered in the round with the emissions/energy implications of the activity being hosted by the new building.

²⁰ Variable refrigerant flow

Chapter 6 Summary and conclusions

- 6.1** The results of the **residential** viability modelling demonstrate good general viability and that most development in Surrey will be able to absorb the additional costs of achieving net zero. Positive residual values were found for all the scenarios tested (including all net zero scenarios) and all the development typologies on **greenfield** land.
- 6.2** In the highest value area, **value area 3**, all development, including on **brownfield** sites whether housing led or flatted schemes, is viable and able to meet the costs of all net zero scenarios. The picture is more mixed for the other two value areas.
- 6.3** In **value area 2** house-led development is viable on **brownfield** typologies and able to meet the costs of the net zero scenarios but mid-rise and high-rise flatted development is not viable at the higher BLMV (BMLV 2). At BMLV 1, only the 60 unit flatted typology is viable with the 240 unit flatted typology remaining unviable. Blocks of flats were already marginal or not viable at the base position and the additional costs of meeting net zero exacerbates the poor outcome.
- 6.4** In **value area 1**, the lowest value area, only the 6-unit typology without affordable housing is able to meet the additional net zero policy costs on **brownfield** land and at the higher benchmark land value (BMLV 2). At BMLV 1 the house-led typologies are able to meet the additional costs of all the 5 scenarios tested but the flats are not. The introduction of higher carbon reduction standards in value area 1 does not determine, on the assumptions used for this study, whether a typology is viable or not. However, it does reduce the residual value and could reduce the options open to the LPAs to achieve other planning objectives.
- 6.5** Using the **5 year forecast** for values and costs adopted for this study the results are much more encouraging especially for the house led typology of 35 units on brownfield land, but still show relatively poor viability in value zone 1. However, if the forecasts became reality, they could make a material difference. For example, in value area 2, whereas at current costs and values, the 60 unit flatted scheme produced a marginal or negative residual value for scenarios 4 and 5 – with the 5 year forecast, there is a positive residual value.
- 6.6** For **non residential** development, the requirement for higher standard non-residential buildings will not have an impact on the delivery, except in the most marginal of circumstances. However, there is a case for considering separate standards for industrial buildings in order to reduce the risk to delivery.
- 6.7** To adopt net zero policies local authorities will need to carry out their own area-wide viability assessment taking into account specific local costs, land values, variances in house prices and local policy objectives. Where development is marginal or not viable policy trade off may be required unless flexibilities can be found within land values or other development costs. In doing so, it will be worth bearing in mind the potential for future changes in costs and values to improve the position.

6.8 As part of this process, it will be important for the Surrey authorities to monitor changes in the technology used to achieve net zero development and their associated costs and to keep the development industry abreast of changes.

6.9 Conor – do you want us to mention the costs toolkit here??

Appendix I National policy and guidance

National policy context

- i. **National framework** - The National Planning Policy Framework (NPPF) recognises the importance of positive and aspirational planning but states that this should be done 'in a way that is aspirational but deliverable'²¹.
- ii. The NPPF advises that cumulative effects of policy should not combine to render plans unviable:
*'Plans should set out the contributions expected from development. This should include setting out the levels and types of affordable housing provision required, along with other infrastructure (such as that needed for education, health, transport, flood and water management, green and digital infrastructure). Such policies should not undermine the deliverability of the plan.'*²²
- iii. The government has signalled its desire to simplify the planning process, including development contributions. The NPPF advises that:
*'All viability assessments, including any undertaken at the plan-making stage, should reflect the recommended approach in national planning guidance, including standardised inputs, and should be made publicly available.'*²³
- iv. In terms of affordable homes the government has reiterated previous policy on affordable homes thresholds and a desire to increase affordable home products that can potentially lead to home ownership:
*'Provision of affordable housing should not be sought for residential developments that are not major developments, other than in designated rural areas (where policies may set out a lower threshold of 5 units or fewer). To support the re-use of brownfield land, where vacant buildings are being reused or redeveloped, any affordable housing contribution due should be reduced by a proportionate amount'*²⁴
*'Where major development involving the provision of housing is proposed, planning policies and decisions should expect at least 10% of the homes to be available for affordable home ownership, unless this would exceed the level of affordable housing required in the area, or significantly prejudice the ability to meet the identified affordable housing needs of specific groups.'*²⁵
- v. With regard to non-residential development, the NPPF states that local planning authorities should:

²¹ DLUHC, 2023 NPPF Para 16

²² DLUHC, 2023 NPPF Para 34

²³ DLUHC, 2023 NPPF Para 58

²⁴ DLUHC, 2023 NPPF Para 65

²⁵ DLUHC, 2023 NPPF Para 66

*'set out a clear economic vision and strategy which positively and proactively encourages sustainable economic growth...local policies for economic development and regeneration...seek to address potential barriers to investment, such as inadequate infrastructure, services or housing, or a poor environment...be flexible enough to accommodate needs not anticipated in the plan, allow for new and flexible working practices (such as live-work accommodation), and to enable a rapid response to changes in economic circumstances.'*²⁶

- vi. However, the NPPF does not state that all sites must be viable now in order to appear in the plan. Instead, the NPPF is concerned to ensure that the bulk of the development is not rendered unviable by unrealistic policy costs and that overall, Local Plan policies should not undermine the deliverability of the plan²⁷. It is important to recognise that economic viability will be subject to economic and market variations over the local plan timescale. In a free market, where development is largely undertaken by the private sector, the local planning authority can seek to provide suitable sites to meet the needs of sustainable development. It is not within the local planning authority's control to ensure delivery actually takes place; this will depend on the willingness of a developer to invest and a landowner to release the land. So, in considering whether a site is deliverable now or developable in the future, we have taken account of the local context to help shape our viability assumptions.
- vii. **Written Ministerial Statements - Affordable Homes Update** (24 May 2021) is specifically referenced in NPPF and sets out the Government's plans for the delivery of First Homes and the new model for Shared Ownership. First Homes criteria includes the requirement for a discount in perpetuity of at least 30% against market value to a maximum discounted price of £250,000 (£420,000 in Greater London). A minimum of 25% of all affordable housing units secured through developer contributions should be First Homes. First Homes are an affordable home ownership product and count towards the NPPF requirement that 10% of all homes are affordable home ownership. First Homes are exempt from CIL.
- viii. **Written Ministerial Statements - Local Energy Efficiency Standards Update** (13 December 2023) recognises that for a number of years, the plans of some local authorities have sought to go further than national standards for energy efficiency. The WMS states that the Government does not expect plan-makers to set local energy efficiency standards for buildings that go beyond current or planned buildings regulations unless they have a well-reasoned and robustly costed rationale that ensures development remains viable and that any additional requirement is expressed as a percentage uplift of a dwelling's Target Emissions Rate calculated using a specified version of the Standard Assessment Procedure.
- ix. **Planning Practice Guidance** - Planning Practice Guidance²⁸ (PPG) provides further detail about how the NPPF should be applied. PPG contains general principles for understanding viability (also relevant to CIL viability testing). The approach taken reflects the latest version of PPG. In order to

²⁶ DLUHC, 2023 NPPF, para 86

²⁷ DLUHC, 2023 NPPF Para 34

²⁸ DLUHC, Planning Practice Guidance

understand viability, a realistic understanding of the costs and the value of development is required and direct engagement with development sector may be helpful²⁹. Evidence should be proportionate to ensure plans are underpinned by a broad understanding of viability, with further detail for strategic sites that provide a significant proportion of planned supply³⁰.

- x. All development costs should be taken into account, including within setting of benchmark land values, in particular para 014 within the PPG Viability section states that:

'Costs include:

- build costs based on appropriate data, for example that of the Building Cost Information Service
- abnormal costs, including those associated with treatment for contaminated sites or listed buildings, or costs associated with brownfield, phased or complex sites. These costs should be taken into account when defining benchmark land value
- site-specific infrastructure costs, which might include access roads, sustainable drainage systems, green infrastructure, connection to utilities and decentralised energy. These costs should be taken into account when defining benchmark land value
- the total cost of all relevant policy requirements including contributions towards affordable housing and infrastructure, Community Infrastructure Levy charges, biodiversity net gain (as required by Schedule 7A of the Town and Country Planning Act), and any other relevant policies or standards. These costs should be taken into account when defining benchmark land value
- general finance costs including those incurred through loans
- professional, project management, sales, marketing and legal costs incorporating organisational overheads associated with the site. Any professional site fees should also be taken into account when defining benchmark land value
- explicit reference to project contingency costs should be included in circumstances where scheme specific assessment is deemed necessary, with a justification for contingency relative to project risk and developers return.'

- xi. Land values³¹ should be defined using a benchmark land value that is established on the basis of Existing Use Value plus a premium for the landowner. The premium should reflect the minimum return at which it is considered a reasonable landowner would be willing to sell their land. The benchmark should reflect the implications of abnormal costs, site specific infrastructure and fees. It can be informed by market evidence including current costs and values but that this should be

²⁹ PPG Paragraph: 010 Reference ID: 10-010-20180724

³⁰ PPG Paragraph: 005 Reference ID: 10-004-20180724

³¹ PPG Paragraph: 013 Reference ID: 10-013-20190509 and 014 Reference ID: 10-014-20190509

based on development that is compliant with policies, where evidence is not available adjustments should be made to reflect policy compliance.

- xii. PPG states that developer return should be 15 - 20% of gross development value and that a lower figure may be more appropriate for affordable homes delivery³².
- xiii. **Community Infrastructure Levy (CIL)** - CIL is payable on development which creates net additional floor space, where the gross internal area of new build exceeds 100 square metres (this limit does not apply to new houses or flats)³³. Custom & self-build is exempt, along with affordable homes, charitable development, buildings into which people do not normally go and vacant buildings brought back into the same use³⁴.
- xiv. CIL rates should be set so that they strike an appropriate balance between additional investment to support development and the potential effect on the viability of developments³⁵.
- xv. For the purposes of CIL, a charging authority should use an area-based approach, involving a broad test of viability across their area. This should use appropriate available evidence, recognising that the available data is unlikely to be fully comprehensive. A sample of site types should be used, however more fine-grained sampling may be required where differential CIL rates are set. Rates should be reasonable and include a buffer, but there is no requirement for a proposed rate to exactly mirror the evidence³⁶.
- xvi. Differential rates may be set in relation to geography, development type and/or scale. However undue complexity and disproportionate impact should be avoided. The charging authority should consider a zero CIL where plan policies require significant contributions towards homes or infrastructure through planning obligations³⁷. In addition, higher rates should not be charged for minor developments without affordable housing³⁸. The guidance for testing viability for plan-making and for setting CIL rates is closely aligned and so testing both together follows the same approach and can use common assumptions.
- xvii. **Other guidance on viability testing for development** - Guidance has been published to assist practitioners in undertaking viability studies for policy making purposes - "*Viability Testing Local Plans - Advice for planning practitioners*"³⁹. The foreword to the Advice for planning practitioners includes support from DHCLG, the LGA, the HBF, PINS and POS. PINS and the POS⁴⁰ state that:

³² PPG Paragraph: 018 Reference ID: 10-018-20190509

³³ PPG Paragraph: 001 Reference ID: 25-001-20190901

³⁴ PPG Paragraph: 005 Reference ID: 25-005-20201116

³⁵ PPG Paragraph: 010 Reference ID: 25-010-20190901

³⁶ PPG Paragraph: 020 Reference ID: 25-020-20190901

³⁷ PPG Paragraph: 026 Reference ID: 25-026-20190901

³⁸ PPG Paragraph: 024 Reference ID: 25-024-20240219

³⁹ The guide was published in June 2012 and is the work of the Local Housing Delivery Group, chaired by Sir John Harman, which is a cross-industry group, supported by the Local Government Association and the Home Builders Federation

⁴⁰ Acronyms for the following organisations - Department of Communities and Local Government, LGA Environment and Housing Board, Home Builders Federation, Planning Inspectorate, Planning Officers Society

'The Planning Inspectorate and Planning Officers Society welcome this advice on viability testing of Local Plans. The use of this approach will help enable local authorities to meet their obligations under NPPF when their plan is examined'

- xviii. The approach to viability testing adopted for this study follows the principles set out in the Advice. The Advice re-iterates that:

'The approach to assessing plan viability should recognise that it can only provide high level assurance'

- xix. The Advice also comments on how viability testing should deal with potential future changes in market conditions and other costs and values and states that:

'The most straightforward way to assess plan policies for the first five years is to work on the basis of current costs and values'. (page 26)

- xx. But that:

'The one exception to the use of current costs and current values should be recognition of significant national regulatory changes to be implemented.....' (page 26)

Principles of viability testing

- xxi. The Advice for planning practitioners⁴¹ summarises viability as follows:

'An individual development can be said to be viable if, after taking account of all costs, including central and local government policy and regulatory costs and the cost and availability of development finance, the scheme provides a competitive return to the developer to ensure that development takes place and generates a land value sufficient to persuade the land owner to sell the land for the development proposed. If these conditions are not met, a scheme will not be delivered.' (page 14)

- xxii. Reflecting this definition of viability, and as specifically recommended by the Advice for planning practitioners, we have adopted a residual value approach to our analysis. Residual value is the value of the completed development (known as the Gross Development Value or GDV) less the costs of undertaking the development. The residual value is then available to pay for the land. The value of the scheme includes both the value of the market homes and affordable homes (and other non-residential values). Scheme costs include the costs of building the development, plus professional fees, scheme finance and a return to the developer. Scheme costs also include planning obligations (including affordable homes, direct s106 costs) and the greater the planning obligations, the less will be the residual value.

- xxiii. The residual value of a scheme is then compared with a benchmark land value. If the residual value is less than the benchmark value, then the scheme is less likely to be brought forward for

⁴¹ Local Housing Delivery Group, 2012, Viability Testing Local Plans - Advice for planning practitioners

development and is considered unviable for testing purposes. If the residual value exceeds the benchmark, then it can be considered viable in terms of policy testing.

- xxiv. PPG paragraph 012 - 015 sets out that benchmark land values should be based on the current use value of a site plus an appropriate site premium in most cases. The principle of this approach is that a landowner should receive at least the value of the land in its 'pre-permission' use, which would normally be lost when bringing forward land for development. The benchmark land values used in this study are based on the principle of 'Existing Use Value Plus' which is considered further in other parts of this report.
- xxv. Note the approach to Local Plan level viability (or CIL) assessment does not require all sites in the plan to be viable. The Harman Report says that a site typologies approach (i.e. assessing a range of example development sites likely to come forward) to understanding plan viability is sensible, a view echoed in CIL guidance. Viability '*...is to provide high level assurance that the policies with the plan are set in a way that is compatible with the likely economic viability of development needed to deliver the plan*'.