APPENDIX 2

- Examples of application of the affordable housing ratio formula
- Calculating proportions of affordable housing

Appendix 2

Examples of application of the affordable housing ratio formula.[1]

1. Developer proposes a residential development on a single site of 100 dwellings. Using the, *open-market : affordable housing*[2] ratio of 65 : 35, then 65 dwellings on the site would be for sale on the open-market and 35 would be built as local needs affordable housing[3]. ***Acceptable***

2. Developer proposes a residential development on a single site of 65 dwellings but wants them to be open-market only. Suggests that the affordable housing element be provided on a separate nearby site that is owned by and/or will be developed by them. Developer calculates that the affordable housing element on the second site is 35% of the number of open-market dwellings to be provided on the first site, which he estimates to be 23 units (35/100 x 65 = 22.75 or, 23 to the nearest whole dwelling unit), making a total of 88 dwelling units. ***Unacceptable***[4]

3. Developer proposes a residential development on a single site of 65 dwellings but wants them to be open-market only. Suggests that the affordable housing element be provided on a separate nearby site that is owned by and/or will be developed by them and will provide for an additional 35 dwelling units (65 + 35 = 100). ***Acceptable(?)***[5]

4. Developer proposes a residential development on a single site of 13 dwellings but wants them to be open-market only. Suggests that the affordable housing element be provided on a separate nearby site that is owned by and/or will be developed by them. Using the 65 : 35 ratio this will provide for an additional 7 dwelling units (13 + 7 = 20). ***Acceptable***

5. Developer proposes a residential development on a single site of 13 dwellings but wants them to be open-market only. Suggests that the affordable housing element be provided on a separate nearby by site that is owned by and/or will be developed by them. Developer calculates that the affordable housing element on the second site is 35% of the number of open-market dwellings to be provided on the first site, which he estimates

[1] All examples are theoretical are on greenfield sites and assume there are no other significant constraints or other considerations (e.g. flood mitigation requirements, land decontamination, policy requirements, etc.,) that have to be taken account of.

[2] The type of affordable housing would reflect its open-market equivalent in direct proportion (e.g. Open-market housing = three-bedroom semi-detached dwellings, then affordable housing = three bedroom semi-detached dwelling units).

[3] The tenure of the affordable housing units may vary in order to reflect the local needs of the area (e.g. 70% social rented, 30% shared ownership).

[4] The ratio is applied to the total number of dwellings to be provided (on both sites), not just the number on the first (open-market housing) site, otherwise only 26% of the total number of dwellings would be affordable.

[5] But unlikely, as Government guidance in Planning Policy Statement 3: Housing, expects residential developments to be a mixture of tenures and types on most sites where practical (paras. 20 – 24)

to be 5 units (35/100 x 13 = 4.55 or 5 to the nearest whole dwelling unit), making a total of 18 dwelling units. ***Unacceptable***[6]

6. Developer proposes a residential development on a single site of 12 dwellings but wants them to be open-market only. Suggests that the affordable housing element be provided on a separate site that is owned by and/or will be developed by them. Using the 65 : 35 ratio this will mean he would have to provide for an additional 6.46 dwelling units. As it would not be practical or sensible to provide only part of a dwelling, the developer agrees to build 6 affordable dwelling units on the second site and make a financial contribution of 46% of the *development cost* of an equivalent affordable dwelling to the Local Planning Authority to be used with other similar contributions. ***Acceptable***

7. Developer proposes a residential development on a site in a village of 2 open-market dwellings but the land available is too small to accommodate a third unit which would have been the affordable housing dwelling using the 65 : 35 ratio. This latter unit would be provided elsewhere, preferably within or, near the settlement, if a suitable site was readily available, and built at the developers expense. Alternatively, in the absence of a suitable site, the developer may elect to make a commuted financial sum[7] to the Local Planning Authority towards the provision of an equivalent sized affordable dwelling unit in the settlement, Parish, Ward or adjoining area (dependent on the provisions included in the 'agreement'), at a later date when a site becomes available. ***Acceptable***

It is acknowledged that no two sites are the same and there may be other factors (e.g. type of site – greenfield, brownfield; previous use – agriculture, industrial, leisure, retail, etc.; availability of subsidy – Local Authority 'donated' land; environmental issues – flooding, terrain, mining, etc.) that will affect the viability of a development on a specific site and need to be taken account of. A detailed explanation of the components that comprise the formulae to calculate the overall financial viability of a development proposal is provided in; *Northern Peninsula Housing Market Area: Strategic Housing Viability Assessment,* paras. 4.12 – 4.16.[8] See also Appendix 3 of this document.

The Council conducts its negotiations for affordable housing and other Section 106/Planning Obligation on the basis of an 'open-book' approach whereby all costs are itemized and in the public domain. All proposals that deviate from the minimum set out in the Development Plan and/or associated planning policy documents (including this Supplementary Planning Document) must be supported by a robust justification as to why they cannot comply with these requirements. These will be tested by the Local Planning Authority as part of its consideration of any such proposal.

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[6] The ratio is applied to the total number of dwellings to be provided (on both sites), not just the number on the first (open-market housing) site, otherwise only 27.8% of the total number of dwellings would be affordable.

[7] See para. 2.11 in the main document

[8] http://www.northdevon.gov.uk/ndc_strategic_housing_market_viability_assessment.pdf

CALCULATING PROPORTIONS OF AFFORDABLE HOUSING

Paragraph 2.6 of the report states that residential developments should provide 35 affordable units or their equivalent for every 65 market units. These should be calculated as follows:

MU x 35/65 = AU

Where MU = Market Units and AU = Affordable Units

The tables below illustrate how this formula will be applied in three circumstances:

1.1 All units provided on site, calculation starting with Market Units

1.2 All units provided on-site, calculation starting with Total Units

2.1 Affordable Units equivalent provided off-site, calculation starting with Market Units

In Tables 1.1 & 1.2, the units have been rounded to the nearest whole number as the provision will be in physical dwelling units.

In Table 2.1, the equivalent number of units is expressed to one decimal point to provide a more precise calculation of any cash-in-lieu payment.

The figures provide West Somerset Council's expectations for affordable housing provision, which will be sought in accordance with the relevant policies of the development plan and this SPD.

1 ALL UNITS ON-SITE

TABLE 1.1: Starting point – Number of Market Units on-site

	Minehead			Watchet/Williton			Elsewhere	
Market Units (MU)	***Afford. Units (AU)***	***Total Units (TU)***		***Afford. Units (AU)***	***Total Units (TU)***		***Afford. Units (AU)***	***Total Units (TU)***
	AU = MU x 35/65	*TU = MU + AU*		*AU = MU x 35/65*	*TU = MU + AU*		*AU = MU x 35/65*	*TU = MU + AU*
1	0	1		0	1		0	1
2	0	2		0	2		1	3
3	0	3		0	3		2	5
4	0	4		0	4		2	6
5	0	5		3	8		3	8
6	0	6		3	9		3	9
7	0	7		4	11		4	11
8	4	12		4	12		4	12
9	5	14		5	14		5	14
10	5	15		5	15		5	15
20	11	31		11	31		11	31
50	27	77		27	77		27	77

TABLE 1.2: Starting point – Total units on-site

	Minehead			Watchet/Williton			Elsewhere	
Total Units (TU)	***Afford. Units (AU)***	***Market Units (MU***		***Afford. Units (AU)***	***Total Units (TU)***		***Afford. Units (AU)***	***Total Units (TU)***
TU = MU+AU	*AU = MU x 35/65*			*AU = MU x 35/65*	*TU = MU + AU*		*AU = MU x 35/65*	*TU = MU + AU*
1	0	1		0	1		0	1
2	0	2		0	2		1	1
3	0	3		0	3		1	2
4	0	4		0	4		1	3
5	0	5		2	3		2	3
6	0	6		2	4		2	4
7	0	7		2	5		2	5
8	3	5		3	5		3	5
9	3	6		3	6		3	6
10	4	6		4	6		4	6
20	7	13		7	13		7	13
50	18	32		18	32		18	32

2 AFFORDABLE UNITS EQUIVALENT OFF-SITE

TABLE 2.1: Starting point – number of Market Units on-site

	Minehead			Watchet/Williton			Elsewhere	
Market Units (MU)	***Afford. Units (AU)***	***Total Units (TU)***		***Afford. Units (AU)***	***Total Units (TU)***		***Afford. Units (AU)***	***Total Units (TU)***
	AU = MU x 35/65	*TU = MU + AU*		*AU = MU x 35/65*	*TU = MU + AU*		*AU = MU x 35/65*	*TU = MU + AU*
1	0.0	1.0		0.0	1.0		0.0	1.0
2	0.0	2.0		0.0	2.0		1.1	3.1
3	0.0	3.0		0.0	3.0		1.6	4.6
4	0.0	4.0		0.0	4.0		2.2	6.2
5	0.0	5.0		2.7	7.7		2.7	7.7
6	0.0	6.0		3.2	9.2		3.2	9.2
7	0.0	7.0		3.8	10.8		3.8	10.8
8	4.3	12.3		4.3	12.3		4.3	12.3
9	4.8	13.8		4.8	13.8		4.8	13.8
10	5.4	15.4		5.4	15.4		5.4	15.4

APPENDIX 3

- Examples of residential development viability
- The Examples
  - 1 Large site
  - 2 Small site

Appendix 3

Examples of Residential Development Viability

West Somerset Council operates on an 'open-book' approach to the negotiation of Section 106/Planning Obligation agreements in respect of the provision of affordable housing. Where an applicant/developer declines to make the necessary information available to the Council, the latter may opt to use the notional figures provided in the relevant example of this section as its default starting point for negotiations in the absence of that requested.

The examples of testing the viability provided below have been based on the methodology contained in the Northern Peninsula Housing Market Area - Strategic Housing Viability Assessment (NP SHVA).[9] In the context of the assumptions and formulae provided in the document the following criteria have been applied:

- The NP SHVA assumes build cost of £900m^2 equated to average build costs (in 2008) across the UK.

- The NP SHVA identifies local variations for each of the Local Authorities and the West Somerset local factor is 0.94. This makes the equivalent build cost to what is described as a 'normal' design standard as £846m^2 (£900 x 0.94).

- BCIS[10] identified that average build costs fell by 0.9% between mid-2008 and mid-2009. This makes the 2009 build cost as £838m2 (£846 x 0.009 = £7.61 or £8 when rounded to the nearest whole number.

- The NP SHVA identifies two types of dwelling size; House = 85m^2 and Apartment = 65m^2

- Commercial residential sales web-sites and publications record their data in terms of type (e.g. Detached, Semi-Detached, Terraced, Flat/Maisonette) but no reference to floor-space size or number of bedrooms.

- The residential development industry calculates build costs in terms of floor-space and the Homes and Community Agency (HCA) has identified minimum floor-space requirements for different types of dwellings that will

[9] University of the West of England; Northern Peninsula Housing Market Area – Strategic Housing Viability Assessment Study, Part 1: Report; Northern Peninsula Housing Market Area Partnership; 2008; (http://www.torridge.gov.uk/CHttpHandler.ashx?id=2522&p=0)
[10] Royal Institute of Chartered Surveyors; Building Costs Information Service Press Release: Tender Prices Fall Further but Costs Stabilise – 29th January 2010; Royal Institute of Chartered Surveyors; 2010; (http://www.bcis.co.uk/site/index.aspx)

be built as affordable housing based on the number of bedrooms and potential occupants.[11]

- For the purpose of calculating and assessing the costs of development proposals the types identified in the NP SHVA are seen as too simplistic to provide a workable set of figures. A simple classification system has been devised that incorporates the main elements that are used by residential estate agents and commercial house builders. This has been built around the HCA minimum floor-space requirements for particular dwelling types in order to provide an indicative set of criteria against which the viability of development proposals can be assessed. These are shown in the table below.

Table 0.1: HCA House types and minimum floor-space standards

Type	No. of beds	Floor-space (m^2)
Detached	4	95
Semi - Detached	3	82
Terraced	3	67
Terraced	2	57
Flat/Maisonette	2	57

Source: Homes and Community Agency, 2010

It is acknowledged that new-build open market housing may vary in respect the amount of floor-space provided, as they are not subject to the HCA design code standards.[12]

- From 1st April 2010 all new affordable housing units qualifying for HCA grant funding are expected to be built to the Sustainable Homes Code Level 4 standards.[13] The NP SHVA identified the additional cost of building to Code Level 3 as around £4,500 per unit. For the purposes of the viability calculations an additional 10% has been added to the build costs but this has only been applied in respect of the affordable housing units in the examples provided.

[11] Homes and Communities Agency; HCA Core Housing Design and Sustainability Standards Consultation, March 2010; Homes and Community Agency; 2010.
[12] Department for Communities and Local Government; Code for Sustainable Homes: A Step-Change in Sustainable Home Building Practice; Communities and Local Government Publishing; 2006.
[13] Department for Communities and Local Government; Code for Sustainable Homes: Technical Guide - Version 2, May 2009; Communities and Local Government Publishing; 2009.

- Many of the Registered Social Landlords (RSL's) operating in West Somerset will not take on bed-sit or one-bedroom new-build accommodation as part of their affordable housing stock as it lacks flexibility in terms of household change and does not conform to the Government's 'Life-time Homes' agenda.[14]

- In respect of the type of open-market and affordable housing units to be included as part of the developments it is expected that these will generally be provided in proportion (e.g. 1 affordable dwelling for every 2 open-market dwellings) and on a like-for-like basis (e.g. semi-detached for semi-detached, 2-bed terraced for 2-bed terraced, etc.,).

- For developments on small sites of less than 10 dwellings, build costs are increased by 10% to £922m^2 for open market and £1,014m^2 for affordable housing units.

- Due to the unusual characteristics of the West Somerset local planning area which excludes the Exmoor National Park and the lack of data that is disaggregated down to local authority geographies a number of geographies and/or locations have been used as a proxy for West Somerset including;

  - **House Prices –** These have been obtained from a residential property sales web-site, www.findaproperty.com The data has been extracted for the Post Code areas; TA4, TA5, TA22, TA23 and, TA24. The data reflects the asking price of 670 properties that were marketed at some time during 2009. As new-build properties command a premium sale price over and above that of equivalent 2nd hand properties and the actual sale price of the latter is usually lower than that being sought, these two factors have been deemed to cancel each other out for the purposes of the examples provided below.

  - **Industrial Land and Residential Building Land Values** – These have been extracted from the Valuation Office (VOA) web-site (www.voa.gov.uk). The data comes from their six-monthly Property Market Report issued in July 2009.[15] The data is provided at a regional level and for specific towns/cities within the region. Barnstaple has been used as a representative proxy for West Somerset.

  - **Agricultural Land Values -** These are available from the Valuation Office (VOA) web-site (www.voa.gov.uk)through their six-monthly Property Market Report issued in July 2009. The data is provided at a regional level only and has been checked against that provided by a commercial publication web-site, Farmers Weekly Interactive

[14] See www.lifetimehomes.org.uk
[15] Valuation Office (VOA); Property Market Report, July 2009; VOA; 2009

(www.fw.co.uk)[16], which provides information down to County level and that for Somerset has been used as an appropriate proxy.

The data-sets used to compile the information included in the examples given below will be updated annually in the first quarter of each calendar year in order to reflect changes that have occurred in the preceding 12 month period.

The examples are purely theoretical and it is acknowledged that no two sites are the same so each will have to be treated on its individual merits. The RSL that is engaged in the development to take on the responsibility for the affordable housing units may wish to vary the mix and/or type of dwellings to more accurately reflect the local need.

Where an applicant/developer seeks to challenge the Council's initial expectation of the level of affordable housing and/or other Section 106/Planning Obligation requirements for a particular development proposal, on the grounds of viability, they will need to provide evidence to support their case. They will be expected to demonstrate how the requirements are too onerous to make the scheme viable, including a clear and transparent methodology, and also justify any alternative proposal by the same means.

The Examples

The following two examples attempt to show the methodology of calculating viability of residential development. These are theoretical models only and assume that the development sites are greenfield locations with minimal constraints. Two examples are provided;

- Large site – 50 dwellings on 1.4 Hectares
- Small site – 6 dwellings on 0.2 Hectares

Both sites are assumed to have exceeded the thresholds and, therefore, are expected to make provision for affordable housing. In keeping with the requirements set out in para. 29 of PPS 3: Housing,[17] the affordable housing units are integrated within the respective development sites. The proportions of affordable housing within the development reflect the advice contained in the emerging Regional Spatial Strategy (RSS) for the South West[18] which sets an average rate of 35% of the total to be provided within the Local Planning Authority area. This equates to 17 units on the large site and 2 on the small site. When calculating the Gross Development Value (GDV) no sale value has been attributed to the affordable housing units. The GDV has been

[16] Farmers Weekly and Knight Frank; Farmland Values Where You Are – Interactive Map: July 2009; Farmers Weekly Interactive; 2009. (web-publication)
[17] Department for Communities and Local Government; Planning Policy Statement 3: Housing (PPS 3); The Stationary Office; 2007; ISBN 0 11 753976 7.
[18] Government Office for the South West; The Draft Regional Spatial Strategy for the South West Incorporating the Secretary of State's Proposed Changes – For Public Consultation, July 2008; Government Office for the South West; 2008.

calculated on the value of the open-market dwellings only. In terms of the type of affordable housing units to be provided as part of the overall development these have been calculated on a like-for-like basis in proportion to their open-market housing equivalents.

The definition of a large site, in the context of this guidance, reflects the nature and scale of residential development that has occurred in the past within the local planning authority area. It may vary from that used by other neighbouring authorities where the size and scale of development is significantly greater.

1 Large site

For the purposes of this exercise a mix of dwellings have been incorporated covering the full range of house types.

Table 1.1: Gross Development Value from Open-Market units

Type	Beds per unit	Number of units	Average. Selling price	Total
Detached	4	4	£307,950	£1,231,800
Semi-Detached	3	12	£194,700	£2,336,400
Terraced	3	8	£160,450	£1,283,600
Terraced	2	4	£160,450	£641,800
Flat	2	5	£130,400	£652,000
Total	-	33	-	£6,145,600

Source: www.findaproperty.com

Notes:

- *Average selling price has been determined from similar marketed property prices and rounded to the nearest £50*
- *No distinction in selling prices between 2-bed and 3-bed terraced properties was available so an average of all terraced houses has been used*

Table 1.2: Residential build-costs

Type	Beds	Floorspace (m^2)	Units	Cost per m^2	Total
Detached (OM)	4	95	4	£838	£318,440
Detached (A/H)	4	95	2	£922	£175,180
Semi-Detached (OM)	3	82	12	£838	£824,592
Semi-Detached (A/H)	3	82	6	£922	£453,624
Terraced (OM)	3	67	8	£838	£449,168
Terraced (A/H)	3	67	4	£922	£247,096
Terraced (OM)	2	57	4	£838	£191,064
Terraced (A/H)	2	57	2	£922	£105,108
Flat (OM)	2	57	5	£838	£238,830
Flat (A/H)	2	57	3	£922	£157,662
Sub – total (OM)	***-***	***-***	***33***	***£838***	***£2,022,094***
Sub – total (A/H)	***-***	***-***	***17***	***£922***	***£1,138,670***
Grand total	**-**	**-**	**50**	**-**	**£3,160,764**

Source: West Somerset Council 2010

Notes

- *All units have been costed on the basis of achieving the minimum floor-space standards required to qualify for HCA grant-funding for the affordable units although it is assumed that this is not available for this development. Open market housing is known to vary in size from the HCA standards depending on the house type.*
- *Affordable housing costs include a 10% increase in order to meet HCA Code Level 4 standard even though it is assumed that HCA grant-funding is not available for the scheme.*

Allowing 20% of total development value (£6,145,600,) this would provide a notional £1,229,120 profit margin for the developer (This would be the equivalent to c.25% of total development cost)

As the Gross Development Value (GDV), Build Costs (BC) and, developers Profit margin (P) have been determined, the Residual Land Value (RLV) can now be calculated using the formula;

GDV – (BC + P) = RLV

For the large site this would be;

£6,145,600 – (£3,160,764 + £1,229,120) = £1,755,716

If the developer was prepared to consider a lower profit margin of 12% of total development value (equivalent of c.15% of total development cost) the Residual Land Value on the site would work out as;

£6,145,600 – (£3,160,764 + £737,472) = £2,247, 364

In the absence of data available for land values in rural areas the figures provided by the Valuation Office for Barnstaple have been used as an indicative proxy valuation for the area as it most reflects the relatively remote nature of much of the West Somerset area. Details of this and other alternative land values are given in Tables 1.3 – 1.5, below.

Table 1.3: Residential Land Values[19]

Area/Location	Bulk land (c.2 Hectares +)	Small site (< 5 dwellings)	Flats/Maisonettes
Barnstaple	£1,250,000	£1,500,000	£1,500,00
South West	£1,620,000	£1,900,000	£1,970,000

Source: Valuation Office (VOA) web-site 2009

Using the 2009 figure for bulk land as the nearest to that of the site, this would give a valuation of the land at c. £1,750,000 (1.4 Ha. x £1,250,000 per Ha.). This would suggest that using a 20% profit margin on gross development value (c.25% on total development costs) the site is viable in terms of the provision of the affordable housing element but suggests that there would be very little additional monies (c.£5,700+) available for any further items that might be expected to be funded via a Section 106 Agreement. However, if the developer accepts a lower profit margin in the gross development value of the site of 12% (equating to c.15% of total development costs) then the overall viability of the site is more certain even taking account of what could be secured through Section 106 requirements for other items (e.g. recreation/open space, education, etc.). It would notonally suggest that just under £500,000 may be available for these latter items. These conclusions are based on the assumption that the developer has purchased the site after a valid planning permission for residential development has been secured.

Not all potential sites are acquired with an extant planning consent for residential development. Many larger sites are initially secured through an ‘option-to-buy’ agreement between potential applicant/developer and the existing land-owner(s). The option may be taken-up at a later when a valid planning approval has been secured or the developer is confident that consent will be achieved. Following negotiations with the land-owner(s), a developer may acquire land for a development site at a reduced cost equivalent when compared with those quoted in Table 1.3, particularly if the land was greenfield and had no previous history of development. In such

[19] VOA definition of this is; greenfield site with valid residential planning permission, free from constraints, immediate access and, infrastructure available to the edge of the land

circumstances then an agricultural land value would usually apply unless (see Table 1.4) it had been allocated for another purpose through the development plan but no consent for this activity had been secured. A rate for a greenfield site with an extant planning permission for industrial development is provided in Table 1.5 below, in order to provide an alternative land-value. In both these circumstances a developer may have more flexibility in respect of any negotiations, depending on what agreed selling price is achieved with the land-owner.

Where a proposal may, initially appear to be marginal in terms of economic viability, there may be room for negotiation between the applicant/developer and the Local Planning Authority if there were other factors to be taken into account (e.g. availability of Homes & Community Agency grant in respect of the affordable housing provision, developer willing to accept a lower profit element, etc.).

It should be noted that it is not the purpose of this part of the planning process to be used to off-set commercial decisions made elsewhere between and applicant/developer and landowner in respect of the price paid for the site and other non-planning considerations.

Table 1.4: Agricultural Land Values 2009: Somerset

Type	Quality	Per Acre	per Hectare
Arable land	***Prime***	£8,000	£19,760
	Average	£7,000	£17,290
	Poor	£6,000	£14,280
Pasture	***Prime***	£5,000	£12,350
	Average	£4,000	£9,880
	Poor	£3,000	£7,410

Source: Farmers Weekly Interactive 2010

Table 1.5: Industrial Land Values[20]

Area/Location	From	To	Typical
Barnstaple	£325,000	£500,000	£360,000
South West	£325,000	£900,000	£595,000

Source: Valuation Office (VOA) web-site 2009

[20] VOA definition of this is; greenfield site with valid industrial planning permission, free from constraints, immediate access and, infrastructure available to the edge of the land

2 Small site

For the purposes of this exercise it has been assumed that the site would comprise solely of one type of dwelling unit, detached houses.

Table 2.1: Gross development value

Type	Beds per unit	Number of units	Average. Selling price	Total
Detached	4	4	£307,950	£1,231,800

Source: www.findaproperty.com
Notes:
- *Average selling price has been determined from similar marketed property prices and rounded to the nearest £50*

Table 2.2: Residential build costs

Type	Beds	Floorspace (m^2)	Units	Cost per m^2	Total
Detached (OM)	4	95	4	£922	£350,360
Detached (A/H)	4	95	2	£1,014	£192,660
Total	-	-	6	-	£543,020

Source: West Somerset Council 2010
Notes
- *All units have been costed on the basis of achieving the minimum floor-space standards required to qualify for HCA grant-funding for the affordable units although it is assumed that this is not available for this development. Open market housing is known to vary in size from the HCA standards depending on the house type.*
- *Affordable housing costs include a 10% increase in order to meet HCA Code Level 4 standard even though it is assumed that HCA grant-funding is not available for the scheme.*

Allowing 20% of total development value (£1,231,800,) this would provide a notional £246,360 profit margin for the developer.

As the Gross Development Value (GDV), Build Costs (BC) and, developers Profit margin (P) have been determined, the Residual Land Value (RLV) can now be calculated using the formula;

GDV – (BC + P) = RLV

For the small site the residual land value would be;

£1,231,800 – (£543,020 + £246,360) = £442,420

If the developer was prepared to consider a lower profit margin of 12% of total development value (equivalent of c.15% of total development cost) the Residual Land Value on the site would work out as;

£1,221,800 – (£543,020 + £147,816) = £530,964

Using the small site valuation for residential land with planning permission shown in Table 1.3 this would give the land a value in an undeveloped state of c.£300,000. If this is deducted from the residual land value, this would leave a difference of £112,420, indicating that the site is definitely financially viable. It is noted that some of the difference might be absorbed through other requirements contained in the Section 106/Planning Obligations agreement that would accompany the planning permission. If a developer were to accept a reduced profit margin of 12%, then the amount of monies available to meet other Section 106/Planning Obligations requirements has increased to £230,964.

The calculations and figures provided in both the examples above are not expected to provide a definitive answer to demonstrating the viability of specific development proposals. The proportions of 20% and 12% of Gross Development Value (equating to c.25% and c.15% of total development costs) provide an indicative range of profit margin that developers have been prepared to accept in the past. They may also be prepared to consider a profit margin element between these figures depending on the prevailing state housing market economics at the time. The examples have been provided to illustrate and explain, in a relatively simple and transparent way, the fundamentals of viability testing of development proposals, whilst acknowledging that there are many characteristics and factors that may need to be taken into account in respect of each individual site. Each site and proposal is potentially unique and will be treated on its individual merits in respect of its characteristics and constraints that may apply.