

Climate Emergency Local Plan Update

Economic Viability Study (EVS)

August 2022

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Date: August 2022

For and on behalf of Avison Young (UK) Limited

1. Introduction

- 1.1 Leeds City Council (the Council) is updating its planning policies, which will form part of the statutory Local Plan. The focus is on the role of planning in helping the Council deliver its climate emergency commitments.
- 1.2 The priority for the Local Plan Update (PLU) is to update and improve existing policies and make new ones to address climate change and the climate emergency declaration to achieve net zero emissions by 2030. In addition, closely related topics such as green and blue infrastructure, flood risk, placemaking and sustainable infrastructure are also included within the proposed scope of the LPU.
- 1.3 Public consultation on the scope of the LPU was carried out between July and September 2021:
- Nearly 800 representations were made with the majority (circa 87%) supporting the LPU's focus, with respondents being encouraged by the proposed direction the plan will take.
 - There were concerns from the development industry as to the deliverability of the policy ambitions and the 'costs burdens' this would place on development, already constrained by other planning burdens and a difficult economic climate.
- 1.4 Development Plan Panel considered the responses and confirmed the scope of LPU in January 2022. A series of officer and Members workshops were held in the Spring 2022 where the emerging suite of policy areas was described. The development industry has also been involved through targeted workshops and the Leeds Climate Commission has been informed of progress throughout.
- 1.5 The focus of this commission is to inform a realistic understanding of what the LPU can support in relation to viability. The policies being tested within this assessment include:
- **Replacement Policy EN1: Carbon Dioxide Reduction.**
 - **Replacement Policy EN2: Sustainable Design and Construction.**
 - **Replacement Policy G1: Protecting, Enhancing and Extending Green and Blue Infrastructure**
 - **Replacement Policy G9 – Biodiversity Net Gain**
 - **New Policy G2C – Tree Replacement**
 - **New Policy G2D – Additional [Tree] Planting**
 - **New Policy – The Health Impacts of Development**
 - **New Policy – Digital Connectivity**
- 1.6 This report has been prepared in accordance with the RICS Professional Statement Financial Viability in Planning: Conduct, and Reporting, 1st edition, May 2019, the RICS Guidance Note: Assessing Viability in Planning under the National Planning Policy Framework 2019 for England, 1st edition March 2021¹ and the latest Planning Policy guidance (PPG) and National Planning Policy Framework (NPPF) guidance relating to viability.
- 1.7 The Royal Institution of Chartered Surveyors (RICS) also recommends that suitably qualified professionals are consulted in undertaking viability assessments to inform the planning process. Avison Young is a company regulated by the RICS and this assessment has been undertaken by Dale Robinson, MRICS, a Chartered Planning and Development Surveyor and Registered Valuer.
- 1.8 The advice contained within this report does not constitute valuation advice in accordance with RICS Valuation – Global Standards 2020 and should not be relied upon as such.

¹ This guidance replaces the 2012 Financial Viability in Planning Guidance Note and provides guidance for carrying out and interpreting the results of viability assessments under the NPPF and the updated PPG.

- 1.9 This report has also been prepared for the sole use of our client, based on the scope of work and on the terms and conditions agreed with our client. Whilst facts have been rigorously checked, Avison Young can take no responsibility for any damage or loss suffered because of any inadvertent inaccuracy within this report. Information contained herein should not, in whole or part, be published, reproduced, or referred to without prior approval. Any such reproduction should be credited to Avison Young.

2. Viability Approach / Methodology

2.1 There is no standard answer to questions of viability, nor is there a single approach for assessing viability.

2.2 For the purpose of this assessment we have referred to guidance issued by the Royal Institution of Chartered Surveyors (RICS) and the latest Planning Policy Guidance (PPG) and National Planning Policy Framework (NPPF) guidance relating to viability. In the first instance we have referred to the 'RICS Professional Statement Financial Viability in Planning: Conduct, and Reporting, 1st edition, May 2019. The Guidance provides recommended good practice when assessing financial viability for planning purposes and is grounded in the statutory and regulatory planning regime that currently operates in England.

2.3 Financial viability for planning purposes is defined as:

'An objective financial viability test of the ability of a development project to meet its costs, including the cost of planning obligations, while ensuring an appropriate site value for the landowner and a market risk adjusted return to the developer in delivering that project.'

2.4 An accepted method of valuation of development land is the 'residual method'. This is explained further in the RICS Valuation Information Paper (VIP) 12. In summary this valuation approach recognises that the value of a development scheme is a function of several elements. These include:

- The value of the completed development (GDV).
- The direct costs of developing the scheme (TCC).
- The return (profit) to the developer for taking the development risk and delivering the scheme.
- The cost of any planning obligations and
- The cost or value of the land.

2.5 The residual approach can be expressed through the following simple calculation.

Gross Development Value (GDV) (minus) Total Costs (including Developers Profit) = Residual Site Value

- Gross Development Value includes all sales income generated by the development, including income from affordable housing.
- Total Development Costs include construction costs, professional fees, planning/S106, finance / interest charges etc.
- Developer's profit is expressed by reference to a percentage of the Total Development Costs or Gross Development Value².

2.6 The consequential output from the appraisal can then be compared to a benchmark land value to assess the viability of the scheme.

2.7 In terms of the process, land value is a key component of a development appraisal, albeit (as explained previously) it can often be the 'outcome' of the appraisal rather than being a fixed figure (hence why appraisals are often referred to as being 'residual', because once all the inputs are included the 'residue' (if there is any) is the amount that the developer can afford to pay for the site.

² It can also be expressed by reference to an Internal Rate of Return (IRR) or Return on Capital Employed (ROCE).

- 2.8 In simple terms; only when the development value exceeds the total project costs and required returns (profit) can a scheme be considered viable. A scheme will not proceed where development costs exceed revenue (i.e. where there is a negative land value). However, the 'residue' from the appraisal (as a land value) does not always meet the expectations of the landowner. If a developer is only able to pay a significantly reduced sum below the landowners' expectations, then the outcome is straight forward. The land will not be sold / released for development.
- 2.9 Therefore, when undertaking a viability assessment, a minimum land value (aka benchmark land value) also needs to be identified.

Benchmark Land Value

- 2.10 Para 013 (Reference ID: 10-013-20190509], of the PPG provides guidance on the issue of benchmark land values and states that a benchmark land value should be established on the basis of the Existing Use Value (EUV) of the land, plus a premium for the landowner. The premium for the landowner should reflect the minimum return at which it is considered a reasonable landowner would be willing to sell their land. The premium should provide a reasonable incentive, in comparison with other options available, for the landowner to sell land for development while allowing a sufficient contribution to comply with policy requirements. Landowners and site purchasers should consider policy requirements when agreeing land transactions. This approach is often called 'Existing Use Value plus (EUV+).
- 2.11 In determining the benchmark land value the PPG states at Para 014 (Ref ID: 10-014-20190509] what factors should be considered when establishing the benchmark. It states that the benchmark land value should:
- Be based upon Existing Use Value (EUV).
 - Allow for a premium to landowners.
 - Reflect the implications of abnormal costs; site-specific infrastructure costs; and professional site fees; and
 - Be informed by market evidence including current uses, costs, and values. Where recent market evidence is used to inform assessment of benchmark land value this evidence should be based on developments which are compliant with policies, including for affordable housing. Where this evidence is not available plan makers should identify and evidence any adjustments to reflect the cost of policy compliance. This is so that historic benchmark land values of non-policy compliant developments are not used to inflate values over time.
- 2.12 PPG defines Existing Use Value at Para 015 (Reference ID: 10 - 015-20190509]. It states that Existing Use Value (EUV) is the first component of calculating benchmark land value. It goes on to state that EUV is the value of the land in its existing use, which will vary depending on the type of site and development types. Para 015 of PPG is also clear in that Existing Use Value is not the price paid for the land and should also disregard hope value.
- 2.13 The premium (or the 'plus' in EUV+) is the second component of benchmark land value. It is the amount above existing use value (EUV) that goes to the landowner. Para 016 of PPG (Ref: 10-016-20190509) states that the premium should provide a reasonable incentive for a landowner to bring forward land for development while allowing a contribution to fully comply with policy requirements. Para 016 states that the process for establishing the premium will be an iterative process informed by professional judgement and must be based upon the best available evidence informed by cross sector collaboration. Market evidence can include benchmark land values from other viability assessments. Land transactions can be used but only as a cross check to the other evidence. Any data used should reasonably identify any adjustments necessary to reflect the cost of policy compliance (including for affordable housing), or differences in the quality of land, site scale, market performance

of different building use types and reasonable expectations of local landowners. PPG states that policy compliance means that the development complies fully with up to date plan policies including any policy requirements for contributions towards affordable housing requirements at the relevant levels set out in the plan. PPG also confirms that a decision maker can give appropriate weight to emerging policies.

2.14 PPG (para 17³) also states that for the purpose of viability assessment alternative use value (AUV) of the land may be informative in establishing benchmark land value. This refers to the value of land for uses other than its existing use. If applying alternative uses when establishing benchmark land value PPG states that these should be limited to those uses which would fully comply with up to date development plan policies, including any policy requirements for contributions towards affordable housing at the relevant levels set out in the plan. It further states that plan makers can set out in which circumstances alternative uses can be used. This might include if there is evidence that the alternative use would fully comply with up to date development plan policies, if it can be demonstrated that the alternative use could be implemented on the site in question, if it can be demonstrated there is market demand for that use, and if there is an explanation as to why the alternative use has not been pursued. Where AUV is used this should be supported by evidence of the costs and values of the alternative use to justify the land value. Valuation based on AUV includes the premium to the landowner. If evidence of AUV is being considered the premium to the landowner must not be double counted.

2.15 The RICS professional Statement⁴ also provides guidance on the issue of benchmark land value. It states: *In the interest of transparency, when providing benchmark land values in accordance with the PPG for an FVA, RICS members must report the:*

- **Current Use Value.** *CUV referred to as EUV or first component in the PPG⁵. This equivalent use of terms (i.e. that CUV and EUV are often interchangeable) is dealt with in paragraph 150.1 of IVS 104 Bases of Value (2017).*
- **Premium.** *Second component as set out in the PPG⁶*
- **Market Evidence** *as adjusted in accordance with the PPG⁷*
- **All supporting considerations, assumptions and justifications adopted** *including valuation reports, where available⁸*
- **Alternative Use Value** *as appropriate (market value on the special assumption of a specified alternative use⁹). It will not be appropriate to report an alternative use value where it does not exist.*

A statement must be included in the FVA or review of the applicants FVA or area wide FVA that explains how market evidence and other supporting information has been analysed and, as appropriate, adjusted to reflect existing or emerging planning policy and other relevant considerations. If a market value report has recently been prepared, this should be stated with the reason for the report, assumptions adopted and reported valuation. The onus is on the RICS members to enquire about all the above.

In addition, the price paid for the land (or the price expected to be paid through an option or conditional agreement), should be reported as appropriate¹⁰ to improve transparency. Price paid is not allowable evidence for the assessment of BLV and cannot be used to justify failing to comply with policy.

³ Ref: 10-017-20190509

⁴ Financial Viability in Planning: Conduct, and Reporting, 1st edition, May 2019

⁵ Para 015 (Reference ID: 10 - 015-20190509)

⁶ Para 016 (Ref: 10-016-20190509)

⁷ Para 016 (Ref: 10-016-20190509)

⁸ Para 014 (Ref 10-014-20190509, Para 15 (Ref: 10-15-20190509, Para 16 (Ref: 10-016-20190509)

⁹ Para 17 (Ref 10-017-20190509)

¹⁰ Para 16 (Ref 10-016-20190509)

2.16 As explained in the next section of this report we have based our assessment on a range of hypothetical ‘development typologies’ assuming both greenfield and brownfield sites.

Greenfield Sites

2.17 For the purpose of establishing the existing use value for greenfield sites we assumed agricultural value and have referred to farm land currently listed as available for sale on UK Land and Farms. The evidence upon which we have relied is summarised below.

Table 2.1 – Agricultural land comparable

Size (acres)	Grade	Location	Price	Price per acre (£)	Status
4,205 acres	1 and 2	Goole, East Yorkshire	£44,000,000	£10,464	Under offer
1,709 acres	2	Ousefleet and Adlingfleet, East Yorkshire	£15,200,000	£8,894	For Sale
295 acres	1	Lot 4 – Goole Fields, East Yorkshire	£3,500,000	£11,864	For Sale
265 acres	1	Lot 3 – Goole Fields, East Yorkshire	£3,000,000	£11,320	For Sale
220 acres	2	Land at Naburn Lodge Farm, York	£2,200,000	£10,000	Under offer
124.42 acres	3	Land at Aldwark, York	£1,125,000	£9,042	For Sale

2.18 For the purpose of this assessment we have adopted the average value, which is £25,363 per hectare (£10,264 per acre). In terms of a premium for the greenfield sites the only specific guidance is set out within the HCA’s (now Homes England) Area Wide Viability Model (Annex 1 Transparent Viability Assumptions). Whilst the document has been withdrawn many practitioners still refer to the guidance. The document recognises that there is practitioner convention on the required premium above EUV, but this is some way short of consensus and the views of Planning Inspectors at Examination of Core Strategy have varied. The document states that benchmarks for greenfield agricultural sites typically range between 10 and 20 times EUV.

2.19 Within our assessment we have applied a premium of 15 times EUV (the midpoint). This results in a benchmark land value for greenfield sites of £380,445 per hectare (£153,960 per acre)¹¹. The only exception is for large Strategic sites for which we have applied a lower premium of 10 times EUV which results in a benchmark land value of £253,634 per hectare (£102,640 per acre)¹².

Brownfield Sites

2.20 In terms of the brownfield sites it is difficult to establish what an appropriate minimum benchmark land value should be as the value will be influenced by the extent of the abnormal costs. For the purpose of this assessment we have made the following general assumptions.

- City Centre – a benchmark land value of £1,853,325 per hectare (£750,000 per acre).
- Other Areas – a benchmark land value of £370,665 per hectare (£150,000 per acre).

¹¹ Say £155,000 per acre

¹² Say £105,000 per acre

3. Development Typologies

- 3.1 Para 003¹³ of Planning Policy Guidance (NPPG) states that assessing the viability of plans does not require individual testing of every site or assurance that individual sites are viable. Instead PPG states that plan makers can use site typologies to determine viability at the plan making stage. PPG further states¹⁴ that plan makers can follow a typology approach to ensure that they are creating realistic, deliverable policies based on the type of sites that are likely to come forward for development over the plan period. In following this process plan makers can first group sites by shared characteristics such as location, whether brownfield or greenfield, size of site and current and proposed use or type of development. The characteristics used to group sites should reflect the nature of typical sites that may be developed within the plan area and the type of development proposed for allocation in the plan.
- 3.2 This assessment has, therefore, tested viability based on a number of hypothetical development schemes / typologies which reflect the main types of development likely to come forward over the plan period.

Standard Residential Typologies

- 3.3 The residential typologies that have been tested in this assessment are summarised in Table 1.

Table 3.1 – Site Typologies

	Site Size	Beacon Settlement	Zone	Gross Area (ha)	Average Density (net)	Potential Type of Housing	GF ¹⁵	BF ¹⁶
1	Small	City Centre	Zone 4	0.05	280	Apartments	No	Yes
2	Medium	City Centre	Zone 4	0.14	280	Apartments	No	Yes
3	Large	City Centre	Zone 4	0.22	280	Apartments	No	Yes
4	Large	City Centre	Zone 4	0.99	280	Apartments	No	Yes
5	Small	Meanwood	Zone 3	0.50	40	Housing	Yes	Yes
6	Medium	Seacroft	Zone 3	1.30	40	Housing	Yes	Yes
7	Large	Halton Moor	Zone 3	2.80	40	Housing	Yes	Yes
8	Small	Allerton Bywater	Zone 2b	0.90	40	Housing	Yes	Yes
9	Medium	Allerton Bywater	Zone 2b	1.80	40	Housing	Yes	Yes
10	Large	Allerton Bywater	Zone 2b	2.92	40	Housing	Yes	Yes
11	Small	Pudsey	Zone 2b	0.39	40	Housing	Yes	Yes
12	Medium	Pudsey	Zone 2b	0.46	40	Housing	Yes	Yes
13	Large	Pudsey	Zone 2b	11.23	40	Housing	Yes	Yes
14	Medium	Micklefield	Zone 2b	1.57	40	Housing	Yes	Yes
15	Large	Micklefield	Zone 2b	4.30	40	Housing	Yes	Yes
16	Strategic	Garforth	Zone 2b	147.30	40	Housing	Yes	No
17	Small	Moor Allerton	Zone 2b	0.28	40	Housing	Yes	Yes
18	Medium	Moor Allerton	Zone 2b	0.90	40	Housing	Yes	Yes
19	Small	Middleton	Zone 2a	0.36	40	Housing	Yes	Yes
20	Medium	Middleton	Zone 2a	0.72	40	Housing	Yes	Yes
21	Large	Middleton	Zone 2a	8.19	40	Housing	Yes	Yes
22	Small	Yeadon	Zone 1	0.43	40	Housing	Yes	Yes

¹³ Reference ID: 10-003-20180724

¹⁴ Para 004 (Ref ID: 10-004-20190509)

¹⁵ Greenfield Typology

¹⁶ Brownfield Typology

	Site Size	Beacon Settlement	Zone	Gross Area (ha)	Average Density (net)	Potential Type of Housing	GF ¹⁵	BF ¹⁶
23	Medium	Guiseley	Zone 1	1.98	40	Housing	Yes	Yes
24	Medium	Yeadon	Zone 1	0.47	40	Housing	Yes	Yes
25	Medium	Horsforth	Zone 1	0.83	40	Housing	Yes	Yes
26	Medium	Bramhope	Zone 1	1.49	40	Housing	Yes	Yes
27	Medium	Boston Spa	Zone 1	1.69	40	Housing	Yes	Yes
28	Large	Guiseley	Zone 1	5.06	40	Housing	Yes	Yes
29	Large	Yeadon	Zone 1	5.91	40	Housing	Yes	Yes
30	Large	Horsforth	Zone 1	5.35	40	Housing	Yes	Yes
31	Large	Bramhope	Zone 1	19.30	40	Housing	Yes	Yes
32	Large	Wetherby	Zone 1	2.39	40	Housing	Yes	Yes
33	Large	Scarcroft	Zone 1	5.80	40	Housing	Yes	Yes
34	Large	Moortown	Zone 1	13.43	40	Housing	Yes	Yes
35	Small	Horsforth	Zone 1	0.84	40	Housing	Yes	Yes
36	Small	Wetherby	Zone 1	0.53	40	Housing	Yes	Yes
37	Strategic	Horsforth	Zone 1	41.95	40	Housing	Yes	No
38	Strategic	Wetherby	Zone 1	55.40	40	Housing	Yes	No
39	Strategic	Aberford and Barwick	Zone 1	110.00	40	Housing	Yes	No
40	Strategic	Tingley	Zone 2b	28.00	40	Housing	Yes	No

3.4 As highlighted in Table 3.1 the City Centre typologies are all assumed to be Brownfield reflecting the nature of the land supply (i.e. previously developed cleared sites). Within other areas of the City we have modelled the typologies assuming both Greenfield and Brownfield sites with the exception of the strategic sites which are all modelled exclusively on a Greenfield basis.

Density

3.5 Policy H3 of the adopted Core Strategy¹⁷ states that housing development in Leeds should meet or exceed the net densities set out below unless there are overriding reasons concerning townscape, character, design or highway capacity.

- i. City centre and fringe¹⁸ - 65 dwellings per hectare
- ii. Other urban areas – 40 dwellings per hectare
- iii. Fringe urban areas – 35 dwellings per hectare
- iv. Smaller settlements – 30 dwellings per hectare

3.6 For the purpose of this assessment we have applied a gross density of 280 dwellings per hectare within the City Centre, reflecting the fact that most schemes will be apartments (with development typically occurring on most of the site and being high rise in nature) and 40 dwellings per hectare in other areas of the City.

Dwelling Types / Housing Mix

3.7 Policy H4 of the Core Strategy sets out the Council's position with respect to the mix of housing types. It states that developments should include an appropriate mix of dwelling types and sizes to address needs measured over the long term taking into account the nature of the development and character of location.

¹⁷ Core Strategy (as amended by the Core Strategy Selective Review 2019)

¹⁸ Defined as up to 500m from the boundary

- 3.8 Further guidance is provided in the supporting text to Policy H4 where it is suggested that the mix set out in Table 3.2 should be aimed for. However, it is accepted that for small developments achievement of an appropriate mix to meet long term needs is not overriding. It is also accepted that the form of development and character of area should also be taken into account. For example a scheme of 100% flats may be appropriate in a particular urban context.

Table 3.2 - Policy H4 Preferred Housing Mix (2012 –2028)

Type	Max (%)	Min (%)	Target (%)
Houses	90%	50%	75%
Flats	50%	10%	25%
Size	Max (%)	Min (%)	Target (%)
1 bed	50%	0	10%
2 bed	80%	30%	50%
3 bed	70%	20%	30%
4 bed	50%	0%	10%

- 3.9 Within this context the assessment is based on the development mix set out in Table 3.3. It is acknowledged that there may be many variations to this mix but we consider the mix (as specified below) to be appropriate for the purpose of this assessment.

Table 3.3 – Development Mix¹⁹

Type	Studio Apartments - 1 person flat	1 bed apartment - 2 person flat	2 bed apartments - 3 person flat	3 bed apartments - 5 person flat	2 bed - 3 person house	3 bed - 4 - person house	4 bed - 7 person house	5 bed - 8 person house	Totals
100% housing ²¹									
Small sites	-	-	-	-	35%	35%	25%	5%	100%
Medium sites	-	-	-	-	35%	35%	25%	5%	100%
Large sites	-	-	-	-	35%	35%	25%	5%	100%
100% apartments									
Small sites	-	30%	50%	20%	-	-	-	-	100%
Medium sites	10%	10%	50%	30%	-	-	-	-	100%
Large sites	10%	10%	50%	30%	-	-	-	-	100%
Mixed housing and apartments									
Small sites	-	-	-	-	-	-	-	-	-
Medium sites	-	10%	25%	-	25%	35%	5%	-	100%
Large sites	-	5%	10%	-	30%	35%	15%	5%	100%
Strategic sites ²⁰	-	2%	3%	-	30%	35%	25%	5%	100%

	100% housing ²¹
	100% apartments
	Mixed housing and apartments

¹⁹ Policy H5 (affordable housing) states that affordable housing should be provided on a pro – rata mix in terms of sizes and types of dwellings therefore no distinction has been made between the mix of private and affordable dwellings.

²⁰ Sites providing in excess of 700 dwellings

²¹ For the purposes of this assessment it is assumed that traditional housing schemes will not have to provide 1 bed house types as these are uncommon in the market. 1 bed dwellings are typically associated with apartments or flats over garages (FOG's).

Dwelling Sizes

- 3.10 Policy H9 (Minimum Space Standards) sets out the minimum spaces standards that all new dwellings must comply with. Based on this policy the unit sizes applied within this assessment are set out in Table 3.4.

Table 3.4 – Dwellings sizes

Property Type	No. Persons	Gross sq.m (net)	Gross sq.ft (net)
Studio flat	1 person	47sq.m (40sq.m)	507sq.ft (431sq.ft)
1 bed flat	2 person	61sq.m (52 sq.m)	657sq.ft (560sq.ft)
2 bed flat	3 person	74sq.m (63sq.m)	797sq.ft (678sq.ft)
3 bed flat	5 person	106sq.m (90sq.m)	1,140sq.ft (969sq.ft)
2 bed house	3 person	72sq.m	775sq.ft
3 bed house	4 person	87sq.m	936sq.ft
4 bed house	7 person	118sq.m	1,270sq.ft
5 bed house	8 person	132sq.m	1,421sq.ft

- 3.11 Whilst it is accepted that unit sizes will vary, especially when breaking down further to reflect semi-detached, detached and terraced properties, the assumptions are considered to be broadly representative of the average unit sizes in the majority of new build developments. This assessment also makes no distinction between the private and affordable dwellings.

Affordable Housing

- 3.12 Policy H5 (Affordable Housing) of the adopted Core Strategy states that affordable housing will normally be expected at the targets specified in Table 3.5 on major²² developments.

Table 3.5 – Affordable Housing Targets

Zone	Target
Zone 1	35%
Zone 2	15%
Zone 3	7%
Zone 4	7%

- 3.13 The policy also states that affordable housing should be designed to meet the identified needs of households, as follows:
- 40% affordable housing for households on lower quartile earnings (intermediate housing); and
 - 60% affordable housing for households on lower decile earnings (social rented)

Non Standard Residential Development Typologies

- 3.14 In addition to the standard residential typologies described previously we have also modelled Private Rented Sector Apartments (PRS) and Purpose Built Student Accommodation (PBSA).

²² Major development is defined as either: •provision of 10 or more dwellings (or where the number of dwellings is not known, development is to be carried out on a site having an area of 0.5 hectares or more) or •provision of a building or buildings where the floor space to be created would be 1,000 square metres or more; •or development on a site having an area of 1 hectare or more

Private Rental Sector Apartments

3.15 Two PRS typologies have been considered, as summarised in the table below.

Table 3.6 – PRS Scheme within the City Centre

	Typology 1	Typology 2
	Central Core	Fringe
Site Area	0.39ha (0.96 acres)	0.39ha (0.96 acres)
Number of apartments	250	250
Average size	59sq.m (635sq.ft)	59sq.m (635sq.ft)
Total net area (apartments)	14,750sq.m (158,772sq.ft)	14,750sq.m (158,772sq.ft)
Gross to Net	80%	80%
Total gross area (apartments)	18,464sq.m (198,750sq.ft)	18,464sq.m (198,750sq.ft)
Gross GF Commercial Space	611sq.m (6,578sq.ft)	611sq.m (6,578sq.ft)
Net GF Commercial Space	550sq.m (5,920sq.ft)	550sq.m (5,920sq.ft)
Affordable Housing	7% (18 flats)	7% (18 flats)
Social Rent	60% (11 flats)	60% (11 flats)
Intermediate	40% (7 flats)	40% (7 flats)

3.16 With respect to Build-to-Rent (PRS) developments Policy H5 (Affordable Housing) states that these schemes shall provide either:

- i) On-site, according to national policy advice, currently 20% Affordable Private Rent dwellings at 80% of local market rents administered by a management company with appropriate arrangements for identifying households in need, including city council nomination rights, which apply in perpetuity, or
- ii) On-site, the percentage of affordable housing specified for zones 1-4²³ and mix of Intermediate and Social Rented types of affordable housing set out in the first paragraphs of this Policy at affordable housing benchmark rents administered by either a registered provider or a management company with appropriate arrangements for identifying households in need, including City Council nomination rights, which apply in perpetuity, or
- iii) A commuted sum in lieu of on-site provision of affordable housing of option

Purpose Built Student Accommodation (PBSA)

3.17 The following PBSA typology has been modelled within this assessment.

PSBA Typology	City Centre
Site Area	0.39ha (0.96 acres)
Number of beds	365
Gross Size	11,615sq.m (125,000sq.ft)

²³ Refer to Table 3.5

Other / Non Residential / Commercial Development Typologies

3.18 The other main land uses / development typologies considered within this assessment are outlined in Table 3.7.

Table 3.7: Commercial Development Typologies

Description	Gross Size sq.m (sq.ft)	Site Area Ha	
		City Centre	Other Areas
Offices (B1)	6,968 (75,000)	1.16	1.75
	4,645 (50,000)	0.77	1.16
	2,322 (25,000)	0.39	0.58
	1,500 (16,150)	0.25	0.38
Industrial (B2)	9,290 (100,000)	n/a	2.65
	4,645 (50,000)	n/a	1.33
	2,500 (27,000)	n/a	0.71
	929 (10,000)	n/a	0.27
Storage and Distribution (B8)	23,225 (250,000)	n/a	6.64
	13,935 (150,000)	n/a	3.98
	6,968 (75,000)	n/a	1.99
	3,000 (32,000)	n/a	0.86

4. Appraisal Assumptions

- 4.1 To ensure that realistic cost assumptions inform this study workshops with developers and Registered Providers for social housing have been held. The aim of this was to provide an opportunity for early engagement and to give developers the opportunity to share evidence on the actual costs of bringing forward development within the City. Evidence on costs was requested as part of the workshops but nothing has been provided.
- 4.2 There the assumptions applied within this assessment are based on an objective assessment of evidence gathered. The main assumptions are set out below.

Standard Costs Assumptions

Base Construction Costs

- 4.3 Planning Practice Guidance (PPG) states that build costs should be based on appropriate data, for example that of the Building Cost Information Service. Our assessment of new build construction costs is based on cost data obtained from BCIS (Building Cost Information Service) rebased to the 3rd Quarter 2022 and adjusted to reflect local sensitivities in Leeds. The costs are inclusive of preliminaries but exclude external works. Because the data from BCIS excludes costs associated with external works an additional allowance has been included for these items.
- 4.4 For clarity the base construction costs that have been included in this assessment are summarised in Table 4.1.

Table 4.1 – Base Construction Costs

Description	BCIS Lower Quartile Rates £psm (£psf)	External Works	Total Build Costs £psm (£psf)
Estate Housing	£1,315psm (£122psf)	15%	£1,512psm (£140psf)
Apartments	£1,550psm (£144psf)	5%	£2,035psm (£151psf)
PRS apartments	£1,938psm (£180psf) ²⁴	-. ²⁵	£1,938psm (£180psf)
Purpose Built Student Accommodation (PBSA)	£1,884psm (175psf)	-. ²⁶	£1,884psm (175psf)
Offices – city centre	£2,207psm (£205psf)	10%	£2,428psm (£225psf)
Offices – other areas	£1,581psm (£147psf)	10%	£1,739psm (£162psf)
Industrial	£765psm (£71psf)	10%	£842psm (£78psf)
Storage and Distribution	£765psm (£71psf)	10%	£842psm (£78psf)

Future Homes and Building Standard (Residential Only)

- 4.5 The Future Homes and Buildings Standard is a set of standards that will complement the Building Regulations to ensure new homes built from 2025 will produce 75-80% less carbon emissions than homes delivered under current regulations. However, with much more of an immediate impact, there will be an interim uplift to Part L building regulations taking effect from June 2022. All new homes will be required to produce 30% less CO₂ than the standard for Part L of the 2013 Building Regulations.

²⁴ Costs are reflective of current costs associated with PRS schemes in the City Centre

²⁵ We have liaised with the Council/DVS and based on their experience of appraising PRS schemes in the City Centre the all-inclusive build costs (including external works) for PRS schemes is circa £1,938psm (£180psf).

²⁶ Costs are inclusive of external works and based on our experience of similar schemes in the city.

- 4.6 DLUHC has provided an update to the 2019 impact assessment for the 2021 changes to Part L of the Building Regulations, with a Final Stage Impact Assessment published in December 2021. This update considers the estimated costs of the interim uplift to Part L building regulations. Unlike the 2019 impact assessment, the 2021 assessment provides a clearer picture of the two likely routes that housebuilders will use to meet the new standards.
- 4.7 The impact assessment considers that the most likely means of compliance is a high level of energy efficiency, a gas boiler, solar panels (PV) and waste water heat recovery. This requires the least change from current building practices and for many housebuilders is the lowest cost solution in the short term.
- 4.8 The assessment considers that the main alternative route to compliance for housebuilders is with an air source heat pump (ASHP). This starts the transition to the Future Homes Standard and would also be suitable for areas that do not have a natural gas supply.
- 4.9 The updated costs are drawn from consultation with the development industry and reflect the immaturity of air source heat pump installation supply chains and procurement processes, as well as ongoing reductions in the variable costs of photovoltaic panel installation. The impact assessment draws attention to the different relative costs of compliance by house types, and notes that while gas boiler and solar PV is the cheaper route for most dwelling types, the ASHP is the cheaper route for detached houses. This reflects the assumed existing provision of a hot water cylinder for detached houses while other dwelling types are assumed to have existing provision of combi boilers with no hot water cylinder.
- 4.10 The estimated costs associated with the interim uplifts to Part L are highlighted in Table 4.2.

Table 4.2 – Part L Cost Increases

Additional cost per dwelling over 2013 Building Regulations	Main route to compliance Gas boiler and Solar PV	Alternative route to compliance ASHP
Detached	£4,840	£3,750
Semi	£3,800	£4,360
Terrace	£3,760	£4,320
Flat	£2,090	£4,090

Source: 2021 Impact Assessment

- 4.11 The impact assessment suggests that the average cost of the main route to compliance per house (i.e. for the gas boiler and solar PV) was £4,133 and £4,143 for the alternative route to compliance (i.e. the air source heat pump). The average cost for apartments assuming the main route to compliance is £2,090 and for the alternative route the average cost is £4,090.
- 4.12 Within this context we have assumed the alternative route to compliance for the interim uplifts to Part L and applied costs of £4,150 per house type and £4,090 per apartment²⁷. This is a worst case scenario as the 2021 impact assessment estimates that the costs associated with both heat pumps and solar PV will fall, as supply chains mature and become more integrated, and learning rates take effect. The assessment suggests that the cost of a heat pump will be around 75% of the initial cost, although the suggested timeframes are no more specific than “later years of the policy”.
- 4.13 While the impact assessment covers the immediate costs of the interim changes to Part L, the next set of costs for moving to net zero carbon emissions (Future Homes) are still to be determined but likely to include a further tightening of performance standards to include both higher levels of fabric

²⁷ For the PBSA we have assumed that 4 bed spaces is equal to 1 apartment.

insulation and the use of low carbon heating systems (i.e., not natural gas based). The specific form of the FHS is still to be determined but the Government have published their current assumptions about the notional building specification which provides an indication as to the level of performance expected

- 4.14 A report prepared by Currie and Brown (prepared on behalf of Tunbridge Wells Borough Council²⁸ suggests that the additional costs of achieving the 2025 Future Homes Standards, over and above the Interim Part L Changes are:

Additional cost per dwelling for FHS over interim Changes to Part L	£per dwelling
Detached	£7,900
Semi	£5,300
Terrace	£4,700
Flat	£3,100

- 4.15 It can be reasonably expected that these costs will reduce as the industry increasingly gears up for new ways of building housing. However, in the short term much will depend on the availability of relevant technology and appropriately trained installers. For the purpose of this assessment a worst case scenario has been assumed with an average cost of £6,000 per house and £3,100 per flat²⁹ being incorporated for the costs associated with achieving the 2025 Future Homes Standards.

Project / Professional Fees

- 4.16 The following allowances have been included for fees relating to design, planning and other professional fees.

Table 4.3 – Project / Professional Fees

Development Typology	Percentage ³⁰
Residential outside of City Centre	6%
Residential within City Centre (including PRS and PBSA)	8%
Offices	12%
Industrial/warehousing	8%

S106 Contributions

- 4.17 The following allowances have been made for S106 Contributions.

Table 4.4 – S106 Contributions

Development Typology	S106 per dwelling (£)
Standard Residential <50 dwellings	£233
Standard Residential >50 dwellings	£625
City Centre / PRS and PBSA	£500 ³¹
Offices	-
Industrial/warehousing	-

²⁸ Energy and Sustainability Policy Viability Report – May 2022 Update

²⁹ Again, we have assumed that 4 student bed spaces is equal to 1 flat.

³¹ Based on information from the Council / DVS the average S106 contribution for apartment schemes in Leeds City Centre ranges between £269 per flat and £599 per flat. The average cost was £430 per flat. We have applied a cost at the upper end of this range at £500 per flat

CIL Charges

4.18 The CIL rates are based on the December 2021 index linked charges, as summarised below.

Table 4.5 – CIL Charges

Development Typology	CIL Charge (£psm)
Residential – Zone 1	£115.38
Residential - Zone 2a	£29.49
Residential - Zone 2b	£57.69
Residential - Zone 3	£6.41
Residential ((including PBSA) Zone 4 (City Centre)	£6.41
Offices (City Centre)	£44.87
Offices (outside City Centre)	£6.41
Industrial / warehousing	£6.41

Source: Leeds CC: Indexation Community Infrastructure Levy (CIL) Guidance Note

Remediation / Ground Conditions (Brownfield sites only)

4.19 In exercises such as this it is very difficult to make allowances for these costs, which are invariably subject to intrusive / detailed ground investigations etc. For the purpose of this assessment we have referred to guidance, previously issued by the Homes and Communities Agency (HCA) on dereliction, demolition and remediation costs (March 2015).

4.20 We have assumed that Brownfield sites will fall under Category A, which comprise small scale and general industrial sites, colliery or mine spoil heaps, miscellaneous factories and works (not heavy industry) and sites with very small to small fuel tanks . The assessment makes a second assumption that all the Brownfield sites will fall within the low water risk category

4.21 Based on these assumptions the remediation costs are:

- Flats / apartments with limited soft landscaping– between £50,000 and £130,000 per hectare;
- Residential with private gardens – between £75,000 and £205,000 per hectare;
- Employment or commercial with limited soft landscaping, business parks and data centres – between £50,000 and £130,000 per hectare.

4.22 Our assessment has assumed a worst case scenario and is applying these costs to 100% of the brownfield land. However, the reality is likely to be very different and not all of the sites will be contaminated and some may only have contamination present in limited areas across the site. For this reason we have adopted the lower costs, which we have then adjusted for inflation, using the BCIS all in Tender Price Index, and location. On this basis the costs set out within Table 4.6 have been incorporated into our assessment:

Table 4.6 – Remediation Costs (Brownfield Sites Only)

Description	Median Cost £per ha	Inflation Adjustment	Location Adjustment	Cost £per ha included in assessment
Flats / Apartments ³²	£50,000	£68,000	0.92	£62,560
Residential with private gardens	£75,000	£102,000	0.92	£93,840

³² Including PRS and PBSA

Employment / Commercial	£50,000	£68,000	0.92	£62,560
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Site Preparation (Brownfield sites only)

- 4.23 It is also assumed that the Brownfield sites will require an element of site preparation, including removal of redundant services, to facilitate redevelopment.
- 4.24 Assuming non-complex sites, the HCA guidance states that costs range between £25psm and £125psm of site area. As outlined previously, because we are assuming these costs are applied to 100% of the site area and reflecting a worst case scenario we have adopted the lowest cost of £25psm. After adjusting for inflation and location the overall cost for site preparation is £31.28psm or £312,800 per ha.

Contingencies

- 4.25 A contingency of 3% has been included for the unconstrained / greenfield sites and 5% for the constrained /Brownfield sites³³.

Letting and Disposal Costs

- 4.26 The following costs have been incorporated within this assessment.
- Letting agents' fees (offices and industrial) at 10% of the first year's rental value
 - Letting legal fees (offices and industrial) at 5% of the first year's rental value
 - Investment sale agents fee (offices and industrial) at 0.5%
 - Investment sale legal fee (offices and industrial) at 0.25%
 - Investment sale agents (PRS and PBSA) at 0.5%
 - Investment sale legal (PRS and PBSA) at 0.25%
 - Furniture allowance of £2,000 per flat for PRS
 - Allowance for operational (management and maintenance) costs (PRS) at 23.75%³⁴
 - Purchasers' costs included at 1.8%
 - Stamp duty based on the latest rates from HMRC
 - Sales agent and marketing costs (residential) at 3% of open market GDV
 - Sales legal (residential) at £1,000 per dwelling

Gross Profit

- 4.27 Planning Practice Guidance states that for the purpose of plan making, an assumption of 15-20% of gross development value (GDV) may be considered a suitable return to developers to establish the viability of plan policies. It further states that plan makers may choose to apply alternative figures where there is evidence to support this according to the type, scale and risk profile of planned development. A lower figure may be more appropriate in consideration of delivery of affordable housing in circumstances where this guarantees an end sale at a known value and reduces risk. Alternative figures may also be appropriate for different development types. The following allowances have been included for profit.

- Residential (PRS) – 10% of total costs³⁵
- Purpose Built Student Accommodation 10% of total costs
- Residential - 20% GDV for open market sales
- Residential – 6% GDV for affordable dwellings
- Commercial and industrial – 20% of total costs

³³ This assessment assumes that all sites/typologies modelled in the City Centre are brownfield

³⁴ For PRS schemes it is necessary to adjust the total rent value to account for the running costs of the development. For instance, the landlord will receive rents from the tenants, but they will be required to pay for all the operational costs in relation to heating, cleaning, maintenance, voids, and general management of communal areas etc. To calculate the net rental income we have applied a deduction of 23.75% from the gross rental value

³⁵ we are aware that the DVS has reviewed multiple PRS developments in the City and agreed profits at 8% of costs. Our assessment, therefore, adopts a very cautious approach .

Viability Tolerance

4.28 It is recognised that in exercises such as this it is not possible to capture all of the costs associated with bringing a development forward. To avoid any misplaced assumptions that might prejudice the assessment no allowances has been included for these items. Instead, the assessment includes what is referred to as a viability tolerance / cushion on the Residual Land Value. No guidance as to what constitutes an appropriate cushion is provided. Instead this is left for the local planning authority to decide in collaboration with their partners and consultees. For the purpose of this assessment we have applied a viability cushion of 10% with the exception of the strategic sites where a viability cushion of 50% has been applied.

Finance Rate

4.29 The assessment is based on a finance rate of 6% and assumes 100% debt funding.

Policy Related Costs Assumptions

4.30 The existing policies that have been considered within this assessment include:

- Policy H10 – Accessible Housing Standards
- Policy G4 – Green Space Improvement and New Green Space Provision
- Policy G5 – Open Space Provision in the City Centre
- Policy EN1 – Climate Change – Carbon Dioxide Reduction
- Policy EN2 – Sustainable Design and Construction
- Policy EN8 – Electric Vehicle Charging Infrastructure

Policy H10 – Accessible Housing Standards

4.31 Policy H10 of the adopted Core Strategy requires that 30% of dwellings meet the requirements of M4(2) accessible and adaptable dwellings of Part M Volume 1 of the Building Regulations. In addition, the policy also requires that 2% of dwellings meet the requirement of M4 (3) 'wheelchair user dwellings' of Part M volume 1 of the Building Regulations. The policy is clear that 'wheelchair user dwellings' should meet the M4(3) wheelchair adaptable dwelling standard unless Leeds City Council is responsible for nominating a person to live in the dwelling.

4.32 The EHRC³⁶ (2018) report 'Housing and Disabled People: a toolkit for local authorities in England' highlights the extra costs of build and space for each of these optional standards – refer to Table 4.7

Table 4.7 – Extra Cost of Build and Space for Accessibility Standards

	Access cost	(build) Access – related space cost recovery	space cost	(after Total Cost
		Extra Space	Space Cost	
<i>Category 2</i>				
1 bed apartment	£940	+1sq.m	£289	£1,229
2 bed apartment	£907	+1sq.m	£289	£1,196
2 bed terrace	£523	+2sq.m	£578	£1,101
3 bed semi detached	£521	+3sq.m	£866	£1,387
4 bed detached	£520	+3sq.m	£855	£1,387
<i>Category 3 Adaptable</i>				
1 bed apartment	£7,607	+8sq.m	£2,310	£9,908
2 bed apartment	£7,891	+14sq.m	£4,043	£11,934

³⁶ Equality and Human Rights Commission £866

	Access cost	(build) Access - related space cost (after space cost recovery)	Extra Space	Space Cost	Total Cost
2 bed terrace	£9,754		+21sq.m	£6,065	£15,819
3 bed semi detached	£10,307		+24sq.m	£6,931	£17,244
4 bed detached	£10,568		+24sq.m	£6,931	£17,499

- 4.33 Within this context the average cost is £1,200 per apartment and £1,300 per house for M42 standards and £10,900 per apartment and £16,854 per house for M4 3 (adaptable) standards. After making adjustments for inflation the following costs have been included in our assessment:

Table 4.8 – Extra Cost of Build and Space for Accessibility Standards included in Assessment

Typology	M4 (2)	M4 (3) Adaptable
Apartments ³⁷	£1,344	£12,208
Houses	£1,456	£18,876

Policy G4 – Greenspace Improvement and New Green Space Provision

- 4.34 Policy G4 of the adopted Core Strategy requires developments of 10 or more dwellings to provide the following quantities of on-site green space per residential unit or where this quantity of greenspace is unachievable or inappropriate on site, equivalent off site provision, financial contribution or combinations therefore will be sought.

Dwelling Type	Amount of green space (per dwelling)
1 bedroom dwelling	23sq.m
2 bedroom dwelling	33sq.m
3 bedroom dwelling	44sq.m
4 bedroom dwelling	54sq.m
5 + bedroom dwelling	66sq.m
Student bedspaces	18sq.m

- 4.35 In determining whether this quantity of provision should be delivered on-site, off-site or as a commuted sum, consideration of the circumstances set out below will indicate whether green space should be provided on-site:
- Local deficits of existing green space,
 - Sufficiently large, suitably shaped and reasonably level sites to accommodate green space,
 - Distances from existing green spaces exceeding the standards of Policy G3. The quality of existing green space will also need to be taken into account,
 - Lack of other residential development sites nearby that could deliver green space,
 - The development generating a need for play facilities that does not currently exist in the locality, or
 - Potential to combine green space provision with requirements for Sustainable Urban Drainage Systems.

³⁷ For PBSA the assessment assumes that 4 bed spaces is equal to one apartment

4.36 In exercises such as this it is not possible to consider all of the above circumstances/criteria. Therefore, the assessment is based on an equivalent financial contribution. The contributions have been calculated to account for:

- The costs of laying out greenspace at £199,964.05 per hectare
- 10 year maintenance sum (greenspace) at £151,711.58 per hectare
- 10 year maintenance sum (play space). Policy G3 requires that 2 children's and young people's equipped play facilities are required per thousand people. Based on the typologies and housing mix is only the large and strategic sites that generate a need for on-site equipped play facilities. For large sites we have assumed 1 LEAP will be provided meaning there will be a maintenance sum of £31,455 and for the strategic sites we have assumed 2 NEAP's will be provided resulting in a maintenance liability of £62,911.28.
- Per child contribution of £1,068.96 per child. The number of children is calculated at 10% of the number of flats / apartments and 62% of the number of houses (dwellings) multiplied by (4).

Policy G5 – Open Space Provision in the City Centre

4.37 Policy G5 requires that within the city centre open space provision will be sought for sites over 0.5 hectares as follows:

- i. Commercial developments to provide a minimum of 20% of the total site area.
- ii. Residential development to provide a minimum of 0.41 hectares of open space per 1,000 population.
- iii. Mixed use development to provide the greater area of either 20% of the total site area, or a minimum of 0.41 hectares per 1,000 population of open space.

4.38 The policy states that in areas of adequate open space supply or where it can be demonstrated that not all the required on site delivery of open space can be achieved due to site specific issues, contributions in lieu of provision will be required towards identified open space and public realm projects.

4.39 For the purpose of this assessment we have assumed an equivalent financial contribution which has been calculated to account for:

- The costs of laying out the open space at £199,964.05 per hectare
- 10 year maintenance sum at £151,711.58 per hectare

Policy EN1 – Climate Change – Carbon Reduction

4.40 The first part of Policy EN1 requires all developments of 10 or more dwellings or over 1,000sq.m of floorspace to reduce total predicted carbon dioxide emissions to achieve 20% less than Building Regulations Target Emission Rate until 2016 when all development should be zero carbon.

4.41 The second part of the policy requires a minimum of 10% of the predicted energy needs of the development from low carbon energy.

Residential

4.42 The first part of Policy EN1 is now superseded by the interim uplift to Part L Building Regulations, which requires all new homes to produce 30% less CO₂ than the standard for Part L of the 2013 Building Regulations. Costs have already been included for the interim uplifts to Building Regulations³⁸

³⁸ Refer to Sections 4.4 to 4.13

- 4.43 With respect to the second part of this policy relating to on-site energy requirements, the following costs have been included.

Table 4.9 – extra over cost, per dwelling, of 10% on site energy requirement

Property Type	Cost³⁹
Studio and 1 bed apartments	£1,479
2 and 3 bed apartments	£1,804
2 bed house	£2,159
3 bed house	£2,808
4 and 5 bed houses	£3,633

Commercial

- 4.44 A paper⁴⁰ published at the COP21 revealed that “BREEAM assessed buildings achieve an average 22% reduction in CO2 emissions compared to buildings designed to regulatory minimum performance requirements. The report highlighted that BREEAM Excellent buildings save more than 30% and therefore the requirements of the first part of Policy EN1 for non-residential buildings will be achieved through Policy EN2 (see below).
- 4.45 For the second part of the policy we have assumed that the requirement for 10% of the predicted energy needs coming from low carbon development can be achieved at an additional cost of 2%.

Policy EN2 – Sustainable Design and Construction

- 4.46 The policy requires all non-residential developments of 1,000 or more square metres (including conversion) where feasible to meet the BREEAM standard of ‘excellent’. Research undertaken by BRE highlights that the extra cost of achieving BREEAM Excellent is 0.4% on industrial buildings and is 0.8% on offices.
- 4.47 The policy also requires residential developments of 10 or more dwellings where feasible to meet a water standard of 110 litres per person per day. Waterwise estimate that the additional cost of achieving these standards is around £9 per home.

Policy EN8 – Electric Vehicle Charging Infrastructure

- 4.48 Policy EN8 states that all applications for new development which include provision of parking spaces will be required to meet the minimum standard of provision of electric vehicle charging points. For residential this requires 1 charging point per parking space and 1 charging point per 10 visitor spaces. For this assessment we have assumed that all dwellings will be provided with an electric vehicle charging point⁴¹.
- 4.49 For apartments we have assumed 1 charging point per 15 apartments.
- 4.50 The cost of an off-street charge point is likely to range between £615 to £1,115. For this assessment we have included the midpoint (i.e. £865 per charging point).
- 4.51 For office / retail / industrial and education this requires charging points for 10% of parking spaces ensuring that electricity infrastructure is sufficient to enable further points to be added at a later stage. It has not been possible to capture these costs, for commercial uses, within our assessment, which will be reflected in the viability tolerances (see later).

³⁹ Costs based on the Housing Standards Review – Cost Impacts (September 2014) and adjusted for inflation.

⁴⁰ <https://www.bre.co.uk/news/BREEAMs-significant-contribution-to-carbon-reduction-detailed-in-new-study--1124.html>

⁴¹ Not all dwellings will have a parking space so this is a cautious approach but adopting this approach also encapsulates the visitor charging spaces.

4.52 As outlined within the introduction of this report the focus of this commission is to inform a realistic understanding of what the LPU can support in relation to viability. The policies being tested within this assessment include:

- Replacement Policy EN1: Carbon Dioxide Reduction.
- Replacement Policy EN2: Sustainable Design and Construction.
- Replacement Policy G1: Protecting, Enhancing and Extending Green and Blue Infrastructure
- Replacement Policy G9 – Biodiversity Net Gain
- New Policy G2C – Tree Replacement
- New Policy G2D – Additional [Tree] Planting
- New Policy – The Health Impacts of Development
- New Policy – Digital Connectivity

Replacement Policy EN1 – Carbon Dioxide Reduction

4.53 The policy is split into two parts. **EN1 Part A (Embodied Carbon)** requires all major development to calculate their whole life cycle carbon emissions using the RICS whole life carbon assessment methodology and demonstrate actions to reduce life cycle carbon emissions of the development. The policy also requires minor and household applications to consider the whole life cycle emissions of the development and make reasonable efforts to reduce those emissions using natural and recycled materials in the construction process.

4.54 To understand the cost impact of this proposal we have consulted with colleagues who work within our London office as measuring whole life cycle carbon emissions is a policy requirement of the new London Plan. Based on their experience costs range between circa £5,000 and £15,000. However, the assessment also requires collaboration with the architect, engineers, and QS to obtain the information needed, some of which may also require additional work over and above what they would normally produce.

4.55 Therefore, a total fixed cost of £50,000 has been included within this assessment.

4.56 **Policy EN1 Part B (Operational Energy)** requires new development to be operationally net zero in line with the following hierarchy:

1. Minimise carbon emissions through passive design principles including fabric efficiency measures.
2. Following carbon minimisation in Step 1, include renewable energy onsite to deliver an annual net zero carbon balance (including regulated and unregulated emissions).
3. As a last resort, all remaining operational carbon for a 30 year timeframe should be offset through a £248/tonne of carbon cash in lieu contribution to LCC to deliver carbon savings locally. This will increase to £280/tonne by 2030.

4.57 Gas boilers and electric panel heating will not be supported.

Residential

4.58 A report issued by Currie and Brown in December 2018 estimated the cost of Carbon Reduction in new residential buildings. Analysis within the report suggests that it is possible to achieve net zero unregulated emissions (100% Carbon Reduction) for the costs set out within Table 4.10.

Table 4.10 – Cost of Zero Carbon Reduction

Dwelling Type	Costs of Achieving Zero Carbon ⁴²
Detached	£16,464
Semi detached	£13,216
Terraced	£12,320
Low rise flat	£9,520
Medium rise flat	£7,056

Source: Currie and Brown: Cost of Carbon Reduction in New Buildings (December 2018).

- 4.59 The average cost for apartments is £8,288 and for housing the average cost is £14,000. However, the Future Homes and Buildings Standard (including interim uplifts to Part L building regulations, described previously, will ensure new homes built from 2025 will produce 75-80% less carbon emissions than homes delivered under current regulations.
- 4.60 To prevent double counting, the costs of achieving the interim uplifts to Part L and FHS⁴³ need to be deducted from the costs presented in Table 4.10 to arrive at the net cost associated with replacement policy EN1. On this basis the net average costs relating to replacement EN1 (Part B) are £1,098 for apartments and £3,850 per house.

Table 4.11– Net Cost of Replacement Policy EN1 (Part B)

Dwelling Type	Costs of Achieving Zero Carbon ⁴⁴	Less Cost of Interim Part L Changes	Less Cost of 2025 FHS	Replacement Policy EN1 (Part B) Net Cost
Average cost per house	£14,000	£4,150	£6,000	£3,850
Average cost per apartment	£8,288	£4,090	£3,100	£1,098

Non Residential / Commercial

- 4.61 As outlined later Replacement Policy EN2 requires all non-residential / commercial developments to meet BREEAM Outstanding. Research undertaken by BRE highlights that the cost of achieving BREEAM Outstanding on industrial buildings is 4.8% and 9.8% on offices. However, the costs associated with achieving BREEAM Outstanding go beyond just carbon reduction measures (albeit they make up a large part of the costs). In this respect the assessment assumes that 80% of the costs associated with meeting BREEAM outstanding will be associated with carbon reduction and attributed to Policy EN1 (Part B). In this regard we have increased the costs for industrial developments by 3.84% and 7.8% for offices.

Replacement Policy EN2: Sustainable Design and Construction.

- 4.62 The policy is split into two parts. Part A relates to new standards and requires all new residential developments to meet Home Quality Mark Level 4. To evidence the above, applications will need to include independently certified evidence of their sustainability credentials. Where no independent accreditation is possible the policy states that the application must provide robust evidence that demonstrates how the standards have been met.

⁴² These costs have been adjusted for inflation using the BCIS All in Tender Price Index

⁴³ Refer to sections 4.5 to 4.15

⁴⁴ These costs have been adjusted for inflation using the BCIS All in Tender Price Index

- 4.63 Beyond the certification and registration fees there is a limited evidence base in terms of the cost implications associated with its application. It is anticipated that the costs will go beyond the carbon reduction costs associated with Replacement Policy EN1 (Part B) but in the majority of cases it is anticipated that what is required for HQM Level 4 will be achieved if satisfying the full suite of existing and proposed policies. In this regard there is an argument that this policy will result in no additional costs other than the certification and registration fees.
- 4.64 However, in order to be prudent we have included a budget estimate of £750 per apartment and £1,000 per house.

Certification and registration fees

- 4.65 Based on the BRE's Home Quality Mark Scheme the following registration and certification fees could be expected.

Table 4.11 – Registration and Certification Fees

Development Size	Certification Fee	Registration Fee
Minimum fee	£270	£120
Minimum fee (affordable)	£240	
>250 dwellings	£45 per dwelling	
>250 dwellings (affordable)	£40 per dwelling	
251 to 500 dwellings	£38 per dwelling	
501 to 750 dwellings	£35 per dwelling	
751 to 1,000 dwellings	£32 per dwelling	
>1000 dwellings	£28 per dwelling	

Source: BRE

- 4.66 For 'non-residential' /commercial schemes the standard is for all developments to meet BREEAM Outstanding. Research undertaken by BRE highlights that the cost of achieving BREEAM Outstanding on industrial buildings is 4.8% and 9.8% on offices. However, a large part of these costs as outlined previously⁴⁵ is associated with carbon reduction measures and will be accounted for when complying with the requirements of Replacement Policy EN1 (Part B).
- 4.67 The net costs attributable to Replacement Policy EN2 translate into an increase in construction costs of 0.96% for industrial developments and 2% for offices.
- 4.68 The registration and certification fees include £540 for a performance measurement certificate and £870 certification fee per property / asset.
- 4.69 **Part B (Water)** of the policy is the same as the current / existing policy and requires residential developments of 10 more dwellings to meet a water standard of 110 litres per person per day.
- Replacement Policy G1: Protecting, Enhancing and Extending Green and Blue Infrastructure**
- 4.70 The policy requires that GBI assessments be undertaken for proposed developments in line with the principles set out in Policy SP13 to protect, maintain, enhance and extend GBI functions related to: habitat enhancement, access, green and open space, water management (including flood risk, waste water and sustainable drainage), amenity and carbon reduction.
- 4.71 The cost of undertaking the GBI assessment is estimated to be in the region of £50,000.

⁴⁵ Refer to para 4.60

Replacement Policy G9 – BioDiversity Net Gain

- 4.72 Replacement Policy G9 requires all development to provide a minimum of 10% Biodiversity Net Gain (BNG) in line with the Environment Act 2021. ...The cost of meeting BNG obligations for developers is estimated at £19,698⁴⁶ per hectare to create and maintain sites over a 30-years lifecycle.

New Policies G2C Tree Replacement and G2D – Additional [Tree] Planting

- 4.73 Policy G2C, in the main, is focussed on conserving and replacing trees that are lost. However, the policy does require all developments to introduce new tree planting at part of creating high quality living and working environments and enhancing the public realm. Policy G2D also seeks additional tree and hedgerow planting within development sites with supporting ongoing management and maintenance arrangements. For the purpose of this assessment we have assessed these policies together and increased our allowances for external works⁴⁷ by 1%.

New Policy – The Health Impacts of Development

- 4.74 The policy requires a health impact assessment for major developments⁴⁸. For the purpose of this assessment we have included a cost of £50,000 for undertaking the health impact assessment. The policy also states that where significant impacts are identified, measures to mitigate the adverse impact of the development will be provided and / or secured by planning conditions or obligations. It has not been possible to capture these costs in this assessment. However, a viability tolerance has been included which takes into account matters such as this.

New Policy – Digital Connectivity

- 4.75 The policy sets out the Council's ambition to deliver wider digital connectivity benefits for the City as a whole. In particular, the Council believes that gigabit connection is now essential infrastructure and the policy seeks to ensure that developments include the necessary infrastructure.
- 4.76 To account for this cost we have made an allowance of £750 per flat and £1,000 per house. The cost of providing the fibre and connecting to the dwellings and non-residential developments will be incurred by the network providers.

Value Assumptions**Residential – Beacon Settlements**

- 4.77 For the purpose of this assessment we have undertaken an analysis of sold house prices achieved over the past year and current asking values for new build and existing stock to arrive at a general tone of value for each property type within each of the Beacon Settlements. The values adopted within this assessment are shown in Table 4.12.

⁴⁶ The costs are contained in a Defra impact assessment on BNG and nature recovery strategies (NRSs)

⁴⁷ Refer to Table 4.1

⁴⁸ Residential developments of 100 or more units, non-residential developments of 10,000sq.m or more and for other developments where the proposal is likely to have a significant adverse impact on health and well-being.

Table 4.12 – Market Values (Private / Market Values)

Beacon Settlement	Zone	Studio Flat	1 bed Flat	2 bed Flat	3 bed Flat	2 bed house	3 bed house	4 bed house	5 bed house
City Centre	Zone 4	£147,017	£191,123	£241,701	£365,748	-	-	-	-
Seacroft	Zone 3	£99,006	£128,708	£155,934	£222,763	£218,000	£275,500	£307,000	£340,000
Halton Moor	Zone 3	£65,769	£85,500	£125,083	£178,690	£221,321	£275,000	£313,375	£350,555
Middleton	Zone 2a	£56,538	£73,500	£118,538	£169,341	£149,237	£173,827	£264,874	£296,300
Allerton Bywater	Zone 2b	£83,961	£109,150	£132,239	£188,913	£220,424	£266,345	£425,000	£475,424
Pudsey	Zone 2b	£79,471	£103,313	£131,893	£188,418	£204,250	£344,639	£465,453	£495,536
Micklefield	Zone 2b	£88,292	£114,780	£139,060	£199,658	£225,145	£262,740	£373,105	£400,000
Garforth	Zone 2b	£95,000	£123,500	£149,625	£213,750	£242,250	£320,578	£457,536	£511,820
Moor Allerton	Zone 2b	£118,407	£153,929	£186,491	£266,416	£241,000	£349,818	£487,116	£547,040
Yeadon	Zone 1	£120,560	£156,750	£189,882	£271,259	£203,020	£250,661	£322,071	£360,283
Guiseley	Zone 1	£133,477	£173,520	£209,991	£300,323	£232,382	£307,395	£402,277	£549,195
Horsforth	Zone 1	£98,601	£128,226	£202,342	£288,698	£239,474	£307,539	£484,444	£717,250
Bramhope	Zone 1	£164,909	£214,381	£259,667	£371,044	£321,667	£340,875	£537,495	£759,995
Boston Spa	Zone 1	£149,206	£193,968	£235,000	£335,714	£274,547	£462,769	£632,480	£707,520
Wetherby	Zone 1	£152,000	£197,600	£281,823	£341,981	£271,048	£358,926	£459,088	£640,000
Scarcroft	Zone 1	£120,560	£156,728	£189,882	£271,259	£279,310	£337,500	£598,939	£670,000
Moortown	Zone 1	£117,532	£152,792	£189,978	£271,396	£222,765	£339,665	£481,299	£554,135
Aberford and Barwick	Zone 1	£126,984	£165,079	£200,000	£285,714	£310,006	£379,050	£554,535	£620,327
Meanwood	Zone 3	£155,653	£212,999	£245,154	£350,220	£276,633	£335,126	£427,132	£477,809
Tingley	Zone 2b	£71,044	£92,357	£111,895	£159,849	£286,699	£330,195	£430,149	£454,000

Affordable Housing – Beacon Settlements

- 4.78 For the purpose of this assessment it is assumed that the preferred delivery mechanism for the affordable housing would be to transfer the units to a nominated Registered Provider (RP). On this basis the revenue streams associated with the affordable housing have been derived from the Councils affordable housing benchmark prices and rents in Leeds for 2021/22.
- 4.79 Table 4.13 sets out the prices that the Council will normally expect developers to dispose of affordable dwellings to RP's. They are derived from the mortgage payments that low earning households in Leeds can afford to pay. They translate the affordability standards set out in Policy H5 of the Core Strategy (see earlier) into benchmarks that can be applied in practice achieving consistency between different developments. It is expected that RP's will pass on the affordability to occupiers subject to reasonable administration costs. For comparison purposes we have also shown how these values have changed since the previous 2013 assessment was undertaken.

Table 4.13 – Affordable Sale Prices

Dwelling Type	Affordability	2021/22 Price £psm	Benchmark
House	Lower Decile	£730.90	
	Lower Quartile	£926.69	
Apartment in Suburbs	Lower Decile	£791.20	
	Lower Quartile	£1,013.57	
Apartment in City Centre	Lower Decile	£906.59	
	Lower Quartile	£1,161.39	

Private Rented Sector – Apartments (City Centre)

- 4.80 We have applied an average rental value of £1,169pcm for the central core typology and £900pcm for fringe typology⁴⁹.
- 4.81 The affordable sales values are based on the 2021/22 transfer prices. Table 4.14 sets out the affordable rent benchmarks. Management companies responsible for administering the rental dwellings would be expected to rent the affordable dwellings at rents that accord with the benchmarks subject to arrangements agreed with the Council.

Table 4.14 – Affordable Rents for PRS Schemes

Dwelling Type	Affordability	Benchmark £psm per week	Benchmark £psm per month
Apartments	Lower Decile	£1.38psm	£6.00psm
	Lower Quartile	£1.77psm	£7.68psm

- 4.82 The net rental income (following deductions for operational costs) has been capitalised at a yield of 4.5%.

Purpose Built Student Accommodation)

- 4.83 An average rental value of 175per week (assuming 44 week term) has been assumed per bed space. This equates to a rental value per bed space of £7,700 per annum. A running void of 3% and gross to net leakage of 23% (inclusive of management costs, marketing and agents' fee, bad debts and sinking fund etc) have also been assumed for the purpose of this assessment.
- 4.84 The net rental income has been capitalised at a yield of 5.75%.

⁴⁹ These rents been derived based on current asking rents for PRS schemes in the city and on information shared from the District Valuer.

Offices

- 4.85 Take-up in Leeds city centre reached 11,470sq.m (123,463sq.ft) during the first quarter of 2022, with take-up falling slightly below the level seen during Q4 2021.
- 4.86 Professional services firms were the most active business sector throughout the quarter, accounting for 34% of take-up. Key deals included HG Construction which leased 1,312sq.m (14,126sq.ft) at Belgrave Hall and Lupton Fawcett which signed for 1,069sq.m (11,510 sq.ft) at 2 The Embankment. Business Services and Manufacturing & Services sectors were also particularly active, comprising 19% and 18% of take-up, respectively.
- 4.87 Supply has shown little change since the end of Q4 2021, increasing by just 1%, the vacancy rate also moved slightly from 7.9% in Q4 2021 to 8% at the end of Q1 2022.
- 4.88 There is currently 71,180sq.m (766,200sq.ft) of office space under construction in Leeds city centre of which 11% is pre-let. 11 and 12 Wellington Place are due to compete this year, becoming the most sustainable office buildings in Leeds upon completion.
- 4.89 Prime rents in Leeds remained stable throughout Q1 at £366psm (£34psf) with rent free periods remaining at 24 months on a ten-year term.
- 4.90 Meanwhile, in the out-of-town market, take-up totalled 9795sq.m (105,434sq.ft), almost double Q4 2021 and 27% above the five-year average. Key deals included Williams Lea which leased 1,544sq.m (16,617sq.ft) at Leeds Valley Park and Cennox which signed for 987sq.m (10,620sq.ft) at 2 City West. Prime rental tone in Leeds' out-of-town market remains at £266psm (£24.75psf).
- 4.91 Prime yields are currently around 5.25%.

Industrial

- 4.92 We have obtained evidence on recent transactions, which are summarised in the table below.

Table 4.15 – Rental Evidence

Scheme	Date	Size (sq.ft)	Rent (£psf)	Term	Incentive
Centre 31, Normanton <i>(Existing)</i>	Feb 22	68,992	£6.75	10 years	4 months' rent free
Orion, Logic Leeds <i>(New)</i>	March 22	25,047	£7.75	10 years	12 months half rent
L43, Latitude, Normanton <i>(New)</i>	April 22	43,000	£8.00	10 years	-
Unit 1, Speedwell Road, Castleford <i>(Existing)</i>	April 22	37,555	£6.50	10 years with 5yr break	5 months' rent free
16 Roydsdale Way, Euroway, Bradford <i>(Existing)</i>	May 22	52,996	£6.25	10 years with 7yr break	12 months half rent
Unit 4, Moor Park 25, Mirfield <i>(New)</i>	Nov 21	45,000	£6.85	20 year lease with 5 yearly reviews	6 months rent free
Unit 3, Total Park, Leeds <i>(New)</i>	Oct 21	35,838	£7.25	10 year lease	11 months rent free
Unit 2, Moor Park 25, Mirfield <i>(New)</i>	Sept 21	22,500	£7.25	15 year lease	3 months rent free
Unit 5, Moor Park 25, Mirfield <i>(New)</i>	Sept 21	59,000	£6.75	15 year lease	3 months rent free
Unit 6, Moor Park 25, Mirfield <i>(New)</i>	Sept 21	32,000	£7.25	15 year lease	3 months rent free

Scheme	Date	Size (sq.ft)	Rent (£psf)	Term	Incentive
Unit 3, Leftfield Park, Pontefract (Existing)	June 21	83,582	£6.25	15 year lease with a 10yr break	
Unit 2, Total Park, Leeds (New)	June 21	58,933	£6.50	10 year lease	9 months' rent free
Unit 4, Total Park, Leeds (New)	June 21	43,565	£6.50	15 year lease	12 month rent free
Unit 2, 62 Leeds, Gelderd Road (Existing)	June 21	42,293E	£6.15	10 year lease with a 10 yr break	-
Unit 1, Leftfield Park, Pontefract (Existing)	June 21	35,004	£6.50	15 year lease with a 10 year break	-
Unit 2, PLP Wakefield (New)	May 21	75,000	£6.75	Not known	-
Frontier Park, Junction 27 M62 (New)	April 21	45,000	£6.25	15 year lease	-
Kinetic, Leeds (Existing)	Mar 21	60,169	£6.25	15 years with 10yr break	9 months' rent free
Trilogy 33, Logic Leeds (Existing)	Mar 21	33,000	£6.75	15 year lease with 10yr break	15 months rent free
Unit 6, Leeds 62, Gelderd Road, Leeds (Existing)	Mar 21	57,500	£6.50	15 year lease with 10 year break	14 months' rent free

- 4.93 As outlined above there is a shortage of current/recent transactional evidence for new build industrial schemes. In fact there is no available evidence for large industrial units. The only scheme that we are aware of is Super B at Bradford (231,000sq.ft), which we understand is under offer at £7.50psf headline.
- 4.94 As outlined in the table above the most recent deal within the mid-size range was the letting of 43,000sq.ft at Latitude, Castleford (jcn31), which achieved a rental value of £8.00psf.
- 4.95 Within this context the following rents have been applied within this assessment.

Table 4.15: Commercial Development Typologies

Description	Gross Size sq.m (sq.ft)	Rent
Industrial (B2)	9,290 (100,000)	£7.50psf
	4,645 (50,000)	£8.00psf
	2,500 (27,000)	£8.00psf
	929 (10,000)	£8.00psf
Storage and Distribution (B8)	23,225 (250,000)	£7.50psf
	13,935 (150,000)	£7.50psf
	6,968 (75,000)	£8.00psf
	3,000 (32,000)	£8.00psf

- 4.96 In addition to the above rents we have also included an incentive of 12 months' rent free and capitalised the rental income at a yield of 4.5%.




5. Appraisal Results

5.1 The results of the assessment are summarised in the following Tables:

- Table 5.1 – summarises the results for the two PRS and PBSA typologies.
- Table 5.2 - summarises the viability findings for the residential beacon settlements assuming development occurs on Greenfield sites. The City Centre (Zone 4) is excluded from these results, as it is assumed most sites (if not all sites) within the City Centre / Zone 4 will be brownfield⁵⁰.
- Table 5.3 - summarises the viability findings for the residential beacon settlements assuming development occurs on Brownfield sites. The strategic sites are excluded from these results as it is assumed all strategic sites will be Greenfield.
- Table 5.4 – Summarises the results for the commercial typologies assuming development occurs on Greenfield sites.
- Table 5.5 – summarised the results for the commercial typologies assuming development occurs on Brownfield sites,

Table 5.1 – PRS and PBSA Typologies Results

	PRS Core	Central PRS Fringe	PBSA
Baseline	£2,522,579	-£1	£3,697,177
Future Homes Standard 2025	£1,655,436	-£1	£3,380,670
Replacement Policy EN1	£2,625,240	-£1	£3,703,211
Replacement Policy EN2	£2,316,381	-£1	£3,576,516
Replacement Policy G1	£2,473,070	-£1	£3,598,160
New Policies G2C and G2D	£2,109,047	-£1	£3,402,911
New Policy – Health Impacts	£2,473,070	-£1	£3,598,160
New Policy – Digital Connectivity	£2,312,786	-£1	£3,620,603
Cumulative Impact	£829,557	-£1	£2,891,016

	Benchmark Land Value ⁵¹ exceeded
	Marginally below of above the benchmark
	Benchmark Land Value not exceeded

⁵⁰ See Table 5.3 for Brownfield results

⁵¹ Benchmark Land Value is £750,000 per acre within the City Centre (Zone 4)

Table 5.2 - Greenfield – Beacon Settlement Results⁵²

Site Type	Zone	Land Value (£per acre)								
		Baseline ⁵³	FHS 2025	Replacement Policy EN1 ⁵⁴	Replacement Policy EN2	Replacement Policy G1	New Policies G2C and G2D	New Policy – Health Impacts	New Policy – Digital Connectivity	Cumulative Impact
Small sites	Zone 1	£234,753	£173,778	£206,439	£223,999	£216,821	£222,492	£216,821	£228,323	£109,622
	Zone 2a	-£1	-£1	-£1	-£1	-£1	-£1	-£1	-£1	-£1
	Zone 2b	£681,565	£590,103	£623,764	£665,287	£639,338	£663,173	£639,338	£669,058	£444,372
	Zone 3	£1,081,524	£990,062	£1,030,988	£1,065,316	£1,046,562	£1,063,133	£1,046,562	£1,067,805	£865,487
Medium sites	Zone 1	£427,583	£354,061	£404,731	£414,785	£417,190	£412,870	£417,190	£419,724	£317,310
	Zone 2a	-£1	-£1	-£1	-£1	-£1	-£1	-£1	-£1	-£1
	Zone 2b	£623,313	£531,850	£588,171	£607,252	£603,744	£604,921	£603,744	£610,515	£454,528
	Zone 3	£366,000	£274,538	£336,979	£349,998	£352,553	£347,609	£352,553	£351,929	£214,364
Large sites	Zone 1	£357,849	£279,624	£341,908	£344,235	£355,098	£342,076	£355,098	£349,402	£260,012
	Zone 2a	-£1	-£1	-£1	-£1	-£1	-£1	-£1	-£1	-£1
	Zone 2b	£522,834	£431,371	£503,390	£506,924	£518,964	£504,442	£518,964	£509,910	£401,170
	Zone 3	£341,245	£249,782	£319,428	£325,312	£335,001	£322,853	£335,001	£327,090	£211,206
Strategic Sites	Zone 1	£271,491	£221,907	£263,634	£262,777	£271,326	£261,223	£271,326	£266,057	£212,634
	Zone 2b	£438,299	£388,715	£430,401	£429,585	£438,093	£428,031	£438,093	£431,191	£377,644

	Benchmark Land Value ⁵⁵ exceeded
	Marginally below or above the benchmark
	Benchmark Land Value not exceeded

⁵² Excludes Zone 4 – the City Centre as it is assumed most sites (if not all sites) will be brownfield

⁵³ Results are inclusive of Interim uplift to Part L of Building Regulations and replacement policy G9, which are both being driven by national Legislation rather than local plan policies.

⁵⁴ Note the results only consider the impact of the net additional costs associated with this policy over and above the interim uplifts to Part L building regulations and proposed FHS 2025.

⁵⁵ Benchmark Land Value is £105,000 per acre for Strategic Sites and £155,000 per acre for all other sites

Table 5.3 - Brownfield- Beacon Settlement Results⁵⁶

Site Type	Zone	Land Value (£per acre)								
		Baseline ⁵⁷	FHS 2025	Replacement Policy EN1 ⁵⁸	Replacement Policy EN2	Replacement Policy G1	New Policies G2C and G2D	New Policy – Health Impacts	New Policy – Digital Connectivity	Cumulative Impact
Small sites	Zone 1	£107,744	£43,507	£78,536	£96,666	£89,450	£95,070	£89,450	£101,142	-£1
	Zone 2a	-£1	-£1	-£1	-£1	-£1	-£1	-£1	-£1	-£1
	Zone 2b	£491,052	£397,911	£432,965	£474,493	£448,825	£472,322	£448,825	£478,310	£205,946
	Zone 3	£891,011	£797,870	£840,189	£874,523	£856,048	£872,282	£856,048	£877,040	£627,934
	Zone 4	£3,025,286	£2,682,357	£2,742,972	£2,934,557	£2,675,658	£2,894,115	£2,675,658	£2,948,245	£1,383,537
Medium sites	Zone 1	£293,062	£236,340	£274,681	£283,183	£284,299	£281,704	£284,299	£287,003	£196,064
	Zone 2a	-£1	-£1	-£1	-£1	-£1	-£1	-£1	-£1	-£1
	Zone 2b	£432,799	£339,361	£397,371	£416,459	£413,231	£414,070	£413,231	£419,766	£233,575
	Zone 3	£175,487	-82,346	£146,180	£159,205	£162,040	£156,758	£162,040	£161,158	-£1
	Zone 4	£3,290,292	£2,947,363	£3,236,334	£3,201,721	£3,165,425	£3,153,806	£3,165,425	£3,213,675	£2,341,998
Large sites	Zone 1	£206,941	£140,620	£193,518	£195,399	£204,683	£193,554	£204,683	£199,779	£102,333
	Zone 2a	-£1	-£1	-£1	-£1	-£1	-£1	-£1	-£1	-£1
	Zone 2b	£332,320	£239,180	£312,591	£316,130	£328,451	£313,591	£328,451	£319,160	£174,856
	Zone 3	£150,731	£57,590	£218,628	£134,518	£144,488	£132,002	£144,488	£136,317	-£1
	Zone 4	£3,277,845	£2,934,916	£3,300,194	£3,190,007	£3,229,285	£3,141,359	£3,229,285	£3,201,238	£2,559,217

	Benchmark Land Value ⁵⁹ exceeded
	Marginally below or above the benchmark
	Benchmark Land Value not exceeded

⁵⁶ Excludes Strategic sites as it is assumed all strategic sites will be Greenfield (see results in Table 5.1)

⁵⁷ Results are inclusive of Interim uplift to Part L of Building Regulations and replacement policy G9, which are both being driven by national Legislation rather than local plan policies.

⁵⁸ Note the results only consider the impact of the net additional costs associated with this policy over and above the interim uplifts to Part L building regulations and proposed FHS 2025.

⁵⁹ Benchmark Land Value is £750,000 per acre within the City Centre (Zone 4) and £150,000 per acre for all other sites

Table 5.4 – Commercial Typologies – Greenfield Results

Use Type	Size sq.m (sq.ft)	Land Value (£per acre)							
		Baseline ⁶⁰	Replacement Policy EN1	Replacement Policy EN2	Replacement Policy G1	New Policies G2C and G2D	New Policy – Health Impacts	New Policy – Digital Connectivity	Cumulative Impact
Offices – Other Areas	6968 (75,000)	£3,369,673	£2,964,372	£3,263,649	£3,340,045	£3,294,538	£3,340,045	£3,294,538	£2,587,213
	4,645 (50,000)	£3,394,074	£2,971,572	£3,287,028	£3,349,376	£3,318,513	£3,349,376	£3,318,513	£2,562,049
	2,322 (25,000)	£3,409,015	£2,941,896	£3,300,731	£3,319,620	£3,333,470	£3,319,620	£3,333,470	£2,441,788
	1,500 (16,150)	£3,382,406	£2,873,529	£3,274,277	£3,245,961	£3,307,919	£3,245,961	£3,307,919	£2,282,459
Industrial	9,290 (100,000)	£1,126,412	£1,063,672	£1,105,630	£1,106,847	£1,095,573	£1,106,847	£1,095,573	£929,447
	4,645 (50,000)	£1,435,711	£1,353,714	£1,414,457	£1,396,727	£1,404,988	£1,396,727	£1,404,988	£1,180,461
	2,500 (27,000)	£1,459,385	£1,342,993	£1,437,006	£1,386,358	£1,428,410	£1,386,358	£1,428,410	£1,099,922
	929 (10,000)	£1,468,165	£1,233,756	£1,442,894	£1,276,132	£1,437,897	£1,276,132	£1,437,897	£749,542
Storage and Distribution	23,225 (250,000)	£1,119,741	£1,068,855	£1,099,336	£1,111,932	£1,088,971	£1,111,932	£1,088,971	£958,690
	13,935 (150,000)	£1,122,702	£1,066,554	£1,102,130	£1,109,675	£1,091,902	£1,109,675	£1,091,902	£945,709
	6,968 (75,000)	£1,434,877	£1,365,699	£1,413,936	£1,408,823	£1,404,075	£1,408,823	£1,404,075	£1,218,425
	3,000 (32,000)	£1,441,497	£1,338,245	£1,419,666	£1,381,207	£1,410,809	£1,381,207	£1,410,809	£1,121,891

	Benchmark Land Value ⁶¹ exceeded
	Marginally below or above the benchmark
	Benchmark Land Value not exceeded

⁶⁰ Results are inclusive of replacement policy G9, which is being driven by national Legislation rather than local plan policies

⁶¹ Benchmark Land Value of £155,000 per acre is exceeded

Table 5.5 – Commercial Typologies – Brownfield Results

Use Type	Size sq.m (sq.ft)	Land Value (£per acre)							
		Baseline ⁶²	Replacement Policy EN1	Replacement Policy EN2	Replacement Policy G1	New Policies G2C and G2D	New Policy – Health Impacts	New Policy – Digital Connectivity	Cumulative Impact
City Centre Offices	6968 (75,000)	£5,848,637	£4,999,832	£5,622,227	£5,803,940	£5,687,816	£5,803,940	£5,687,816	£4,230,510
	4,645 (50,000)	£5,882,885	£5,008,018	£5,654,878	£5,815,549	£5,721,379	£5,815,549	£5,721,379	£4,189,891
	2,322 (25,000)	£5,824,991	£4,895,039	£5,598,080	£5,692,045	£5,665,590	£5,692,045	£5,665,590	£3,952,724
	1,500 (16,150)	£5,898,581	£4,888,001	£5,667,841	£5,691,186	£5,737,944	£5,691,186	£5,737,944	£3,789,473
Offices – Other Areas	6968 (75,000)	£3,056,720	£2,644,886	£2,948,867	£3,027,092	£2,980,279	£3,027,092	£2,980,279	£2,262,212
	4,645 (50,000)	£3,080,284	£2,651,212	£2,971,399	£3,035,587	£3,003,409	£3,035,587	£3,003,409	£2,236,144
	2,322 (25,000)	£3,095,257	£2,621,570	£2,985,135	£3,005,863	£3,018,399	£3,005,863	£3,018,399	£2,115,917
	1,500 (16,150)	£3,066,381	£2,687,472	£2,956,439	£2,929,937	£2,990,599	£2,929,937	£2,990,599	£1,954,491
Industrial	9,290 (100,000)	£898,398	£834,879	£877,251	£878,832	£867,002	£878,832	£867,002	£698,951
	4,645 (50,000)	£1,207,931	£1,125,159	£1,186,314	£1,168,947	£1,176,654	£1,168,947	£1,176,654	£950,209
	2,500 (27,000)	£1,231,095	£1,113,921	£1,208,349	£1,158,068	£1,199,561	£1,158,068	£1,199,561	£869,139
	929 (10,000)	£1,241,307	£1,006,135	£1,215,678	£1,049,274	£1,210,493	£1,049,274	£1,210,493	£512,869
Storage and Distribution	23,225 (250,000)	£891,867	£840,205	£871,098	£884,058	£860,543	£884,058	£860,543	£728,340
	13,935 (150,000)	£894,766	£837,841	£873,829	£881,738	£863,410	£881,738	£863,410	£715,295
	6,968 (75,000)	£1,206,936	£1,136,981	£1,185,631	£1,180,882	£1,175,579	£1,180,882	£1,175,579	£988,006
	3,000 (32,000)	£1,213,790	£1,109,764	£1,191,596	£1,153,500	£1,182,550	£1,153,500	£1,182,550	£891,715

	Benchmark Land Value ⁶³
	Marginally below or above the benchmark
	Benchmark Land Value not exceeded

⁶² Results are inclusive of replacement policy G9, which is being driven by national Legislation rather than local plan policies

⁶³ Benchmark Land Value of £750,000 for City Centre Offices and £150,000 per acre is exceeded for all other use types

6. Conclusions

6.1 The Council is updating its planning policies, which will form part of the statutory Local Plan. The priority for the Local Plan Update (LPU) is to update and improve existing policies and make new ones to address climate change and the climate emergency declaration to achieve net zero emissions by 2030. In addition, closely related topics such as green infrastructure, flood risk, placemaking and sustainable infrastructure are also included within the proposed scope of the LPU.

6.2 Through this assessment we have demonstrated:

- That the cumulative impact of the proposed / emerging policy approaches would be viable / sustainable for offices (within the city centre and other areas of the city) and employment uses assuming development is brought forward on both greenfield and brownfield sites.
- The cumulative impact of the proposed policies is viable / sustainable for PRS schemes in the central core. However, PRS schemes on the fringes of the city centre are currently unviable without layering on the additional costs associated with the proposed policies. Therefore, the proposed policies simply compound the viability challenges for PRS schemes on the fringe of the city centre.
- The cumulative impact of the proposed / emerging policy approaches would be viable / sustainable for Purpose Built Student Accommodation (PBSA).
- Residential development being brought forward on Greenfield sites is able to sustain the cumulative impact of the proposed/emerging policy approaches. The notable exception to this is development within Zone 2a. The assessment is based on a single beacon settlement within Zone 2a (Middleton) which is typically characterised by comparatively low house prices. As a consequence, development is currently unviable without layering on the additional costs of the proposed/emerging policies. The cumulative impact on small sites within Zone 1, also results in a land value which falls below the benchmark land value.
- As expected, the viability of residential development on brownfield sites is more challenging. Mirroring the trends for Greenfield sites the brownfield sites in Zone 2a are not viable with and without the proposed policies. In addition to this small brownfield sites in Zone 1 fall below the benchmark land value before the impact of the proposed policies. However, this is more to do with the impact of affordable housing, with the typology being just over the threshold meaning the impact of affordable housing is more acute than it would be in the majority of circumstances. After layering on the costs associated with the new / emerging policies small brownfield sites in Zone 1 become unviable when taking into account their cumulative impact. The same conclusions are drawn for medium and large brownfield sites in Zone 3. The land value for large brownfield sites in Zone 1 also falls below the benchmark land value after taking into account the cumulative impact of the proposed policy changes. However, it should be recognised that the assessment of brownfield sites has taken a cautious approach in that it is assumed all brownfield sites will require remediation and site preparation. This is unlikely to be the case and some sites may not require remediation and / or site preparation. Equally, the assessment also applies the costs to 100% of the site area when in reality only a small part of the site may be subject to these abnormal costs. Our assessment has also included costs for replacement policy EN2 and the new policy covering digital connectivity when in reality these policies are unlikely to result in additional costs (the same is true for Greenfield sites). If the costs for EN2 and broadband are excluded and costs for remediation and site preparation are halved (recognising that only a small part of the site may be subject to abnormal costs) large brownfield sites in zone 4 are viable and exceed the

benchmark. Medium sites in zone 3 also become viable with land values of circa £80,000 per acre, albeit this is still below the benchmark. Within this context, our assessment has taken a cautious approach and presents a worst case scenario.

- 6.3 Viability testing for deliverability in the context of a Local Plan does not necessarily envisage every site to be capable of delivering all Local Planning Authority ('LPA') requirements. Indeed some sites will be unviable, for example brownfield sites with a high level of site-specific abnormal costs, even with no planning policies imposed upon them. Instead the NPPF envisages that a significant majority of sites should be able to viably bear the cumulative impact of policies put forward by the LPA.
- 6.4 This assessment clearly demonstrates that, in the majority of cases, there is no adverse impact on viability. Therefore, this assessment supports the proposed policy approaches being considered as part of the Council's Climate Emergency Local Plan Update.

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