

Land to west of Penkrige Planning Feasibility and Viability Assessment

Staffordshire County Council

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1.0 Introduction

- 1.1 This report provides an initial high-level feasibility and viability appraisal of a proposed housing-led development on parcels of land to the west of Penkrige, Staffordshire. Lichfields has prepared this report for Staffordshire County Council (SCC), the landowner, to inform and support the potential promotion of the sites for development through the planning system.
- 1.2 The development proposals are at an early stage. Some initial work has been carried out on the potential for development and the likely scale of mitigation and infrastructure that might be required to support development. However, as a masterplan develops and there becomes more certainty and clarity on uses, design and specification for all aspects of the development, then this appraisal will need to be revisited. This report provides a snapshot, based upon currently available information, and has been informed by two reports which it should be read alongside:
- 1 The Penkrige Estate Development Appraisal prepared by Wood providing a review of the environmental constraints and opportunities associated with the sites; and
 - 2 The Penkrige Estate Transport Appraisal Report prepared by Atkins providing a high-level transport appraisal, identifying likely transport infrastructure (and costs) to develop the sites.
- 1.3 Other information in respect of the scale of development which could potentially be accommodated has been supplied by SCC, whilst this appraisal also makes assumptions as to the mix of uses and supporting development likely to be necessary where this is not yet available.
- 1.4 This report is set out under sections that introduce the site, provide information on the development proposals, consider the infrastructure and mitigation likely required to overcome constraints and provide an analysis of viability, including assumptions adopted and sensitivity analysis. The conclusions provide an overview of the deliverability of a notional development scheme at Penkrige reflecting the current point in time and the emerging proposals.

No part of this report constitutes a valuation and this report should not be relied upon as such. The conclusions and recommendations of this report are based upon a range of information, estimates and figures drawn from several sources and based on reasonable assumptions, as set out. Uncertainty and risks mean outcomes may differ and Nathaniel Lichfield & Partners Ltd (Lichfields) does not guarantee or warrant any estimates or projections contained in this report.

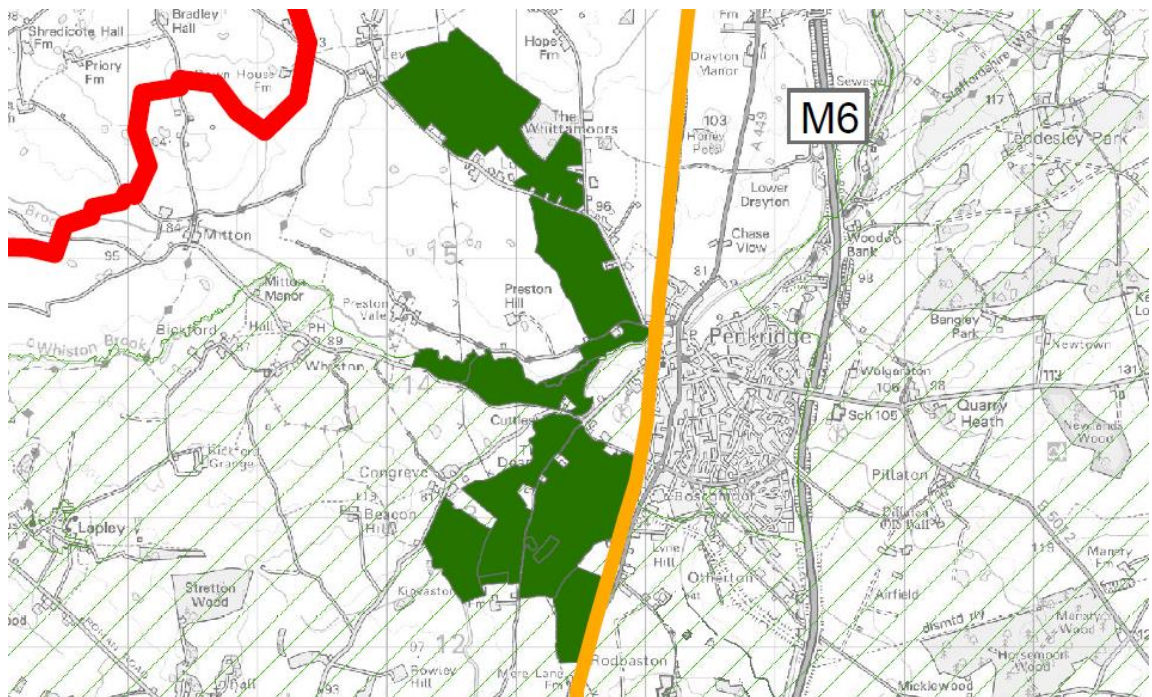
2.0 The site and location

2.1 Penkridge is a market town located approximately 9km south of Stafford and 7km north west of Cannock. The assessment site comprises several parcels of land to the west of the town, totalling c.332 hectares of primarily farmland. They can broadly be grouped in to three groups:

- 1 Levedale Estate – the parcels of land north of Levedale Road (c.90ha);
- 2 Preston Barn Estate - the parcels of land north of Pinfold Lane and the Whinston Brook, and south of Levedale Road (c.55ha); and
- 3 Deanery and Rodbaston Estates – of land south of Bungham Lane between the River Penk and railway line/Wolverhampton Road (c.187ha).

2.2 The parcels are all in existing agricultural use as County Council owned tenanted farms.

Figure 2.1 Penkridge land parcels



Source: SCC

2.3 Penkridge is located in a rural area between Stafford and Wolverhampton. It falls within the northern part of South Staffordshire District. In housing market terms, the SHMA¹ indicates it is part of the wider Greater Birmingham and Black Country housing market area, and further identifies it as part of a ‘northern’ sub housing market area of South Staffordshire. More widely, the SHMA indicates that District’s housing market is buoyant with strong housing delivery.²

2.4 The town itself is bounded by the M6 to the east and West Coast Mainline to the west. The Wolverhampton Road runs through the town south towards the A5 and M54, whilst Penkridge station has train services to Birmingham, London and Liverpool. The town provides a comprehensive range of local services and facilities; it is identified as a ‘main service village’ within the South Staffordshire Core Strategy (2012).

¹ Strategic Housing Market Assessment – Black Country and South Staffordshire SHMA (March 2017)

² Paragraphs 5.61 – 5.66.

3.0 Development proposals

- 3.1 The proposals for the Penkridge sites are at an early stage and no initial masterplanning work has been produced thus far. An initial quantum of development has been provided by SCC based on some very initial feasibility work, which has been used for the purposes of testing viability. This has been complemented with assumptions where necessary (e.g. on the breakdown of uses or types of new homes) to build an illustrative scheme with indicative phasing.

Development type and amounts

- 3.2 SCC has indicated that the sites can potentially deliver a total of c.6,470 homes, notionally split with 1,754 dwellings on the Levedale estate, 1,067 dwellings on the Preston Barn estate, and 3,649 dwellings on the Deanery and Rodbaston Estates. This would be a representative of a gross density of approximately 20 dph across the 324 hectare land holding. The potential scale of development is broadly based on a net developable area of 60% gross site area and a net density of c.32.5 dph.
- 3.3 Further information on what other uses the development would include is not yet available. It is noted that SCC's Residential Design Guide SPG (2000) indicates that sites over 500 dwellings should be mixed use, also providing employment and shopping uses within the development. An urban extension of 6,470 would essentially form a new community in itself and would be expected to include a full range of local community services and facilities. We have assumed the notional development would include the following uses and amounts:
- 6,470 new homes, of which 2,588 (40%) will be affordable homes with an assumed tenure split of 50% social/affordable rented and 50% intermediate, in line with Core Strategy Policy H2;
 - Local Centre and Neighbourhood centre(s) comprising shops and services on a commercial basis (assumed for the purposes of this viability appraisal to be cost/value neutral, and as such not tested);
 - Three community spaces across the neighbourhoods (e.g. a community hall/sports pavilion etc.) as well as a health centre/GP surgery;
 - Three first schools, two middle schools and a high school;
 - Up-to c.133ha of green and blue infrastructure including formal and informal open space uses and areas for water management (assumed a broad 60:40 split between developable area and non-development area, such as open space, infrastructure land, landscape buffers, flood areas etc.)
- 3.4 In respect of the types of new homes, an indicative dwelling mix has been drawn up for the purposes of testing viability. This is based upon existing demand profiles and an overall approach of achieving mixed communities, as follows:
- 1 The SHMA (2017) sets out at Part 2 a modelled housing need for different tenures and parts of the housing market area. Whilst this is based on needs, and projected household change, rather than wider indicators of market demand, it provides a starting point for considering a mix. It identifies for South Staffordshire district:
 - a For market homes, needs mainly for three and four or more bedroom homes providing an indicative mix of 16% 1-bed, 34% 2-bed, 30% 3-bed, and 20% 4+ bed (Table 4.4c).
 - b For intermediate discount market sale homes, a need for 22% 1-bed, 29% 2-bed, 28% 3-bed, and 21% 4+ bed (Table 4.8c).

- c For social rented/affordable rented homes, indicating a need for 29% 1-bed, 26% 2-bed, 18% 3-bed, and 27% 4+ bed (Table 4.7c).
 - d Together this notionally suggests a combined total mix as set out in Table 3.1 below.
- 2 Generally, new build transactions in the local market indicate fewer flats have been being built and sold, potentially reflecting less genuine market demand for such smaller properties. This perhaps also reflects the more rural nature of parts of the District, including Penkridge, where demand profiles for ownership tenures are likely to be for 1-bed properties (with buyers seeking more space).
 - 3 Indicative average sizes for dwelling types have been adopted based on a combination of MHCLG Nationally Described Space Standards, standard new build house types being marketed within the broad area and estimates drawn from new build houses sold in the last year.

3.5 Table 3.1 below provides the indicative dwelling mix applied. Whilst the scheme will include a much greater variance and range of homes with different types, tenures, sizes, specifications, layouts and market price points, adopting these illustrative dwelling types are considered to represent a ‘typical’ mid-point for the range of values that might be achieved. For the purposes of testing it is assumed the affordable element for rent will be a mix of social rent units and affordable rent units.

Table 3.1 Indicative dwelling mix

Dwelling type	Indicative size (sqm)	Market	Affordable: Social/Rent	Affordable: Intermediate	Total	SHMA 2017 Total Mix
1-bed flat	52 sqm	194 (5%)	375 (29%)	129 (10%)	698 (11%)	20%
2-bed flat	65 sqm	194 (5%)	259 (20%)	65 (5%)	2,146 (33%)	31%
2-bed house	77 sqm	1,165 (30%)	75 (6%)	388 (30%)		
3-bed house	92 sqm	1,359 (35%)	233 (18%)	453 (35%)	2,045 (32%)	27%
4-bed house	122 sqm	776 (20%)	259(20%)	194 (15%)	1,579 (24%)	22%
5-bed house	152 sqm	194 (5%)	91 (7%)	65 (5%)		
Total	~	3,822 (60%)	1,292 (20%)	1,294 (20%)	6,470	~

Source: SHMA (2017) / Core Strategy Policy H2 / Lichfields Assumptions / MHCLG Nationally Described Space Standards

Notes: Whilst the scheme may include some specialist housing types, such as Extra Care, Bungalows, Self/custom-build amongst others, it is assumed for testing that these would continue to broadly sit within the above dwelling mix. Size (sqm) for flats excludes common areas.

3.6 All of the above uses and amounts may need to be reviewed as more detailed masterplanning becomes available and parameters for the development scheme become more detailed.

Development phasing

3.7 A trajectory, with key dependencies, for the delivery of the proposed development has not yet been produced. Information on the masterplan, strategy and timing for core up-front works and mitigation is not yet available. Therefore, several assumptions have been made as to the likely phasing and timing of development, assuming there are no abnormal barriers to delivery.

3.8 The phasing of infrastructure is as yet unknown, and therefore any triggers which drive how quickly the development can be delivered is also currently uncertain. We have assumed that any infrastructure could be introduced in a timely manner and that there are no onerous up-front works which would add significantly for the timescales for any site preparation. We assume that once the required permissions and consents are achieved, the development could commence promptly in a notional year 1 of development.

- 3.9 In respect of the rate of housing delivery; the development comprises three distinct areas of growth which could come forward at the same time providing different housebuilding outlets. We have used evidence from Lichfields' award winning research on how quickly large-scale housing deliver³ to inform an assumption that the site will build-out over a 23-year period at an rate of 250dpa increasing to 275dpa, then 300dpa over the course of the development. This reflects an average of c.280 dwellings per annum; a reasonably high rate for equivalent schemes of this size, but not without precedent and also recognising the potential for varied housing delivery with multiple outlets across each of the different parcels.

³ Lichfields 'Start to Finish – How quickly do large-scale housing sites deliver?' - <https://lichfields.uk/media/1728/start-to-finish.pdf>

4.0 **Infrastructure and overcoming constraints**

4.1 Some preliminary work has been undertaken on behalf of SCC in order to begin to identify the key infrastructure items which will be necessary to support the delivery of a future development. To date this has focussed around scoping the transport requirements. These, alongside allowances for other works and/or contributions likely to be necessary to overcome constraints and mitigate impacts, are costed into the viability assessment. However, these are based on a current snapshot of information and all cost estimates are necessarily high-level, based on benchmarks from elsewhere and are inclusive of risks/contingency.

Transport

4.2 The 'Penkridge Farm Site Appraisal – Transport Appraisal Report' produced by Atkins provides and initial assessment of the necessary transport related infrastructure improvements for the development. It also provides a preliminary estimate of costs and a summary can be found at Appendix A of that report. In summary, the Atkins report identifies for the different land parcels the following:

1 Deanery & Rodbaston Estates

- a **Vehicle access and highway works** include 2 roundabouts, 2 priority-controlled junctions, realigning the A449, a new bridge over the existing railway line and widening of an existing bridge, a new road to provide access, and other works to widen existing roads. Combined this is costed at £12,448,800.
- b A new 4m wide **shared footway** including street lighting costed at £1,175,040.
- c A new bus service and bus stops costed at £1,247,080.

2 Levedale Estate

- a **Vehicle access and highway works** including 2 new vehicle access points, a new roundabout, new junction signals, and the widening of the Widen Levedale Road Tunnel arches. Combined this is costed at £1,066,320.
- b A new 4m wide **shared footway** including street lighting costed at £833,760.
- c A new bus service and bus stops costed at £1,065,226.

3 Preston Barn Estate

- a **Vehicle Access and highway works** including a new priority-controlled junction, a new roundabout, junction improvements and the widening of Preston Vale Lane. Combined this is costed at £1,435,680.
- b A new 4m wide **shared footway**, including street lighting, and the widening of the Levedale Road Tunnel arches. Combined this is £1,114,560.
- c A new bus service and bus stops costed at £858,824.

Community

4.3 The provision of suitable, adequate and timely social infrastructure will be key to supporting such a scale of development adjacent to Penkridge. Work on the socio-economic impacts of a scheme has not yet been undertaken at this stage. Whilst the provision of community uses on-site, off-site, and via contributions will be detailed as the masterplan is developed. In the interim, it is assumed that to meet the community and social needs of the development will be provided:

- 1 Three **community facilities** likely providing flexible community space to potentially fulfil a range of functions (e.g. community hall, sports pavilion, function room, indoor sports etc.) with a precise specification to be addressed through further masterplanning. An allowance is made for £3m based on the broad cost for similar facilities elsewhere.
- 2 Contribution to, and provision of, **new schools** to provide new pupil places. To estimate the cost for this appraisal we have used guidance contained within SCC's Education Planning Obligations Policy, which sets out the child yields and cost multipliers to use when estimating the impact from new developments. This is set out in Table 4.1 and totals a contribution of over £40.6m (delivering 5 schools).

Table 4.1 Pupil Yields and Schools Contributions

	Pupils/100 dwellings	Cost Multiplier	Pupil Yield	Contribution
Early years/nursery	3	£13,165	194	£2,555,327
First school	15	£13,165	971	£12,776,633
Middle school	12	£15,140	776	£11,754,696
High school	9	£17,114	582	£9,965,482
Sixth Form	3	£18,560	194	£3,602,496
		Total	2,717	£40,654,633

Source: SCC Education Planning Obligations Policy (v 1.9)

- 3 **Green and blue infrastructure** with it assumed that c.133ha of the gross site areas would be retained as formal and informal open space, including open space, recreation, sports, natural parkland and sustainable urban drainage systems. An allowance of £15,000 per ha is made for provision of this (over and above plot externals assumed within build-costs), based on a mid-point for similar schemes elsewhere, with overall costs of £1,995,000 phased throughout the development.
- 4 **Other contributions** with a further allowance for s.106/CIL contributions to be made to address other community infrastructure requirements not covered by the above, such as health, emergency services, social/care services etc. This has been assumed at £2,500 per dwelling (£16.175m) based on the Council's CIL Viability Assessment (June 2015)⁴.

Other infrastructure and mitigation

- 4.4 At the current point, detailed technical assessments on factors such as a ground conditions, utilities, ecology, flooding/drainage and archaeology (among others) have not been undertaken. The Development Appraisal Report prepared by Wood provides a high-level overview of the potential constraints and mitigation that may be required. The key constraint identified is the West Coast Mainline, but other than this there are no fundamental abnormal costs associated with development of the site. For the purposes of this appraisal, we have assumed there will be no abnormal or significant costs associated with preparing the site for development or any in-built mitigation within any development scheme.
- 4.5 As aforementioned, the key constraint identified is the influence of the West Coast Mainline. Overcoming the issues the rail line presents will require significant investment and collaboration. Costs have already been factored in to this appraisal drawn from the Atkins report. The Wood report also notes that while the site is served by telecoms, there is likely no coverage for any other services. To make allowance for this, we have adopted a figure of £80,000 per hectare (net developable area) for utilities infrastructure upgrades drawn from

⁴ South Staffordshire Site Allocations and Community Infrastructure Levy (CIL) Viability Study, (June 2015), prepared by HDH Planning & Development Ltd.

similar assumptions adopted in other studies.⁵ This high-level assumption is considered appropriate to adopt in advance of any more detailed utilities scoping and feasibility work.

Infrastructure summary

4.6

Bringing the above together Table 4.2 sets out a summary of the infrastructure likely required to support the delivery of the development.

Table 4.2 Summary of infrastructure

Infrastructure Item	Indicative Phasing	Indicative Cost	Delivery
Transport			
Deanery/Rodbaston: 2x priority junctions	Dependent upon parcel phasing. Assumed 50% upfront for access and 50% over next two thirds of build.	£276,480	Staffordshire County Council / Developer
Deanery/Rodbaston: 2x roundabout		£686,880	
Deanery/Rodbaston: realign A449		£1,109,520	
Deanery/Rodbaston: new bridge		£1,432,800	
Deanery/Rodbaston: new road		£3,767,040	
Deanery/Rodbaston: widen bridge		£1,507,320	
Deanery/Rodbaston: widen road		£3,677,760	
Deanery/Rodbaston: 4m wide footway		£1,175,040	
Deanery/Rodbaston: new bus service/stops		£1,247,080	
Levedale: 2x priority junctions	Dependent upon parcel phasing. Assumed 50% upfront for access and 50% over next two thirds of build.	£276,480	
Levedale: 1x roundabout		£213,120	
Levedale: signalise junction		£97,200	
Levedale: Widen tunnel		£479,520	
Levedale: 4m wide shared footway		£833,760	
Levedale: new bus service and bus stops		£1,119,226	
Preston Barn: 1x priority junctions	Dependent upon parcel phasing. Assumed 50% upfront for access and 50% over next two thirds of build.	£267,120	
Preston Barn: 1x roundabout		£473,760	
Preston Barn: junction improvement		£97,200	
Preston Barn: widening road		£587,600	
Preston Barn: 4m wide shared footway		£635,040	
Preston Barn: widening tunnel		£479,520	
Preston Barn: new bus service and bus stops		£858,824	
Community			
3 x community facility (one in each neighbourhood)	At 1,000, 3,000 and 5,000 dwellings.	£3,000,000	To be confirmed
s106/CIL allowance (e.g. health, libraries, care etc.)	£2,500 per unit cost.	£16,175,000	SSDC / SCC / Various
Schools (contributions)			
Early years/nursery contribution	In line with SCC policy: 30% up front; 30% at 1,950 units; 40% at 3,800 units	£2,555,327	Staffordshire County Council Education
First school contribution		£12,776,633	
Middle school contribution		£11,754,696	
High school contribution		£9,965,482	
Sixth form contribution		£3,602,496	

⁵ £80,000/ha for utilities was adopted in the Newcastle-under-Lyme SHLAA Viability Study as a proxy, based on some work undertaken by a cost consultancy.

Infrastructure Item	Indicative Phasing	Indicative Cost	Delivery
Green Infrastructure			
Structural green/blue infrastructure	Throughout	£1,995,000	Developer
Utilities			
Allowance for utilities infrastructure upgrades	Assumed prior to housing delivery	£15,920,000	Utility provider / developer
TOTAL		£99,043,923	

Source: SCC / Transport Appraisal / Viability Assessment

4.7 The total infrastructure package associated with the development is a cost of approximately £99m equivalent to roughly £15,300 per new home.

5.0

Viability

5.1

The viability appraisal underpinning this report is a bespoke appraisal built for the scheme. However, it is based on a standard residual approach to viability, drawing upon comparable exercises undertaken elsewhere, and is largely the same approach as utilised in Homes England's (as the then Homes and Communities Agency) Development Appraisal Tool (DAT). The inputs and assumptions applied within the appraisal are based on existing evidence, published data and/or analysis of the current market. Where applicable we have cross referenced the inputs and assumptions utilised with those adopted within South Staffordshire CIL Viability Study, in order to provide a sense check against local specific evidence.

5.2

We set out as follows a review of the market (and values) informing the appraisal, a summary of the assumptions made and the outputs of the viability appraisal. Further detail on data and assumptions are set out in Appendix 1, whilst a summary of the appraisals undertaken are included at Appendix 2.

Market overview

5.3

In undertaking this high-level viability assessment, we have reviewed secondary information and data on the local market, including prices, affordability and land values.

House prices

5.4

Penkridge is located in the north of South Staffordshire district, in a rural area between Stafford and Wolverhampton, and to the west of Cannock. Penkridge is the central settlement within the northern sub-area identified in Black Country and South Staffordshire SHMA. Median house prices in South Staffordshire district are £215,000; more expensive than neighbouring Cannock Chase (£165,000) and just above Stafford (£202,000), but below the England average (£235,000). The Penkridge area⁶ combined have an average median price of £239,950, just above the national average, and illustrating the area is a comparatively high value part of the District. South Staffordshire is slightly less affordable than the national average with an affordability ratio of 8.25 compared to an England average of 8.00. The district as a whole though is far less affordable than the wider West Midlands which has a ratio of 6.78⁷.

5.5

For the purposes of testing viability, open market values for new build homes have been identified on a £/sqm basis based on actual sale prices for new build homes achieved in the area over the last year (between July 2018 to July 2019) as a benchmark for what might be achieved on the site. The values for the Borough are shown in Table 5.1 and includes developments in Penkridge, Codsall and Kinver (among other smaller developments) where there is some degree of variation in the values achieved.

⁶ MSOA South Staffordshire 001 - E02006174 – A statistical area covering Penkridge and its immediate rural hinterland including Acton Trussell

⁷ ONS Ratio of house price to workplace-based earnings (lower quartile and median), 1997 to 2018

Table 5.1 New-build sales values in Newcastle-under-Lyme Borough

Type of home	Sample size	Median size (sqm)	Median sale value (£)	Median sale value (£/sqm)
Detached	35	119	£375,000	£2,941
Semi-Detached	21	70	£194,995	£3,063
Terrace	9	70	£255,000	£2,521
Flat	6	57	£112,500	£1,974

Source: Land Registry Price Paid dataset (sale values for full market sales to individuals) cross referenced with MHCLG Energy Performance Certificates (EPC) data (for dwelling size)

- 5.6 Whilst these median values are a reasonable starting point, we have also looked at values achieved on comparator new build developments near Penkridge and the site, which shows some variation potentially due to specific location and specification of the homes. Three of these are in South Staffordshire (and included in the above District-wide values), whilst one comparator is c.6km east in Cannock.

Table 5.2 New-build sales values by development (location)

Development	Developer	Count	Median values (£/sqm)			
			Detached	Semi	Terrace	Flat
Lyne Hill, Penkridge	Persimmon	27	£2,860	£2,999	£2,771	£1,974
Otherton Hall Court (Barn Conversions)	Landmark Estates	7	£2,664	£1,706	£2,176	n/a
Wheatfield Manor, Codsall	Taylor Wimpey	31	£2,899	£3,095	n/a	n/a
The Limes, Cannock	Barratt	36	£2,611	n/a	£2,633	n/a

Source: Land Registry and MHCLG EPC

- 5.7 Amongst the three developments by major national housebuilders, this illustrates generally similar £/sqm values achieved across the different types of new-build home. Only the barn conversions at Otherton Hall show markedly lower values, suggesting these are an outlier. Lyne Hill is a large development on the southern edge of Penkridge and perhaps provides the best proxy for values that might be achieved on the west of Penkridge sites. We have used this development as the benchmark for values adopted (being middling in the context of other developments and District averages).

- 5.8 Drawing the above together, and whilst land registry information is only available based on type of home, rather than number of bedrooms, we have applied £/sqm sales values against the different type/size homes for the purposes of appraisal as follows:

- Flats: £1,974/sqm
- 2-bed and 3-bed houses: £2,771/sqm
- 4-bed and 5-bed houses: £2,860/sqm

- 5.9 Furthermore, based on our assumptions above on dwelling mix and indicative average sizes, we have tested these against new build homes marketed for sale in the Penkridge and Codsall areas, which demonstrates that the overall sales values these assumptions generate are a good proxy for what is likely to be achieved at the Penkridge estate.

Land values and appropriate benchmarks

- 5.10 Benchmark land values have been input as a cost value within the appraisal to test viability. This means the residual element of any appraisal is what is left after all costs, including land and profit, are subtracted from the gross development value (GDV); a figure above £0 indicates

positive viability. We have expressed the residual value as a % against GDV to illustrate how close to £0 the residual amount arrived at is. Figures above, or around, 0% indicate a likely viable scheme.

5.11 The issue of what land value to utilise is not a simple one. Government guidance⁸ states:

“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 fully comply with policy requirements.”

5.12 The existing use of the site is agricultural, with MHCLG land value estimates⁹ indicating agricultural land values for Staffordshire are estimated at £21,250 per hectare. The issue of what reasonable premium should apply is one of judgement (as identified in the PPG) and therefore the plus element of EUV+ can be variable.

5.13 Land values in South Staffordshire are generally higher than other local authorities in the West-Midlands. MHCLG land value estimates indicate that residential development land values in South Staffordshire are £2,205,000 per hectare, the highest across Staffordshire. However, this likely hides wider land value variations in the district. For example, values in neighbouring district Cannock Chase, c.6km east of Penkrigde, values are identified as far lower at only £610,000 per hectare. However, taken at face value, care must be applied these MHCLG estimates as they assume nil affordable housing provision, are not reflective of large-scale strategic sites (and the difference between net developable area and gross site area typical on such sites), assume no abnormal development costs and make no major allowances for CIL/s106 costs; they therefore likely overestimate reasonable benchmark land values.

5.14 We have considered various approaches to arriving at a reasonable benchmark land value, based on an EUV+ definition. This allows us to triangulate a benchmark for the initial purposes of viability testing. These are set out as follows:

- 1 Applying the MHCLG land value to the notional net developable site area (199ha) would arrive at a benchmark site value of £438.8m.
- 2 The Council’s South Staffordshire CIL Viability Study looked at two different approaches:
 - a An EUV+ approach with a fixed uplift. This was set at an EUV + fixed uplift of 20% + a further premium of £250,000/ha (reflecting that just a % uplift to a relatively low agricultural land value is often insufficient to incentivise a landowner). Applying this to the Penkrigde estate would indicate a value of £275,500/ha or total site value of £91.5m.
 - b A benchmarking approach, whereby, following consultation and stakeholder feedback, the study adopts a threshold land value of £600,000 per net hectare (equivalent to £360,000 per gross hectare based on a 60% net to gross ratio) for residential land. Applying this to the Penkrigde estate would indicate total site value of £115.9m.
- 3 The scale of uplift on EUV to incentivise a reasonable landowner to sell was a matter addressed by Sir Oliver Letwin in his ‘Independent Review of Build Out’ [rates on housing sites]. His final report recommended for large scale sites land values should be capped at around ten times their existing use value to balance promoting the public interest and a

⁸ Planning practice guidance ID:10-013-20190509

⁹ <https://www.gov.uk/government/publications/land-value-estimates-for-policy-appraisal-2017>

proper recognition of the value of land.¹⁰ This approach was also discussed in CIL Viability Study (para 6.38) which notes it has been adopted elsewhere. Based on £212,500 per ha and an 332ha (gross) site area, this illustrates an EUV+ benchmark of £70.5m for the site.

- 5.15 For the purposes of testing viability, a benchmark land value of £212,500/ha and total site value of £70.5m has been used to derive a notional purchase price for the site. Whilst this is at the lower end of a range of benchmarks, it reflects the public ownership of the site by SCC and therefore the ability of landowner to accept a price that balances public benefit, delivery of homes and return to landowner. In that context, it is helpful as a minimum benchmark value to test the viability of the site.

Viability assumptions

- 5.16 As well as the assumptions set out above in respect of the development amounts, supporting infrastructure and development values, a range of other assumptions have been adopted for the purposes of testing viability. These are set out fully within Appendix 1, but can be summarised as follows:

- 1 **Affordable housing values** have been calculated as follows:
 - a Intermediate tenures are assumed at a value of 80% of market value (e.g. based on a discount market sale property). This is at the upper end of likely transfer values, in the context that land registry data shows recent transfers of shared ownership properties at about 60% market value (the viability study adopting 65%), but reflects the NPPF Annex 2 definition for low cost homes for sale at 80%;
 - b Rented tenures are assumed at a transfer value of 45% of market value based on a blend of affordable rented (50% transfer value) and social (40% transfer value) tenure types. This is in line with the values assumed for such homes in the CIL Viability Study.
- 2 **Site acquisition costs** are based on the above assumed existing use values (with plus element) and agent fees at 1.0%, legal fees at 0.75% and stamp duty at prevailing rate (tranches up to 5%).
- 3 **Build costs** are based upon £/sqm BCIS figures retrieved in August 2019, and factored for South Staffordshire District, with the base case set at median values and the following:
 - a A 10% increase for plot externals (e.g. internal access roads, hard/soft landscaping, fencing, lighting etc.)
 - b A floorspace allowance of +15% for circulation/stairwells in apartment blocks
 - c A contingency on construction costs of 5%
- 4 **Other fees and costs** as follows:
 - a Professional fees at 8% on construction costs
 - b Marketing and sales fees at 3% of Gross Development Value (GDV)
 - c A finance rate of 6.0% interest on debt
- 5 **Developer profit** equivalent to 16.2% on GDV, reflecting a blended rate between return on market homes (20%) and affordable homes (6%).

- 5.17 The outputs are sensitive to the assumptions adopted, and at this early stage of planning – without much detail on the potential scheme, its delivery and how it might be brought forward –

¹⁰ <https://www.gov.uk/government/publications/independent-review-of-build-out-final-report> - paras 4.3-4.4

we have sought to adopt standard assumptions which reflect both the risks and returns associated with a project of this scale.

Viability appraisal

5.18 The viability appraisals are provided on a residual basis and include cashflow modelling over the build period. The output is a residual figure (£) which represents the surplus or shortfall from costs vs. revenue of the scheme, whilst this is also shown as a % to put that into the context of the scale of investment and how marginal the position is. We present these as both pre-finance and post-finance, reflecting the compounding effect that interest payments can have on a scheme over several years. The headline outputs are provided below, but full summaries are included in Appendix 2.

Base case and sensitivities

5.19 Four scenarios have been appraised, each assuming a scheme which meets policy requirement, including affordable housing delivery, and funds necessary mitigation and infrastructure, as follows:

- 1 A **base case** which is based on a baseline set of assumptions.
- 2 A **lower quartile build cost** sensitivity which is based on potential for reduced build costs/economies of scale on a site of this size.
- 3 A **reduced development** scenario which is based on a notional scheme of c.2,700 new homes. This is tested reflecting the findings of the Penkridge Estate Transport Appraisal Report prepared by Atkins, which indicates that due to transport constraints the authors do not consider that the full development capacity of the sites will be able to be developed. That appraisal is not clear on precisely how much could be developed, but this scenario adopts an assumption of 2,700 based on the junction capacity figures cited. The appraisal is not clear whether the mitigation identified (or an alternative scheme of transport mitigation) could deliver a base case level of development (i.e. the full 6,470 homes).
- 4 A **reduced development + lower quartile build costs** sensitivity.

5.20 The outcomes of these are presented in Table 5.3.

Table 5.3 Outcomes of viability scenarios

	Base Case	LQ Build Costs	Reduced Capacity (2,700)	Reduced Capacity + LQ Build Costs
Gross Development Value	£1,372,244,293	£1,372,244,293	£572,652,178	£572,652,178
Total Development Costs	(£1,322,547,795)	(£1,226,943,858)	(£564,172,726)	(£524,276,183)
RV (Before Finance)	£49,696,498	£145,300,435	£8,479,452	£48,375,995
RV (pre-finance) as a % of GDV	4%	11%	1%	8%
RV (After Finance)	£20,013,618	£124,524,189	£4,074,743	£45,356,280
RV as a % of GDV	1%	9%	1%	8%

Source: Lichfields

5.21 The **base case** scenario illustrates a residual value surplus of £20m, equivalent to 1% of GDV. This is a marginal surplus but demonstrates that the scheme can be viable. The sensitivity of **lower quartile build costs** demonstrates that this residual value would increase to £124.5m with reduced construction costs. This reflects the potential for achieving lower build costs via economies of scale on a project and scheme of this size, particularly if national housebuilders are involved who via existing supply chains are more likely and able to achieve build cost efficiencies. This scale of surplus illustrates that the scheme could be viably delivered, but also

crucially could absorb and withstand increased costs or return a high land value. This is pertinent given the findings of the transport appraisal, which indicates further additional transport mitigation may be necessary to support the higher levels of development.

5.22 The **reduced capacity** scenarios demonstrate a smaller scheme, with certain infrastructure costs and land-take scaled accordingly, could equally deliver a viable scheme, albeit the margin of viability on this is reduced (reflecting that infrastructure costs per dwelling would rise to c.19,800 per dwelling, retaining all the proposed transport infrastructure costs). This provides some bookends indicating that, depending on the final scale of development, a reasonably self-contained large-scale western extension to Penkridge could be deliverable.

5.23 The various scenarios above illustrate that the development and delivery of the West of Penkridge sites can be a viable, self-funding, prospect in the context of delivering a policy compliant development. Whilst there will be risks for viability, the appraisals illustrate that there is a reasonable prospect that the particular type of development can be brought forward in an economically viable manner in the future, and therefore that the site is ‘achievable’ in the context of planning guidance (PPG ID3-020-20190722).

Individual parcels

5.24 As well as the above scenarios, we have also produced an appraisal for each of the three component parcels; the Levedale Estate, the Preston Barn Estate and the Deanery/Rodbaston estate. Within these it is assumed they come forward as stand-alone developments independent of one another. These scenarios each use the base case assumptions as the starting point, with the infrastructure costs apportioned accordingly. They assume full development capacity is achievable from the transport mitigation identified in the transport appraisal, albeit it may be the case that a reduced capacity on each of these can only be achieved due to highway constraints. The outcomes of these are shown in Table 5.4

Table 5.4 Outcomes of viability for individual parcels

	Levedale Estate	Preston Barn Estate	Deanery/Rodbaston Estates
Site Size	90 ha	55 ha	187 ha
Units	1,754	1,067	3,649
Build Period	7 years	5 years	15 years
Gross Development Value	£372,011,822	£226,303,657	£773,928,814
Total Development Costs	(£355,911,720)	(£218,572,793)	(£748,001,281)
RV (Before Finance)	£16,100,102	£7,730,864	£25,927,532
RV (pre-finance) as a % of GDV	4%	3%	3%
RV (After Finance)	£15,318,727	£7,452,541	£18,992,163
RV as a % of GDV	4%	3%	2%

Source: Lichfields

5.25 The viability of the individual parcels is similar to the overall position, albeit due to shorter assumed build periods, cashflow is improved and the position after finance costs is improved. Whilst notionally the Levedale Estate faces relatively lower infrastructure costs per unit and fares better in viability terms, this is likely to be less likely to be the case in actuality as the Levedale Estate is more remote from the edge of Penkridge and as a ‘standalone’ development might need to provide a much wider and greater breadth of supporting infrastructure; further work would be necessary to identify the infrastructure requirements to support the development of individual parcels.

6.0 Conclusions

- 6.1 This high-level viability testing demonstrates that the west of Penkrigde sites can be an achievable and viable prospect, if allocated through the Local Plan. The development can generate sufficient value to deliver necessary infrastructure and policy requirements, including affordable housing. The base case scenario shows positive viability, with a surplus of c.£20m or 1% of GDV, albeit this is relatively marginal illustrating that there are risks around the viability. This is also the case with a reduced development scenario, whereby a smaller scheme could similarly achieve a surplus. The sensitivity scenarios on build costs illustrate the upside risk of lower quartile build costs being delivered, which would deliver greater surplus and demonstrates the scheme may be able to absorb and withstand increased costs (e.g. higher land value or requirements to provide further infrastructure).
- 6.2 This position is important in the context of further transport work which the transport appraisal indicates is necessary to be undertaken. Further modelling is necessary to understand the precise junction capacity and therefore the precise number of new homes that could be delivered. Equally further work might be able to identify a wider transport strategy with a more comprehensive transport infrastructure scheme, enabling a relatively larger scheme to be delivered, or whether individual parcels could come forward independently as a small option. What the above appraisals show is that there may be a degree of flexibility within the viability to meet increased infrastructure costs.
- 6.3 The above is based on a point in time assessment, and the viability position will likely need to be revisited as further work emerges on the scheme and any necessary infrastructure or mitigation. However, it provides evidence that a deliverable scheme can be achieved and can be used by SCC to support its planning-led promotion of the site to deliver new homes to help meet housing needs.

Appendix 1 Assumptions

Input	Assumption	Source and commentary
Development Scheme		
Housing	6,470 homes (base case, 2,700 homes on reduced scenario)	Based on information from SCC.
Tenure and Mix	60% Market; 20% social/affordable rented; 20% affordable intermediate. 11% 1-bed; 33% 2-bed; 32% 3-bed; 24% 4+bed.	Based on current policy requirements and local housing market evidence for Newcastle-under-Lyme. Newcastle-under-Lyme and Stoke-on-Trent Core Spatial Strategy (2009) – Policy CSP6 Affordable Housing & page 46. A further assumption has been made for the purposes of viability testing that there will be an even mix of affordable rented and social rented homes and that intermediate homes will be of a value equivalent to discount market sale/starter homes. Size mix of homes drawn from SHMA.
Phasing	Average of c.280 homes per annum (250 increasing to 275 then 300dpa), 23-year delivery period	Evidence on delivery rates for similar large-scale strategic sites from Lichfields evidence in 'Start to Finish: How quickly do large scale residential sites deliver?'
Development Values		
Market housing	1 & 2 bed flats: £1,974/sqm 2 & 3 bed houses: £2,771/sqm 4+ bed houses: £2,860/sqm	Land registry new build price paid (2018/19) cross referenced with EPC statistics for sqm of property to provide £/sqm values. Medians applied as per house types. Values adopted are based on Lyne Hill scheme in Penkrige (Persimmon) as a proxy for likely type of development values and in context of higher and lower development values across other averages.
Affordable housing	Intermediate transfer value: 80% of market Social/affordable rented transfer value: 45% of market	Intermediate tenures are assumed at a value of 80% of market value (e.g. based on a discount market sale property). Rented tenures are assumed at a transfer value of 45% of market value based on a blend of affordable rented (50% transfer value) and social (40% transfer value) tenure types, in line with the assumption within the S. Staffs CIL Viability Study. Whilst this approach results in values above an equivalent assumption based on capitalisation of gross social rents (accounting for voids, maintenance and management), it reflects the potential of registered providers being able to cross subsidise (assuming a continued absence of grant funding).
Costs		
Housing build costs	Houses: Ave: £1,283 LQ: £1,147 Flats: Ave: £1,443	BCIS Q2 2019 Estimates (retrieved August 2019) – Estate Housing 2-storey (Median: £1,228 LQ: £1,098) and Flats 3-5 storey (Median: £1,443 LQ: £1,272). South Staffordshire BCIS district factor applied: x0.95 + 10% for externals allowance, based on

Input	Assumption	Source and commentary
	LQ: £1,529	comparables and scale of development. +15% allowance for apartments/flats circulation/stairwell space build costs, based on comparables.
Site specific infrastructure	£99,043,923	Based on information from SCC and assumptions drawn from benchmarks, planning obligations guidance and S. Staffs CIL Viability study. See Table 4.2 in main report. For reduced development scenario, infrastructure costs proportionately reduced with development, except transport infrastructure which is assumed to remain at same level.
Finance costs	6% interest on debt	Applied to annual cashflow. Based upon assumptions adopted in CLG Land Value Estimates for Policy Appraisal
Professional fees	8% on construction costs	Based upon benchmarking against the Harman Guidance
Sales and marketing	3% of GDV	Allowance based on combined sales and marketing costs from CLG Land Value Estimates for Policy Appraisal.
Contingency	5% on construction costs	Based upon equivalents and reflecting scale/risks associated. Note: infrastructure costs assumed to be all-in estimates with contingency and risk built in.
Land acquisition costs	Agent fees: 1.0%, Legal fees: 0.75% Stamp duty: prevailing rate (tranches up to 5%)	Based upon assumptions adopted in CLG Land Value Estimates for Policy Appraisal
Landowner and Developer Return		
Benchmark (threshold) Land value	£70,550,000	Based on an EUV+ threshold land value with + element being based on a notional 10x EUV cap. EUV in agricultural use: £21,250/ha (based on CLG Land Value Estimates) with 10x cap being £212,500 per ha. Adopted with specific reference as a minimum, reflecting public land ownership.
Profit	16.2% on GDV	Blended rate reflecting profit on market housing (20%) and profit on affordable housing (6%). Profit assumed to be realised at the conclusion of the cashflow (end year).

Appendix 2 Summary Appraisals

Scenario:	Base Case	LQ Build Costs	Reduced Capacity (2,700)	Reduced Capacity + LQ Build Costs
Gross Development Value				
Market Housing	£994,928,595	£994,928,595	£415,194,313	£415,194,313
Social Housing	£124,675,722	£124,675,722	£52,028,508	£52,028,508
Intermediate Housing	£252,639,976	£252,639,976	£105,429,356	£105,429,356
Total GDV	£1,372,244,293	£1,372,244,293	£572,652,178	£572,652,178
Development Costs				
Site acquisition (land + fees)	(£75,301,625)	(£75,301,625)	(£31,520,781)	(£31,520,781)
Build costs	(£784,162,466)	(£699,557,212)	(£327,239,360)	(£291,932,685)
Infrastructure costs	(£99,043,923)	(£99,043,923)	(£53,494,902)	(£53,494,902)
Professional fees	(£62,732,997)	(£55,964,577)	(£26,179,149)	(£23,354,615)
Contingency	(£39,208,123)	(£34,977,861)	(£16,361,968)	(£14,596,634)
Marketing/sales	(£41,167,329)	(£41,167,329)	(£17,179,565)	(£17,179,565)
Developer profit	(£220,931,331)	(£220,931,331)	(£92,197,001)	(£92,197,001)
Total Development Costs	(£1,322,547,795)	(£1,226,943,858)	(£564,172,726)	(£524,276,183)
Residual Value (before finance)	£49,696,498	£145,300,435	£8,479,452	£48,375,995
Finance on cashflow	(£29,682,881)	(£20,776,246)	(£4,404,709)	(£3,019,714)
Residual Value	£20,013,618	£124,524,189	£4,074,743	£45,356,280
RV (pre-finance) as a % of GDV	4%	11%	1%	8%
RV as a % of GDV	1%	9%	1%	8%

Scenario:	Levedale Estate	Preston Barn Estate	Deanery and Rodbaston Estates
Gross Development Value			
Market Housing	£269,722,528	£164,078,642	£561,127,426
Social Housing	£33,799,261	£20,560,896	£70,315,566
Intermediate Housing	£68,490,034	£41,664,120	£142,485,823
Total GDV	£372,011,822	£226,303,657	£773,928,814
Development Costs			
Site acquisition (land + fees)	(£20,405,438)	(£12,465,906)	(£42,409,281)
Build costs	(£212,584,384)	(£129,320,147)	(£442,257,935)
Infrastructure costs	(£24,231,670)	(£16,751,122)	(£58,020,130)
Professional fees	(£17,006,751)	(£10,345,612)	(£35,380,635)
Contingency	(£10,629,219)	(£6,466,007)	(£22,112,897)
Marketing/sales	(£11,160,355)	(£6,789,110)	(£23,217,864)
Developer profit	(£59,893,903)	(£36,434,889)	(£124,602,539)
Total Development Costs	(£355,911,720)	(£218,572,793)	(£748,001,281)
Residual Value (before finance)	£16,100,102	£7,730,864	£25,927,532
Finance on cashflow	(£781,376)	(£278,323)	(£6,935,369)
Residual Value	£15,318,727	£7,452,541	£18,992,163
RV (pre-finance) as a % of GDV	4%	3%	3%
RV as a % of GDV	4%	3%	2%

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