



ark
housing consultancy

Bath & North East Somerset Council

Validation of a Strategic Viability Study

April 2011

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1. Background and Brief

- 1.1 Bath and North East Somerset Council (B&NES) previously commissioned Three Dragons Consultancy to undertake a study of the economic viability of residential development in B&NES and to test the impact on development viability of varying levels of affordable housing planning obligations. Three Dragons reported on the results of its study in June 2010.
- 1.2 The Council is reformulating its affordable housing and other planning policies and has approved in draft a new Core Strategy with an expectation that an average of 35% of new housing on sites over a prescribed threshold will be delivered as affordable. In some higher value parts of B&NES, the target increases to 40-45% dependent on underlying development viability characteristics.
- 1.3 PPS3 and allied guidance expects local planning authorities to subject emerging affordable housing planning policy to an assessment of its achievability given its bearing on the viability of residential development across their areas. This policy level testing is normally described as a 'strategic viability study'. Accepted good practice for such studies expects authorities to test hypothetically the application of the emerging policy, but to adopt reasonable and realistic assumptions for the financial dimensions of development allowing for enabling local developers and land promoters to secure a realistic return on their investment and to generate land prices which will exceed alternative use values for housing sites to a degree sufficient to induce their timely development. Most strategic viability studies include dialogue with appropriate representatives from the residential development sector in a locality to help ensure that approaches to scheme/site appraisal and the assumptions adopted are fair, reasonable and reflective of local circumstances.
- 1.4 As the draft Core Strategy is now scheduled to be subject to a further consultation phase and examination in public, and because the Three Dragons study is now over six months old, the Council has decided to check and validate the approach and assumptions adopted. The validation process is expected to include consultation with local housing producers, with agents who can comment on value assumptions and market conditions, and with a costing expert who can test the construction cost assumptions adopted.
- 1.5 Ark has been appointed to undertake the validation work. Our validation exercise was divided into two stages:
- i) a brief review of the Three Dragons approach and assumptions supported by consultation and input from other relevant organisations and information from the costing expert;
 - ii) an appraisal, adopting updated development assumptions, of 12 allocated sites in B&NES, spread across a range of market zones. Whilst these sites were still to be assessed on a fairly hypothetical basis, it provided an opportunity to relate appraisals to real opportunities and thus to strengthen the outputs of, and make more robust, the strategic viability study.

- 1.6 This brief report sets out the results emerging from both stages of the validation exercise. Following completion of stage i), the preliminary findings were shared and discussed with appropriate Council officers before updated development assumptions were adopted and work commenced on stage ii).
- 1.7 The validation exercise has been reasonably limited in its scope and understandably this has placed limitations on the depth of analysis. Nonetheless telling conclusions have been reached and these are summarised in section 6 of this report.
- 1.8 The validation work was carried out during December 2010 and January 2011.

2. The Three Dragons Viability Study

2.1 Methodology

2.1.1 The study undertaken by Three Dragons had four main strands, including:

- ~ Discussion with a project group of officers from the Council to help inform the approach to research;
- ~ Analysis of information held by the Council including information describing the profile of land supply;
- ~ Use of the Three Dragons proprietary scheme appraisal model (the Toolkit) to carry out appraisals of scheme viability based on a Residual Land Value (RLV) approach to the assessment;
- ~ A workshop with developers, land owners and their agents to debate some of the assumptions used in appraisal and some of the initial findings.

2.1.2 The RLV approach to viability assessment is the standard methodology adopted by the housebuilding and residential development industry. It is simple and straightforward and is predicated on applying a current cost and value convention, i.e. inputting receipts and revenues from development and costs of production as if they were all being incurred at the prices pertaining in the market place at the time the appraisal is carried out. The impact of inflation on values and costs is not forecast in the appraisal. Where there is a perception of a positive or a negative impact from inflation (future values exceed future costs or vice versa) these are recognised in the overall profit expectation for the developer. Higher profit margins will tend to be required if there is a perception of a significant risk of a negative effect from inflation.

2.1.3 The methodology for appraisal adopted by Three Dragons is straightforward and typical, and makes for a fully defensible approach. The mechanics of appraisal is much less an issue of relevance than the assumptions and inputs adopted. These have major significance to the results of the appraisals and are worthy of careful consideration. We address these more fully in Section 2.2 and they also formed a major element of the dialogue we had with consultees from housebuilding organisations.

2.1.4 Three Dragons have based the appraisal entirely on hypothetical development across B&NES albeit appraisals have been sensitised for:

- ~ Development in a series of 10 market zones which reflect local variances in market values and build prices;
- ~ Development at a range of densities from 30 dwellings per hectare to 200 dwellings per hectare, suggestive of varying dwelling mix and the different market dynamics of developing in high value urbanised locations as opposed to rural or lower value suburban settings;
- ~ Variation in the balance of affordable tenures between social renting and intermediate housing;
- ~ Variations in market values by up to 10% positively or negatively from the main assumptions adopted.

- 2.1.5 In Ark's view, based on appearing as an expert witness from time to time at planning appeals and defending strategic viability approaches, there is value in relating viability assumptions to real development projects in an area, whether estimating based on identified sites or even examining real scheme outturns. This can add a helpful layer of practical reality and reliability to the results. The Three Dragons study does highlight case study sites in Section 5 to help support the case for defining thresholds for the application of affordable housing planning obligations at a level which is low but should not stymie development, but otherwise does not address any actual development sites in B&NES.
- 2.1.6 There would have been value in making more reference to real development opportunities in B&NES to bolster the results of the study. This would also have permitted some better targeting of assumptions made on development densities to particular areas (this point was picked up at the developer workshop). Generally though, the methodology is sound.

2.2 Assumptions and Appraisal Inputs

- 2.2.1 So, if the Three Dragons methodology is generally sound, what of the more salient question of the defensibility and applicability of the appraisal assumptions adopted?

2.2.2 Market Zones

In Ark's view, there is insufficient variance between values in a couple of zones or areas to warrant presenting them separately. Certainly this would be true between Bath North and West on the one hand and Bath South on the other. These ought to be merged. Aside from this change, there does appear to be sufficiently distinctive pricing between the zones to confirm the need for separate appraisal of development in each area although this needs to be reviewed from time to time as the relative market appeal and cost drivers of different areas can and will change.

2.2.3 Development Density

Increasingly, developers will seek to avoid the inclusion of apartments in market sale and intermediate home ownership tenures. Only a very limited number of sites in B&NES, in the higher value parts of Bath itself, are likely to include any significant proportion of flatted accommodation. Therefore, the trend with development densities is lowering and the average for B&NES generally is probably now at around 40 dwellings per hectare for new applications. Three Dragons note that *'50 dph is probably the optimal density at which affordable contributions can be maximised in the B&NES area'*. It needs to be borne in mind that this level of density is now unrealistic for all parts of B&NES except central Bath.

2.2.4 Affordable Housing Transfer Payments

These were defined at average amounts for either social renting or intermediate home ownership based on assumed density levels. At 50 dph, the figures are £78,000 for a social rented dwelling and £112,000 for an intermediate home ownership dwelling. The figures rise to £80,000 and £114,000 respectively at the more realistic 40 dph.

Three Dragons note that intermediate home ownership prices were increased by 25% from the level advised by RPs during the study. This was an attempt to reflect the depressed appetite for intermediate home ownership and thus prices recently being paid. With market conditions likely to continue in the current vein for some while, and the increasing pressures on RPs finances in various ways, Ark feels that it is unlikely that the 25% uplift will be manifest for some considerable while.

We are also uncertain about how the average levels for dwelling prices were calculated. We think that these may be simply an average of the rate for all the market price zones in B&NES. If more housing development is scheduled to occur in the low value locations of Norton/Radstock, Paulton, Peasedown and Keynsham the prices would need to be adjusted downward. However, because Bath Western Riverside accounts for a sizable proportion of the forward programme it may well be that the average figures are justified. Some further analysis of the forecast programme of residential development, based on location, is probably worth carrying out in order to test this point.

2.2.5 Market Values

We have carried out consultation with local estate agents and with some housebuilders operating in B&NES. The results of this feedback are set out in Section 3 and provide comparables for the values adopted by Three Dragons. The values informing the Three Dragons study are based on published Land Registry data and are, of course, predominantly for second hand properties with features and characteristics which can be difficult to contrast directly with typically specified new build product. Ordinarily, new build products will achieve a premium price albeit these premiums have been eroded especially when considering the incentives developers have to offer in order to achieve sales.

Land Registry published purchase prices are, of course, net values achieved so do reflect discounts or offers below asking prices. However, for new build properties, they do not reflect the cost of sales incentives including free insurance, mortgage deals, white goods, cash back and the like. At a cost of around £3,500 per dwelling on a three bedroom semi-detached house, netting these off the gross development value will have a significant impact on RLV. However, netting incentives off the premium new build prices can have the effect of aligning them more closely to average Land Registry prices in an area and strengthens the validity of basing sales prices on Land Registry data.

2.2.6 Build Prices

Section 4 of this paper summarises the results of a brief review of build price assumptions, as relevant to B&NES, carried out by an experienced costing consultant operating in the area. Three Dragons have assumed that both market and affordable dwellings achieve Code Level 3 and their price assumptions are adjusted from BCIS base figures accordingly. Although this standard exceeds current housebuilder standards typically it is, in Ark's opinion, a reasonable base assumption for a forward looking study.

2.2.7 Dwelling Sizes

Ark has checked the assumed average dwelling size adopted by Three Dragons for dwellings in market or affordable tenures. The sizes tend to be smaller for market dwellings up to 3 bed semi-detached houses and then tend to be larger for market dwellings.

We are comfortable with the assumptions used (see page 57 of the Three Dragons Study report) but generally would still be used to seeing housebuilder standard 3 bedroom semi detached houses being between 75m² and 82m² rather than the suggested 90m².

2.2.8 Profit and Overhead Contribution

Three Dragons shows developer profit and overhead contributions sub-divided between the two elements. Profit expectations differ between market dwellings and affordable as follows:

	Profit	Overhead	Contribution
Market	17%	5%*	20% of GDV
Affordable	6%	5%*	11% of affordable value

**The overhead provisions are based on build costs rather than Gross Development Value, which would be more typical for housebuilders. The overall contribution is therefore about 20% of GDV.*

Whilst we are comfortable with the affordable margins, we believe that the market housing contribution level is below typical expectations for developers in the current market.

At the stage when acquisitions are being secured, a fair amount of detailed analysis of sites together with negotiating the finer detail of planning consents still have to be concluded. This 'risk' factor is reflected in the margin attributed to the appraisal and in Ark's view this would typically be 25%, and sometimes even higher. When schemes are substantially de-risked, at the point at which a scheme level viability assessment is being conducted in support of a specific planning application, then it may be more justifiable to argue for a margin of around 20% and indeed Ark has successfully argued this point on numerous individual scheme viability assessments. The profit margin was tested with consultees at the workshop hosted by Three Dragons. As a result of comments made the profit element was increased from 15% to 17%.

2.2.9 Other Assumptions

The other key assumptions worthy of examination included:

- ~ Development financing interest rate - 7% of build cost
- ~ Fees for construction related services - 12% of build cost



- ~ Sales and marketing - 3% of GDV
- ~ S.106 contributions for other than affordable - £15k/unit

These are commented upon by housebuilder consultees at Section 3 later.

3. Consultation Feedback

3.1 Estate Agents

- 3.1.1 We carried out a series of telephone interviews with estate agents operating across the various identified market zones within B&NES. In all we contacted 7 separate firms of agents and we were able to gather value data for 6 distinct market zones. The zones are similar to those identified by Three Dragons but there is some integration or consolidation of their groupings to follow established local market understanding.
- 3.1.2 The estate agent direct research has been supplemented by some analysis of properties available for sale via the Rightmove website and again these values are divided between the 6 logical market zones in B&NES.
- 3.1.3 A resume of both the estate agent research and the Rightmove analysis is attached to this paper at Appendix A.
- 3.1.4 In addition to gathering specific value data, the agents interviewed were asked to provide a brief commentary on the condition of the local housing market. The following summary highlights the main findings:
- the market has been stagnating again with some agents reporting modest price falls,
 - although there is a variation in expectations for the market in 2011 generally confidence is limited and prices are perceived as likely to remain flat, or to fall slightly in the earlier part of 2011. Some agents, probably more in hope than anything else, are forecasting some positive price movement in 2011 although probably in the summer or latter half of the year,
 - the most positive feedback concerned the more expensive market zones particularly in central Bath. This is in part a reflection of scarcity of good quality properties and a buyer cohort which includes wealthy cash-rich buyers who are experiencing poor returns from other investments.
- 3.1.5 It is important to note that all of the price data obtained is based on asking prices. Although the agent focusing on Bath North reported that asking prices are often achieved (or even exceeded) generally actual sale prices at present will be less than asking prices. Also, it must be borne in mind that the price data is largely for second hand properties and so will not necessarily compare well with new-build prices, partly because of new-build premiums but partly also because new-build headline prices include incentives and so are not really net bankable receipts for developers (see 2.2.5 earlier).
- 3.1.6 If we carry out some comparative analysis between the results of Ark's agent/Rightmove research and the Land Registry data adopted by Three Dragons the following emerges:

Area	Property Type	Three Dragon's Study Value	Agent/ Rightmove (asking price)	% Variance
1. Bath North	1 bed flat	£160,000	£160,000	0
	2 bed house	£275,000	£220,000	-20%
2. Bath South	1 bed flat	£115,000	£145,000	+26%
	2 bed house	£210,000	£190,000	-9%
3. Bath Rural	2 bed house	£380,000	£220,000	-42%
	3 bed house	£440,000	£250,000	-43%
4. Chew Valley Rural	2 bed house	£245,000	£220,000	-10%
	3 bed house	£325,000	£350,000	+8%
5. Keynsham & Saltford	2 bed house	£185,000	£170,000	-8%
	3 bed house	£215,000	£200,000	-7%
6. Norton/Radstock/ Paulton & Peasedown	2 bed house	£160,000	£140,000	-12%
	3 bed house	£185,000	£170,000	-8%

3.1.7 Although not sufficiently detailed or with a wide enough sample to suggest a completely reliable variance from the modelling values there are one or two areas where the input values appear quite different from local market expectations and experience. This would be true for one bedroom flats in Bath South and especially true for houses in Bath's rural hinterland. Generally though variances are modest and can be readily accounted for by the skewing of some samples by one or two properties of unusual value characteristics and by normal tolerances. The values adopted for Norton/Radstock 2 bedroom houses are worthy of closer examination and further relevant commentary on values adopted for this area emerges in Section 3.2 below.

3.2 Housebuilders

3.2.1 We carried out telephone interviews with 3 senior personnel from leading housebuilder/developer organisations operating in B&NES. These were:

Simon Gait: Land Director, Linden Homes

Debbie Aplin: Managing Director, Crest Nicholson Regeneration

Ralph Hawkins: Development Director, Barratt Homes

All have substantial involvement and interest in residential development in B&NES and are well placed to comment knowledgeably on the condition of the residential development market locally and to provide insight into prevailing development appraisal assumptions.

3.2.2 Crest Nicholson Regeneration is the developer for the large regeneration scheme at Bath Western Riverside. Debbie Aplin's knowledge of residential development in B&NES relates specifically to this scheme and it is not representative of development across the area. Crest does have other development interests corporately in B&NES but other personnel within the organisation would need to be contacted in order to test assumptions for more typical local schemes.

3.2.3 Based on the discussions held with all three consultees the following relevant feedback was obtained:

- generally residential schemes have been delivering affordable housing at between 20% and 25% of all dwellings and some schemes have been dependent on external subsidy in order to achieve these affordable housing contributions,
- competition from RPs for affordable housing planning obligations has been very 'managed' in B&NES. All tend to work with the Homewest partners and one described effectively a one-to-one negotiation with a particular RP in B&NES regardless of whether grant was needed. This lack of competition may mean that prices secured are not especially high and this impacts overall on the amount of affordable which can viably be delivered. One of the developers confirmed that the prices secured for both social renting and intermediate home ownership were around 15% lower than the averages assumed by Three Dragons,
- development densities are typically reducing as developers aim to minimise the inclusion of apartments in new schemes. Typical development densities outside of central Bath are likely to be in the 30-40 dwellings per hectare region,
- sales rates are very depressed compared with traditional levels and all developers are modelling on very conservative assumptions for numbers of sales achieved per period. For larger sites the rates, once dwellings start to achieve practical completion, are assumed to be 25-35 per annum dependent on dwelling type and location. If this rate is realistic and materialises then it has a significant impact on cash flow, development interest charges and ultimately overall viability. Perceptions about BWR are different given its nature and here assumptions adopted suggest sales at up to 5 per month,
- the assumed level of Section 106 contributions per unit, at £15,000, is regarded as very high. One developer identified £5,000 per unit as more typical across its operating area but another suggested that applying B&NES Council's own matrix for calculating the obligations would produce a typical unit figure as high as £19,000,
- developers expect prices to be flat or to decline by up to 5% into the first half of 2011. There is very little optimism or confidence about general housing market conditions and all feel that the full effects of the public spending cuts/ job losses are yet to be felt and could produce another market downturn,
- as regards profit and overhead margin the sector as a whole is assuming 25% as a minimum at acquisition stage. This may be modified for schemes which have planning consents at a reasonable level of detail and are effectively 'oven ready',
- although build prices vary significantly dependent on scheme type and specification, general feedback suggests that, even allowing for achieving Code level 3, the Three Dragon's assumptions are fairly reasonable but may be slightly low for Band 1 properties at £900-£950 when a figure of nearer £1,000-£1,050 might be more reflective of current costs,

- there was scepticism about some of the market values suggested particularly for the lower value areas within the district. All developers noted that the adopted values did not properly reflect net prices to developers after allowing for incentives. One developer drew a direct comparison between values assumed by Three Dragons for Paulton and its own assumed net sales prices for a real current scheme in that locality. Three Dragons assumed an achievable market sale price of around £210/ft² for a three bedroom house whereas the developer is currently assuming a net achievable of £185/ft², almost 12% less.

3.2.4 Because of the feedback on market values in the Norton/Radstock, Paulton and Peasedown market zone we decided to seek some commentary from another housebuilder currently active in the areas. We contacted Bovis Homes in December, have chased but are still awaiting responses to some specific questions we have posed, which should help to clarify appropriate value assumptions. What we do already know is that Bovis has allowed for an average of £210/ft² as achievable sales receipts for a scheme in Paulton as this appears in a scheme specific viability appraisal. The Bovis figure directly accords with the Three Dragons assumption of average values and is very different from the figures reported by the other housebuilders with the neighbouring site.

3.3 Registered Providers

- 3.3.1 Some of the Registered Providers (housing associations) developing affordable homes in B&NES were contacted by Ark to provide information on the level of transfer payments they would typically be able to sustain for grant free affordable housing on Section 106 sites.
- 3.3.2 We have received detailed breakdowns of payments which can be achieved on the 'supportable deficit' basis. The two RPs have asked for their respective figures to be treated confidentially and therefore we are not attributing amounts to particular RPs. However, both have a significant local presence in B&NES and are active developers.
- 3.3.3 The 'supportable deficit' principle bases fundable capital costs on the amount which is serviceable from compound revenues over a 30 to 40 year period. Initially, the revenue costs including attributable loan payments will exceed rental income but over time the revenue account moves into surplus. These surpluses grow more significant once the loan is repaid in 30 to 35 years. Net deficits and surpluses are all discounted back to a present value and this needs to be neutral or modestly positive for a scheme to 'break even' based on a certain capital cost.
- 3.3.4 The supportable deficit funding approach is relevant to social renting and to the rental element of intermediate home ownership. The remainder of the transfer price for intermediate home ownership is reflective of the average starting share of the open market value which will be sold (either 40% or 50% usually).
- 3.3.5 Where there is competition among RPs for Section 106 schemes, or where it is important strategically for an RP to develop its presence in an area, transfer prices for social rental housing are likely to exceed the supportable deficit amount. This could be by as much as £10,000 per dwelling in an area like B&NES, in Ark's experience.

3.3.6 Supportable deficit figures obtained by Ark were identified separately for five different market zones and for a range of property types. The breakdown is as follows:

	RP (A)	RP (B)	Average
<i>Bath City North</i>			
1 bed flat	£79,900	£60,000	£69,500
2 bed house	£93,400	£81,250	£87,325
3 bed house	£104,500	£96,000	£100,250
<i>Bath City South</i>			
1 bed flat	£73,400	£52,000	£62,700
2 bed house	£83,200	£69,500	£76,350
3 bed house	£93,500	£83,000	£88,250
<i>Keynsham and Saltford</i>			
2 bed house	£78,400	£63,500	£70,950
3 bed house	£86,600	£75,000	£80,500
4 bed house	£92,600	£86,000	£89,300
<i>Norton/Radstock</i>			
2 bed house	£78,400	£63,500	£70,950
3 bed house	£86,600	£75,000	£80,800
4 bed house	£92,600	£86,000	£89,300
<i>Bathavon Rural</i>			
2 bed house	£85,700	£74,500	£80,100
3 bed house	£95,700	£90,500	£93,100

3.3.7 There are significant variances in the amounts payable by the two RPs, despite the fact that both will be appraising assuming the same starting rents, based on HCA target rents. The differences arise as a result of variations in the appraisal assumptions adopted, particularly the appraisal period, the rate of discounting of cash flow and the long-term borrowing interest rate.

3.3.8 The average affordable dwelling type produced across the B&NES area for the next three to five years is likely to be between a two and three bedroom house. The mean average supportable deficit payment would be £73,543 not adjusted for the relative quantity of delivery in the market zones. Given that a premium can be added to this figure, it suggests that the Three Dragons average social rented transfer payment of £80,000 for a 40 dph scheme is achievable and realistic.

3.3.9 Interestingly, Ark's findings from this RP research are at odds with some of the feedback obtained from housebuilders on the transfer prices they are achieving.

4. Costing Consultant Review of Construction Base Prices

- 4.1 As part of this validation exercise, the Council appointed an experienced specialist cost consultant to advise on appropriate construction base prices in the area. The consultant appointed, Brendon Penny, has a long track record of providing cost advice and of acting as an employer's agent on residential development projects throughout Bath and North East Somerset. Brendon Penny holds its own database on costs and this includes figures for RPs procuring affordable housing through design and build contracts and for housebuilders procuring market housing through their normal supply chains, with the competitive pricing that this implies.
- 4.2 As an initial exercise Brendon Penny was asked to examine the construction base price adopted by Three Dragons. This was based on the Building Cost Information Service (BCIS) database which collates a sample of tender prices for a given area. Brendon Penny was asked to comment on the suitability of BCIS as a price benchmark and to contrast the BCIS price with their own local knowledge. A copy of Brendon Penny's initial report on build prices is attached as Appendix B.
- 4.3 The initial Brendon Penny report provides cost information, based on its own data, for three specific locational groupings within B&NES being:
- Bath City Centre
 - Bath Suburbs/District
 - B&NES Rural
- 4.4 As mentioned earlier, Brendon Penny's cost database includes figures relevant to RP procured schemes and also figures relevant to housebuilders' own costs. The former are typically considerably higher than the latter. RP procurement usually anticipates a higher specification standard but the processes adopted are somewhat unwieldy, involves a larger and more complex supply chain and involves lower volumes and less standardisation. Housebuilders have much greater efficiencies and economies in procurement.
- 4.5 The following table provides a brief comparison of the costs identified by Brendon Penny. The unit costs include provision for external works, preliminaries, design fees and overhead and profits for the supply chain including labour contractors. The costs are based on a house and are per square metre of Gross Internal Area:

Location	BCIS	RP Design & Build	Housebuilder
Bath City Centre	£1,272	£1,255	£1,009
Bath Suburbs/District	£1,272	£1,149	£947
B&NES Rural	£1,272	£1,350	£974

- 4.6 For average costs across B&NES, the BCIS figure is around 2.5% higher than the RP design and build figure but over 26% higher than the housebuilder figure. The latter is the more relevant comparison albeit the Brendon Penny housebuilder average is around 5% lower than the figures suggested by the housebuilder consultees.

- 4.7 The Council identified twelve specific sites which are earmarked for residential development in the Local Development Framework. As a second stage in the assessment of costs (and in the validation process generally) Ark and Brendon Penny were asked to relate their findings to these specific sites. At Appendix C is attached Brendon Penny's report on particular cost factors impacting on these sites and the variance to base costs which would be likely to arise to reflect these factors. Variances range between an addition or reduction of between 5% and 10% on the base prices.
- 4.8 The next section of this report identifies the twelve sites, their locations and their spread geographically throughout Bath and North East Somerset. In the viability modelling carried out by Ark for these twelve sites, the variances to base costs have been applied as recommended by Brendon Penny.

5. Site Specific Viability Modelling

- 5.1 As mentioned in Section 4, the Council has identified twelve sites which were examined in the Strategic Housing Land Availability Assessment (which was completed in December 2010) and are anticipated to contribute to meeting the housing delivery targets for Bath & North East Somerset.
- 5.2 The sites are spread throughout the B&NES area and provide a good diversity of size and development characteristics.
- 5.3 Ark agreed with the Council that it would carry out a brief viability appraisal for each of the identified sites in order to further test the findings of the Three Dragons strategic viability study. The appraisals were conducted using the Toolkit produced by Three Dragons, with defaults specific to B&NES, for use by the Council.
- 5.4 A number of the appraisal assumptions originally adopted by Three Dragons were adjusted by Ark to reflect the findings of this validation exercise. In particular we:
- amended sales values where appropriate to accord with the feedback we obtained from estate agents and housebuilders and the research we carried out on the Rightmove website,
 - adjusted and sensitised build prices to reflect the Brendon Penny advice on base build costs including varying the base prices by scheme location and type in accordance with the reports attached at Appendices B and C,
 - reduced intermediate home ownership transfer prices to reflect prevailing market conditions, adjusting them to acknowledge differing underlying open market values for different locations,
 - adjusted the developer's profit margin to 22% of GDV and removed any separate allowance for overheads based on build costs,
 - reduced contribution related fees to 10% of build costs from 12%,
 - reduced other Section 106 obligations to an average of £10,000 per unit rather than £15,000.
- 5.5 We have retained many of the default assumptions already incorporated in the Toolkit including adopting the default dwelling mix which is governed by the development density of a site. Our view is that this is an acceptable approach for outline viability modelling. However, these default mixes are unlikely to accurately mirror the real dwelling mix which would be proposed for most of the sites in question. Also, the tenure mix calculations produce numbers of dwellings in each tenure showing fractions. Although this is not producing material anomalies in the appraisal results it would be preferable for the toolkit to be reworked to achieve whole dwelling results when dividing units by tenure.

5.6 We have retained the Homes and Communities Agency (HCA) target rent defaults in the appraisals. In Ark's view this is appropriate and planning policy in B&NES expects rented housing produced through the operation of planning obligations to be 'social rent' at target rents. However, the recently published Localism Bill is proposing that a proportion of existing social rented housing be converted over time to 'affordable rents' and that all new rented schemes benefitting from HCA grant investment be set on affordable rents. Affordable rents will be based at or close to 80% of market rents and ordinarily, especially in an area like B&NES, be higher than social rents. This would improve viability but impact adversely on affordability. This will become an issue to consider for B&NES and other local planning authorities when the Localism Bill is enacted, particularly if Section 106 schemes require any grant investment to enable affordable housing provision to be viable.

5.7 The results of the individual site appraisals were as follows:

Code MSN 10 - Alcan Site, Midsomer Norton	
An ex-industrial site of 4.4 ha gross with potential for approximately 150 dwellings.	
Residual Land Value: £427K/ha	
Target RLV:	£1m/ha
Net value increase to achieve policy affordable housing and target RLV – 17%	
Affordable housing level which is viable: 10%	

Code RAD 3 - Charltons, Frome Road, Radstock	
An ex-timber yard of 0.42 ha with potential for approximately 25 dwellings	
Residual Land Value: £358K/ha	
Target RLV:	£1m/ha
Net value increase to achieve policy affordable housing and target RLV – 15%	
Affordable housing level which is viable: 10%	

Code RAD 21 - Mill Road and Frome Road, Radstock	
A Greenfield site of 2.36 ha with potential for approximately 70 dwellings	
Residual Land Value: £371K/ha	
Target RLV:	£1m/ha



Net value increase to achieve policy affordable housing and target RLV – 20%

Affordable housing level which is viable: 5%

Code RAD 29 - Rear of 43 Elm Tree Avenue, Radstock

A land assembly site of 0.7 ha with potential for approximately 27 dwellings

Residual Land Value: £462K/ha

Target RLV: £1m

Net value increase to achieve policy affordable housing and target RLV – 15%

Affordable housing level which is viable: 11%

Code EH 3 - Church Lane, East Harptree

Village infill site of 0.75 ha with potential for approximately 15 dwellings

Residual Land Value: £1,865,000/ha

Target RLV: £1.8m

This scheme is viable with build costs increased by 5% from Brendon Penny base estimates and with sales values based on Ark's research.

Code TIM 2 - Land off South Road, Timsbury

Agricultural land of 2.92 ha with potential for approximately 80 dwellings

Residual Land Value: £1,738,000/ha

Target RLV: £1.5m

This scheme is more than viable with build costs at the levels suggested by Brendon Penny. Sales values are adjusted from the Ark research downwards to reflect the lower perceived value of Timsbury.



Code WES 3 - Bellots Road, Bath
A warehouse site of 1 ha with potential for approximately 50 dwellings
Residual Land Value: £1.572m/ha
Target RLV: £1.8m
Sales values to increase by 6% to achieve policy compliant position. Reduction in AH by 5% to achieve viable scheme.

Code KING 15 - Westmark, Windsor Bride Road, Bath
A cleared and light industrial site of 0.73 ha with potential for approximately 125 dwellings
Residual Land Value: £1.979m
Target RLV: £1.8m
35% AH, of which 26% social rent and 9% shared ownership. Creates a RLV of £1.979m and is viable Note: Assumed 125 dwellings at density of 171 per hectare. Applicant previously submitted an application for 171 apartments that was later withdrawn.

Code ODN 3 - Englishcombe Lane, Bath
A paddock site of 1.4 ha with potential for approximately 45 dwellings
Residual value: £1.234m/ha
Target: £1.8m
To achieve policy position and viability market value needs to increase by 14%. Reduction in AH to 17% to deliver a viable project based on current values and costs. Note: This site has a low density for Bath, due to part of the site being undevelopable.



Code ODN 1 - Old Red Lion Quarry, Bath
An ex-commercial site of 0.85ha with potential for approximately 43 dwellings
Residual Land Value: £1.713m/ha
Target RLV: £1.8m
Increase in market value in order to achieve RLV in excess of £1.8m/ha is just 2%.
Reduction in AH to make the scheme viable is by 2% down to 33% AH.

Code K4 - The Grange Hotel, Keynsham
A hotel grounds site of 0.2 ha with potential for approximately 14 dwellings
Residual Land Value: £1.428m/ha
Target RLV: £1.2m
This is viable with 35% AH.
Note: Based on current policy this site for only 14 units would not require any AH contribution. This shows that a 14 unit site is viable.

Code K 37 - 69/71 Bristol Road, Keynsham
A conversion and additional development site of 0.4 ha with potential for approximately 12 dwellings
Residual value: £397,000/ha
Target RLV: £1.2m
This is a refurbishment project and costs are assumed to be quite high, and yet values are typical for Keynsham. Is this a relevant site to test? This may need further viability investigations.
Sales value to increase by 22% for the scheme to be viable.
The AH proportion would have to be reduced down to 8% to create a viable project.

6. Conclusions

- 6.1 Although the scope and depth of this validation exercise has been fairly limited, it has subjected the appraisal assumptions applying to the strategic viability study to effective and practical testing, helping to relate them better to the B&NES localities.
- 6.2 Inevitably there are some inconsistencies between the findings of the validation exercise and the original viability study. Just as inevitably, there are actually inconsistencies in some of the findings of the validation exercise itself, not least in feedback from consultees. Nonetheless it is possible to synthesise these with the additional factual data which Ark has obtained to arrive at a reliable view on appropriate development assumptions to adopt in appraisals.
- 6.3 As we mentioned in Section 2 earlier in this report, the methodology adopted by Three Dragons in carrying out the strategic viability report is fundamentally sound. We would though recommend that some of the appraisal assumptions in the Toolkit used by the Council are changed as follows:
- (i) for hypothetical appraisals, typical development densities for sites other than in Central Bath should be assumed to be between 30 and 40 dwellings per hectare,
 - (ii) affordable housing transfer payments for intermediate home ownership dwellings should be reduced from an average of £114,000, when density is 40 dwellings per hectare, to a figure nearer to £90,000 per dwelling in most localities. For higher value zones such as Prime Bath or most rural locations the transfer price should be higher,
 - (iii) sales values in some market zones need to be reduced to reflect the findings of the research which Ark has undertaken and which are set out in Appendix A. The table at Section 3.1.5 of this report illustrates some of the variances and these are most acute for the rural areas. There would be merit in conducting a more thorough-going review of the sales data including more sampling of achieved sales price for particular new build schemes when such development has recently taken place or is current. Ark's site specific appraisal work, supporting this validation exercise, has been based on adopting values reflective of the research we have carried out and applying what we consider to be appropriate differentials between dwelling values where we have not secured a direct comparable,
 - (iv) build costs should be reduced to more closely align with the housebuilder prices evident in the Brendon Penny database and adjusted by locality in accordance with the variances suggested by Brendon Penny. The base build prices Ark has adopted for appraisal purposes, without any uplifts for higher cost areas or reductions for lower specification areas, are:

	£/m²
bungalows	1,000
flats (6+ storeys)	1,250
flats (5+ storeys)	1,150
houses less than 75m ²	1,000
houses more than 75m ²	1,000

- (v) Section 106 contributions for other than affordable housing should be expected typically to amount to £10,000 per dwelling,
 - (vi) profit assumptions for market housing should be based on achieving a gross contribution to the developer of between 22% and 25% of Gross Development Value (GDV), unless viability assessments are being carried out on specific schemes which are at a reasonably advanced pre-development stage and have been substantially de-risked (when the contribution level might arguably be lowered) or have particular development risks higher than the norm (when it could be agreed that the contribution ought to be higher),
 - (vii) construction related fees should be reduced to 10% of build costs and marketing costs should increase to 4% of GDV for market sale dwellings.
- 6.4 In Section 5.5 earlier we identified that the Toolkit produces dwelling numbers, when subdividing the total by tenure percentages, showing fractions. We believe that some further work on the Toolkit is appropriate in order to produce outputs, and to drive other elements of the appraisal, based on showing the nearest whole number equivalents.
- 6.5 We also mentioned in Section 5 the issue of the default mix for schemes producing results which would be unlikely to reflect practical reality. To a degree this is unavoidable as the default cannot be expected to recognise the very specific characteristics of a particular site and its setting. However, we do feel that a review of the default mix is needed particularly with a view to reducing the assumed number of apartments included in schemes which have fairly low densities. We recognise that there would need to be a corresponding reduction in the inclusion of detached dwellings but this would also improve the realism of the output.
- 6.6 As regards the overall conclusions on the viability of the emerging Core Strategy policy in B&NES, of a 35% expectation of affordable housing provision on new housing sites and with this rising to 40-45% in higher value locations in B&NES, five of the twelve sites we have appraised can achieve or exceed the policy expectation based on current market conditions. Two of the others are not significantly adrift of being viable. This is based on assuming no grant investment in schemes and making no allowance for any impacts on viability which proposed changes to the rent setting regime might have.
- 6.7 There are some lower value localities in B&NES where identified sites and updated appraisal assumptions are giving rise to grant-free affordable housing levels which are below the policy expectation. This is particularly true for sites in the Norton Radstock area and especially for lower density schemes. The results of our appraisal work suggest that net increases in sales values (after allowing for cost increases)

would need to be in the region of 15% from current levels to ensure that viability was achievable at policy affordable housing obligations. Although the housing market remains at a low ebb the cost value ratio is not significantly different from historic trends. So although the viability position is likely to improve over time as price and sales rate recovery is experienced this is not likely in the near future to achieve 15% net increases in sales values.

- 6.8 For the lower value localities, the Council should prioritise these for investment of external grant. Although grant availability is reduced, it should still be sufficient to help bolster the Core Strategy policy in a targeted way. Investment of grant will give rise to the rent setting issue we have described earlier but although this is problematic for affordability it could be an additional boost for viability.
- 6.9 Overall though, in the context of development viability across the whole of the Council's area, the current depressed position of the market and economic cycle, the potential for targeted external subsidy and the evident acceptability of similar policy expectations applied (and tested through appeal) in other areas the policy for B&NES appears reasonable.



Appendix A

Estate Agent and 'Rightmove' Research

Feedback from Local Estate Agents

Area 1 - Bath North:

<i>Property Type</i>	<i>Lowest Asking Price (AP)</i>	<i>Highest Asking Price (AP)</i>	<i>Typical AP</i>
Studio	£110,000	£135,000	£125,00
1bed flat	£118,950	£199,995 (garden flat)	£160,000
2bed flat	£169,950	£270,000	£220,000
2bed house	£140,000	£299,500	£215,000
3bed house	£157,000	£450,000+	£350,000
4bed+ house	£163,950	£475,000+	£425,000

Additional Questions:

1. Has the housing market stagnated or fallen recently? – Values have fallen a little because of supply and demand. However we are achieving the asking price sometimes a little bit more. The market is reasonably buoyant. We are seeing cash rich buyers as not getting a good return from banks. Now a slight decline, but still busy.
2. How do you predict what may happen in early 2011? – Expecting more properties to come onto the market. The increase in VAT may put people off initially, but once they have got used to it, we are expecting a reasonable year. We have concerns over the Government cuts causing tough times at the beginning of the year, but are hopeful that it will pick up towards the end of the year.
3. Are there any places that are relatively cheap or relatively expensive? – Cheap areas – none really in North Bath. Expensive area – Prime Bath, Lansdown, Upper Weston, Newbridge

Source: Estate Agent: Andrews. Contact: Eileen Jenkins, tel: 01225 339622

Date: 08/12/10

Area 2 - Bath South:

<i>Property Type</i>	<i>Lowest AP</i>	<i>Highest AP</i>	<i>Typical AP</i>
Studio	£85,000	£150,000	£110,000
1bed flat	£90,000	£300,000	£145,000
2bed flat	£100,000	£450,000	£190,000
2bed house	£120,000	£500,000	£190,000
3bed house	£125,000	£1,000,000	£320,000
4bed+ house	£140,000	£2,000,000	£375,000

Additional Questions:

1. Has the housing market stagnated or fallen recently? – Fallen by 5% in the last 3 months
2. How do you predict what may happen in early 2011? – Increase by 5%
3. Are there any places that are relatively cheap or relatively expensive? – Cheaper areas – Twerton, Odd Down, Bear Flat, Expensive areas – Widcombe, Combe Down

Source: Estate Agent: Andrews Contact: Alex Bowwater, tel: 01225 310570
Date: 08/12/10

Areas 1 and 2 - Bath:

<i>Property Type</i>	<i>Lowest AP</i>	<i>Highest AP</i>	<i>Typical AP</i>
Studio	£90,000	£250,000	£140,000
1bed flat	£105,000	£300,000	£180,000
2bed flat	£115,000	£400,000	£240,000
2bed house	£125,000	£615,000	£230,000
3bed house	£150,000	£850,000	£360,000
4bed+ house	£180,000	£4,000,000+	£500,000

Note: limited sample size

Additional Questions:

1. Has the housing market stagnated or fallen recently? – Has been falling over the last couple of weeks, but this is usual for December.
2. How do you predict what may happen in early 2011? – Expecting there to be more interest in the market. Expect to see more coming onto the market. At the moment there is a lack of properties on the market. Expect a slight increase in price at the beginning of the year. As demand goes up, supply will go up. If we don't get enough properties on the market then price will come down.
3. Are there any places that are relatively cheap or relatively expensive? – Cheap areas – Whiteway, Twerton, Odd Down. Expensive areas – City Centre.

Source: Estate Agent: Palmer Snell. Contact: Stephen Haigh, tel: 01225 448440
Date: 13/12/10

Area 4 - Chew Valley Rural:

<i>Property Type</i>	<i>Lowest AP</i>	<i>Highest AP</i>	<i>Typical AP</i>
Studio	N/A	N/A	-
1bed flat	N/A	N/A	-
2bed flat	N/A	N/A	-
2bed house	£180,000	£250,000	£220,000
3bed house	£200,000	£700,000	£375,000
4bed+ house	£320,000	£700,000+	£500,000

Note: limited sample size

Additional Questions:

1. Has the housing market stagnated or fallen recently? – Stagnated with a shortage of properties to sell.
2. How do you predict what may happen in early 2011? – There won't be much on the market, which may stabilise the market.
3. Are there any places that are relatively cheap or relatively expensive? – Cheap areas – None Most Expensive areas – Chew Magna, Chew Stoke

Source: Estate Agent: Chesterton Humberts. Contact Sharon Everatt, tel: 01275 333433
Date: 13/12/10

Area 5 - Keynsham and Salford:

<i>Property Type</i>	<i>Lowest AP</i>	<i>Highest AP</i>	<i>Typical AP</i>
Studio	£75,000	£80,000 (don't get many studio appt)	£80,000
1bed flat	£80,000	£100,000	£90,000
2bed flat	£100,000	£140,000 - £250,000 (lux)	£125,000
2bed house	£110,000	£150,000	£140,000
3bed house	£140,000	£250,000	£185,000
4bed+ house	£250,000	£500,000	£ 325,000

Additional Questions:

1. Has the housing market stagnated or fallen recently? – The lower end (up to £150,000) has dipped, but the rest has held it's own.
2. How do you predict what may happen in early 2011? – More of the same. There's not a great deal on the market, no sign of change, prices staying as they are.
3. Are there any places that are relatively cheap or relatively expensive? – Cheap area – Keynsham. Expensive area – Salford

Source: Estate Agent: Davies & Way. Contact: Steven Morris, tel: 01225 400400
Date: 09/12/10

Area 6 - Norton/Radstock, including Paulton and Peasedown:

<i>Property Type</i>	<i>Lowest AP</i>	<i>Highest AP</i>	<i>Typical AP</i>
Studio	£75,000	£100,000	£80,000
1bed flat	£100,000	£115,000	£105,000
2bed flat	£110,000	£125,000	£115,000
2bed house	£115,000	£140,000	£130,000
3bed house	£135,000	£200,000	£160,000
4bed+ house	£175,000+	£1,000,000	£280,000

Additional Questions:

1. Has the housing market stagnated or fallen recently? - Fallen
2. How do you predict what may happen in early 2011? – Continue to fall.
3. Are there any places that are relatively cheap or relatively expensive? – No a fairly flat market across Midsomer Norton and Radstock all of which is cheap compared to Bath

Source: Estate Agent: Your Move. Contact: Tracey Bailey, tel: 01761 419400
Date: 09/12/10

Area 6 - Norton/Radstock, including Paulton and Peasedown:

<i>Property Type</i>	<i>Lowest AP</i>	<i>Highest AP</i>	<i>Typical AP</i>
Studio	N/A	N/A	-
1bed flat	N/A	N/A	-
2bed flat	£110,000	£120,000	£115,000
2bed house	£120,000	£170,000	£145,000
3bed house	£152,000	£214,000	£175,000
4bed+ house	£219,000	£450,000	£300,000

Additional Questions:

1. Has the housing market stagnated or fallen recently? – Has stagnated over the past 3 – 4 months, but is picking up now.
2. How do you predict what may happen in early 2011? – After Christmas prices should increase slightly.
3. Are there any places that are relatively cheap or relatively expensive? Cheap areas – Radstock Expensive areas – None

Source: Estate Agent: Barons. Contact: Jess Wareham, tel: 01761 411411
Date: 09/12/10

Snapshot Review of Properties Available on the Market as at 8th December 2010

Area 1 - Bath North and West:

<i>Property Type</i>	<i>Lowest Asking Price (AP)</i>	<i>Highest Asking Price (AP)</i>	<i>Typical or Median AP</i>
Studio	£109,500	£159,950	£127,000
1bed flat	£128,500	£425,000	£159,950
2bed flat	£155,000	£595,000	£247,500
2bed house	£179,950	£695,000	£235,000
3bed house	£215,000	£795,000	£289,950
4bed+ house	£285,000	£2M+	£525,000

Area 2 - Bath South and East:

<i>Property Type</i>	<i>Lowest AP</i>	<i>Highest AP</i>	<i>Typical or Median AP</i>
Studio	£105,000	£125,000	£115,000
1bed flat	£109,500	£335,000	£160,000
2bed flat	£124,950	£285,000	£210,000
2bed house	£139,500	£429,950	£182,000
3bed house	£125,000	£855,000	£250,000
4bed+ house	£191,950	£1.6M+	£399,500

Area 3 - Bath Rural:

<i>Property Type</i>	<i>Lowest AP</i>	<i>Highest AP</i>	<i>Typical or Median AP</i>
Studio	-	-	-
1bed flat	£139,950	£265,000	£163,500
2bed flat	£139,950	£249,950	£174,950
2bed house	£189,950	£350,000	£217,500
3bed house	£175,000	£2M+	£245,000
4bed+ house	£250,000	£1.5M+	£485,000

Note: limited sample size

Area 4 - Chew Valley Rural:

<i>Property Type</i>	<i>Lowest AP</i>	<i>Highest AP</i>	<i>Typical or Median AP</i>
Studio	-	-	-
1bed flat	-	-	-
2bed flat	£285,000	£285,000	£285,000*
2bed house	£170,000	£289,950	£215,000
3bed house	£245,000	£725,000	£349,950
4bed+ house	£325,000	£895,000	£485,000

Note: limited sample size

Area 5 - Keynsham and Salford:

<i>Property Type</i>	<i>Lowest AP</i>	<i>Highest AP</i>	<i>Typical or Median AP</i>
Studio	-	-	-
1bed flat	£85,000	£165,000	£115,000
2bed flat	£124,950	£235,000	£147,000
2bed house	£145,000	£395,000	£180,000
3bed house	£139,950	£500,000	£219,950
4bed+ house	£250,000	£595,000	£349,950

Area 6 - Norton/Radstock, including Paulton and Peasedown:

<i>Property Type</i>	<i>Lowest AP</i>	<i>Highest AP</i>	<i>Typical or Median AP</i>
Studio	-	-	-
1bed flat	£89,950	£156,950	£99,500
2bed flat	£94,950	£139,950	£117,000
2bed house	£109,950	£199,950	£145,000
3bed house	£130,000	£325,000	£170,000
4bed+ house	£164,950	£475,000	£295,000

Source: *Rightmove.co.uk*



Appendix B

Brandon Penny Initial Report on Build Prices



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BRENDON PENNY



REPORT ON COST DATA

for

**ARK HOUSING CONSULTANCY AND
BATH & NORTH EAST SOMERSET COUNCIL**

Brendon Penny
Chartered Quantity Surveyors
Eden Office Park
83 Macrae Road
Pill
Bristol
BS20 0DD

DECEMBER 2010

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ARK HOUSING CONSULTANCY – BATH & NORTH EAST SOMERSET COUNCIL

Report on Cost Data

1.0 INTRODUCTION

1.1 Brendon Penny has been asked to assist Ark Housing Consultancy with their validation exercise of development and construction values for some potential Residential Development sites owned by the Council. In particular, the following areas are to be examined and advised upon:-

- Relevance of BCIS Data as an estimate of underlying Build Costs.
- Proposed adjustments to BCIS data.
- Particular Cost Factors affecting Developments.
- Typical Costs being achieved by Speculative Housebuilders and RPs.
- Future Cost Guidance on specific Development Sites.

1.2 We have examined the first four items as noted above in detail and our findings are reported below.

1.3 The fifth item relating to the Cost Guidance on Specific Development Sites will be examined in early 2011 under a separate report as required.

2.0 RELEVANCE OF BCIS DATA AS AN ESTIMATE OF UNDERLYING BUILD COSTS

2.1 Over many years of experience of Cost Consultancy and Project Management of Housing Projects, Brendon Penny have built up comprehensive Cost Data by analysing all of their Design & Build Procurement (Affordable) and Speculative Housebuilder/RP Housing Contracts.

2.2 We actually prefer to use our own Cost Data for Project Feasibility Studies and Preliminary Cost Advice rather than data available from BCIS. The reason for this is that we cannot verify the data that the BCIS service provides as there is often insufficient Site Specific information to accurately evaluate the cost data to the point of having confidence in the costs that we report.

2.3 We have built up a database of historic costs based on an extensive list of Affordable Housing Contracts which we have project managed between 1995 and 2010. This has covered a total of approximately 2000 dwellings over that period including bungalows, flats, houses, dwellings with Specific design occupancy to meet individual Special needs, Lifetime Homes, full wheelchair Specification dwellings etc. Our experience not only covers Affordable Rent but also Intermediate Rent and Shared Ownership.

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CHARTERED QUANTITY SURVEYORS • PROJECT MANAGERS



ARK HOUSING CONSULTANCY – BATH & NORTH EAST SOMERSET COUNCIL

Report on Cost Data (Continued)

2.0 **RELEVANCE OF BCIS DATA AS AN ESTIMATE OF UNDERLYING BUILD COSTS** (Continued)

- 2.4 We have included a table of historic cost data being achieved by the Design & Build Procurement (Affordable) route and which is most relevant to Bath City and B&NES District under Appendix A to this report.
- 2.5 We have shown our historic cost data in three key locations as follows:
- Bath City Centre
 - Bath Suburbs/District
 - B&NES Rural
- 2.6 We have tabled our historic cost data into eight key elements of cost including Dwelling Cost, Site Abnormals, Externals, Drainage, Preliminaries, Design Fees, Contingency and OH&P.
- 2.7 Having produced our own Cost Analyses from five Projects, we consider that data to be more accurate and reliable. We can easily evaluate site and construction variations, Planning enhancements etc. from our own Project Cost Information.
- 2.8 The most current cost information (October 2010) from BCIS advises a mean cost/m² for Dwelling Costs of £798/m² with B&NES having a location factor of 102 resulting in £814/m² when this factor is applied. This cost/m² does not identify the Specification (stone elevations, slate roofs, timber sash/ conservation windows) that the analysis represents, the mix of dwellings or the number of Projects sampled to achieve this figure. The BCIS cost/m² falls just above the average of our historic data for the different dwelling types identified within the range from £770/m² to £894/m². The total average dwelling cost used by BCIS including an assessment of the external works, drainage, preliminaries, design fees, contingency and OH&P results in a cost/m² of £1,272/m². This compares to an average Bath Suburbs/District cost/m² of £1,241/m².
- 2.9 We also have extensive experience working with most of the Major House Builders in the Region under S106 Agreements with Projects dating back to 1996. The BCIS, however, does not cover typical costs used by Speculative Housebuilders/RPs.



ARK HOUSING CONSULTANCY – BATH & NORTH EAST SOMERSET COUNCIL

Report on Cost Data (Continued)

2.0 RELEVANCE OF BCIS DATA AS AN ESTIMATE OF UNDERLYING BUILD COSTS (Continued)

- 2.10 We have included our typical historic cost data table being achieved by Speculative Housebuilders/RPs and which is most relevant to Bath City and B&NES District under Appendix B to this report.
- 2.11 Likewise with the Design & Build (Affordable) costs, the Speculative Housebuilders/RP's costs have been split into the three key locations and the eight key cost elements.
- 2.12 Brendon Penny Cost Data relates to dwelling types whereas BCIS data only gives average dwelling costs. We have added a comparison column entitled BCIS Cost Data to both of our cost table and added our own data for the external works, drainage, preliminaries, design fees, contingency and OH&P and arrived at a resulting average cost/m2 for all residential dwelling types.

3.0 PARTICULAR COST FACTORS AFFECTING DEVELOPMENTS

- 3.1 There are particular factors of each location that effect the cost data and these are described below:-
- Bath City Centre – Access difficulties, sloping sites, road/footpath closures, tightness of the site, cabins on scaffold above footpaths and scaffold licences etc.
 - Bath Suburbs/District – This is the base point for Brendon Penny's Cost Data and, similarly, what the BCIS Cost Data reflects, so represents the average costs for the B&NES Geographical Area.
 - B&NES Rural – Location of site, typically smaller number of dwellings per site, infrastructure costs against number of dwellings, services connections (gas, electric, water, sewer, BT) are usually further away from the site and more costly to connect and potentially all services (e.g. gas) will not be available on site and a more expensive heating/hot water system will have to be installed.
- 3.2 We have included Notes at the bottom of each of the Historic Cost Data Tables which identifies key specification items that are included in the Data. In particular, all costs relating to Design & Build Affordable Projects are based on Code for Sustainable Homes Level 3 and costs relating to Speculative Housebuilders/RP Projects have been adjusted for October 2010 Building Regulation Standards.

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**ARK HOUSING CONSULTANCY – BATH & NORTH EAST SOMERSET
COUNCIL**

Report on Cost Data (Continued)

4.0 CONCLUSION

- 4.1 There are inherent risks in using average dwelling costs for any feasibility exercises which impacts on the average cost, in particular:-
- The mix of dwelling types
 - The size of the development
 - External works and drainage which need to be evaluated on a site specific basis and using average costs is generally highly inaccurate.
- 4.2 Our table of Cost Data indicates that BCIS Costs are **approximately 2.5% higher** than Brendon Penny's own Cost Data for the average costs for the B&NES Geographical Area.
- 4.3 However, compared with Speculative Housebuilders/RP's Cost Data, BCIS Costs **are approximately 26.5% higher**.
- 4.4 On average City Centre Build Costs attract a further cost penalty of approximately £50/m² (4%) uplift compared to the B&NES Suburb/District areas for reasons listed in 3.1 above.
- 4.5 On average Rural B&NES Build Costs attract a penalty of approximately £47/m² (3.8%) uplift compared to their B&NES Suburb/District areas for the reasons listed in 3.1 above.
- 4.6 We trust that the above Report and enclosed analysis provides the global assessment that the Council is looking for and we look forward to receiving further details of specific Development Sites so that the next stage of our appointment can be implemented.



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ARK HOUSING CONSULTANCY – B&NES COUNCIL

APPENDIX A

Historic Cost Data
(Affordable Housing Competitive Design & Build Costs)

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CHARTERED QUANTITY SURVEYORS • PROJECT MANAGERS



BRENDON PENNY

ARK HOUSING CONSULTANCY - BATH & NORTH EAST SOMERSET COUNCIL

HISTORIC COST DATA - Affordable Housing Competitive Design & Build Tender (December 2010)

Location Element / Dwelling Type	Bath City Centre			Bath Suburbs / District			B&NES Rural			BCIS Cost Delta Average Dwelling Cost
	Bungalow	Apartment	Townhouse	Bungalow	Apartment	House	Bungalow	Apartment	House	
Dwelling Cost	n/a	922	731	735	791	687	791	770	872	814
Site Abnormals	n/a	40	40	40	0	0	0	0	0	0
Externals	n/a	151	149	163	198	151	198	174	174	172
Drainage	n/a	52	61	61	44	52	54	64	64	48
Preliminaries	n/a	94	109	110	111	94	111	94	111	109
Design Fees	n/a	47	55	55	66	47	66	47	48	58
Contingency	n/a	13	16	16	11	13	11	13	13	11
OH&P	n/a	64	74	75	60	64	60	64	68	62
Total	n/a	1,384	1,235	1,255	1,280	1,295	1,280	1,228	1,360	1,272

NOTES:

- All values above are £ per m²
- Dwelling costs above include all substructure, superstructure and services costs.
- Dwelling costs based on traditional foundations. (no abnormal foundations included for).
- Dwelling costs based on timber frame construction, code 3, gas central heating and solar panels (except rural where an alternative to gas has been priced for).
- Dwelling specification for Bath City Centre includes for stone elevations, natural slate roofs and timber sash windows.
- Dwelling specification for Bath Suburbs includes for stone elevations, re-con slate roofs and sash windows.
- Dwelling specification for B&NES Rural includes for stone elevations, re-con slate roofs and timber casement windows.
- Site Abnormal costs allowed for Bath City Centre to accommodate restrictions on site access, locality etc.
- Externals costs include all roads, paths, landscaping and external accessories (e.g. shed, water butt, compost bin, rotary line etc).
- Drainage costs include all foul, storm and surface water drainage and connections to existing drainage systems.
- Preliminaries costs include all site management, temporary accommodation and welfare, insurances, bonds, warranty etc.
- Design Fees costs include all post contract consultants fees, planning fees, building control fees etc.
- Contingency costs is an allowance for post contract client variations.
- OH&P costs is the main contractors overheads and profit.
- Bath City Centre and Bath Suburbs District cost/m² based on a site of 20 dwellings, less dwellings will increase cost/m², more dwellings will reduce cost/m².
- B&NES Rural cost/m² based on a site of 6 dwellings, less dwellings will increase cost/m², more dwellings will reduce cost/m².
- All cost/m² based on design and build competitive tender procurement route.



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APPENDIX B

Historic Cost Data (Housebuilders / RPs)

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CHARTERED QUANTITY SURVEYORS • PROJECT MANAGERS



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HISTORIC COST DATA - Speculative Housebuilder/RPs (December 2010)

Location Element / Dwelling Type	Bath City Centre			Bath Suburbs / District			B&NES Rural			BCIS Cost Data Average Dwelling Cost
	Bungalow	Apartment	Townhouse / House	Bungalow	Apartment	House	Bungalow	Apartment	House	
Dwelling Cost	n/a	714	652	n/a	693	635	n/a	693	635	814
Site Abnormals	n/a	40	40	n/a	0	0	n/a	0	0	0
Externals	n/a	139	109	n/a	139	123	n/a	144	144	172
Drainage	n/a	43	38	n/a	43	38	n/a	44	44	49
Preliminaries	n/a	85	66	n/a	85	66	n/a	85	66	105
Design Fees	n/a	43	38	n/a	43	38	n/a	43	38	58
Contingency	n/a	11	9	n/a	11	9	n/a	11	9	11
OH&P	n/a	53	38	n/a	53	38	n/a	53	38	62
Total	n/a	1,128	991	n/a	1,066	947	n/a	1,073	974	1,272

NOTES:

All values above are £ per m2.

Dwelling costs above include all substructure, superstructure and services costs.

Dwelling costs based on traditional foundations, (no abnormal foundations included for).

Dwelling costs based on timber frame construction, to building regulations specification.

Dwelling specification for Bath City Centre includes for stone elevations, natural slate roofs and timber sash windows.

Dwelling specification for Bath Suburbs includes for stone elevations, re-con slate roofs and upvc windows.

Dwelling specification for B&NES Rural includes for stone elevations, re-con slate roofs and timber casement windows.

Site Abnormal costs allowed for Bath City Centre to accommodate restrictions on site access, locality etc.

Externals costs include all roads, paths and landscaping.

Drainage costs include all foul, storm and surface water drainage and connections to existing drainage systems.

Preliminaries costs include all site management, temporary accommodation and welfare, insurances, warranty etc.

Design Fees costs include all post contract consultants fees, planning fees, building control fees etc

Contingency costs is an allowance for post contract developer variations.

OH&P costs is the main contractors overheads and profit.

Bath City Centre and Bath Suburbs/District cost/m2 based on a site of 20 dwellings, less dwellings will increase cost/m2, more dwellings will reduce cost/m2.

B&NES Rural cost/m2 based on a site of 6 dwellings, less dwellings will increase cost/m2, more dwellings will reduce cost/m2.

All cost/m2 based on speculative housebuilder/RPs.

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Appendix C

Brandon Penny Cost Report for Specific Sites



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POTENTIAL B & NES DEVELOPMENT SITES

VALIDATION OF VIABILITY – STAGE 2

for

ARK HOUSING CONSULTANCY AND
BATH & NORTH EAST SOMERSET COUNCIL

Brendon Penny
Chartered Quantity Surveyors
Eden Office Park
83 Macrae Road
Pill
Bristol
BS20 0DD

JANUARY 2011

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ARK HOUSING CONSULTANCY – BATH & NORTH EAST SOMERSET COUNCIL

Validation of Viability – Stage 2

1.0 INTRODUCTION

1.1 Twelve sites have now been specifically selected from the many sites identified in the Council's Development Strategy. These are as follows:-

1. Bath – Wes 3
2. Bath – King 15
3. Bath – Odn 1
4. Bath – Odn 3
5. Keynsham – K4
6. Keynsham – K37
7. Midsomer Norton – MSN 10
8. Radstock – RAD 3
9. Radstock – RAD 21
10. Radstock – RAD 29
11. Timsbury – Tim 2
12. East Harptree – EH 3

2.0 SITE APPRAISALS FOR ABNORMALS & VARIATIONS IN AVERAGE COST DATA PREVIOUSLY ADVISED

2.1 We have visited the listed sites and made a very "broad-brush" assessment of likely abnormal costs and cost variations to those quoted in our December Report. The results are tabled below:-

<u>Site Identity</u>	<u>Comments</u>	<u>Cost Variation (+/-)</u>
Bath – Wes3	<p>This Site would be most appropriately classified as Bath Suburbs/District. The likely abnormal costs would be due to:-</p> <ul style="list-style-type: none"> • Extensive demolitions of existing buildings including a significant amount of reinforced concrete to be broken up - likely cost of circa £100 to 150K (but cannot be evaluated as £/m2 adjustment until development use & density known) • Ground conditions currently unknown • Highway Works currently unknown but likely to have Section 106 Contributions. <p>We suggest a cost Variation to our December Report as per the attached column.</p>	+5%

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ARK HOUSING CONSULTANCY – BATH & NORTH EAST SOMERSET COUNCIL

Validation of Viability – Stage 2 Continued

2.0 Site Appraisals for Abnormals & Variations in Average Cost Data Previously Advised Continued

<u>Site Identity</u>	<u>Comments</u>	<u>Cost Variation (+/-)</u>
Bath – King15	<p>This Site would be most appropriately classified as Bath Suburbs/District. The likely abnormal costs would be due to:-</p> <ul style="list-style-type: none"> • Demolitions of existing buildings but assessed as only circa £10K (assume retention of stone wall to river boundary) • Ground conditions - piled foundations & Flood Risk Assessment • Archaeological investigations • Conservation Area – elevation materials • Highway Works - likely contribution to replacement of Destructor Bridge, other Traffic improvements, a new pedestrian bridge, junction improvements • Section 106 Contributions <p>We suggest a cost Variation to our December Report as per the attached column.</p>	+10%
Bath – Odn1	<p>This Site would be most appropriately classified as Bath Suburbs/District. The likely abnormal costs would be due to:-</p> <ul style="list-style-type: none"> • Demolitions of existing buildings including a significant amount of tarmac/concrete hardstandings to be broken up - likely cost of circa £50K • Ground conditions currently unknown • Highway Works currently unknown but likely to have Section 106 Contributions. <p>We suggest a cost Variation to our December Report as per the attached column.</p>	+5%



ARK HOUSING CONSULTANCY – BATH & NORTH EAST SOMERSET COUNCIL

Validation of Viability – Stage 2 Continued

2.0 Site Appraisals for Abnormals & Variations in Average Cost Data Previously Advised Continued

<u>Site Identity</u>	<u>Comments</u>	<u>Cost Variation (+/-)</u>
Bath – Odn3	This Site would be most appropriately classified as Bath Suburbs/District. A Greenfield site with narrow access from main road. The likely abnormal costs would be due to:- <ul style="list-style-type: none"> • Sloping site but ground conditions currently unknown • Highway Works currently unknown but likely to relate to new access. • Section 106 Contributions. We suggest a Nil cost Variation to our December Report as per the attached column.	Nil
Keynsham – K4	This Site would be most appropriately classified as Bath Suburbs/District. There are no significant abnormal costs. We suggest a cost Variation to our December Report as per the attached column.	- 5%
Keynsham – K37	This Site would be most appropriately classified as Bath Suburbs/District. There are no significant abnormal costs but because 9 out of the 12 proposed dwellings would be created by conversion of the existing building, we suggest that the costs in our December Report would not be relevant and viability would have to be looked at on a "one-off" basis.	Not Applicable
Midsomer Norton – MSN10	This Site would be most appropriately classified as Bath Suburbs/District. Demolitions are already in progress to clear the site although this may not include the tarmac/concrete hardstandings which, if to be broken up will be a significant cost – circa £200K. Other variations would include:- <ul style="list-style-type: none"> • Reduction in cost because of lesser Planning requirements in terms of materials. • Size of site likely to deliver greater viability • Potential contamination of site • Highway works We suggest a cost Variation to our December Report as per the attached column.	- 10%

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ARK HOUSING CONSULTANCY – BATH & NORTH EAST SOMERSET COUNCIL

Validation of Viability – Stage 2 Continued

2.0 Site Appraisals for Abnormals & Variations in Average Cost Data Previously Advised Continued

Radstock – RAD3	<p>This Site would be most appropriately classified as Bath Suburbs/District. Cost variations would include:-</p> <ul style="list-style-type: none"> • Reduction in cost because of lesser Planning requirements in terms of materials. • Demolition of existing buildings • Ground conditions due to the river although no flood risk • Potential contamination of site • Highway works <p>We suggest a cost Variation to our December Report as per the attached column.</p>	- 10%
Radstock – RAD21	<p>This Site would be most appropriately classified as Bath Suburbs/District. Cost variations would include:-</p> <ul style="list-style-type: none"> • Reduction in cost because of lesser Planning requirements in terms of materials, although within the Radstock Conservation Area. • Steeply sloping site resulting in significant engineering works in the form of retaining walls plus significant foundation costs and likely split level house designs • Potential contamination of site • Diversion of overhead electricity cable • Some Highway works & footpath diversion <p>The most significant aspect is the indication of a likely refusal of planning consent plus a clear indication that the site is not suitable for development. We suggest a cost Variation to our December Report as per the attached column.</p>	Nil
Radstock – RAD29	<p>Redevelopment of this site has already commenced so we have not considered it any further.</p>	Not Applicable



ARK HOUSING CONSULTANCY – BATH & NORTH EAST SOMERSET COUNCIL

Validation of Viability – Stage 2 Continued

2.0 Site Appraisals for Abnormals & Variations in Average Cost Data Previously Advised Continued

Timsbury – Tim2	<p>This Site would be most appropriately classified as B&NES Rural. Cost variations would include:-</p> <ul style="list-style-type: none"> • Ground conditions unknown • Highway works • Service diversions • Possible footpath diversion • Planning Policy possibly suggests Affordable rather than Open Market Development. <p>We suggest a Nil cost Variation to our December Report.</p>	Nil
East Harptree – EH3	<p>This Site would be most appropriately classified as B&NES Rural. Cost variations would include:-</p> <ul style="list-style-type: none"> • Small development – only 10 dwellings likely. • However, Open Market use would achieve maximum land cost and be deemed most suitable and possibly contribute to School extension costs & with no affordable housing provision likely. • Ground conditions unknown • Highway works <p>We suggest a cost Variation to our December Report as per the attached column.</p>	+5%

2.2 We must re-iterate the inherent risks, advised in paragraph 4.1 of our December Report, of using global and average costs even in provisional feasibility studies. However, our assessment of cost variations to those average costs will provide a guide as to likely additions or reductions to those costs that should be allowed.

2.3 Should you require further and more detailed assessments to be carried out on the above sites or any others identified within the Council's study, we will be pleased to assist in doing so.