BPS Response

Issues Raised at EIP of the Reading Local Plan – October 2018

7 November 2018

Q/1. How has the viability assessment addressed the viability for sites delivering less than 10 homes which is beyond the level set out in the Ministerial Statement

To ensure a degree of consistency the viability assessment ran identical development typologies to those which were included within the 2014 Viability assessment which helped inform the existing plan targets.

This had the benefit of testing whether the original development typologies were more or less viable given the passage of time.

The original scenarios include a "small" site development which was based on a 9 unit scheme comprising the following mix:

4 x 2 bed flats

2 x 3 bed terrace

3 x 4 bed semi-detached

A range of appraisals were undertaken adopting the following affordable housing percentages and tenure mixes looking at:

Affordable percentage

- All private
- 10% affordable
- 20% affordable
- 30% affordable

Tenure Split

- 50% social rent 20% affordable rent and 30% shared ownership
- 70% affordable rent and 30% shared ownership
- 50% affordable rent and 50% shared ownership

In order to ensure that a truly representative set of scenarios had been used to inform the 2018 exercise the AMR for 2017 was reviewed to assess the typical range of development sites coming forward (para 3.23 of the BPS March 2018 report). Based on this analysis two further scenarios were identified concerning scheme of less than 10 units. This include

Scenario A which was based on a single detached unit and Scenario B which was based on 7 units comprising:

2 x 1 bed flat

3 x 2 bed flat

2 x 3 bed terrace

As with the earlier development scenarios a number of different appraisals were undertaken modelling

- All private
- 10% affordable
- 20% affordable
- 30% affordable

Tenure options were limited to 50% affordable rent and 50% shared ownership

Therefore 3 typologies or scenarios were used against which a total of 17 separate appraisals have been worked to establish viability.

In addition the results have been further tested through undertaking sensitivity testing of sales values. This was deliberate to see what impact changes in net sales values might have on overall viability. These included the following percentage adjustments:

-10%, -5%, 0%, 5%, 10%

These changes were applied to all 17 appraisals in effect raising the overall total of appraisals to 85.

Further sensitivity testing was undertaken to assess the potential to deliver increases in land value.

The results of these appraisals are reported in Section 6 of our March 2018 report.

We consider that we have taken significant steps to test a range of scales, unit numbers, types and tenures for the sub 10 unit scenarios to ensure the viability conclusions for the proposed policies have been adequately tested.

Q/2 How the viability assessments have addressed viability for all relevant schemes concerning the standards set out in Policy H5, and what the assumptions were. Evidence should be provided on the application of 1% relating to zero homes. Sensitivity tests should also be referred to, including where this information is within the Viability Assessment.

This question has been addressed in two parts. Firstly considering Policy H5, there are six parts to Policy H5 which are set out below:

H5 Standards for New Housing

New build housing should be built to the following standards:

a. *All new build housing outside the Central Area as defined on the Proposals Map will comply with the nationally-described space standard*
b. *All new build housing will be built to the higher water efficiency standard under Regulation 36(3) of the Building regulations (2015 Regulations)*
c. *All major new-build residential development should be designed to achieve zero carbon homes.*
d. *All other new build housing will achieve at a minimum a 19% improvement in the dwelling emission rate over the target emission rate, as defined in the 2013 Building Regulations.*
e. *All new build housing will be accessible and adaptable in line with M4(2) of the Building Regulations where it is viable, unless it is built in line with M4(3). (see below)*
f. *On developments of 20 or more new build dwellings, at least 5% of dwellings will be wheelchair user dwellings in line with M4(3) of the Buildings Regulations*

In approaching the impact on development costs of this policy we have had regard to the CLG document H*ousing Standards Review, Final Implementation Impact Assessment – Published March 2015.* This document defines the approach to the impact of planning policy on construction costs through the imposition of policy standards which potentially exceed existing Building Regulations.

Looking at the limbs of the policy H5 individually

a. *All new build housing outside the Central Area as defined on the Proposals Map will comply with the nationally-described space standard*

The CLG publication *Technical housing standards – nationally described space standard published 2015* provides space standards for housing. The following table summarises the standards required:

Table 1 - Minimum gross internal floor areas and storage (m^2)

Number of bedrooms(b)	Number of bed spaces (persons)	1 storey dwellings	2 storey dwellings	3 storey dwellings	Built-in storage
1b	1p	39 (37) *			1.0
	2p	50	58		1.5
2b	3p	61	70		2.0
	4p	70	79		
3b	4p	74	84	90	2.5
	5p	86	93	99	
	6p	95	102	108	
4b	5p	90	97	103	3.0
	6p	99	106	112	
	7p	108	115	121	
	8p	117	124	130	
5b	6p	103	110	116	3.5
	7p	112	119	125	
	8p	121	128	134	
6b	7p	116	123	129	4.0
	8p	125	132	138	

Our appraisals model a range of property types and sizes, the areas adopted are shown below:

	Sq M
1 bed flat	45
2 bed flat	66
3 bed flat	85
3 bed terrace	85
4 bed terrace	110
3 bed semi	90
4 bed semi	110
3 bed detached	115
4 bed detached	220

It can be seen that the floor areas adopted fall mid-range in respect of the relevant space standards but have not be been defined further by reference to number of persons

b. All new build housing will be built to the higher water efficiency standard under Regulation 36(3) of the Building regulations (2015 Regulations)

Under existing policies, the Council requires that all new homes are constructed to meet at the minimum Code for Sustainable Homes Level 3, with 50% of provision on major sites going further and meeting Code for Sustainable homes Level 4. The equivalent water efficiency standard for both Code levels was 105

litres/person/day, and therefore it has been expected that new housing development would comply with this since the introduction of the Sustainable Design and Construction SPD in 2011, without any adverse effect on viability it having become embedded over time. Adoption of the national standard is actually therefore a slight reduction on what has been sought historically.

The Housing Standards Review makes the following assessment concerning water efficiency standards

.4.2 Water

32. On balance, and in line with other parts of this review, it is proposed to maintain a national regulatory baseline, but to allow one further tighter standard to be imposed locally where there is a clear local need. This would be equivalent to the Code Level 3/4 standard which is already required by many authorities. However, higher standards equivalent to Code Level 5/6 will not be acceptable as they, in effect, require new homes to incorporate grey-water/rainwater harvesting which is not only relatively expensive (£900-£2,700 per unit as set out further in this Impact Assessment), but also have cost impacts in relation to on-going maintenance and energy use.

It is relevant to note that the conclusion firmly points to the intention to limit the imposition of standards higher than the former Code for Sustainable homes level 4.

In testing plan policies assumptions regarding typical construction costs have been adopted reflecting the recommendations of the Housing Standards Review.

Construction cost information is derived by reference to actual market generated costs from real developments, as such it is always a retrospective analysis. Clearly as standards move over time the cost component and materials and construction techniques adopted evolve to meet new standards therefore it is important that cost information is as a recent as possible.

There is only one source of published publically verifiable construction cost information available and this is sourced from the Build Cost Information Service (BCIS) run by the Royal Institution of Chartered Surveyors (RICS). Information from this source is widely used in terms of both plan making and decision making in terms of planning viability. BCIS publish data from both a 15 year sample and a 5 year sample. The latter has been used to inform costs in the viability assessments used to generate the viability evidence base because it is limited to the most recent data available. Projects within this 5 year sample have by default been required to meet prevailing construction standards and it is safe to assume that

the sample generally reflects construction quality to level 4 Code for sustainable homes.

This is consistent with the level of impact recommended by the Housing Standards Review. (See Section 5 of our March Report)

c. *All major new-build residential development should be designed to achieve zero carbon homes.*

A number of reference sources have been consulted in respect of the potential cost impact associated with achieving zero carbon construction. These include:

1. Modular Construction in UK Housing - An Overview of the Market, the Players and the Issues - Pinsent Masons Research -February 2017
2. GLA – Signed, Sealed, Delivered – The contribution of offsite manufactured homes to solving London's housing crises – August 2017

3. Global Construction - 5 key benefits of modular construction By Adam Groff - May 22, 2015

4. INFORMATION PAPER IP 17/11 CROSS-LAMINATED TIMBER An introduction to low-impact building materials - Andy Sutton and Daniel Black, BRE Pete Walker, University of Bath

5. Modern methods of construction - Views from the industry – NHBC primary Research – June 2016

6. Better Value in Steel VALUE AND BENEFITS ASSESSMENT OF MODULAR CONSTRUCTION – Published by the Steel Construction Institute in association with the Oxford Brookes University

7. Post Note - Modern Methods of Building – Parliamentary Office of Science and Technology 2003

8. Smart Construction – KPMG – April 2016

These have not been specifically referenced in our assessment of costs for the following reasons:

A) The conclusions drawn by these various documents are focussed on the wider benefits of modern construction methods and are not specific to the achievement of zero carbon development.

B) It is apparent that to achieve zero carbon there would be a need to embrace modern construction methods which offer a combination of:

    a. Low carbon construction
    b. High locked in carbon within the initial build
    c. Low life time emissions
    d. High energy efficiency

In addition to these aspects developments can also seek to mitigate carbon use through

a. Generating green energy
b. Sourcing low impact materials including recycling
c. Consideration about the use of buildings and how this impacts on carbon usage

C) It is apparent that there is no simple fix to delivering zero carbon such as adopting a specific solar array. It is likely to result from a range of measures top of the list being to move to modern methods of construction. The sources above do not generally seek to evaluate the relative costs benefits of such a change.

To examine the potential cost implications we have undertaken further research with Karakusevic Carson Architects a leading architectural practice which specialises in delivering buildings using Cross Laminate Technology (CLT).

We were aware of this company through our work with LB Camden and Urban Design London. We explored a number of projects specifically in relation to their costs including projects we had reviewed as part of our work with LB Camden's planning department as development viability advisors.

It was apparent that construction methods such CLT offer the prospect for delivering carbon neutral developments. Overall construction costs are very comparable to traditional methods of construction in that higher overall materials and set up costs are generally offset by very rapid construction timescales and low labour and transport requirements.

It was also apparent that CLT is very suitable to a wide range of developments and as the use of this form of construction becomes more mainstream initial set up costs are likely to fall making this a more cost advantageous method of construction.

In approaching a cost estimate for achieving zero carbon we therefore took the view there would no effective cost premium depending on the method of construction. However allowing that CLT and other modern construction methods are not currently mainstream we have allowed a further 1% to provide for the professional team to undertake additional research.

In practice it would be expected that developers seeking to achieve this standard would turn to experts already familiar with these technologies therefore they may be limited cause to consider even this allowance.

The Housing Standards Review also makes the following recommendation;

Until such time as zero carbon policy is in place nationally from 2016, local authorities will be able to continue to ask for higher standard on energy but have been encouraged to not go above Code level 4.

This supports the approach we have adopted of using BCIS cost data reflecting code level 4 construction costs.

d. *All other new build housing will achieve at a minimum a 19% improvement in the dwelling emission rate over the target emission rate, as defined in the 2013 Building Regulations.*

The Housing Standards Review makes the following statements concerning emissions and energy efficiency:

24. The Government announced in June 2014 that it would be taking further steps from 2016 to raise the requirements of Part L further in respect of the energy efficiency and carbon emissions targets. This will be done after full consultation with industry and will be subject to a separate impact assessment that considers the costs and benefits of doing so.

26. The policy proposal consulted on as part of the Housing Standards review was therefore to move to a Building Regulations only approach to new homes. The level of support for this proposal was 63%.

27. From 2016 local authorities will not be able to require energy efficiency measures above Building Regulations. There will be a national standard for all new homes set at around the level in the Code for Sustainable Homes level 4. Until such time as zero carbon policy is in place nationally from 2016, local authorities will be able to continue to ask for higher standard on energy but have been encouraged to not go above Code level 4.

As discussed above we have used cost information provided by BCIS based on a 5 year sample of projects. The sample generally reflects construction quality to level 4 Code for sustainable homes.

Use of BCIS data in this context reflecting Code level 4 projects is consistent with this recommendation.

e. *All new build housing will be accessible and adaptable in line with M4(2) of the Building Regulations where it is viable, unless it is built in line with M4(3). (see below)*

f. *On developments of 20 or more new build dwellings, at least 5% of dwellings will be wheelchair user dwellings in line with M4(3) of the Buildings Regulations*

The Housing Standards Review makes the following statements in respect of access

38. The Government proposes to replace these varying standards with two new Optional Requirements in the Building Regulations. The Lifetime Home Standard will be replaced by Category 2 – Accessible and Adaptable Housing, and existing wheelchair housing standards will be replaced by Category 3 – Wheelchair user dwellings in Part M (Access to and use of buildings). The Government does not propose to make any changes to the existing technical requirements of Part M, but the guidance in Approved Document M will be restructured to fit within the framework which integrates the new optional requirements – 94% of respondents to our previous consultation supported proposals to restructure existing guidance in this way.

39. The New Optional Requirements have been developed following further consultation with an industry group and have been developed from the Level 2 and Level 3 proposals which were published in the 2013 illustrative technical standards consultation. Responses to consultation were very supportive of these requirements – 69% of respondents thought the proposals to replace Lifetime Homes (Level 2) were about right, whilst 74% of respondents thought the proposals for replacement of the Wheelchair Housing Design Guide (Level 3) were about right.

The current building regulations in this regard are set out in *Access to and use of Buildings Approved Document M. 2015 Edition incorporating 2016 Amendments for use in England*

Standards M4(2) and M4(3) address a number of areas where adaption for wheelchair use. These include amongst other items

a) Approach
    a. Parking
    b. Communal entrances
    c. Private entrances
    d. Stairs / ramps
b) Private entrances and spaces within the building
    a. Storage
    b. Fittings
    c. Turning areas
    d. Door widths
    e. Hall widths

In new build schemes adaptation of design to meet these requirements can be addressed at the design and specification stage without significant cost implications. For example wall sockets can be located to meet wheel chair needs just as easily as sockets for the able bodied. There is no element of conversion involved.

The primary implication in relation to external and communal areas where there is the need to ensure wheelchair access is in the need for possible site specific modifications such as the inclusion of ramped access ways. It is possible that in buildings of less than 3 floors accessible flats can be accessed from ground floor level which would not necessitate the installation of lifts. Over three floors lifts are required to assist unit values and therefore accessible units can utilise these facilities at no extra cost.

Within individual units many adaptions can largely be addressed at the design stage however ensuring turning circles and corridor widths is dependent on units being of an adequate size and designed to meet the required turning areas.

The policy looks to a maximum of 5% of units within 20 unit plus sixed schemes being delivered to M4(3). This means that up to 5% of units within a scheme will need to have sufficient floor area to accommodate the standards laid down in M4(3). As can be seen in relation to part a. above the unit sizes adopted in respect of the appraisal are mid-range in terms of the nationally described space standard. This would allow scope for some 5% of units within a scheme to be slightly oversize to accommodate the necessary access requirements without requiring other units to be below floor area requirements. Consequently no specific adjustment has been allowed for in construction costs to meet this requirement.

Category M(2) would replace the Council's existing 100% Lifetime Homes standard - and the Housing Standards Review Impact Assessment (para 157) has the new standard as being a cheaper build cost over Lifetime Homes, so criterion (e) represents a cost reduction over existing policies.

Q/ To provide details of examples relating to the minimum terms for Build to rent schemes (relating to Bullet 1 of Policy H4) and how this relates to Reading, and whether and how viability for investment in the schemes has been assessed in relation to the 30 year requirement.

Policy H4 sets the following requirement:

Planning permission will be granted for developments of self-contained, private rented homes which;

1. *Are secured in single ownership providing solely for the rental market for a minimum 30 year terms with provision for clawback of affordable housing contributions should the covenant not be met*

The practical operation of the policy is that in the event that a build to rent scheme is sold anytime within a 30 year period it will trigger a review as to whether an affordable contribution should be delivered. Build to rent schemes are also subject to the same requirements and 30% target to deliver affordable housing as set out in policy H3.

At the point of review if conversion to private sale results in a substantial uplift in GDV then the intention of the policy is to capture this for the benefit of affordable housing provision.

The reasoning behind this requirement is the generally held view that build to rent schemes are less valuable than private sale schemes. This view reflects the fact that 20-25% of annual rent will be consumed through repairs, service charge, lettings and management fees. By comparison private sales make no such allowances.

A developer can choose to either build for sale or rent dependent on which route appears to offer a combination of least risk and maximum profit. There is no compunction in this choice. The choice will also be informed by the requirements of plan policies.

In vast majority of build to rent developments entail a forward sale of the property to an investor. The risk to the developer once this sale has been agreed is therefore one largely confined to securing planning consent and construction management risk.

The risk to the investor is whether the price paid for the property is justified over its life in terms of the net income it generates.

The Investor unlike a developer in a build for sale scenario has the option at any time to cease renting the units and opt for a market sale. Without an obligation to

maintain units as rented tenure, Investors and developers could opt to follow a build to rent scenario at planning application stage which is likely to result in a lower level of viability and therefore lower level of affordable housing provision. Once developed units could then be switched to market sale generating higher returns to the developer/investor through having pegged affordable housing to the lower viability of rented tenure.

It is argued that investors require the option to switch tenure to manage risk in the event of a collapse in the rented market and that any restrictions on this ability will increase risk and therefore suppress viability. It is not disputed that restrictions on the ability to change tenure are likely to increase the perception of risk.

The issue is whether it is a consistent approach to provide investors with the ability switch tenure without any assessment as to whether this generates a net financial benefit compared to developers building for sale.

The viability assessment undertaken at the point at which consent is granted does not factor in any assumed benefit from a tenure switch. This is because the applicant undertakes to deliver rented tenure. If it were assumed that tenure were to be switched in say 10 years then this could reasonably be factored into the assessment of scheme value which is likely to have a material impact on viability. However because there is no certainty that this switch will occur it is not factored in.

LPA's are required to secure the maximum reasonable level of affordable housing. If the level is determined through an assumption of no change in tenure and this subsequently occurs resulting in increased viability, then it cannot be said that the maximum reasonable level of affordable housing will have been delivered.

Ordinarily such changes would not need to be met through provisions in plan policy but would be triggered by a planning application for a change of use. However market sale and build for rent tenures are currently classed as C3 uses and as such there would be no need for a planning application to enable a tenure switch.

To build into an appraisal an assumption of a future tenure switch could potentially overstate viability and any level of affordable provision based on this assumption would potentially make such a build to rent scheme non-viable.

Therefore in order to ensure the maximum deliverable level of affordable housing is provided, it is consistent that provision for a review of viability should attach to rented tenure but that the level of affordable provided reflects the assumptions attaching to a rented scheme discarding the potential for a later tenure switch.

The debate then centres on the period of this obligation. Policy H4 seeks to effectively impose a perpetuity period which is consistent with ensuring that there

is no financial advantage available to the investor to switching tenure in terms of receiving financial benefit which would otherwise have been provided as affordable housing. This is entirely consistent with the approach facing developers of build for sale property. In this way the policy does not discriminate between build to rent or private sale.

It should also be noted that such a review would not necessarily trigger a further contribution. This would only occur if there was a financial advantage from unit sales rather than continuing as rented tenure.

In addition to the above we note that the Thames Quarter permission involved the developer agreeing to 20 year covenant, and that was in the absence of an adopted policy framework. That development has now been sold to M&G and work has commenced. This demonstrates that 20 years is certainly not a deterrent.

Q/ More explanation concerning how land value has been determined for the purposes of testing the plan.

There is a wide variance in terms of market sales data in respect of land transactions making a clear market rate almost impossible to determine. This is further challenged by the new NPPG's requirement that land transactions should be analysed on a policy compliant basis.

BPS has been directly involved in excess of 20 planning applications in the last 12 months for Reading BC involving the viability assessments concerning he delivery of affordable housing. This experience has further highlighted that the predominant method adopted by applicant's for determining land value is through the EUV plus approach advocated under the New NPPG.

Our analysis of the land supply illustrates that the predominant source of land for development within the borough is from previously developed sites. Therefore unlike Greenfield development, land value cannot be assumed to be uniform across all sites.

The plus element in the EUV plus approach can also be determined through the margin between EUV and the site value based on a policy compliant development as defined under the new NPPG. It is noted that the Reading Local plan is being considered under the previous NPPF and NPPG, however decision making under the new plan will reference the updated NPPF and NPPG, therefore it has been considered realistic for the approach to determining land value to be consistent with the new NPPG guidance (paragraphs 2.13-2.14 BPS Report) The updated NPPG is set out below.

Benchmark land value should:

- *be based upon existing use value*
- *allow for a premium to landowners (including equity resulting from those building their own homes)*
- *reflect the implications of abnormal costs; site-specific infrastructure costs; and professional site fees and*
- *be informed by market evidence including current uses, costs and values wherever possible. Where recent market evidence is used to inform assessment of benchmark land value this evidence should be based on developments which are compliant with policies, including for affordable housing. Where this evidence is not available plan makers and applicants should identify and evidence any adjustments to reflect the cost of policy compliance. This is so that historic benchmark land values of non-policy compliant developments are not used to inflate values over time.*

In plan making, the landowner premium should be tested and balanced against emerging policies. In decision making, the cost implications of all relevant policy requirements, including planning obligations and, where relevant, any Community Infrastructure Levy (CIL) charge should be taken into account.

Where viability assessment is used to inform decision making under no circumstances will the price paid for land be a relevant justification for failing to accord with relevant policies in the plan. Local authorities can request data on the price paid for land (or the price expected to be paid through an option agreement).

Paragraph: 014 Reference ID: 10-014-20180724

A generic approach to determining land value has been adopted for plan testing purposes. This adopts a base land value on a per plot basis of £60,000.

This represents a hurdle rate (land value as a proportion of GDV) as a percentage of gross value in the following range with an average across all unit values and types of 14.9%. The majority of typologies included a high proportion of flats which in general serves to increase the hurdle rate per typology above this level:

1 bed flat	28%
2 bed flat	19%
3 bed flat	17%
3 bed terrace	16%
4 bed terrace	12%
3 bed semi	16%
4 bed semi	12%
3 bed detached	15%
4 bed detached	10%

We would typically expect to see hurdle rates of between 10-20% from a range of residential developments.

Based on our experience of scheme hurdle rates this range appears broadly realistic, however further sensitivity testing was undertaken. This is covered in paragraphs 6.14 – 6.18 of the BPS March 2108 report

Where scenarios showed a positive residual value we assumed any surplus could be applied to improving the quantum of socially rented properties or meeting additional costs such as enhanced land costs or developer profit margins.

To place the surplus in a measurable quantum we have applied the surplus to increase the plot value from the base plot value of £60,000 to show an overall average of £81,979. Focussing on just those scenarios testing the plan target of 30% affordable housing delivery shows an overall average of £72,529 This breaks down to the following plot value averages by scenario grouping:

	Adjusted Plot Value	Percentage Increase
Original Scenarios	£79,663	33%
AMR Derived Scenarios	£64,224	7%
Local Plan Allocations	£73,701	23%

Applying this higher average plot value impacts the hurdle rate as follows:

1 bed flat	34%
2 bed flat	23%
3 bed flat	20%
3 bed terrace	19%
4 bed terrace	15%
3 bed semi	19%
4 bed semi	15%
3 bed detached	18%
4 bed detached	12%

The table shows that there is scope to increase the hurdle rate to an average across all types and values to 18.01%. This shows the potential for the hurdle rate to be at the upper end of the viability spectrum.

Q/Bring together all assumptions used in the appraisals

The BPS March report sets out the assumptions adopted in the assumptions in a number of locations. The relevant paragraph numbers are shown next to the assumptions

Typology unit mix 3.22

Orginal Development Scenarios											
Site Area	Flats			Terraced	Terraced	Semi Detached		Detached			Total
Hectares	1 bed	2 bed	3 bed	2/3 bed	4 bed	3 bed	4 bed	3 bed	4 bed	5 bed	Units
0.1		4		2	3						9
0.27	5	5		3	3	2	2				20
0.6	15	20		10	5	5	5				60
1.37	25	40		30	24	14					133
2.6				40	40	20	20	10	10		140

AMR derived typologies 3.23

Additional Scenarios Reflecting 2016/17 AMR												
Site Area	Post	Flats			Terraced	Terraced	Semi Detached		Detached			Total
Hectares	Code	1 bed	2 bed	3 bed	2/3 bed	4 bed	3 bed	4 bed	3 bed	4 bed	5 bed	Units
0.58	RG4					1.3						1.3
0.125	RG1		1	3	2							6
3.854	RG2	20	50	10	55	15						150
10.92	RG30	75	200	50	300	25						650

Local plan additional allocations derived typologies 3.24

Scenarios Reflecting Draft Local Plan Allo												
Site Area	Post	Flats			Terraced	Terraced	Semi Detached		Detached			Total
Hectares	Code	1 bed	2 bed	3 bed	2/3 bed	4 bed	3 bed	4 bed	3 bed	4 bed	5 bed	Units
0.756	RG1	20	27	7	35	9						98
3.31	RG1	76	103	32	133	33						377
2.77	RG30	34	45	34	90	22						225
1.43	RG31	8	10	8	21	5						52
3.75	RG4	19	25	19	50	13						126

Affordable housing values

Rent assumptions when assessing valuation of affordable rent property 3.28

Weekly LHA rate for February 2018

Reading BRMA

Shared Accommodation Rate:	**£78.78 per week**
One Bedroom Rate:	**£153.02 per week**
Two Bedrooms Rate:	**£188.33 per week**
Three Bedrooms Rate:	**£221.79 per week**
Four Bedrooms Rate:	**£315.12 per week**

Other valuation assumptions adopted when valuing affordable rent within the appraisal models

Capitalisation Rate %	5.50%
Capitalisation period (years)	30
Management Costs %	£600
Voids/Bad Debts %	2.50%
Grant per unit	
Repairs	£600

In respect of shared ownership. The assumptions adopted in the appraisals are as shown below:

Proportion of Equity Sold %	30.0%
Rent on unsold equity %	2.5%
Capitalisation yield %	5.5%
Staircasing (years)	100

Unit Sales Values 4.14

	Flats			Terraced		Semi Detatched		Detached	
	1 bed	2 bed	3 bed	3 bed	4 bed	3 bed	4 bed	3 bed	4 bed
New Build	£ 259,828	£324,039		£419,000	£516,000	£437,129	£551,667	£572,500	£693,733
All Sales	£ 205,223	£259,064		£323,551	£372,217	£387,356	£469,027	£454,478	£697,616
Proposed Values	£ 216,000	£315,018	£361,250	£373,065	£480,040	£387,000	£495,000	£402,500	£594,000

Development cost assumptions 5.3

- Professional fees 10% of total construction costs
- Contingency 5% of total construction costs
- Sales Fees 1% of total revenue
- Legal Fees 0.5% of total revenue
- Marketing 2% of total revenue
- Zero Carbon 1% of total Revenue
- Finance costs 6.57% of total costs including land

Developer profit 5.5 & 5.8 it was our preference to adopt a range of profit on GDV targets as follows:

Private sales	17-20% GDV
Affordable sales	6%
Build to rent	14.5%

In deference to the penultimate draft of the NPPG we adopted a blanket 20%. The final version of the NPPG issued in July has revised guidance as follows:

For the purpose of plan making an assumption of 15-20% of gross development value (GDV) may be considered a suitable return to developers in order to establish the viability of plan policies. Plan makers may choose to apply alternative figures where there is evidence to support this according to the type, scale and risk profile of planned development. A lower figure may be more appropriate in consideration of delivery of affordable housing in circumstances where this guarantees an end sale at a known value and reduces risk. Alternative figures may also be appropriate for different development types.

Paragraph: 018 Reference ID: 10-018-20180724

This accords with our initial assessment of appropriate margins of profit, however dues to timing considerations the plan target has been assessed against a blanket 20% margin. This should be considered as adding considerable to the robustness of the viability results as it effectively allows for higher margin of profit than might otherwise be considered reflective of market norms.

Construction costs 5.1 and 5.2 & Appendix B

These have been prepared by qualified Quantity Surveyor with the results as a cost per sq m shown below:

1	2	3	4	5	6	7	8	9	10	11	12	
				All mean costs max 5yrs except shell cost which are default								
				LF100	LF110	Facilitating	Sub Total	Ext wks	Sub Total	Contingency	Total	
							6 + 7	10%	8 + 9	5%	10 + 11	
Ref	Functional unit	Detail	BCIS category	£/m²	£/m²	£/m²	£/m²	£/m²	£/m²	£/m²	£/m²	
1	Flats	Typically 1B, 2B & 3B - 50/70/90 m²	Generally	1,394	1,533	60	1,593	159	1,753	88	**1,840**	Flats
2	Detached housing	3B, 4B - 110/130 m²		1,520	1,672	60	1,732	173	1,905	95	**2,000**	Detached housing
3	Semi-Detached housing	2B, 3B & 4B - 80/90/100 m²	Generally	1,145	1,260	60	1,320	132	1,451	73	**1,524**	Semi-Detached housing
4	Terraced housing		Generally	1,178	1,296	60	1,356	136	1,491	75	**1,566**	Terraced housing

To facilitate a fuller understanding a spreadsheet of these figures has been included.

Reading CIL Exercise
Avg build costs LF 100 - TPI 302 - max 5 years

BCIS®

RICS

£/m2 study

Description: Rate per m2 gross internal floor area for the building Cost including prelims.

Last updated: 14-Oct-2017 12:20

At 4Q2017 prices (based on a Tender Price Index of 302) and UK mean location (Location index 100).

Maximum age of results: 5 years

Building function (Maximum age of projects)	£/m² gross internal floor area						Sample
	Mean	Lowest	Lower quartiles	Median	Upper quartiles	Highest	
New build							
320. Offices							
Generally (5)	1,923	1,280	1,993	2,038	2,081	2,177	10
Air-conditioned							
Generally (5)	1,836	1,280	1,569	2,045	2,081	2,144	6
1-2 storey (5)	1,752	1,415	-	-	-	2,090	2
3-5 storey (5)	1,827	1,280	-	2,057	-	2,144	3
Not air-conditioned							
Generally (5)	2,054	1,987	-	2,026	-	2,177	4
1-2 storey (5)	2,069	1,987	-	2,043	-	2,177	3
6+ storey (5)	2,010	-	-	-	-	-	1
341.1 Retail warehouses							
Generally (5)	961	667	752	790	954	1,771	6
Up to 1000m2 (5)	667	-	-	-	-	-	1
1000 to 7000m2 GFA (5)	1,020	742	779	800	1,005	1,771	5
345. Shops							
Generally (5)	1,506	807	-	1,582	-	2,052	4
1-2 storey (5)	1,506	807	-	1,582	-	2,052	4
810.11 Estate housing detached (5)	1,520	880	1,246	1,487	1,930	2,142	9
810.12 Estate housing semi detached							
Generally (5)	1,145	724	1,000	1,126	1,243	1,969	149
Single storey (5)	1,306	909	1,164	1,325	1,424	1,882	27
2-storey (5)	1,109	724	993	1,092	1,217	1,969	117
3-storey (5)	1,120	839	881	1,046	1,143	1,693	5
810.13 Estate housing terraced							
Generally (5)	1,178	795	1,007	1,110	1,237	3,680	112
Single storey (5)	1,284	886	1,034	1,293	1,573	1,618	6
2-storey (5)	1,145	809	1,002	1,108	1,231	2,245	94
3-storey (5)	1,171	795	1,030	1,186	1,290	1,640	11
4-storey or above (5)	3,680	-	-	-	-	-	1
816. Flats (apartments)							
Generally (5)	1,394	762	1,158	1,316	1,592	4,612	270
1-2 storey (5)	1,330	819	1,122	1,253	1,476	2,167	63
3-5 storey (5)	1,354	762	1,158	1,298	1,548	2,489	182
6+ storey (5)	1,846	1,142	1,522	1,709	1,804	4,612	25
852. Hotels (5)	1,894	1,551	-	1,941	-	2,143	4

Reading CIL Exercise

BCIS®

RICS®

£/m2 study

Description: Rate per m2 gross internal floor area for the building Cost including prelims.

Last updated: 14-Oct-2017 12:20

At 4Q2017 prices (based on a Tender Price Index of 302) and UK mean location (Location index 100).

Maximum age of results: Default period

Building function (Maximum age of projects)	£/m² gross internal floor area						Sample
	Mean	Lowest	Lower quartiles	Median	Upper quartiles	Highest	
New build							
320. Offices							
Generally (15)	1,671	749	1,226	1,539	1,923	5,168	138
Air-conditioned							
Generally (15)	1,817	1,081	1,357	1,660	2,032	5,168	41
1-2 storey (15)	1,576	1,081	1,255	1,415	1,719	3,113	15
3-5 storey (15)	1,862	1,147	1,385	1,638	2,074	5,168	18
6+ storey (15)	2,125	1,554	1,752	1,905	2,006	3,896	7
Not air-conditioned							
Generally (15)	1,618	903	1,156	1,496	1,934	3,020	68
1-2 storey (15)	1,562	946	1,095	1,464	1,909	2,805	36
3-5 storey (15)	1,644	903	1,274	1,473	1,847	3,020	29
6+ storey (20)	2,098	1,646	-	2,148	-	2,449	4
341.1 Retail warehouses							
Generally (25)	791	390	605	705	835	2,451	69
Up to 1000m2 (25)	850	481	667	737	782	2,451	13
1000 to 7000m2 GFA (25)	795	390	596	706	866	1,771	45
7000 to 15000m2 (25)	710	476	604	657	746	1,061	9
Over 15000m2 GFA (25)	699	615	-	-	-	782	2
345. Shops							
Generally (30)	1,237	531	769	974	1,573	3,808	42
1-2 storey (30)	1,267	531	751	974	1,671	3,808	38
3-5 storey (30)	951	792	-	922	-	1,169	4
810.11 Estate housing detached (15)	1,342	880	1,068	1,320	1,503	2,142	21
810.12 Estate housing semi detached							
Generally (15)	1,149	574	994	1,123	1,267	2,154	431
Single storey (15)	1,310	801	1,134	1,286	1,450	2,154	77
2-storey (15)	1,118	574	989	1,099	1,229	1,981	334
3-storey (15)	1,054	786	878	1,001	1,144	1,693	20
810.13 Estate housing terraced							
Generally (15)	1,168	558	982	1,122	1,303	3,680	398
Single storey (15)	1,269	861	1,053	1,206	1,498	1,946	51
2-storey (15)	1,147	558	978	1,116	1,271	2,245	287
3-storey (15)	1,139	741	924	1,075	1,225	2,363	59
4-storey or above (5)	3,680	-	-	-	-	-	1
816. Flats (apartments)							
Generally (15)	1,368	673	1,142	1,309	1,543	4,612	943
1-2 storey (15)	1,297	781	1,110	1,248	1,438	2,460	229
3-5 storey (15)	1,349	673	1,141	1,297	1,538	2,713	634
6+ storey (15)	1,730	998	1,423	1,666	1,819	4,612	76
852. Hotels (15)	1,853	1,102	1,565	1,794	2,141	2,800	20

BCIS®

RICS®

£/m2 study

Description: Rate per m2 gross internal floor area for the building Cost including prelims.

Last updated: 14-Oct-2017 12:20

At 4Q2017 prices (based on a Tender Price Index of 302) and UK mean location (Location index 100).

Maximum age of results: Default period

Building function (Maximum age of projects)	£/m² gross internal floor area						Sample
	Mean	Lowest	Lower quartiles	Median	Upper quartiles	Highest	
Shell only							
320. Offices (30)	580	-	-	-	-	-	1
345. Shops (15)	795	646	722	760	870	979	7

Reading CIL Exercise
BCIS downloaded 26 Oct 2017

LF Reading	110
TPI 4Q2017	302 forecast
Avg build costs - see tabs	

Reading CIL Exercise

New build costs including facilitating works, external works & contingency

1	2	3	4	5	6	7	8	9	10	11	12	
				All mean costs max 5yrs except shell cost which are default								
				LF100	LF110	Facilitating	Sub Total	Ext wks	Sub Total	Contingency	Total	
							6 + 7	10%	8 + 9	5%	10 + 11	
Ref	Functional unit	Detail	BCIS category	£/m²	£/m²	£/m²	£/m²	£/m²	£/m²	£/m²	£/m²	
1	Flats	Typically 1B, 2B & 3B - 50/70/90 m²	Generally	1,394	1,533	60	1,593	159	1,753	88	**1,840**	Flats
2	Detached housing	3B, 4B - 110/130 m²		1,520	1,672	60	1,732	173	1,905	95	**2,000**	Detached housing
3	Semi-Detached housing	2B, 3B & 4B - 80/90/100 m²	Generally	1,145	1,260	60	1,320	132	1,451	73	**1,524**	Semi-Detached housing
4	Terraced housing		Generally	1,178	1,296	60	1,356	136	1,491	75	**1,566**	Terraced housing
5	Offices	Typically 5,000-10,000 m²	Generally	1,923	2,115	60	2,175	218	2,393	120	**2,512**	Offices
6	Offices shell only			795	875	60	935	93	1,028	51	**1,079**	Offices shell only
7	Shops/ retail	5+ units	Generally	1,506	1,657	60	1,717	172	1,888	94	**1,983**	Shops/ retail
8	Shops shell only			795	875	60	935	93	1,028	51	**1,079**	Shops shell only
9	Retail warehouses	Out-of-town - 200 - 4,000m²	1000-7000m²	1,020	1,122	60	1,182	118	1,300	65	**1,365**	Retail warehouses
10	Hotels	Travel Lodge/ Premier Inn style		1,894	2,083	60	2,143	214	2,358	118	**2,476**	Hotels

Reading CIL Exercise
A selection of recent jobs with facilitating works

Ref	Project	£/m²
1	Maryon House	50
2	Castlewood	110
3	Koko Hope & Anchor	115
4	St Johns Rd	45
5	Beulah Hill	30
6	Bangor Wharf	40
7	Dulwich Hamlet FC	14
8	161 Denmark Hill	39
9	Rom Valley Way	8
10	Equipment works	70
11	60 Neasden Lane	166
12	Half Acre & Albany	111
13	1-83 High St Hounslow	3
14	Pear Tree House	43
		844
	Average	60