

**Gedling Borough Council
Nottingham Core Affordable Housing Viability
Assessment
Final Report**

Three Dragons



November 2009

1 INTRODUCTION

Background to the Study

- 1.1 A consortium of the local authorities in the Nottingham Core Housing Market Area commissioned Three Dragons to undertake a study which examined, “..... the potential impact on development viability of revised planning-led affordable housing targets, thresholds and tenure splits for each authority” (extract from the Study Brief).
- 1.2 The local authorities in the Nottingham Core Housing Market Area are Ashfield District Council (Hucknall part only), Broxtowe Borough Council, Erewash Borough Council, Gedling Borough Council, Nottingham City Council and Rushcliffe Borough Council.
- 1.3 The Study Brief provides a further explanation of the relationship between this study and the development of policy at the local level, stating that:

“The Nottingham Core authorities are fully committed to increasing the delivery of affordable housing through a planning-led process, but they recognise Planning Policy Statement 3 (PPS3) requires a viability assessment to be undertaken before making major policy changes, and want to be confident that viability issues do not threaten implementation of these policies. Regional Housing Group funding has been obtained so that the authorities can carry out a comprehensive viability assessment, which will enable them to set specific and deliverable affordable housing targets. These targets may be fed through policy into each authority’s Local Development Framework (LDF), housing strategy and the East Midlands Regional Spatial and Housing Strategies.”

- 1.4 This report relates to the specific circumstances of Gedling Borough Council.

Progress in Delivering Affordable Housing

- 1.5 The following table shows affordable housing completions since the Local Plan was adopted in 2005. It indicates that the Borough has been achieving about 20% delivery of affordable housing since 2005. Completions in the year 2007/08 were higher than in previous of the three years since the Local Plan was adopted but this was against a higher housing completions figure overall. There is no particular evidence of an upward trend in delivery of affordable housing since 2005.

Table 1.1: Housing Completions -since Local Plan was Adopted

Year	Total	Affordable housing	
		Number	As a %
2005/06	222	44	20%
2006/07	296	41	14%
2007/08	447	95	21%
2008/09	204	43	21%

Overall 2005/2009	1169	223	19%
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Source: Gedling Borough Council

Need for Affordable Housing

- 1.6 The Nottingham Core HMA was published by B. Line Housing Information and Three Dragons in May 2007. The report calculates housing need estimates using the 'Bramley model' which has been considered as "potentially one of the most robust methods that could be used at regional, HMA and local levels."¹
- 1.7 The following table indicates that there is an annual need for 143 affordable houses in Gedling and this equates to about 36% of the planned new housing supply.

Table 1.1: Final Housing Need Figures for Gedling

Net Annual Need	LA Planned Annual New Supply ²	Need as a % of New Supply
143	400	36%

Source: Adapted from Nottingham Core Strategic Housing Market Assessment, B. Line Housing Information and Three Dragons, May 2007.

- 1.8 It is suggested that a target of 30% of the affordable housing in Gedling should be Intermediate Housing marketed at 70% of the open market entry level price. Lower proportions of open market entry level price are illustrated, but not recommended because it is likely that this would create financial difficulties for Registered Social Landlords to develop.
- 1.9 Our report is not intended to deal with the issue of affordable housing need in any detail. However, we note that the Strategic Housing Market Assessment indicated that the need for affordable housing was estimated at just under 40%. Therefore, even if delivery of affordable housing were viable at levels above 40%, there would be no purpose in seeking this level of affordable housing – there would be no need for it.

Policy context - national

- 1.10 This study focuses on the percentage of affordable housing sought on mixed tenure sites and the size of site from above which affordable housing is sought (the site size threshold). National planning policy, set out in PPS3 makes clear that local authorities, in setting policies for site size thresholds and the percentage of affordable housing sought, must consider development economics and should not promote policies which would make development unviable.

PPS3: Housing (November 2006) states that:

"In Local Development Documents, Local Planning Authorities should:

¹ An Approach to Affordable Housing to Inform the East Midlands Regional Plan, Cambridge Centre for Housing and Planning Research, August 2006.

² Based on the Regional Spatial Strategy East Midlands Regional Plan which states there will be 8,000 dwellings in Gedling over the Strategy period.

Set out the range of circumstances in which affordable housing will be required. The national indicative minimum site size threshold is 15 dwellings. However, Local Planning Authorities can set lower minimum thresholds, where viable and practicable, including in rural areas. This could include setting different proportions of affordable housing to be sought for a series of site-size thresholds over the plan area. Local Planning Authorities will need to undertake an informed assessment of the economic viability of any thresholds and proportions of affordable housing proposed, including their likely impact upon overall levels of housing delivery and creating mixed communities".
(Para 29)

- 1.11 The companion guide to PPS3³ provides a further indication of the approach which Government believes local planning authorities should take in planning for affordable housing. Paragraph 10 of the document states:

*"Effective use of planning obligations to deliver affordable housing requires good negotiation skills, **ambitious but realistic affordable housing targets and thresholds** given site viability, funding 'cascade' agreements in case grant is not provided, and use of an agreement that secures standards."* (our emphasis)

Policy context – East Midlands Region

- 1.12 The East Midlands Regional Plan was published in March 2009. It has identified that 8,000 dwellings should be provided in Gedling for the period 2006 to 2026, giving an annual average figure of 400 dwellings per annum for the period.
- 1.13 Policy SRS 3 for the Three Cities sub region (which includes Gedling) indicates that at least 230 dpa out of the 400 dpa should be, '*...within or adjoining Nottingham PUA, including sustainable urban extensions as necessary*'.
- 1.14 Policy 14 of the Regional Plan requires 17,100 (30%) affordable dwellings to be provided in the Nottingham Core HMA, within which Gedling falls. If the same ratio is applied to Gedling, this would equate to about 120 affordable dwellings per annum, between 2006 and 2026.

Policy context – Gedling District Council

- 1.15 The Borough of Gedling Replacement Local Plan (2005) includes one saved policy regarding affordable housing. Policy H18 seeks 20% affordable housing on sites of 1 hectare or more. We note that, since 2005, overall delivery of affordable housing has been around 20%.
- 1.16 An Interim Planning Guidance for Affordable Housing was also adopted in 2005 and reiterates the policies in the Replacement Local Plan, giving further details of how they will be implemented.
- 1.17 Several development briefs produced since the Local Plan was adopted, outline the affordable housing provision for individual sites in Gedling. Two of the most recent development briefs are:

³ CLG, Delivering Affordable Housing, November 2006

- Ashwater Drive/Spring Lane Development Brief (2007) - affordable housing provision for this site will be in line with the government's Planning Policy Statement 3 which indicates a threshold of 15 dwellings or 0.5ha of land. The brief states that it is likely that the percentage of affordable housing provision will be higher than the 20% set out in the Local Plan. At the time the brief was written the Council had suggested that 65% of the affordable dwellings should be for social rent with the remainder available for sale at a discount of 30% below the market value in perpetuity;
- Top Wighay Farm, Hucknall Development Brief (2008) indicates that 30% of the housing will be affordable housing; with 60% of provision rented and 40% intermediate housing. These dwellings will be mainly two and three bed-roomed accommodation.

1.18 As a result of the proposed changes to the Regional Spatial Strategy, in response to more recent government guidance and the newly adopted Regional Plan, Gedling is working on a joint an aligned Core Strategy with the five other local authorities that make up the Nottingham Core Housing Market Area (Broxtowe Borough Council, Erewash Borough Council, Ashfield District Council, Nottingham City Council and Rushcliffe Borough Council) - as recommended by central government.

Research undertaken

- 1.19 There were four main strands to the research undertaken to complete this study:
- Discussions with a project group of officers from the commissioning authorities which informed the structure of the research approach;
 - Analysis of information held by the authority, including that which described the profile of land supply;
 - Use of the Three Dragons Toolkit to analyse scheme viability (and described in detail in subsequent chapters of this report);
 - A workshop held with developers, land owners, their agents and representatives from a selection of registered social landlords active in the district. A full note of the workshop is shown in Appendix 1.

Structure of the report

- 1.20 The remainder of the report uses the following structure:
- Chapter 2 explains the methodology we have followed in, first, identifying sub markets and, second, undertaking the analysis of development economics. We explain that this is based on residual value principles;
 - Chapter 3 provides analysis of residual values generated across a range of different development scenarios (including alternative percentages and mixes of affordable housing) for a notional 1 hectare site.
 - Chapter 4 considers options for site size thresholds. It reviews national policy and the potential future land supply and the relative importance of small sites. The chapter considers practical issues about on-site

provision of affordable housing on small sites and the circumstances in which collection of a financial contribution might be appropriate (and the principles by which such contributions should be assessed);

- Chapter 5 identifies a number of case study sites (generally small sites which are currently in use), that represent examples of site types found in the authority. For each site type, there is an analysis of the residual value of the sites and compares this with their existing use value.
- Chapter 6 summarises the evidence collected through the research and provides a set of policy recommendations.

2 METHODOLOGY

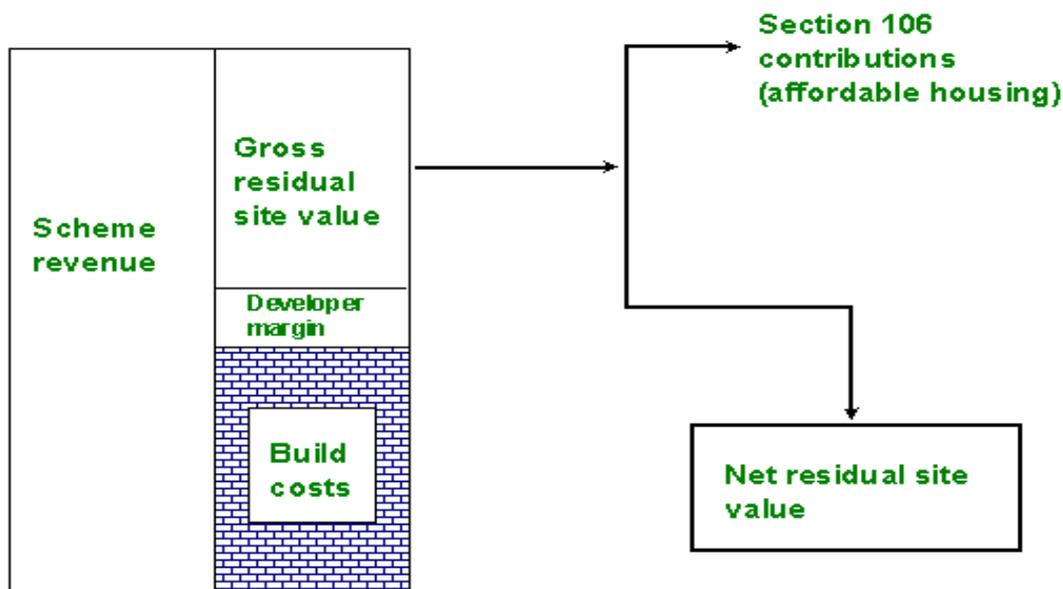
Introduction

- 2.1 In this chapter we explain the methodology we have followed in, first, identifying sub markets (which are based on areas with strong similarities in terms of house prices) and, second, undertaking the analysis of development economics. The chapter explains the concept of a residual value approach and the relationship between residual values and existing/alternative use values.

Viability – starting points

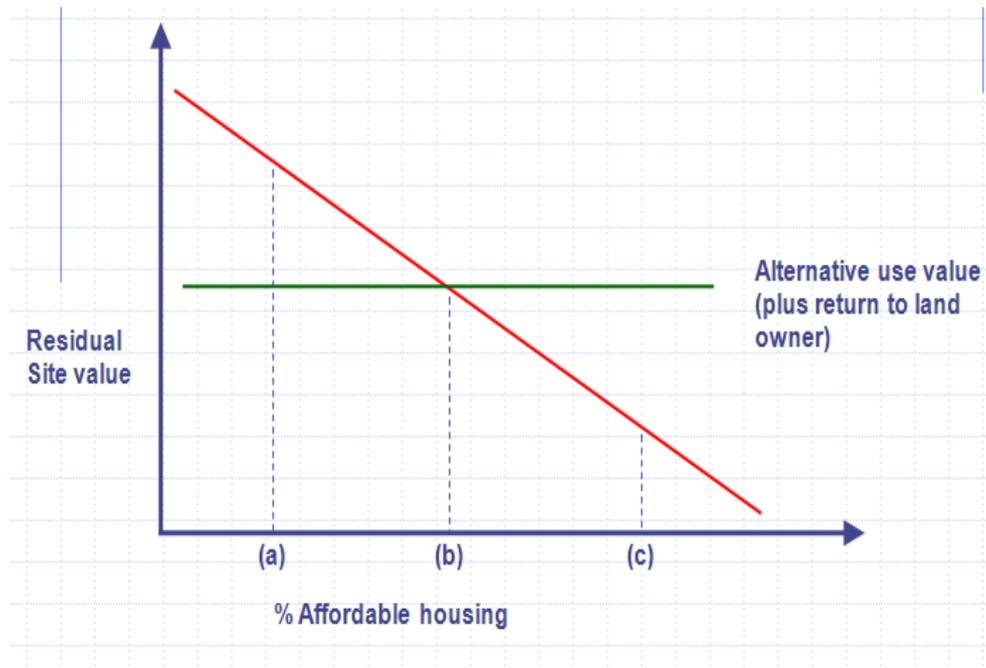
- 2.2 We use a residual development appraisal model to assess development viability. This mimics the approach of virtually all developers when purchasing land. This model assumes that the value of the site will be the difference between what the scheme generates and what it costs to develop. The model can take into account the impact on scheme residual value of affordable housing and other s106 contributions.
- 2.3 Figure 2.1 below shows diagrammatically the underlying principles of the approach. Scheme costs are deducted from scheme revenue to arrive at a gross residual value. Scheme costs assume a profit margin to the developer and the 'build costs' as shown in the diagram include such items as professional fees, finance costs, marketing fees and any overheads borne by the development company.
- 2.4 The gross residual value is the starting point for negotiations about the level and scope of s106 contribution. The contribution will normally be greatest in the form of affordable housing but other s106 items will also reduce the gross residual value of the site. Once the s106 contributions have been deducted, this leaves a net residual value.

Figure 2.1 Theory of the Section 106 Process



- 2.5 Calculating what is likely to be the value of a site given a specific planning permission, is only one factor in deciding what is viable.
- 2.6 A site is extremely unlikely to proceed where the costs of a proposed scheme exceed the revenue. But simply having a positive residual value will not guarantee that development happens. The existing use value of the site, or indeed a realistic alternative use value for a site (e.g. commercial) will also play a role in the mind of the land owner in bringing the site forward and thus is a factor in deciding whether a site is likely to be brought forward for housing.
- 2.7 Figure 2.2 shows how this operates in theory. Residual value falls as the proportion of affordable housing increases. At some point (here 'b'), alternative use value (or existing use value whichever is higher) will be equal to scheme value. If there is a reasonable return to the land owner at point 'b' (i.e 'b' reflects best possible current use value (alternative or existing) and there is a sufficient return, then the scheme will come forward. At point 'c', affordable housing will make the site unviable. At 'a' the scheme should be viable with affordable housing. The diagram does not assume grant. Grant should be used to 'lever out' sites from their existing or best alternative uses.

Figure 2.2 Affordable housing and alternative use value



2.8 The analysis we have undertaken uses a Three Dragons Viability model. The model is explained in more detail in Appendix 2, which includes a description of the key assumptions used.

3 HIGH LEVEL TESTING

Introduction

- 3.1 This chapter of the report considers viability for mixed tenure residential development for a number of different proportions and types of affordable housing. The analysis is based on a notional 1 hectare site and has been undertaken for a series of sub markets that have been identified. The residual value shown will be the same whether the site is greenfield or on previously used land. The chapter explains this and explores the relationship between the residual value for the scenarios tested and existing/alternative use values.

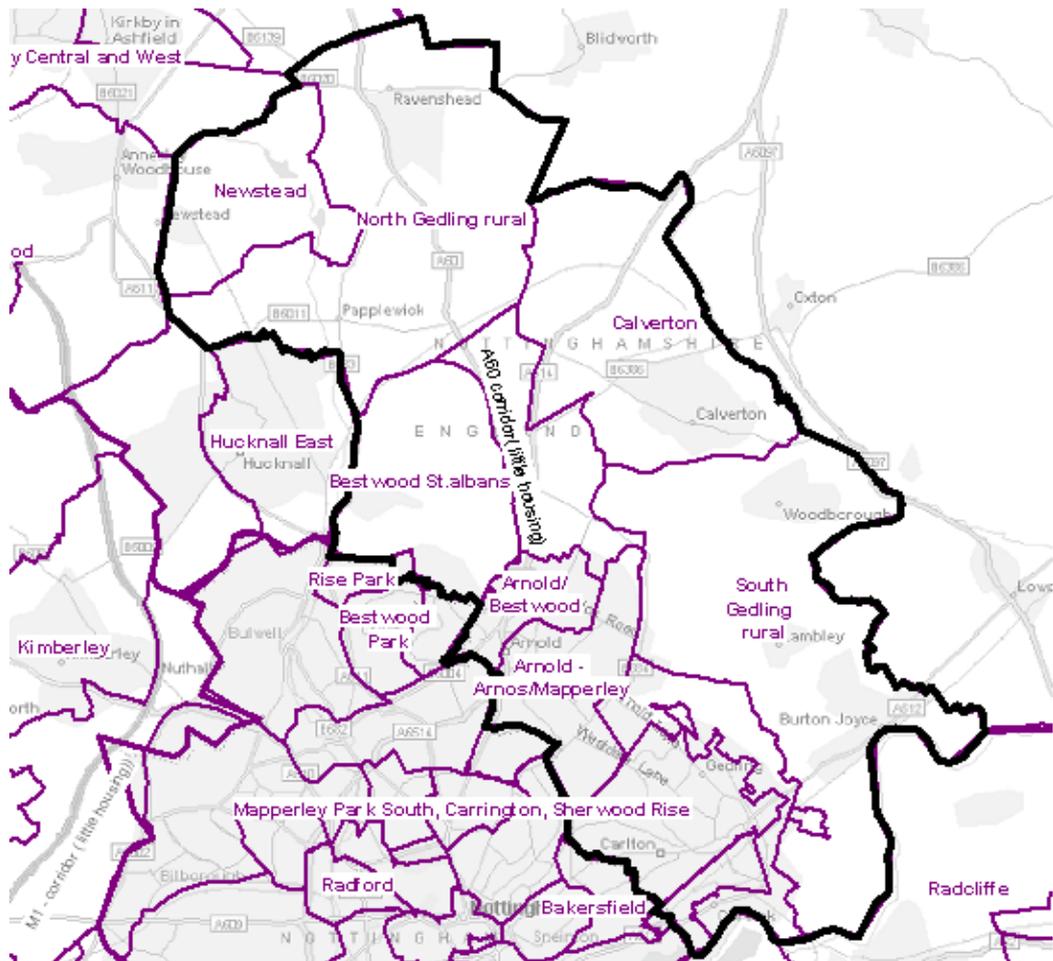
Market value areas

- 3.2 Variation in house prices will have a significant impact on development economics and the impact of affordable housing on scheme viability.
- 3.3 We undertook a broad analysis of house prices in Gedling using HM Land Registry data to identify the sub markets. These sub markets have been developed from smaller geographical areas which were developed for the Strategic Housing Market Assessment. The house prices which relate to the sub markets provide the basis for a set of indicative new build values as at December 2008. Table 3.1 below sets out the sub markets in Gedling developed for the study.

Table 3.1 Viability sub markets in Gedling BC area

GEDLING
NEW BUILD INDICATIVE
1) South Gedling rural
North Gedling rural (incl Ravenhead)
2) Arnold - Mapperley
3) Calverton
4) Bestwood/Arnold
Carlton
5) Colwick & Netherfield
Bestwood St.Albans
6) Newstead

Source: Market value areas as agreed between Three Dragons and Gedling BC



Testing assumptions (notional one hectare site)

- 3.4 For the viability testing, we defined a number of development mix scenarios, using a range of assumptions agreed with the Council. The scenarios were based on an analysis of typical development mixes and were discussed at the stakeholder workshop.
- 3.5 The development mixes were as follows:
- 30 dph: including 10% 2 Bed flats; 10% 2 bed terraces; 15% 3 bed terraces; 20% 3 bed semis; 25% 3 bed detached; 15% 4 bed detached; 5% 5 bed detached
 - 40 dph: including 5% 1 bed flats; 15% 2 bed flats; 15% 2 bed terraces; 15% 3 bed terraces; 20% 3 bed semis; 20% 3 bed detached; 10% 4 bed detached;
 - 50 dph: including 10% 1 bed flats; 20% 2 bed flats; 20% 2 bed terraces; 15% 3 bed terraces; 15% 3 bed semis; 15% 3 bed detached; 5% 4 bed detached;
 - 80 dph: including 20% 1 bed flats; 30% 2 bed flats; 30% 2 bed terraces and 20% 3 bed terraces.

- 3.6 We calculated residual scheme values for each of these (base mix) scenarios in line with a further set of tenure assumptions. These were 20%; 25%; 30%; 35% and 40% affordable housing. These were tested at 75% Social Rent and 25% New Build HomeBuy in each case. For the New Build HomeBuy, the share purchase was assumed to be 50%. All the assumptions were agreed with the authority. Unless stated, testing was carried out assuming nil grant.

Other s106 contributions

- 3.7 For the modelling we have undertaken (and unless shown otherwise) we have assumed that other planning obligations have a total cost of £7,000 per unit.

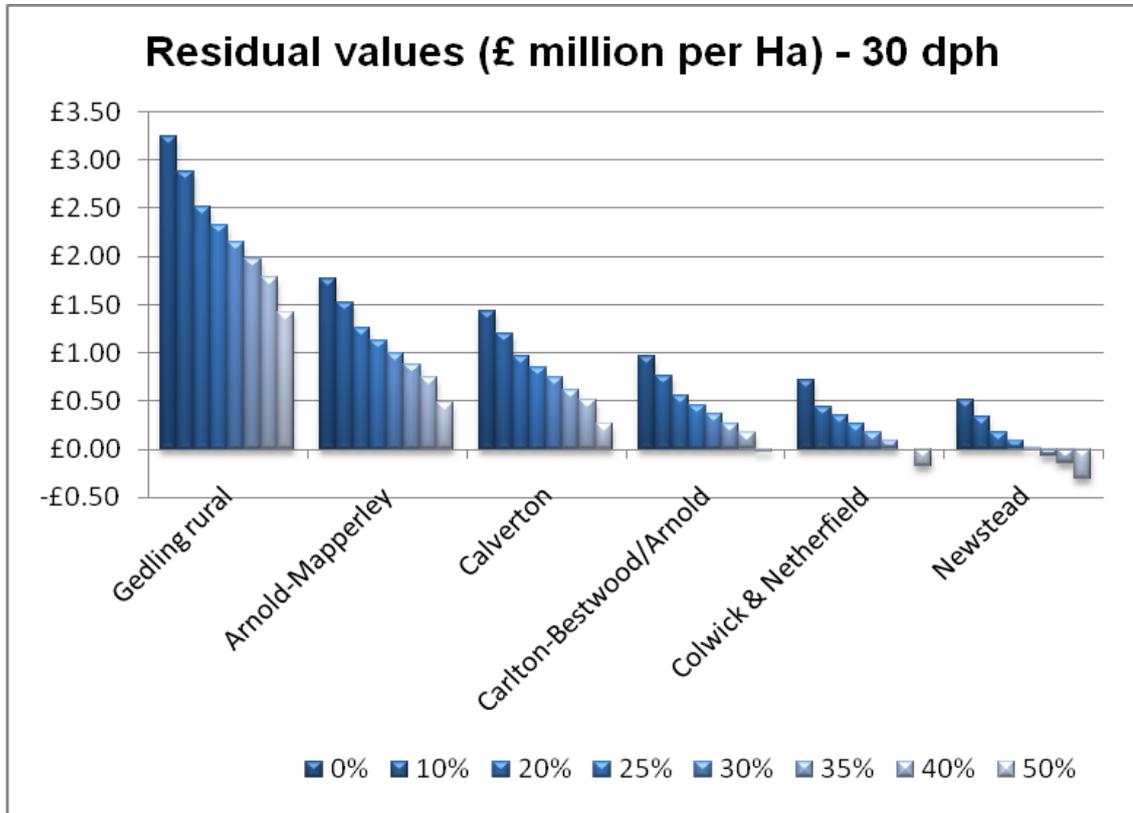
Results: residual values for a notional one hectare site

- 3.8 This section looks at a range of development mixes and densities. It shows the impacts of increasing the percentage of affordable housing on residual site values. The full set of results is shown in Appendix 3.

Low density housing (30 dph)

3.9 Figure 3.1 shows low density housing (30dph) and the residual values for each of the market value areas outlined in Section 3.

Figure 3.1 Low density housing (30 dph) – Residual value in £s million

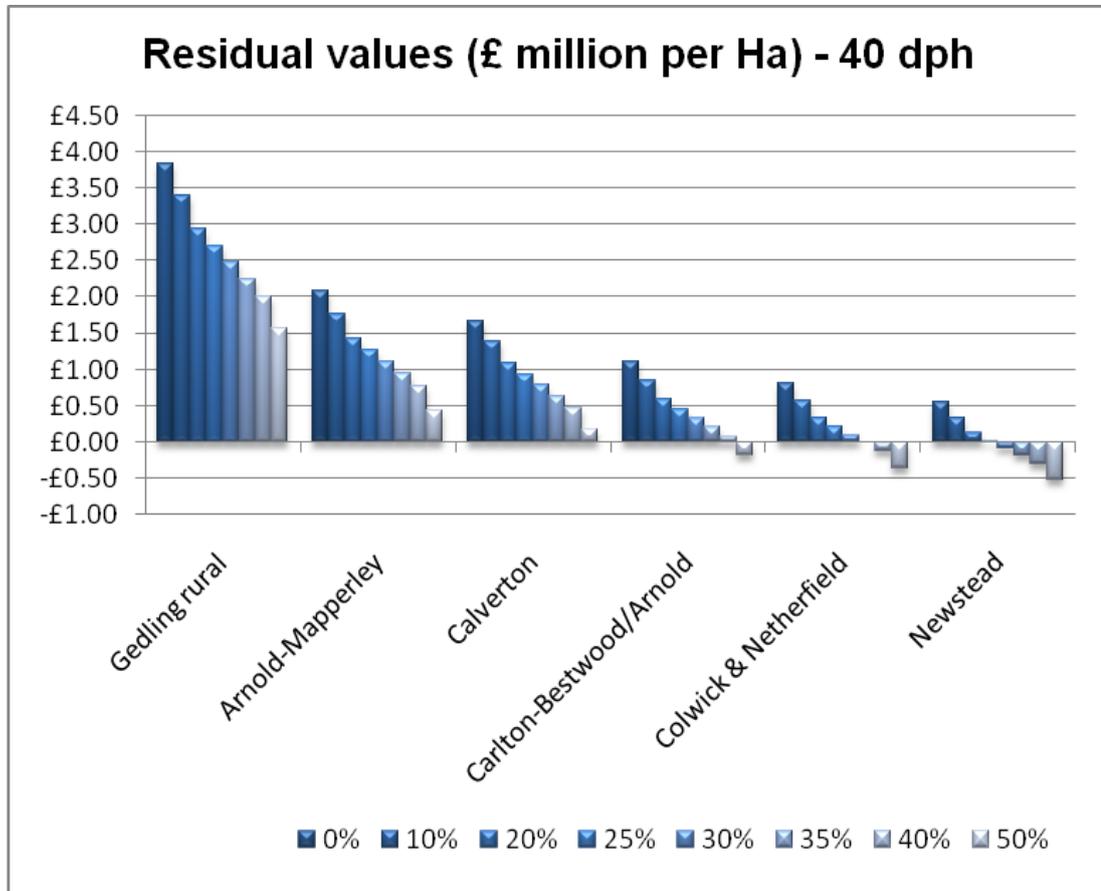


- Figure 3.1 shows a range of mainly positive residual values, depending on the sub market and amount of affordable housing. The chart shows very strong residuals particularly in rural Gedling. However it also shows anticipated viability difficulties in delivering affordable housing in the weaker two sub markets of Colwick and Netherfield and Newstead where scheme values are likely to be negative around 30% to 40% affordable housing.
- At, 20% affordable housing, the current policy position, residual values range from £0.18 million per hectare in Newstead to £2.51 million per hectare in Gedling Rural.
- The range in values has potentially important implications for policy making. With the scenarios tested, an equivalent value (£1.42 m versus £1.43 m) is generated between Gedling Rural at 50% affordable housing and Calverton at 100% market housing.

Lower density housing (40 dph)

3.10 Figure 3.2 shows lower density housing (40 dph) and the residual values for each of the market value areas.

Figure 3.2 Lower density housing (40 dph) – Residual value in £s million

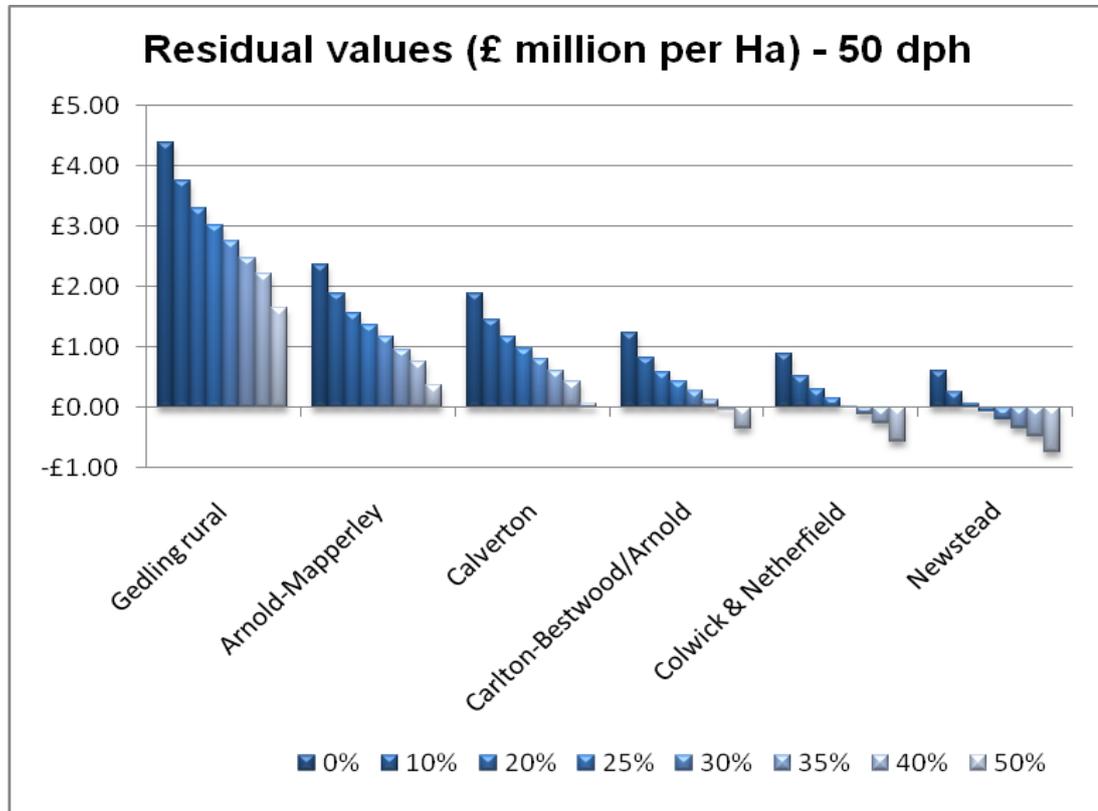


- As previously, a range of both positive and negative land values is shown, although with negative scheme values now beginning to be seen at higher percentages of affordable housing in locations such as Carlton-Bestwood.
- The impact of increased density varies between market areas and at different levels of affordable housing. Increases in residual value occur with increased density (30 dph to 40 dph) in higher value market areas (the top three) up until the highest affordable housing percentages (40% and 50%). The lower (three) sub markets also benefit from increased density, but at much lower percentages of affordable housing. For example at 25% affordable housing, equivalent residuals result for the Carlton-Bestwood sub market, but for Newstead (25% affordable), a higher residual results at 30 dph (rather than 40 dph).
- The impact at the lower end of the market, by increasing density is generally to make schemes less viable. This is because at high densities, a higher proportion of smaller units are included and these units usually fail to 'cover' costs so well with selling prices.

50 dph scheme

3.11 Figure 3.3 shows residual values for a (50 dph) scheme and the residual values for each of the market value areas outlined earlier.

Figure 3.3 Medium density housing (50 dph) – Residual value in £s million



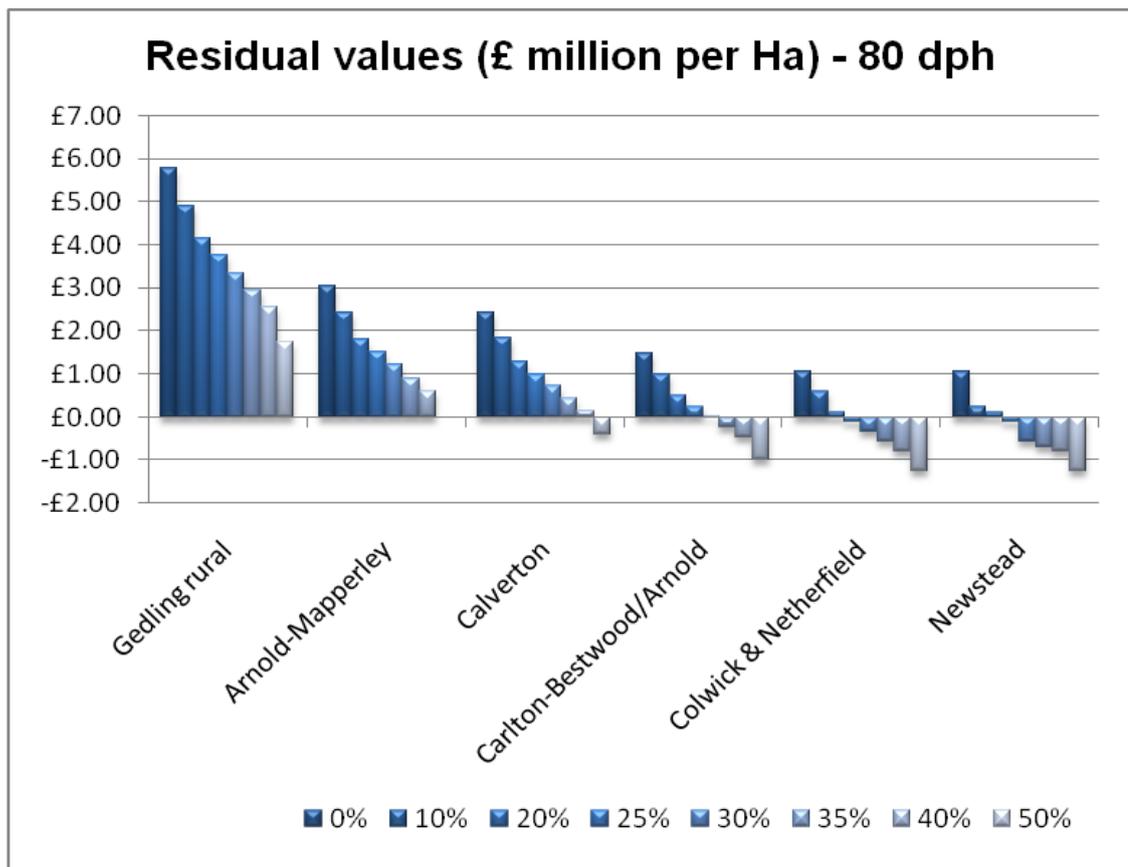
- Figure 3.3 shows that increasing density does not necessarily increase residual values;
- The general impact of an increase to 50 dph (from 30 dph and 40 dph) is to increase residual values in higher value locations and at lower percentages of affordable housing.
- Higher densities do not deliver higher residual values in the lower value market areas. Negative residual values are found at this density in Colwick and Netherfield and Newstead. Only schemes of 100% market housing would appear to be viable in Newstead based on an average scenario.
- At 20% affordable housing, residual values for the scheme of 50 dph tested, range from £3.29m per hectare in Gedling Rural to - £0.13 m in Newstead.

80 dph scheme

3.12 Figure 3.4 shows residual values for a (80 dph) scheme and the residual values for each of the sub markets

3.13 The results show that in the highest value sub market – Gedling Rural - 80 dph will yield the highest residual values at all proportions of affordable housing. In Arnold-Mapperley, 80 dph will maximise values at around 35% affordable housing. In Calverton 80 dph maximises residual value (across all densities) at 25% affordable housing. The trend is therefore showing that the higher value the sub market (house prices) the more density helps to deliver affordable housing. It follows that in the weaker sub markets (Colwick and Netherfield and Newstead) lower density helps best to deliver affordable housing viably.

Figure 3.3 Higher density housing (80 dph) – Residual value in £s million



Impacts of potential grant funding

3.14 The availability of public subsidy (in the form of grant) can have a significant impact on scheme viability. Grant given to the affordable housing providers enables them to pay more for affordable housing units, thus increasing overall scheme revenue and therefore the residual value of a mixed tenure scheme. There are two main sources of grant which may be available: from the Homes and Communities Agency and/or the local authority (for example using money collected from development in the form of a commuted sum, through a S106 agreement).

3.15 We have assumed grant of £65,000 per Social Rented unit and £30,000 per New Build HomeBuy unit. This level of grant was agreed with Gedling BC as being a reasonable figure to use for viability testing purposes.

- 3.16 We have tested the impact of grant on residual values for a 1 Ha site at 40 dph in selected locations. The results are shown in Table 3.2.

Table 3.2 Comparison of impact of grant versus on residual values (at 40 dph): Residual Value (£s million per hectare)

40 Dph	Arnold-Mapperley		Calverton		Carlton-Bestwood		Colwick & Netherfield	
	No grant	Grant	No grant	Grant	No grant	Grant	No grant	Grant
0% AH	£2.08	N/A	£1.67	N/A	£1.10	N/A	£0.81	N/A
10% AH	£1.76	£1.98	£1.38	£2.58	£0.85	£1.07	£0.57	£0.79
20% AH	£1.43	£1.87	£1.08	£1.52	£0.59	£1.03	£0.34	£0.78
25% AH	£1.27	£1.81	£0.93	£1.47	£0.46	£1.00	£0.22	£0.76
30% AH	£1.10	£1.75	£0.78	£1.43	£0.33	£0.98	£0.10	£0.75
35% AH	£0.94	£1.70	£0.63	£1.39	£0.21	£0.97	£0.00	£0.76
40% AH	£0.77	£1.64	£0.48	£1.35	£0.08	£0.95	£-0.13	£0.74
50% AH	£0.44	£1.53	£0.18	£1.27	£-0.18	£0.91	£-0.36	£0.73

- 3.17 Table 3.2 shows that the availability of grant will enhance site viability. In a District such as Gedling, grant will be highly important in helping to make sites viable where it can be seen that (Figures 3.1, 3.2, 3.3 and 3.4) even at relatively modest levels of affordable housing, there are negative site values without subsidy in the weaker market locations.
- 3.18 As a general rule, the introduction of grant has a greater proportionate impact in the lower value sub markets. For example, in Colwick and Netherfield (economics in Newstead very similar), there is a doubling in residual value at 20% affordable housing (from £0.34m per hectare to £0.78m). The equivalent uplift in Arnold-Mapperley is 30%
- 3.19 Grant will make a large difference therefore in weaker sub markets. This will be particularly the case at higher percentages of affordable housing in the weakest sub markets.
- 3.20 Whilst the biggest impact of grant is in the weaker value areas, grant is not an insignificant factor in middle and higher markets and the Council should consider how best to enhance affordable housing supply via this option.

Impacts of increasing the proportion of Intermediate housing within the affordable element

- 3.21 In the previous section we considered the impact of grant on scheme viability. Where grant is not available to support schemes (or is not sufficient on its own), scheme viability can be (further) enhanced by increasing the percentage of intermediate affordable housing. We have tested all scenarios thus far assuming the relevant affordable element is split 75% Social Rent and 25% Shared Ownership. Here we test a 50%:50% split in the affordable element.

Table 3.3 Site values (£ million per hectare) for a 40 dph scheme comparing 50% Social Rent and 50% Shared Ownership without grant versus grant option (75% Social Rent and 25% Shared Ownership)

40 Dph	Arnold-Mapperley		Calverton		Carlton-Bestwood		Colwick & Netherfield	
	No grant 50%:50%	Grant	No grant 50%:50%	Grant	No grant 50%:50%	Grant	No grant 50%:50%	Grant
0% AH	£2.08	N/A	£1.67	N/A	£1.10	N/A	£0.81	N/A
20% AH	£1.58	£1.87	£1.22	£1.52	£0.71	£1.03	£0.45	£0.78
25% AH	£1.46	£1.81	£1.11	£1.47	£0.61	£1.00	£0.36	£0.76
30% AH	£1.34	£1.75	£0.99	£1.43	£0.52	£0.98	£0.28	£0.75
35% AH	£1.21	£1.70	£0.88	£1.39	£0.42	£0.97	£0.18	£0.76
40% AH	£1.09	£1.64	£0.77	£1.35	£0.32	£0.95	£0.09	£0.74
50% AH	£0.84	£1.53	£0.54	£1.27	£0.13	£0.91	-£0.08	£0.73

3.22 Table 3.3 shows the residual values with a 50%:50% split in the affordable element. This does not however show an improvement over the 'with grant' residuals generated. In Arnold-Mapperley, for example, a 'with grant' scenario produces a significantly higher residual value than the 50%:50% affordable option, across all the percentages of affordable housing tested. This is also the case in higher and lower sub markets tested.

3.23 The main reason for these outcomes is that the revenue from Shared Ownership sales is based on relatively low house prices. In very high house price areas, switching tenure would have much more dramatic impacts, but in a location where house prices are low, switching tenure to a higher percentage of intermediate affordable housing will not raise residual values as does grant on the basis of the assumptions made here.

Market sensitivity testing

3.24 Given the volatility of the current housing market, we have looked a situation where house prices are 10% higher and 10% lower than the current assumed levels.

3.25 Table 3.4 shows residual values for a 40 dph scheme with house prices increased and decreased by 10%. This is not a reflection of any particular prognosis in the market, but aims to show the sensitivity land values to changes in house prices.

Table 3.4 Residual values (£ million per hectare) of a 40 dph scheme with prices 10% higher and lower than current

Plus 10%					
	0%	20%	30%	40%	50%
Arnold-Mapperley	£2.68	£1.94	£1.57	£1.19	£0.82
Calverton	£2.22	£1.55	£1.21	£0.87	£0.53
Carlton-Bestwood	£1.59	£1.01	£0.72	£0.43	£0.13
Colwick and Netherfield	£1.29	£0.75	£0.48	£0.21	-£0.06
Minus 10%					
	0%	10%	20%	30%	40%
Arnold-Mapperley	£1.49	£0.92	£0.64	£0.35	£0.07
Calverton	£1.12	£0.61	£0.35	£0.09	-£0.16
Carlton-Bestwood	£0.61	£0.16	-£0.05	-£0.27	-£0.49
Colwick and Netherfield	£0.34	-£0.06	-£0.26	-£0.46	-£0.66

3.26 Indeed, residual values are sensitive to changes in house prices. For example in Arnold-Mapperley, a 10% increase in house prices will increase residual land value by 36% at a 20% affordable housing target. At the weaker end of the market, eg Colwick and Netherfield, a 10% increase in prices will have an even more dramatic impact, increasing land values by over double (£0.34 m per Ha to £0.75 m per Ha)

3.27 Falling house prices will have a significant impact on land values as could be seen by comparing the figures in Table 3.4 above, with those in Appendix 3, which are the baseline.

Viability on very large sites

3.28 The analysis carried out relates to a notional one hectare site, where it is anticipated that market selling prices will broadly 'pick up' the values from surrounding or very local settlements.

3.29 In practice, where very large sites are released (several hundred houses), these sites will have the potential to create their own market, which in many instances will exceed the prices being charged for new housing being built less strategically (windfall sites).

3.30 The testing of such sites is beyond the scope of this study, as market values and specific infrastructure and abnormal costs need to be established in each instance. We would suggest that these sites are tested by the Council going forward, where affordable housing targets can be set independently of the findings of this study. The methodology should follow a residual development appraisal approach in the same manner as undertaken in this study.

Benchmarking results

- 3.31 There is no specific guidance on the assessment of viability which is published by national government. In Section 2, we set out that we think viability should be judged against return to developer and return to land owner.
- 3.32 One approach is to take “current” land values for different development uses as a kind of ‘going rate’ and consider residual values achieved for the various scenarios tested against these. Table 3.5 shows residential land values for selected locations within the East Midlands.

Table 3.5 Residential land values regionally

EAST MIDLAND			
REGION	Small Sites (sites for less than five houses)	Bulk Land (sites in excess of two hectares)	Sites for flats or maisonettes
	£s per hectare	£s per hectare	£s per hectare
Lincoln	2,100,000	1,900,000	1,900,000
Mansfield	1,150,000	1,000,000	1,000,000
Nottingham (suburbs)	2,100,000	2,000,000	2,100,000
Derby	2,150,000	2,000,000	1,900,000
Leicester	2,100,000	2,000,000	1,750,000
Northampton	2,250,000	2,100,000	2,000,000
Loughborough	2,100,000	2,000,000	1,750,000

Source: Valuation Office; Property Market Report, July 2008

- 3.33 The table indicates residential land values ranged from £1 million (Mansfield) to £2.1 million (Nottingham suburbs). However, we note that as house prices have fallen since last summer, the values shown by the Valuation Office for July 2008 are likely to be significantly higher than current values. At the time of writing, there is no more up to date information publicly available.
- 3.34 Another benchmark which can be referred to is that of industrial land. Table 3.6 shows values ranging from £275,000 per hectare to £600,000 per hectare in the first part of 2008.

Table 3.6 East Midlands industrial land values

EAST MIDLANDS			
	From £s per ha	To £s per ha	Typical £s per ha
Lincoln	300,000	350,000	325,000
Mansfield	250,000	350,000	275,000
Nottingham	475,000	625,000	550,000
Derby	375,000	525,000	450,000
Leicester	400,000	700,000	600,000
Northampton	450,000	650,000	500,000

Source: Valuation Office; Property Market Report, July 2008

- 3.35 The 'benchmark' of industrial land value can be important where land, currently in use as industrial land, is being brought forward for residential development or where sites may be developed either for residential or employment use. In the weakest market value areas of the District, if industrial represents a realistic current/alternative use, it may be difficult to bring forward residential schemes with the highest proportions of affordable housing we modelled, especially at the higher density scenarios.

4 LAND SUPPLY, SMALL SITES AND USE OF COMMUTED SUMS

Introduction

- 4.1 This chapter reviews the policy context and options for identifying the size of sites above which affordable housing contributions would be sought, in the national policy context. The threshold set out in the 2005 Local Plan was 1 hectare (say about 35 dwellings) but the Council have made use of the PPS3 threshold of 15 dwellings (since 2007) but this approach, we understand, has not always been supported at appeal. The chapter provides an assessment of the profile of the future land supply and the likely relative importance of small sites. It then considers practical issues about on-site provision of affordable housing on small sites and the circumstances in which collection of a financial contribution might be appropriate (and the principles by which such contributions should be assessed).

Purpose of the Analysis

- 4.2 PPS3 Housing sets out national policy on thresholds and affordable housing and states:

"The national indicative minimum site size threshold is 15 dwellings. However, Local Planning Authorities can set lower minimum thresholds, where viable and practicable, including in rural areas. This could include setting different proportions of affordable housing to be sought for a series of site-size thresholds over the plan area." (Para 29)

- 4.3 By reducing site size thresholds and 'capturing' more sites from which affordable housing can be sought, an authority can potentially increase the amount of affordable housing delivered through the planning system.
- 4.4 In this section we examine the impact that varying site size thresholds would have on affordable housing supply. In order to do this we need to examine the likely future site supply profile.

Small sites analysis

- 4.5 We have analysed data on past permissions to consider how important sites of different sizes are likely to be to the future land supply. The table below shows the results of this exercise. The analysis has considered permissions granted over the three years 2005 to 2008.

Table 4.1: Proportion of dwellings in different sizes of sites, granted permission between 2005 and 2008

Size of sites - dwellings	% of dwellings
1-4	14.1%
5-9	5.9%
10-14	9.1%
15-24	12.9%
25-49	8.5%
50+	49.5%
	100.0%

4.6 The information on past permissions shows a broad range of site sizes which are contributing to the land supply in Gedling. The data indicates that around 29% of dwellings granted planning permission are on sites of less than 15 dwellings (the national indicative minimum site size threshold). On the other hand, sites of 50 dwellings or more represented about half the supply of housing.

4.7 Below 15 dwellings, schemes of 1 to 4 dwellings are more important to the supply than larger sites. However, nearly 10% of the supply is from sites of 10-14 dwellings. A threshold of 10 dwellings would capture about 80% of all dwellings in the supply.

4.8 GEDLING – LOOKING AT THE DATA - IS THERE AN ISSUE WE NEED TO EXPLORE ABOUT THE IMPORTANCE OF SMALL SITES IN RURAL AREAS? HOW WOULD YOU DEFINE RURAL FROM PLANNING PERSPECTIVE?? We note comment on RES policy but think issue is about mixed tenure schemes as well as 100% AH schemes.

Small sites and management of affordable housing

4.10 We discussed the suitability of small sites for affordable housing at the workshop with the development industry and which included representatives from locally active housing associations.

4.11 The housing associations said that there is no problem, in principle, of providing affordable housing on-site (even if this means there will be as few as one or two affordable homes in the scheme). Whilst some housing associations normally prefer to secure affordable housing in larger 'blocks', other associations will take on very small numbers (even single units) of affordable housing.

4.12 Although the number of affordable housing units is not a reason, in itself, to forego an on-site contribution, there may be scheme-specific housing management reasons why it is better to take an off-site contribution (either as units or a commuted sum). Such reasons could include, for instance, high service charges in a flatted block.

4.13 Another reason raised at the workshops for not taking on-site provision on small sites was that of the lack of familiarity amongst developers of small sites

about affordable housing. It was agreed that whilst this factor should not exempt developers of small sites from making an affordable housing contribution, the form of the contribution could more realistically be as a commuted sum and not on-site provision. Contributions as a commuted sum were believed to reduce the degree of complexity in scheme negotiations with the local authority and housing and a potential range of other parties and make for a simpler s106 agreement.

Use of commuted sums

- 4.14 As a general principle, we recognise that seeking on-site provision of affordable housing will be the first priority and that provision of affordable housing on an alternative site or by way of a financial payment in lieu (or commuted sum) should only be used in exceptional circumstances. This position is consistent with national guidance in Paragraph 29 of PPS3 which states:

“In seeking developer contributions, the presumption is that affordable housing will be provided on the application site so that it contributes towards creating a mix of housing. However, where it can be robustly justified, off-site provision or a financial contribution in lieu of on-site provision (of broadly equivalent value) may be accepted as long as the agreed approach contributes to the creation of mixed communities in the local authority area” Para 29.

- 4.15 Where commuted sums are sought as an alternative to direct on or off-site provision, PPS3 sets out the appropriate principle for assessing financial contributions - that they should be of “broadly equivalent value” (see para set out 29 above). Our approach is that the commuted sum should be equivalent to the ‘developer/landowner contribution’ if the affordable housing was provided on site. One way of calculating this is to take the difference between the residual value of 100% market housing and the residual value of the scheme with the relevant percentage and mix of affordable housing.
- 4.16 If the ‘equivalence’ principle is adopted, then the decision of the local authority to take a commuted sum will be based on the acceptability or otherwise of on-site provision as a housing and spatial planning solution.
- 4.17 Any concerns about scheme viability (whatever size of site) should be reflected by providing grant or altering tenure mix, or by a ‘reduced’ affordable housing contribution whether provided on-site, off-site or as a financial contribution. Other planning obligations may also need to be reduced under some circumstances.
- 4.18 However, if affordable housing is sought from very small sites, in certain circumstances it becomes impractical to achieve on site provision e.g. seeking less than 25% on a scheme of 4 dwellings. There will also be occasions where on-site provision can only deliver a partial contribution towards the proportion of affordable housing sought e.g. 25% affordable housing in a scheme of 5 dwellings would deliver one affordable unit on site (representing 20% of provision). In the latter case, it is possible to devise a formula which mixes on-site provision with a commuted sum to ‘make up the balance’.
- 4.19 The ‘equivalence principle’ for off-site provision and taking commuted sums was discussed and supported by the development industry workshop. Comment was also made at the workshop that where commuted sums are

collected, it is important that the local authority has an effective programme in place to spend the money.

5 CASE STUDY VIABILITY ANALYSIS

Introduction

- 5.1 The analysis in Chapter 3 provides a good indication of the likely viability of sites in the borough. The residual values can be compared with existing use values to establish whether land owners are likely to make a return over and above existing use value, taking into account a developer margin.
- 5.2 The analysis in Chapter 3 will apply for large as well as small sites (on a pro rata basis). We do not have any evidence to suggest that the economics change significantly between large and small sites. This assumption was accepted at the development industry workshops as has been the case elsewhere where we have run similar workshops.
- 5.3 It will be noted (Table 3.5) that small sites can achieve higher land values than larger ones, suggesting that the economics of developing smaller sites could actually be more favourable than developing larger ones.
- 5.4 In theory therefore there is no real need to review in detail viability issues for small sites. However, for the sake of further illustration, and recognising that there may be special circumstances which impact on the viability of some types of smaller sites, it was felt helpful to review the development economics of some illustrative case studies.

Case study sites

- 5.5 In this section we review a number of case study developments which are examples of small sites for residential development. Figure 5.1 shows the types of schemes granted planning permission during the period 2005 to 2008, with the nature of the existing land use. Here we are measuring the number of schemes of different sizes, in Table 4.1 we considered the number of dwellings in schemes of different sizes – hence the high percentage of dwellings in larger schemes which Table 4.1 depicted.

Figure 5.1 Incidence of planning permissions (no of schemes) 2005-2008



- 5.6 Figure 5.1 shows a high incidence of permissions for schemes involving the development of one dwelling, mainly from land which is categorised as Garden/Garage/Extension. Other significant types of schemes involve the demolition of one dwelling and the construction of two, or the conversion of one dwelling to two from an existing building. The demolition of one dwelling to make way for the construction of a range of schemes (3 through to 9 – and above in some instances) are also a significant element of land supply for housing. In addition, commercial existing uses (industrial and retail) provide a significant number of residential development opportunities.
- 5.7 From the schemes which involve the development of one unit on residential land (C3), 21 (7% of all permission incidences) involve the demolition of an existing dwelling and the construction of a new dwelling. A further 50 incidences (18% of all permissions) involve the demolition of one dwelling to create two or more dwellings (but less than nine).
- 5.8 There are a number of schemes which do not fit neatly into any of these categories. These are included as miscellaneous. Permissions for more than 15 dwellings has been categorised separately.

5.9 On the basis of the data, we have selected four case studies for further investigation. These are shown in Table 5.1

Table 5.1 Case study sites

Case Study	Number of dwellings	Type of new development	Site (Ha)	Size	Resulting density
A	1	1 x 5 bed detached house		0.03	33
B	2	1 x 4 bed detached house; 1 x 5 bed detached house		0.05	40
C	4	2 x 3 bed terraces; 2 x 4 bed detached		0.1	40
D	8	3 x 1 bed flats 5 x 2 bed flats		0.05	160

5.10 For each case study we have undertaken an analysis of residual values for three sub markets and at levels of affordable housing from 0%; 20%; 25%; 30%; 40% and 50%. All the other assumptions used are the same as for the main analysis described in Chapter 3.

5.11 We have then benchmarked the residual values derived against various potential alternative/existing use values. One comparator is the value of a second hand dwelling which is a relevant comparison where the development includes the demolition of an existing dwelling. We have used the market value of a second hand 4 bed detached dwelling as the comparator for these cases. Our estimate of the 'average' market value of one 4 bed detached property for each of the three market value areas we have analysed is as follows:

Gedling Rural - £310,000

Arnold-Mapperley - £240,000;

Calverton - £225,000

Colwick and Netherfield - £190,000

5.12 The range of sites coming forward in the District is very varied and include a number of commercial uses – we think around 15% of all permission. It is difficult to benchmark existing use values against these commercial sites as they are often valued as businesses, or are shops. However, around 25% of these sites are industrial, storage or warehouse uses. For these types of sites industrial land compactors apply.

Case study A – Develop one detached house on a 0.03 ha site

- 5.13 The first scenario assumes the development of one five bed detached house. The results, with the affordable housing impacts are shown in Table 5.2:

Table 5.2 Develop one detached house

Case A	Affordable Housing percentages						
	0%	10%	20%	25%	30%	40%	50%
Gedling Rural	£170,000	£154,000	£136,000	£128,000	£121,000	£104,000	£89,000
	£5.66	£5.13	£4.53	£4.27	£4.03	£3.47	£2.97
Arnold- Mapperley	£95,000	£84,000	£73,000	£68,000	£64,000	£52,000	£41,000
	£3.16	£2.80	£2.43	£2.26	£2.13	£1.73	£1.37
Calverton	£78,000	£68,000	£59,000	£53,000	£49,000	£39,000	£30,000
	£2.60	£2.27	£1.97	£1.77	£1.63	£1.30	£1.00
Colwick and Netherfield	£41,000	£34,000	£27,000	£25,000	£20,000	£13,000	£7,000
	£1.37	£1.13	£0.90	£0.83	£0.67	£0.43	£0.23

Table shows residual values in a selection of market value areas: the upper figure is the residual value for the scheme and the lower figure is the equivalent residual value per hectare (in £s million)

- 5.14 Table 5.2 shows residual values at the different proportions of affordable housing. All results are positive, even as high as 50% affordable housing although absolute returns to the land owner is low particularly in the weakest sub market looked at here. Where one dwelling of this type is built on, for instance, infill or backland sites, we would expect there to be an uplift in site value, particularly in the Arnold-Mapperley sub market. For sites taken from garden land, this will also be the case although a devaluation to the existing dwelling may also occur.
- 5.15 As indicated in Figure 5.1, a minority of cases (7%) involve the replacement of an existing property with a new one. Given the average values we set out in 5.11 above, demolishing an existing dwelling and building a single new five bed detached dwelling and which makes a contribution to affordable housing, looks unlikely to be viable.
- 5.16 However, in the example used above, it can be seen that the residual value generated without any affordable housing is well below the existing use value. This will partly explain the small number of examples of this development type found in the District. It also implies that the circumstances in which a dwelling is brought forward for redevelopment will not be the 'average' situation for the market value area. The analysis implies that properties brought forward for redevelopment will be below average values and the new dwellings will be of a higher value than 'average' for new properties.

- 5.17 Where the existing use value is industrial or similar, then a higher proportion of affordable housing could be generated in the higher two sub markets, although this type of development again suffers from very low returns in terms of the total sum of money which a land owner is likely to receive.

Case study B – Develop two detached houses (one 4 bed and one 5 bed) on a 0.05 ha site.

- 5.18 The viability of developing two detached houses rather than one will depend on the site size and existing use value. There will be some instances where the relationship between existing use value and residual development value is favourable and some where this may not be the case. Table 5.3 shows residual values for the development of two detached houses.

Table 5.2 Develop two detached houses

Case A	Affordable Housing percentages						
	0%	10%	20%	25%	30%	40%	50%
Gedling Rural	£307,000	£276,000	£247,000	£232,000	£217,000	£188,000	£157,000
	£6.14	£5.52	£4.94	£4.64	£4.34	£3.76	£3.14
Arnold- Mapperley	£167,000	£147,000	128,000	£118,000	£109,000	£88,000	£68,000
	£3.34	£2.94	£2.56	£2.36	£2.18	£1.78	£1.36
Calverton	£135,000	£117,000	£101,000	£92,000	£83,000	£66,000	£49,000
	£2.70	£2.34	£2.02	£1.84	£1.66	£1.32	£0.98
Colwick and Netherfield	£66,000	£55,000	£41,000	£35,000	£30,000	£17,000	£5,000
	£1.32	£1.10	£0.82	£0.70	£0.60	£0.34	£0.10

Table shows residual values in a selection of market value areas: the upper figure is the residual value for the scheme and the lower figure is the equivalent residual value per hectare (in £s million)

- 5.10 Similar arguments apply to Case Studies 1 and 2. For infill, backland and garden plots, there will be some uplift, although modest at lower affordable housing percentages. However, as previously discussed, schemes involving the demolition of an existing residential dwelling are unlikely to provide any Section 106 contributions unless financial circumstances are extraordinary.
- 5.11 The analysis of recent permissions (Figure 5.1) indicates that the development of a site for 2 dwellings including the demolition of an existing dwelling is relatively low (around 6% of incidences of planning permissions). We believe that even replacing one dwelling with two new ones will normally present viability problems, although (see Para 5.16) above, there will be instances where 'normal' or usual situations do not apply and a relatively low value dwelling can be developed for two new dwellings, providing an affordable housing contribution. These circumstances will need to be looked at by the Council on a site by site basis.

Case study C – Develop four dwellings on a 0.1 ha site

- 5.12 A number of schemes in the borough involve the development of four dwellings. We have modelled a mix of terraces and detached houses.

Table 5.3 Develop two terraces and two houses

Case A	Affordable Housing percentages						
	0%	10%	20%	25%	30%	40%	50%
Gedling Rural	£472,000	£420,000	£369,000	£344,000	£318,000	£267,000	£215,000
	£4.72	£4.20	£3.69	£3.44	£3.18	£2.67	£2.15
Arnold- Mapperley	£260,000	£225,000	£189,000	£172,000	£154,000	£119,000	£83,000
	£2.60	£2.25	£1.89	£1.72	£1.54	£1.19	£0.83
Calverton	£211,000	£178,000	£148,000	£132,000	£116,000	£84,000	£52,000
	£2.11	£1.78	£1.48	£1.32	£1.16	£0.84	£0.52
Colwick and Netherfield	£108,000	£84,000	£60,000	£47,000	£35,000	£11,000	£13,000
	£1.08	£0.84	£0.60	£0.47	£0.35	£0.11	£0.13

Table shows residual values in a selection of market value areas: the upper figure is the residual value for the scheme and the lower figure is the equivalent residual value per hectare (in £s million)

- 5.13 This type of scheme, developed on backland or residential infill should generate a substantial uplift from existing use value. Four dwellings at a relatively high density (40 dph here) will generate both a substantial absolute value as well as on the per hectare basis in the higher two value markets, although it should be stated that such schemes in Colwick and Netherfield are unlikely to generate a reasonable land owner return without grant support.
- 5.14 As before, where this type of development involves the demolition of an existing dwelling, residual values will normally fall short of existing use values – even at 100% market housing, although the economics of ‘knock one down, development four’ are significantly more favourable than with a lesser number of new build homes. As previously, the Council may wish to retain the right to negotiate these sites as they come forward.

Case study D – Development of 8 dwellings on a 0.05 ha site

- 5.15 We look here at an example of an 8 dwelling development which illustrates the kind of development economics which can be found with larger ‘small’ schemes (say 6 to 9 dwellings).
- 5.16 We take as an example here the development of three one bed, and two, two bed flats.

Table 5.4 Develop eight flats

Case A	Affordable Housing percentages						
	0%	10%	20%	25%	30%	40%	50%
Gedling Rural	£449,000	£375,000	£300,000	£261,000	£224,000	£150,000	£76,000
	£8.98	£7.50	£6.00	£5.22	£4.48	£3.00	£1.52
Arnold- Mapperley	£207,000	£146,000	£93,000	£65,000	£37,000	-£19,000	-£76,000
	£4.14	£2.92	£1.86	£1.30	£0.74	-£0.38	-£1.52
Calverton	£151,000	£95,000	£46,000	£19,000	-£7,000	-£59,000	£111,000
	£3.02	£1.94	£0.92	£0.38	-£0.14	-£1.18	-£2.22
Colwick and Netherfield	£28,000	£123,000	-£59,000	-£81,000	-£103,000	-£146,000	£189,000
	£0.56	£2.46	-£1.18	-£1.62	-£2.06	-£2.92	-£3.78

Table shows residual values in a selection of market value areas: the upper figure is the residual value for the scheme and the lower figure is the equivalent residual value per hectare (in £s million)

- 5.17 This type of development is unlikely to generate much land value, particularly in the weaker sub markets where the selling prices of flats are close to the costs of construction. As previously, viability will depend on the existing land use value, with undeveloped plots benefitting substantially from planning permission, particularly in the stronger sub markets
- 5.18 But again – where the alternative use value is that of an existing 4 bed detached house (demolished to create the new development), scheme viability becomes more difficult if affordable housing is included in the scenario.

Commentary on the results

- 5.19 This section on case studies is primarily illustrative, looking at the economics with particular reference to smaller sites and including consideration of achieved residual values for different sites and how they compare with existing use values.
- 5.20 The results for the small sites reflect the previous analysis which considered the notional 1 hectare site. Market values across the district are not strong enough to support high levels of affordable housing without grant. In the weaker sub markets, the introduction of relatively low levels of affordable housing deliver either very low or negative residual values and this is the same for the small sites. Sites with a low number of dwellings (smaller sites) are no less or more viable than sites with a larger number of dwellings.
- 5.21 Schemes which involve the redevelopment of one dwelling with either one or two new dwellings will be more difficult to deliver with an affordable housing contribution because of the high existing use value. In an area like Gedling, such sites will, as a general rule, be unlikely to be able to deliver affordable

housing and remain viable but may be able to do so in certain circumstances. We would suggest that the Council generally take a flexible approach to these types of schemes.

6 MAIN FINDINGS AND CONCLUSIONS

Overview

6.1 In undertaking this viability study we have provided a broad based and comprehensive testing approach. This has involved two main types of analysis – a generic development type using a notional 1 hectare sites along with analysis of a range of case study sites reflecting the particular development types found in Gedling. Our testing approach has then considered a range of sub markets within the district and different density and development mix types, along with testing at different levels of affordable housing. The residual values generated have been benchmarked against historic residential land values and realistic alternative use values. We believe that this range and depth of analysis provides a very robust basis for the council to establish policies for both affordable housing targets and thresholds in its future plans.

Key findings

6.2 The market value areas in Gedling which we identified were Gedling Rural, Arnold-Mapperley, Calverton, Bestwood/Arnold/Carlton, Colwick and Netherfield and Newstead.

6.3 There is variation in market values between the market value areas. These differences in market values were reflected in differences in residual values (for the different scenarios tested). We found that residual value is dependent not only on location but also on the density adopted.

6.4 Residual values are shown to be significantly stronger in Gedling Rural and Arnold-Mapperley than the other four weaker markets. Without grant both these higher value markets can deliver 50% affordable housing and retain a positive residual value with the scenarios we tested up to and including 80 dph. However residual values only generally exceed the alternative use value for industrial land value of around £500,000 up to and including 40% affordable housing (and this excludes the 80 dph scenario).

6.5 Calverton is a slightly weaker market but should sustain 25/30% affordable housing and generate residual values in excess of our benchmark industrial use value.

6.6 Gedling District has three fairly weak sub markets in Bestwood/Arnold/Carlton,, Colwick and Netherfield and Newstead. We think these areas present significant viability challenges. Newstead look particularly challenging where residual values for 100% market housing barely clears industrial. At all densities tested, residual values for Colwick and Netherfield and Newstead are around or less than £0.5 million per hectare at 10% affordable housing. This is by no means a 'magic' viability benchmark, but a small change in prices in these locations, all other things equal, could make development marginal.

6.7 The introduction of grant at the levels tested makes a significant difference to residual values, particularly in the weaker locations.

6.8 The analysis shows that increasing the proportion of intermediate affordable housing in the mix of affordable housing has differential effects. In higher

value areas, adding more Shared Ownership to a scheme will benefit disproportionately (to lower value areas) from higher house prices. In lower value areas, switching tenure to increase the percentage of intermediate affordable housing will have less impact and these areas will benefit more from grant.

- 6.9 Our analysis included a £7,000 per dwelling planning obligations package. In a 1 ha scheme of 40 dwellings, this represents a reduction in residual value of £280,000. Our analysis indicates that this level of obligations package, combined with an affordable housing contribution will prove difficult to deliver with high levels of affordable housing generally and at all levels of affordable housing in the lower value market areas.
- 6.10 The analysis of the supply of sites in the district suggested that generally small sites make a significant contribution to the supply of sites but large sites play a more important role. Information about past planning permissions shows that around 29% of dwellings granted planning permission are on sites of less than 15 dwellings (the national indicative minimum site size threshold). On the other hand, 80% of all dwellings permitted are on sites of 10 dwellings or more.
- 6.11 Viability is highly sensitive to the relationship between existing (or, where relevant, alternative) use value. A proportion of smaller sites being brought forward, involve the redevelopment of existing residential properties – either as a one for one replacement or at a higher density of development. Whilst such schemes can deliver affordable housing in some circumstances in the higher value markets, it must be acknowledged that residual values, with even relatively low levels of affordable housing, will not be sufficiently above current use values to encourage land owners to bring the land forward. The use of grant could help in achieving higher levels of affordable housing on such sites.
- 6.12 Again, it is important to highlight that it is not the size of the site per se that causes difficulties with viability, but the nature of the existing or alternative use.
- 6.13 From a housing management perspective, we did not find any in- principle objections from housing associations to the on-site provision of affordable housing on small sites. There may be particular schemes where on-site provision is not the preferred option, but as a general rule, on-site provision of (very) small numbers of affordable homes is acceptable to housing associations.
- 6.14 Where a financial payment in lieu of on-site provision of affordable housing (or commuted sum) is to be sought, it should be of “broadly equivalent value”. This approach is, on the evidence we have considered, a reasonable one to take in policy terms.
- 6.15 If this ‘equivalence’ principle is adopted, then the decision of the local authority to take a commuted sum will be based on the acceptability or otherwise of on-site provision as a housing and spatial planning solution, not in response to viability issues.

Conclusions and policy recommendations

- 6.16 There is no detailed government guidance setting out how targets should be assessed, based on an assessment of viability. In coming to our conclusions, we have reviewed the residual values generated for the different sub markets in the borough at the alternative levels of affordable housing tested and considered how these values compare with historic land values generally in the area.
- 6.17 The current policy operated in Gedling is a saved policy from the 2005 Local Plan which seeks 20% affordable housing. We note that Gedling has been delivering around 20% affordable housing since the Local Plan was adopted.
- 6.18 Comparing Q2 of 2005⁴ with Q3 of 2008, we find that mean average house prices in Gedling have decreased by 4%⁵. These figures are for all house prices and not specifically for new homes. We also recognise that prices will have declined further since Q3 2008. This comparison indicates that, on the basis of price alone, there would need to be a strong case, on viability grounds, for increasing the target percentage across the board. We particularly note the weakness of the markets in Newstead, Colwick and Netherfield.
- 6.19 Our review has also taken into account that the Strategic Housing Market Assessment indicated that the need for affordable housing was estimated at around 36%.
- 6.20 On the basis of the available evidence, we believe there are two main options for setting affordable housing proportions for spatial planning policy purposes.
- Retain the 2005 Local Plan target as a pragmatic approach to housing delivery which reflects the fact that the Gedling housing market is a mixed area with a spread of market values and that prices which held in 2005 are broadly equivalent to today's values. Success of this option would rely on significant levels of subsidy for schemes in the weaker market areas to help in the delivery of affordable housing at the target percentage;
 - Adopt differential targets for different parts of the borough, to reflect the spread of market values. There are then two sub options to be considered:
 - A target of 10% for the market areas of Newstead, Colwick and Netherfield, Bestwood/Arnold/Carlton, and Calverton; and a target of 30% for the remainder;
 - A more refined set of targets at 40% for Gedling rural; 25% for Arnold-Mapperley and Calverton and 10% for Newstead, Colwick and Netherfield, Bestwood/Arnold/Carlton,,
- 6.21 We consider that the second option is more appropriate for Gedling given the range of values found in the district. Whilst dividing the district into 3 areas with different targets has the advantage of matching residual values more

⁴ The Local Plan was adopted in July 2005

⁵ CLG Live Table Mean House Prices by District. Q2 2005 = £153,351 Q3 2008 = £146,712

closely with affordable housing delivery, it adds complexity to the policy. With the option of 2 alternative targets meeting 30% affordable housing delivery in Arnold-Mapperley may require public subsidy in some circumstances to be achieved. Conversely, some sites in the Carlton market area might be able to achieve more than 10% affordable housing but the authority would not be able to ask for this as a general rule.

- 6.22 We understand that the Council is anticipating the allocation of a significant new urban extension. This opportunity can create its own market conditions and, although would reflect underlying values in the area, could achieve a quality of development which means that the targets outlined for the district as a whole, could be exceeded. In framing any future policy, we therefore recommend that the Council does not set out an affordable housing target for the scheme in advance of detailed viability assessment of it and taking into account best estimates of future market values likely to be achieved there.
- 6.23 Similarly, the Council may wish to retain flexibility to it can consider the affordable housing requirement for other sites it allocates in the light of individual circumstances; here we are particularly thinking of any sites in the Carlton market area, were a 10% general target be used for this area.

Viability on individual sites

- 6.24 Our analysis has indicated that there will be site-specific circumstances where achievement of the affordable housing proportions set out above may not be possible. This should not detract from the robustness of the overall targets but the council will need to take into account specific site viability concerns when these are justified.
- 6.25 If there is any doubt about viability on a particular site, it will be the responsibility of the developer to make a case that applying the council's affordable housing requirement for their scheme makes the scheme **not viable**. Where the council is satisfied this is the case, the council has a number of options open to it (including changing the mix of the affordable housing and supporting a bid for grant funding from the Homes and Communities Agency and/or using their own funds) before needing to consider whether a lower level of affordable housing is appropriate. In individual scheme negotiations, the council will also need to consider the balance between seeking affordable housing and its other planning obligation requirements.

Thresholds

- 6.26 There is a significant need for affordable housing in Gedling and it is appropriate for the Council to give consideration to a lower threshold than the indicative national minimum (15 dwellings) set out in PPS3 and the threshold of 1 hectare which is current Local Plan policy.
- 6.27 The supply of sites which has been coming through in recent years does not, in our view, indicate the need for a threshold below 15 dwellings generally but does indicate that a reduction from the current Local Plan position of 1 hectare is required and that the use of 15 dwellings is appropriate.
- 6.28 Where the Council may need to consider a lower threshold is in its rural areas where larger sites are unlikely to come forward in significant numbers. The

Council could review the profile of sites in its rural areas to assess the relative importance of small sites in Rural Gedling and use this information to come to a view on an appropriate threshold – down to 0 if this will bring in a significant number of additional dwellings.

- 6.29 From a viability point of view, below 15 dwellings there is no particular threshold which appears more appropriate than another. Some sites down to 1 dwelling will be equally capable of delivering affordable housing as much larger sites in Rural Gedling. Our viability analysis indicated that small sites were more likely to be able to deliver affordable housing viably in Rural Gedling than is the case in the urban areas.
- 6.30 But there will be a group of small sites where the current use is as a dwelling(s) and where it will be more difficult to provide an affordable housing contribution. The authority will need to take a flexible view in seeking affordable housing from these sites.
- 6.31 Below a certain level of dwellings (depending on the target percentage adopted), on-site provision is not mathematically practical and an equivalent commuted sum will need to be sought. One option which the Council could consider is adopting a ‘two part’ threshold. The actual threshold for seeking affordable housing contributions would be set at zero but up to, for example, from schemes of up to 4 dwellings, a commuted sum would be sought, with an on-site contribution above this threshold.
- 6.32 Alternatively, the Council could consider adopting a threshold which excluded the smallest sites (say 1, 2 and 3 dwellings) but sought affordable housing on-site for all schemes above the threshold.

6.33 GEDLING – DO YOU HAVE INFORMATION WHICH PROVIDES A FULLER PICTURE OF THE SITE SUPPLY IN YOUR RURAL AREAS AND WHICH COULD BE USED TO TAKE THIS APRT OF THE DEBATE FORWARD?

Commuted sums

- 6.34 Where **commuted sums** are collected a possible approach to calculating the appropriate sum sought is to base this on the equivalent amount which would be contributed by the developer/landowner were the affordable housing provided on site. This is expressed as follows:

Residual value 100% market housing = Residual value with 100% market housing

Residual value Affordable housing (say 40%) = Residual value with X% affordable housing

Equivalent commuted sum = Residual value 100% market value minus residual value with affordable housing

- 6.35 Where commuted sums are collected, the council will need to have in place a strategy to ensure the money is spent effectively and in a timely manner. Options for spending will be a matter for the council to consider but could include supporting schemes which would otherwise not be viable, increasing the amount of social rented housing in a scheme, increasing the proportion of family units in a scheme, seeking higher quality affordable housing (e.g. a higher level of the Code for Sustainable Homes).

The current housing market

- 6.36 At the time of preparing this report, the housing market has suffered a downturn as a result of the 'credit crunch'.
- 6.37 We think it likely however that developers will increasingly run an argument during 2009 and 2010 that the affordable housing and wider s106 policy is holding back sites. We believe that whilst the council should be flexible in its negotiations on specific sites, we do not think it should shift its position from the policy conclusions of this report since these will be more appropriate to the longer term trend in house prices which have been shown to be upwards. In other words, the policy position should be one which reflects the longer run and not simply the impacts of the credit crunch, although on a scheme by scheme basis, the Council will need to take into account market circumstances at the time when development takes place.

Appendix 1

Nottingham Core Affordable Housing Viability Study

Workshops Notes

Three workshops were held:

Tuesday 22nd July 2008 at Rushcliffe BC;
Wednesday 23rd July 2008 at Gedling BC and
Tuesday 29th July 2008 at Erewash BC.

Three Dragons and the Nottingham Core steering group would like to thank all those in attendance for their inputs to the study. Those attending are listed below.

Introduction

At each workshop Three Dragons gave a presentation summarising the methodology and outlining the process of higher level and detailed testing which would be carried out to examine viability targets. It was explained that the study covers the authorities of Gedling DC, Broxtowe BC, Erewash BC, Gedling BC, Nottingham City Council and Rushcliffe BC.

It was agreed that the Powerpoint presentation (attached) would be made available to all workshop participants in conjunction with these feedback notes.

Key issues

1 Basis for interpreting viability

There was no objection in principle to the method for assessing viability proposed by Three Dragons. This measures viability by reference to residual scheme value (i.e. total scheme revenue less scheme costs) and then compares the residual value with the existing or alternative use value of a site.

Feedback from the workshops emphasised the importance of existing use values

On agricultural land, auction prices per hectare for agricultural land in the East Midlands range from £3,000 per hectare to £11,000 per hectare (Source Property Market Report Jan 2008). However, even in the present market, it was stated that farmers are looking for around £1million per acre and for paddock land, around £500,000 per acre where there is prospect of the land achieving planning permission for residential development.

Options for such land are normally for over 10 yrs with requirement to secure specified minimum sum. These may not come forward in the present housing market.

Housing associations find it difficult to compete in the land market, even in current market conditions, as landowners are 'holding onto' their sites in anticipation of a future up-turn in the market. However, it was noted that, at least for the short term,

developers are approaching housing associations to 'buy' units which were developed initially as market units. Similarly it was reported that there is evidence of developers seeking ways of building out affordable housing units in advance of market housing, on mixed tenure schemes.

There is also an important viability question which relates to the timing of site acquisition: has the land been owned by developer for a considerable time or has been recently acquired (and if so, under which particular market conditions?)

2 Overall methodology

Three Dragons explained that the approach to the study will be two stage with the first stage focusing on testing a notional one hectare site, assuming different development mixes and different percentages of affordable housing, with the second stage looking at a range of generic site types, ranging from large green field through to smaller brown field, windfall type sites, and in different current uses (e.g. residential use, employment use).

Participants at the workshops generally supported the approach set out (see also PowerPoint which explains the approach diagrammatically). It was noted that one form of 'brownfield development' which should be considered is where housing is developed within the 'grounds' of an existing property.

Data sources (e.g. HMLR for house prices and BCIS for build costs) were explained to participants. The need for best primary data sources based on a large sample was understood and agreed.

3 Sub markets

A key part of the study will involve the analysis of viability at a sub market level. Sub markets will be defined primarily by house prices. The Powerpoint presentation shows a map of draft areas although these are subject to further refinement.

Participants generally welcomed the focus on sub markets and were receptive to the argument that differential affordable housing targets, responsive to house price differentials, might be a proper policy response. This could mean both different targets between authorities and/or different targets for different areas within an authority.

It was stated that the affordable housing contribution that registered social landlords pay, will vary according to rents achieved in different locations. Three Dragons responded to this point by saying that it would be difficult to reflect this factor at a sub market level, but that it will be possible to reflect rent differentials at a local authority area level. It was noted that registered social landlord payments for intermediate housing (e.g. HomeBuy could reflect market values).

4 Density and development mix

A template of development mixes was run past each of the workshops, showing proposed mixes at different densities. There were no significant objections to the proposed matrix, although it was stated that at the current time, even in high density

schemes, around 70% to 80% of units will be 2 bed, because of the marketability problem in the current market relating to 1 beds. Although flatted developments generally were said to be more difficult to progress in the current market, it was agreed that apartments would return as part of the 'normal development mix' when the market has picked up.

No bungalows except on retirement schemes and exceptions sites.

One delegate suggested that the testing process should include three bed flats in Nottingham City centre apartment type schemes.

5 Thresholds and the viability of smaller sites

A range of views were expressed in relation to thresholds and the viability of small sites.

It was generally concluded that there is no reason why small sites should not contribute to affordable housing provision. Generally, small sites are no less viable than large ones although it was stated that the value of market housing could be adversely affected in small mixed tenure schemes.

The logic of a 15 dwelling threshold was questioned – why is it 15?; the economics do not change at this point.

One point raised related to developers who typically deal with small sites. One delegate suggested that '*small builders do not have a clue about affordable housing*'. It was agreed that whilst this factor should not exempt smaller developers from making an affordable housing contribution, the form of the contribution could more realistically be as a commuted sum and not on-site provision. Contributions as a commuted sum were believed to reduce the degree of complexity in scheme negotiations with the local authority, and registered social landlord and a potential range of other parties and make for a simpler s106 agreement. An initial view expressed at one workshop was that the 'cut off' point for on site provision should be around, say, 5 dwellings, (below that, a commuted sum should be sought).

It was stated that councillors are generally keen to support small builders as local employers and as a way of supporting the local economy. Imposing on-site affordable housing contributions may work against this objective. Low cost home ownership may be easier to integrate within a small owner-occupied scheme than social rented housing.

6 On-site provision and commuted sums

The principle was debated and agreed that any commuted sum should be the difference between the residual value of a scheme with 100% market housing and one with the relevant mix of market and affordable housing.

With small sites, there is no problem, in principle, of providing affordable housing on site (even if this means there will be as few as one or two affordable homes in the scheme). Whilst some housing associations normally prefer to secure affordable

housing in larger 'blocks', other associations will take on very small numbers (even single units) of affordable dwellings.

Whilst the number of affordable housing units is not a reason, in itself, to forego an on-site contribution, there may be scheme-specific reasons why it is better to take an off-site contribution (either as units or a commuted sum). Such reasons could include, for instance, high service charges in a flatted block. Local authorities should seek the views of housing associations about acceptability of on-site provision.

Where commuted sums are collected, it is important that the local authority has a programme for how the money is to be spent.

7 Development costs

Three Dragons presented the proposed development costs that will be used for the testing framework. This is included in the Powerpoint presentation as a screenshot from the Toolkit. It was explained that the base build costs per square metre will be calculated from the BCIS data source (NB: costs in the Powerpoint presentation are not necessarily those relating to the Nottingham Core authorities). The other development costs (professional fees, internal overheads, profit margins, etc) are however those which Three Dragons intend to use.

The view at one workshop was that a 10-15% developer return would be an acceptable margin. However, it was questioned in one workshop whether the developer's return should be higher in the current market, to reflect increased risk.

It was suggested that interest rates plus 2% above LIBOR, not 2% above base rate should be used as the basis of the testing.

What will be the impact on costs of meeting Code for Sustainable Homes standards? This is not yet done extensively in the Nottingham Core area, although Code 3 is what seems to be coming through. Upton at Northampton is providing homes to high Code Standards (KD to investigate with EP at meeting on 11th August). It was commented that higher Codes may be easier to achieve with timber frame construction than with traditional masonry structure. A starting point for analysis of between Code Level 3 and Level 4 was discussed and accepted at the third workshop.

A more general point was raised about the rising costs of materials. The extent to which costs are rising is however difficult to gauge, particularly as the price of labour falls in response to a more competitive environment for contracts.

8 Other Section 106 contributions

The level of planning gain package was discussed at all workshops. The range was queried – more widely (than the Notts Core area) it can range from £5,000 per dwelling to Milton Keynes tariff levels of £18,000 plus free land) or even higher.

9 Protocols for negotiations on Section 106

Three Dragons explained that the project will provide the six local authorities with an Affordable Housing Toolkit to assist the process of negotiations on viability and Section 106 contributions. The availability of the Toolkit to developers and their agents was questioned by some delegates at the workshops – how would the process be managed, etc.

The general view from the workshops was that it was important for the authorities to have a clear policy which was consistently applied but that this should be seen as a starting point – it was important that the authorities were then flexible in their negotiations and be prepared to take into account scheme specific considerations.

10 Other issues

The study needs to take account of schemes which are developed out for 100% affordable housing (generally as a mix of social rent and intermediate affordable housing).

Availability of grant from the Housing Corporation remains uncertain, especially in the light of the Regular Market Engagement approach currently being taken.

Housing Corporation target rents are not necessarily the same as those used by local registered social landlords which are based on 1999 house prices.

Attendees:

Rushcliffe BC:

Graham Day	Mosaic Estates
Angela Doherty	Rushcliffe BC
Mick Dunstall	The Moore Group
Donna Dwyer	Rushcliffe BC
Mark Elliott	Lace Market Properties
Lucy Kay	Escritt Barrell Golding Land Agents
Stephen Pugh	Spirita
Martin Rich	Broxtowe Borough Council
Chris Reed	Nottingham City Council
Marie Wilson	Eastern Shires Housing Group

Kathleen Dunmore	Three Dragons
Andrew Golland	Three Dragons

Gedling BC:

Lisa Bell	Gedling DC
David Bowden	Bowden Land
Martin Field	EMDA
Roger Foxall	Langridge Homes
Jo Gray	Gedling BC
Deborah Higgins	MHP
Nick Hutchings	Henry Mein Partnership
Judith Lewis	Broxtowe BC

Adam Murray Haworth Estates
Anabel Rooksby Peveril Homes
Anne Tomanek Gedling BC

Kathleen Dunmore Three Dragons
Andrew Golland Three Dragons
Adam Watkins Three Dragons

Erewash BC:

Alwa Daykin East Midlands HA
John Deakin Bellway Homes
Peter Harley Derwent Living
Miles King Midlands Rural Housing
Phillip Marshall Rushcliffe BC
Peter Morris Carter Jonas
Adam Reddish Erewash BC
Jas Singh Freeth Cartright
Peter Tyers P.T Associates
Sue Wytcherley Tuntum HA

Lin Cousins Three Dragons
Andrew Golland Three Dragons

Appendix 2 Three Dragons model: Method statement

The Toolkit provides the user with an assessment of the economics of residential development. It allows the user to test the economic implications of different types and amounts of planning obligation and, in particular, the amount and mix of affordable housing. It uses a residual development appraisal approach which is the industry accepted approach in valuation practice.

The Toolkit compares the potential revenue from a site with the potential costs of development before a payment for land is made. In estimating the potential revenue, the income from selling dwellings in the market and the income from producing specific forms of affordable housing are considered. The estimates involve (1) assumptions about how the development process and the subsidy system operate and (2) assumptions about the values for specific inputs such as house prices and building costs. These assumptions are made explicit in the guidance notes. If the user has reason to believe that reality in specific cases differs from the assumptions used, the user may either take account of this in interpreting the results or may use different assumptions.

The main output of the Toolkit is the residual value. In practice, as shown in the diagram below, there is a 'gross' residual value and a 'net' residual value. The gross residual value is that value that a scheme generates before Section 106 is required. Once Section 106 contributions have been taken into account, the scheme then has a net residual value, which is effectively the land owner's interest.

Key data assumptions

Market areas and prices:

GEDLING												
	Detached			Semis			Terraces			Flats		
	5 Bed	4 Bed	3 Bed	4 Bed	3 Bed	2 Bed	4 Bed	3 Bed	2 Bed	3 Bed	2 Bed	1 Bed
1) South Gedling rural	£ 399,000	£ 347,000	£ 295,000	£ 250,000	£227,000	£ 204,000	£ 244,000	£ 221,000	£ 193,000	£213,000	£186,000	£130,000
North Gedling rural												
2) Arnold - Mapperley	£ 308,000	£ 268,000	£ 228,000	£ 193,000	£175,000	£ 158,000	£ 188,000	£ 171,000	£ 149,000	£165,000	£144,000	£100,000
3) Calverton	£ 287,000	£ 250,000	£ 212,000	£ 180,000	£163,000	£ 147,000	£ 175,000	£ 159,000	£ 139,000	£154,000	£134,000	£94,000
4) Bestwood/Arnold	£ 257,000	£ 224,000	£ 190,000	£ 161,000	£147,000	£ 132,000	£ 157,000	£ 143,000	£ 124,000	£138,000	£120,000	£84,000
Carlton												
5) Colwick & Netherfield	£ 242,000	£ 211,000	£ 179,000	£ 152,000	£138,000	£ 124,000	£ 148,000	£ 135,000	£ 117,000	£130,000	£113,000	£79,000
Bestwood St.albans												
6) Newstead	£ 229,000	£ 200,000	£ 170,000	£ 144,000	£130,000	£ 118,000	£ 140,000	£ 128,000	£ 111,000	£123,000	£107,000	£75,000

The development mixes were as follows:

- 30 dph: including 10% 2 bed terraces; 20% 3 bed terraces; 15% 3 bed semis; 30% 3 bed detached; 25% 4 bed detached;
- 40 dph: including 10% 2 bed flats; 10% 2 bed terraces; 15% 3 bed terraces; 30% 3 bed semis; 20% 3 bed detached; 15% 4 bed detached;
- 50 dph: including 5% 1 bed flats; 10% 2 bed flats; 10% 2 bed terraces; 15% 3 bed terraces; 35% 3 bed semis; 15% 3 bed detached; 10% 4 bed detached;
- 80 dph: including 20% 1 bed flats; 30% 2 bed flats; 30% 2 bed terraces and 20% 3 bed terraces.

Affordable housing targets:

20%;
25%;
30%;
35%;
40%;

Affordable housing split: 75% to 25% Social Rent to Shared Ownership

Typical unit sizes adopted (m²):

	Market	Affordable
1 Bed Flat	45	46
2 Bed Flat	60	67
2 Bed Terrace	65	76
3 Bed Terrace	80	84
3 Bed Semi	90	86
3 Bed Detached	120	90
4 Bed Detached	150	110

Other Affordable Housing Factors:

Social rents

	Weekly Rent
1 Bed Flat	55
2 Bed Flat	63
2 Bed Terrace	64
3 Bed Terrace	69
3 Bed Semi	72
3 Bed Detached	76
4 Bed Detached	87

Gross to net factors (Affordable housing revenue)

9 - AFFORDABLE HOUSNG COSTS AND CAPITALISATION FACTORS

ALWAYS DEPRESS THE CLEAR TABLE BUTTON FIRST ClearTable

You can enter your own values in the white cells below
Where cells are left blank, the Toolkit value for that row will be used

Social Rent		Toolkit Values	User Values
Costs per annum	Management & Maintenance	£ 1,000	<input type="text"/> per annum
	Voids/bad debts	3.00%	<input type="text"/> of gross rent
	Repairs reserve	£ 500	<input type="text"/> per annum
Capitalisation		6.00%	<input type="text"/> of net rent

New Build HomeBuy		Toolkit Values	User Values
Costs per annum	Rental Factor	2.75%	<input type="text"/> of share
Capitalisation		6.00%	<input type="text"/> of net rent

Intermediate Rent		Toolkit Values	User Values
Costs per annum	Management costs	6.00%	<input type="text"/> of gross rent
	Maintenance Costs	£ 500	<input type="text"/> per dwelling
	Voids/bad debts	5.00%	<input type="text"/> of gross rent
	Repairs Reserve	1.00%	<input type="text"/> of gross rent
Capitalisation		6.00%	<input type="text"/> of net rent

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Appendix 3 Results – Residual values – no grant scenarios

	0%	10%	20%	25%	30%	35%	40%	50%
At 30 dph								
Gedling rural	£3.24	£2.88	£2.51	£2.33	£2.15	£1.97	£1.79	£1.42
Arnold-Mapperley	£1.77	£1.52	£1.26	£1.13	£1.00	£0.88	£0.75	£0.49
Calverton	£1.43	£1.20	£0.97	£0.85	£0.74	£0.62	£0.51	£0.27
Arnold-Best'd-Carlton	£0.96	£0.76	£0.56	£0.46	£0.36	£0.27	£0.17	-£0.03
Colwick & Netherfield	£0.71	£0.44	£0.35	£0.26	£0.18	£0.09	£0.00	-£0.18
Newstead	£0.51	£0.34	£0.18	£0.09	£0.01	-£0.07	-£0.15	-£0.31
At 40 dph								
	0%	10%	20%	25%	30%	35%	40%	50%
Gedling rural	£3.83	£3.39	£2.93	£2.70	£2.47	£2.24	£2.01	£1.56
Arnold-Mapperley	£2.08	£1.76	£1.43	£1.27	£1.10	£0.94	£0.77	£0.44
Calverton	£1.67	£1.38	£1.08	£0.93	£0.76	£0.63	£0.48	£0.18
Arnold-Best'd-Carlton	£1.10	£0.85	£0.59	£0.46	£0.33	£0.21	£0.08	-£0.18
Colwick & Netherfield	£0.81	£0.57	£0.34	£0.22	£0.10	£0.00	-£0.13	-£0.36
Newstead	£0.56	£0.34	£0.13	£0.02	-£0.09	-£0.19	-£0.30	-£0.52
At 50 dph								
	0%	10%	20%	25%	30%	35%	40%	50%
Gedling rural	£4.39	£3.76	£3.29	£3.02	£2.75	£2.47	£2.20	£1.65
Arnold-Mapperley	£2.36	£1.88	£1.56	£1.36	£1.16	£0.96	£0.76	£0.37
Calverton	£1.89	£1.45	£1.16	£0.97	£0.79	£0.61	£0.43	£0.07
Arnold-Best'd-Carlton	£1.23	£0.83	£0.59	£0.44	£0.28	£0.12	-£0.04	-£0.35
Colwick & Netherfield	£0.89	£0.52	£0.31	£0.16	£0.02	-£0.12	-£0.27	-£0.56
Newstead	£0.61	£0.26	£0.06	-£0.07	-£0.20	-£0.34	-£0.47	-£0.74
At 80 dph								
	0%	10%	20%	25%	30%	35%	40%	50%
Gedling rural	£5.78	£4.91	£4.16	£3.76	£3.35	£2.95	£2.54	£1.73
Arnold-Mapperley	£3.04	£2.43	£1.82	£1.52	£1.21	£0.91	£0.60	£0.00
Calverton	£2.41	£1.85	£1.28	£1.00	£0.72	£0.44	£0.16	-£0.40
Arnold-Best'd-Carlton	£1.49	£1.00	£0.51	£0.26	£0.01	-£0.23	-£0.48	-£0.98
Colwick & Netherfield	£1.05	£0.59	£0.12	-£0.10	-£0.34	-£0.57	-£0.80	-£1.26
Newstead	£1.05	£0.24	£0.12	-£0.10	-£0.57	-£0.70	-£0.80	-£1.26

Illustrative scheme – 40 dph at 30% AH; Calverton sub market

1 - SITE IDENTIFICATION

Site Details

Site Address

Site Reference

Application Number

Scheme Description

I have read, and accepted, the terms and conditions set out in the [license agreement](#)

3 - BASIC SITE INFORMATION

Site Area

Total Size of Site In Hectares (You must enter a value in here)

Density / Number of Dwellings

Enter a number of dwellings (You must enter a value in here)

Percentage Increase/Decrease in Density:
You may test the effect of a percentage increase/decrease in the site density by using the cell below

%

Resulting Number of Dwellings	<input type="text" value="40"/>	<input type="checkbox"/> Tick if this a rural development
Resulting Density	<input type="text" value="40"/> dph	

4 - CHARACTERISTICS OF DEVELOPMENT

ALWAYS DEPRESS THE CLEAR TABLE BUTTON FIRST

You then have 2 options for entering information about the scheme

EITHER, enter information for up to 20 dwelling types – each row must be either fully complete or left blank (enter 1 if information not relevant e.g. size of affordable unit but is a market unit)

OR select the Toolkit default mix by depressing the button called Use Default Unit Types

Ref.	Description of Dwelling	No of Bed-Rooms	Dwelling Type	No of Units	Size in sq.m Affordable	Size in sq.m Market	Parking (flats only)	No. of Storeys (1-99)
1	1 Bed flats	1	Flat	2.0	45	44	n/a	2
2	2 Bed Flats	2	Flat	6.0	67	60	n/a	2
3	2 Bed Town Houses	2	House	6.0	76	65	n/a	n/a
4	3 Bed Town Houses	3	House	6.0	86	80	n/a	n/a
5	3 bed semis	3	House	8.0	86	90	n/a	n/a
6	3 bed deatched	3	House	8.0	86	120	n/a	n/a
7	4 bed detached	4	House	4.0	101	150	n/a	n/a
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
Total Number of units				40				

5 - MARKET VALUES

This is a custom scheme, default values are not available.

ALWAYS DEPRESS THE CLEAR TABLE BUTTON FIRST

You can enter your own values for each dwelling type or select the Toolkit default market values by depressing the button called Default Market Values

You can adjust the market values by using the % increase/decrease arrows

100 %

Depress the Reset button to return to base market value

Ref.	Unit Type	No of Bed-Rooms	Market Value	Adjusted Market Value
1	1 Bed flats	1	£94,000	£94,000
2	2 Bed Flats	2	£134,000	£134,000
3	2 Bed Town Houses	2	£139,000	£139,000
4	3 Bed Town Houses	3	£159,000	£159,000
5	3 bed semis	3	£163,000	£163,000
6	3 bed deatched	3	£212,000	£212,000
7	4 bed detached	4	£250,000	£250,000
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

6 - TENURE MIX

If you are using a default mix then you can distribute units across the tenures by percentage; enter the percentage of units to assign to each tenure in the top row. The percentages are applied equally across all unit types

If you are not using a default mix then you may either enter units by percentage or by the exact number of units of each type for each tenure; in the table enter the exact number of units of each type for each tenure in the table

Whichever method is selected, ensure that relevant information is entered in the boxes at the bottom of the table.

Input by Percentages Input by Quantity

Clear Table

Ref.	Description	SALE	AFFORDABLE				Required No. of Units
			Social rent	New Build HomeBuy	Intermediate rent	Discount Market	
		70%	21%	9%			
1	1 Bed flats	1.4	0.4	0.2			2.0
2	2 Bed Flats	4.2	1.3	0.5			6.0
3	2 Bed Town Houses	4.2	1.3	0.5			6.0
4	3 Bed Town Houses	4.2	1.3	0.5			6.0
5	3 bed semis	5.6	1.7	0.7			8.0
6	3 bed detached	5.6	1.7	0.7			8.0
7	4 bed detached	2.8	0.8	0.4			4.0
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
Total		28.0	8.4	3.6			40.0

New Build HomeBuy	Percentage Purchased	50%
	Rental limit on unbought share	100%
Percentage purchased by purchaser for Discount Market		
Local Sale	Average Income	
	Income Multiplier	

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8 - SOCIAL AND INTERMEDIATE RENT

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Clear Tables

This is a custom scheme, default rents are not applicable. Please enter your own values into the white cells

Hide Default Rents <-

Ref.	Description	Social Rent Values (per week)			Intermediate Rent Values (per week)			
		No. of units	Default Rents	User Rents	No. of units	Market Rent	Adjust 75%	User Rents
1	1 Bed flats	0.42	£ -	£ 55.00		£ -	£ -	
2	2 Bed Flats	1.26	£ -	£ 63.00		£ -	£ -	
3	2 Bed Town Houses	1.26	£ -	£ 64.00		£ -	£ -	
4	3 Bed Town Houses	1.26	£ -	£ 69.00		£ -	£ -	
5	3 bed semis	1.68	£ -	£ 72.00		£ -	£ -	
6	3 bed detached	1.68	£ -	£ 76.00		£ -	£ -	
7	4 bed detached	0.84	£ -	£ 87.00		£ -	£ -	
8			£ -			£ -	£ -	
9			£ -			£ -	£ -	
10			£ -			£ -	£ -	
11			£ -			£ -	£ -	
12			£ -			£ -	£ -	
13			£ -			£ -	£ -	
14			£ -			£ -	£ -	
15			£ -			£ -	£ -	
16			£ -			£ -	£ -	
17			£ -			£ -	£ -	
18			£ -			£ -	£ -	
19			£ -			£ -	£ -	
20			£ -			£ -	£ -	

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9 - AFFORDABLE HOUSNG COSTS AND CAPITALISATION FACTORS

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Clear Table

You can enter your own values in the white cells below
Where cells are left blank, the Toolkit value for that row will be used

Social Rent		Toolkit Values	User Values
Costs per annum	Management & Maintenance	£ 1,000	per annum
	Voids/bad debts	3.00%	of gross rent
	Repairs reserve	£ 500	per annum
Capitalisation		6.00%	of net rent

New Build HomeBuy		Toolkit Values	User Values
Costs per annum	Rental Factor	2.75%	of share
Capitalisation		6.00%	of net rent

Intermediate Rent		Toolkit Values	User Values
Costs per annum	Management costs	6.00%	of gross rent
	Maintenance Costs	£ 500	per dwelling
	Voids/bad debts	5.00%	of gross rent
	Repairs Reserve	1.00%	of gross rent
Capitalisation		6.00%	of net rent

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10 - DEVELOPMENT COSTS

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Build Costs per sq m

You can enter your own values in the white cells below.
Where cells are left blank, the Toolkit value for that row will be used

	Toolkit Values	User Values
Bungalows	£1,049	
Flats (6+ storeys)	£1,545	
Flats (5 & less storeys)	£1,115	£1,075
Houses <= 75m2	£999	£870
Houses > 75m2	£901	£760

Other Development Costs

You can enter your own values in the white cells below. Enter 0% for non-applicable items.
Where cells are left blank, the Toolkit value for that row will be used.

	Toolkit Values	User Values
Professional Fees %	12.00%	of build costs
Internal Overheads	5.00%	of build costs (Market and Discount Market units)
Interest Rate (Market)	7.00%	of build Costs (Market, Discount Market and Low Cost Sale units)
Interest Rate (Affordable Housing)	7.00%	of build costs (SR, HB, IR units)
Marketing Fees	3.00%	of market value (Market and Discount Market units)
Developers Return	15.00%	of market value (Market and Discount Market units)
Contractors Return	6.00%	of development costs (SR, HB, IR and LCS units)
Land financing costs	£ -	Please see the Guidance Notes for use of this value

Exceptional Development Costs

You may enter SCHEME totals for exceptional costs. The first row is for Sustainable Homes costs. The other three rows are for user defined costs. You can enter the name of the cost in the left hand cells and SCHEME value in the right hand cell.

Sustainable Homes Standard	
Market Housing	Affordable Housing
None	None

Costs incurred for Sustainable Homes Levels None and None	£	-
<Enter Costs Description>	£	-
<Enter Costs Description>	£	-
<Enter Costs Description>	£	-

Scheme Total	
per dwelling	
per hectare	

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11 - PLANNING OBLIGATIONS

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For each type of contribution you may either enter a total figure (for that row) or you may enter values per unit (for each tenure). If you choose the second option, the Toolkit will calculate the total obligation 'cost' for the scheme.

To enter one total value for a row, tick the corresponding box in the "Enter Total?" column and enter a value in the "User Total" column : To enter the values by tenure leave the box un-ticked

	Input by Total		Input by Unit					Calculated Total (Affordable and Sale)	
	Enter Total?	User Total	Sale	Affordable					
				Social rent	New Build HomeBuy	Intermediate rent	Discount Market		Local Sale
Education Contribution	<input type="checkbox"/>								
Highway Works	<input type="checkbox"/>								
Contribution to public transport	<input type="checkbox"/>								
Contribution to community facilities	<input type="checkbox"/>								
Provision for open space	<input type="checkbox"/>								
Contribution to public realm	<input type="checkbox"/>								
Contribution to public art	<input type="checkbox"/>								
Environmental improvements	<input type="checkbox"/>								
Town centre improvements	<input type="checkbox"/>								
Waterfront improvements	<input type="checkbox"/>								
Support for employment development	<input type="checkbox"/>								
Employment related training	<input type="checkbox"/>								
Total package	<input type="checkbox"/>								
<Enter Planning Obligation Description here>	<input type="checkbox"/>								
<Enter Planning Obligation Description here>	<input type="checkbox"/>								

Obligations package per unit

Contribution from Commercial

Total for Scheme	£280,000
Total for Scheme per hectare	£280,000
Total for Scheme divided by total number of units	£7,000
Total for Scheme divided by number of sale units	£10,000

16 - HOUSING CORPORATION GRANT AVAILABILITY

- No - Grant is not available
- Yes - Grant is available and is a known value

17 - ONCOSTS FOR AFFORDABLE HOUSING

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If applicable, the user can provide information about oncosts. You have one of 3 options: i) use the Toolkit default percentages ii) enter your own % iii) enter your own oncost value (in £s) per unit. If there are no oncosts clear the tick box called 'Apply Oncosts'.

Apply Oncosts

Oncosts are based on a percentage of development costs (not including returns to the developer)

	Affordable Housing Tenures			Total
	Social rent	New Build HomeBuy	Intermediate rent	No. Of Affordable Units
Number of units	8.4	3.6		12
i) Default oncosts rate (%)	6%	6%		6%
ii) User oncosts (%)				
iii) User oncosts By Unit (£)				
Oncosts per Unit	£ 4,658	£ 4,658	£ -	
Total oncosts for Affordable Housing	£ 39,125	£ 16,768	£ -	
Total Oncosts for Affordable Housing	£	55,894		

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20 - Scheme Results

Site Reference Details		Site Details	
Site Reference Number		Site	Gedling BC - Notional One Hectare Site
Application Number		Address	
Site Location	Chelmsford	Site	
Scheme Description	40 Dwellings per Hectare	Details	

TOTAL NUMBER OF UNITS		DENSITY (per hectare)		AFFORDABLE UNITS		
Dwellings	40	Dwellings	40.0	Quantity		% of All Units
% Wheelchair Units				Total	12.0	30%
				Social rent	8.4	21%
				Intermediate	3.6	9%

REVENUE AND COSTS		RESIDUAL VALUE	
Total scheme revenue	£ 5,422,000	Whole scheme	£ 846,000
Total scheme costs	£ 4,576,000	Per hectare	£ 846,000
		Per dwelling	£ 21,000
		Per market dwelling	£ 30,000

CONTRIBUTION TO REVENUE FROM:		PUBLIC SUBSIDY (GRANT)	
Market housing	£ 4,746,000	Whole Scheme	£ -
Affordable Housing	£ 676,000	Per Social Rental dwelling	£ -
- Social rent	£ 248,000	Per New Build HomeBuy dwelling	£ -
- New Build HomeBuy	£ 428,000	Per Intermediate Rent dwelling	£ -
- Intermediate Rent	£ -		
- Discount Market	£ -		
- Local Sale	£ -		
Capital Contribution	£ -		
Commercial Elements	£ -		

CONTRIBUTION TO COSTS FROM:		Alternative Site Values		Against residual
Market housing	£ 3,388,000	Existing Use Value	£ -	£ -
Affordable Housing	£ 988,000	Acquisition Cost	£ -	£ -
- Social rent	£ 692,000	Alternative Use Value 1	£ -	£ -
- New Build HomeBuy	£ 296,000	Alternative Use Value 2	£ -	£ -
- Intermediate Rent	£ -	Alternative Use Value 3	£ -	£ -
- Discount Market	£ -			
- Local Sale	£ -			
Land Finance	£ -			
Planning Obligations	£ 200,000			
Total Exceptional Costs	£ -			
Commercial Elements	£ -			

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