Nottingham City Council
Whole Plan Viability Assessment

August 2018

NCS Nationwide CIL Service

Contents

1 Executive Summary

Purpose of the Study

1.1 The purpose of the Viability Study is to appraise the economic viability of potential development allocated within Nottingham City. The study will assess viability in terms of the impact of proposed planning policies on the projected delivery of development during the Plan period. The study considers policies that might affect the cost and value of development (e.g. Affordable Housing and Design and Construction Standards).

1.2 Section 34 of the 2018 National Planning Policy Framework requires that plans should be deliverable ensuring that obligations and policy burdens do not threaten the viability of the developments identified in the plan. An assessment of the costs and values of each category of development is therefore required to consider whether they will yield competitive returns to a willing land owner and willing developer thus enabling the identified development to proceed.

Methodology

1.3 The viability assessment comprises a number of key stages as outlined below:

EVIDENCE BASE – LAND & PROPERTY VALUATION STUDY

1.4 Collation of an area-wide evidence base of land and property values for both residential and commercial property

EVIDENCE BASE – CONSTRUCTION COST STUDY

1.5 Collation of an area-wide evidence base of construction costs for both residential and commercial property

IDENTIFICATION OF SUB-MARKETS

1.6 Sub market identification informed by the valuation evidence gathered at stage one above, Large differences in values across a study area indicate the need to define independent sub areas for viability testing purposes. As such differential sale value assumptions may be applied to the assessment of different sites across the study area.

POLICY IMPACT ASSESSMENT

1.7 Identification of the policies within the plan, which will have a direct impact on the costs of development and hence the viability of development. Typical policy impacts include affordable housing requirements and sustainable construction requirements.

VIABILITY APPRAISAL

1.8 Viability assessment for both potential residential and commercial development sites based on a series of typologies which reflect the development likely to emerge over the plan period. The assessments are conducted for both greenfield and brownfield development as it is recognised this can result in significant difference in viability.

Residential Viability

1.9 The study demonstrates that all greenfield housing and brownfield housing in the medium and high value sub-markets is viable and deliverable taking account of the cost impacts of the policies proposed by the plan and the requirements for viability assessment set out in the NPPF. The viability of both apartment development and brownfield housing in the lower value sub-market area is challenging under current market circumstances and some relaxation of Affordable Housing and infrastructure contributions may need to be considered at application stage for these forms of development to be delivered. The study indicates that all proposed student housing is viable and deliverable.

1.10 The assessment of the Waterside Strategic Site indicated that all proposed housing would be viable. The viability of high rise apartments and low rise apartments is challenging outside the higher value locations adjacent to the waterside. Overall though the strong positive viability of the housing outweighs the negative viability of the apartments and the overall strategy may be considered viable and deliverable

Commercial Viability Assessment

1.11 The commercial category viability results demonstrate that only retail development has a significant viability margin. In reality much commercial development is delivered direct by business operators who do not require the 'development profit' element. As such many commercial categories of development are broadly viable and deliverable despite the apparent negativity of the results.

Conclusions

1.12 The study is a strategic assessment of whole plan viability and as such is not intended to represent a detailed viability assessment of every individual site. The study applies the general assumptions in terms of affordable housing, planning policy costs impacts and identified site mitigation factors based on generic allowances. It is anticipated that more detailed mitigation cost and viability information may be required at planning application stage to determine the appropriate level of affordable housing and planning obligation contributions where viability issues are raised. The purpose of the study is to determine whether the overall development strategy proposed by the Plan is deliverable given the policy cost impacts of the Plan.

1.13 In conclusion, the assessment of all proposed residential sites in Nottingham has been undertaken with due regard to the requirements of the NPPF and the best practice advice contained in the Viability Planning Practice Guidance July 2018. The study demonstrates that the majority of the housing development proposed by the Local Plan is viable and deliverable taking account of the cost impacts of the policies proposed by the plan and the requirements for viability assessment set out in the NPPF. The viability of both apartment development and brownfield housing in the lower value sub-market area is challenging under current market circumstances and some relaxation of Affordable Housing and infrastructure contributions may need to be considered at application stage for these forms of development to be delivered.

1.14 It should be noted that this study should be seen as a strategic overview of plan level viability rather than as any specific interpretation of Nottingham City Council policy on the viability of any individual site or application of planning policy to affordable housing or developer contributions. Similarly the conclusions and recommendations in the report do not necessarily reflect the views of Nottingham City Council.

2 Introduction

2.1 The purpose of the study is to assess the viability of potential development allocations which could be included in the Nottingham City Local Plan in the context of 'whole plan' viability.

2.2 In order to provide a robust assessment, the study assesses the principal strategic sites that will form the bulk of housing and employment development to consider the cost and value impacts of the proposed plan policies. The development viability appraisals take account of proposed Local Plan policies, affordable housing requirements, mandatory requirements to be introduced during the Plan period such as the National Housing Standards and Sustainable Construction requirements to determine whether the proposed plan policies and the development proposals are viable.

The NPPF and Relevant Guidance

2.3 In response to the original NPPF issued in 2012, the Local Housing Delivery Group, a cross industry group of residential property stakeholders including the House Builders Federation, Homes and Communities Agency and Local Government Association, has published more specific guidance entitled 'Viability Testing Local Plans' in June 2012 (the Harman Report).

2.4 The guidance states as an underlying principle, that:-

"An individual development can be said to be viable if, after taking account of all costs, including central and local government policy and regulatory costs and the cost and availability of development finance, the scheme provides a competitive return to the developer to ensure that development takes place and generates a land value sufficient to persuade the land owner to sell the land for the development proposed. If these conditions are not met, a scheme will not be delivered."

2.5 The guidance recommends the following stages be completed in testing Local Plan viability:-

1) Review Evidence Base and align existing assessment evidence

2) Establish Appraisal Methodology and Assumptions (including threshold land values, site and development typologies, costs of policy requirements and allowance for changes over time)

3) Evidence Collation and Viability Modelling (including development costs and revenues, land values, developers profit allowance)

4) Viability Testing and Appraisal

5) Review of Outputs

2.6 The National Planning Policy Framework 2018 maintains the importance of maintaining viability assessments in considering appropriate Development Plan policies. Para 34 states:-

"Plans should set out the contributions expected from development. This should include setting out the levels and types of affordable housing provision required, along with other infrastructure (such as that needed for education, health, transport, flood and water management, green and digital infrastructure). Such policies should not undermine the deliverability of the plan.

2.7 In tandem with the launch of the revised NPPF, the Government published new Planning Practice Guidance on Viability in July 2018. With respect to 'Viability and Plan Making', the guidance states:-

How should plan makers set policy requirements for contributions from development?

Plans should set out the contributions expected from development. This should include setting out the levels and types of affordable housing provision required, along with other infrastructure (such as that needed for education, health, transport, flood and water management, green and digital infrastructure).

These policy requirements should be informed by evidence of infrastructure and affordable housing need, and a proportionate assessment of viability that takes into account all relevant policies, and local and national standards, including the cost implications of the Community Infrastructure Levy (CIL) and section 106. Policy requirements should be clear so that they can be accurately accounted for in the price paid for land. To provide this certainty, affordable housing requirements should be expressed as a single figure rather than a range. Different requirements may be set for different types of site or types of development.

How should plan makers and site promoters ensure that policy requirements for contributions from development are deliverable?

The role for viability assessment is primarily at the plan making stage. Viability assessment should not compromise sustainable development but should be used to ensure that policies are realistic, and that the total cumulative cost of all relevant policies will not undermine deliverability of the plan.

It is the responsibility of plan makers in collaboration with the local community, developers and other stakeholders, to create realistic, deliverable policies. Drafting of plan policies should be iterative and informed by engagement with developers, landowners, and infrastructure and affordable housing providers.

Policy requirements, particularly for affordable housing, should be set at a level that takes account of affordable housing and infrastructure needs and allows for the planned types of sites and development to be deliverable, without the need for further viability assessment at the decision making stage.

It is the responsibility of site promoters to engage in plan making, take into account any costs including their own profit expectations and risks, and ensure that proposals for development are policy compliant. The price paid for land is not a relevant justification for failing to accord with relevant policies in the plan.

3 Methodology

The Process

There are a number of key stages to Viability Assessment which may be set out as follows.

1) Evidence Base – Land & Property Valuation Study

3.1 Establish an area wide evidence base of land and property values for development in each sub-market area. The evidence base relies on the area wide valuation study undertaken by Heb Surveyors in 2018. The evidence is compiled from current data sources as set out in the Valuation report and direct engagement with stakeholders in the local development industry.

2) Evidence Base – Construction Cost Study

3.2 Establish an area wide evidence base of construction costs for each category of development relevant to the local area. The study will also indicate construction rates for professional fees, warranties, statutory fees and construction contingencies. The evidence base relies on the Construction Cost Study by Gleeds undertaken in 2017 which is based on analysis of construction costs over a range of projects within the Gleeds Research and Development Data Base. This is supplemented by BCIS construction cost information where insufficient data is available within any particular category.

3) Identification of Sub Market Areas

3.3 The Heb Valuation Evidence considered the existence of potential sub-markets within the study area which might inform the application of differential value assumptions in the Whole Plan testing or inform the creation of differential Charging Zones as part of the progression of a revised Community Infrastructure Levy Charging Schedule if these emerge in future.

4) Policy Impact Assessment

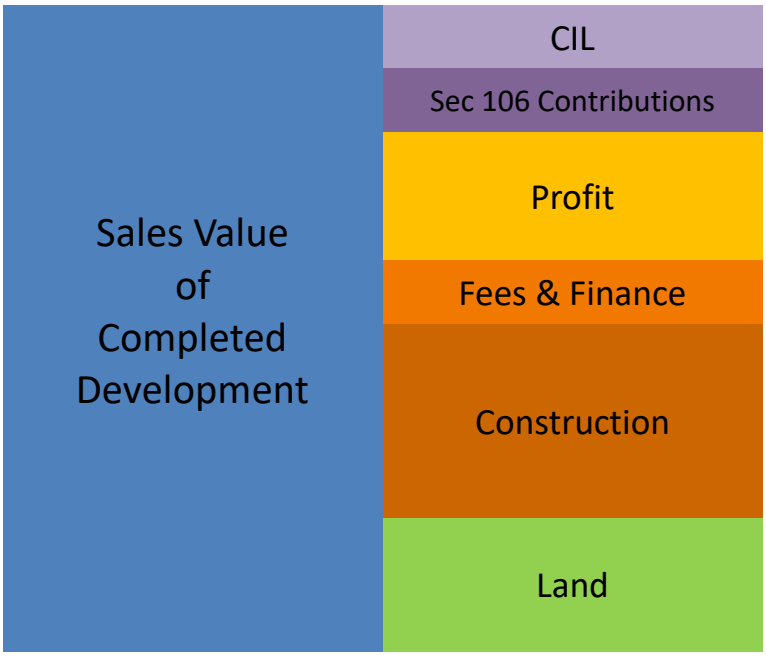
3.4 The study will establish which policies proposed by the Local Plan have a direct impact on the cost of development and apportion appropriate allowances based on advice from cost consultants, Gleeds, to be factored in the viability assessment. Typically cost impacts will include sustainable construction requirements based on National Housing Standards and BREEAM standards.

5) Viability Appraisal – Whole Plan Assessment

3.5 The study employs a bespoke model to assess Plan viability in accordance with current best practice guidance. Where relevant, initial generic tests will be based on a series of development typologies to reflect the type of development likely to emerge over the plan period. The purpose of these tests is two-fold – it will firstly assess cumulative impact of the policies to determine whether the overall development strategy is deliverable. Secondly the model will identify the level of additional margin, beyond a reasonable return for the landowner and developer, which may be available for planning obligations.

3.6 Where site specific assessments are undertaken the projected development mix will be inserted into the model along with any site specific abnormal costs or infrastructure requirements. As with the generic models, the appraisal will include the impact of all proposed and existing plan policies (affordable Housing, S106 contributions, CIL etc) to determine if the development can provide a competitive return to the landowner and developer and therefore be deemed deliverable.

The Development Equation



3.7 The appraisal model is illustrated by the above diagram and summarises the 'Development Equation'. On one side of the equation is the development value i.e. the sales value which will be determined by the market at any particular time. One of the key variable elements of the value in residential development appraisal will be determined by the proportion and mix of affordable housing applied to the scheme under S106 contributions. Appropriate discounts for the relevant type of affordable housing will need to be factored into this part of the appraisal.

3.8 On the other side of the equation, the development cost includes the 'fixed elements' i.e. construction, fees, finance and developers profit. Developers profit is usually fixed as a minimum % return on gross development value generally set by the lending institution at the time. The flexible elements are the cost of land and the amount of developer contribution (CIL and Planning Obligations) sought by the Local Authority.

3.9 Economic viability is assessed using an industry standard Residual Model approach. The model subtracts the benchmark/threshold Land Value and the Fixed Development Costs from the Development Value to determine the viability or otherwise of the development and any additional margin available for CIL. It should be noted that Nottingham City Council does not intend to pursue CIL.

Viability Assessment Model

3.10 The NCS model is based on standard development appraisal methodology, comparing development value to development cost. The model factors in a reasonable return for the landowner with the established threshold value, a reasonable profit return to the developer and the assessed cost impacts of proposed planning policies to determine if there is a positive or negative residual output. Provided the margin is positive (ie Zero or above) then the development being assessed is deemed viable. The principles of the model are illustrated below.

Development Value (Based on Floor Area) Eg 10 x 3 Bed 100sqm Houses x £2,200per sqm	£2,200,000
Development Costs	
Land Value	£400,000
Construction Costs	£870,000
Abnormal Construction Costs (Optional)	£100,000
Professional Fees (% Costs)	£90,000
Legal Fees (% Value)	£30,000
Statutory Fees (% Costs)	£30,000
Sales & Marketing Fees (% Value)	£40,000
Contingencies (% Costs)	£50,000
Section 106 Contributions/Policy Impact Cost Assumptions/CIL (Strategic Site Testing Only)	£90,000
Finance Costs (% Costs)	£100,000
Developers Profit (% Return on GDV)	£350,000
Total Costs	£2,175,000
Output	
Viability Margin	£50,000
Potential CIL Rate (CIL Appraisal only)	£50 sqm

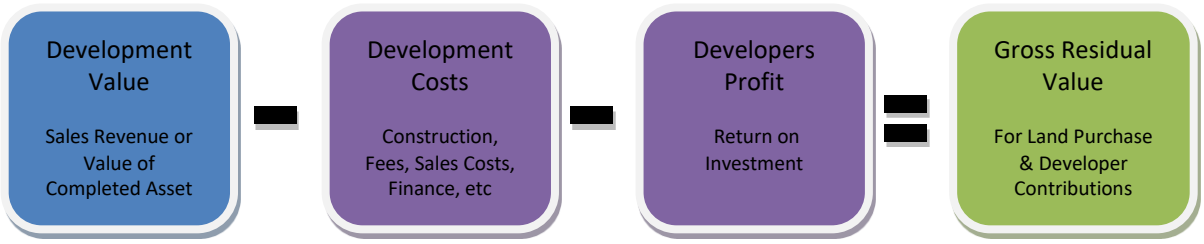
3.11 The model will calculate the gross margin available for additional developer contributions. These additional contributions may be by way of Affordable Housing, S106 Infrastructure or CIL.

3.12 It is important to note that the model applies % proportions and further % tenure splits to the housing scenarios to reflect affordable housing discounts which will generate fractional unit numbers. The model automatically rounds to the nearest whole number and therefore some results appear to attribute value proportions to houses which do not register in the appraisal. The fractional distribution of affordable housing discounts is considered to represent the most accurate illustration of the impact of affordable housing policy on viability.

Land Value Assumptions

3.13 It is generally accepted that developer contributions (Affordable Housing, CIL , S106 and S278), will be extracted from the residual land value (i.e. the margin between development value and development cost including a reasonable allowance for developers profit). Within this gross residual value will be a base land value (i.e. the minimum amount a landowner will accept to release a site) and a remaining margin for contributions.

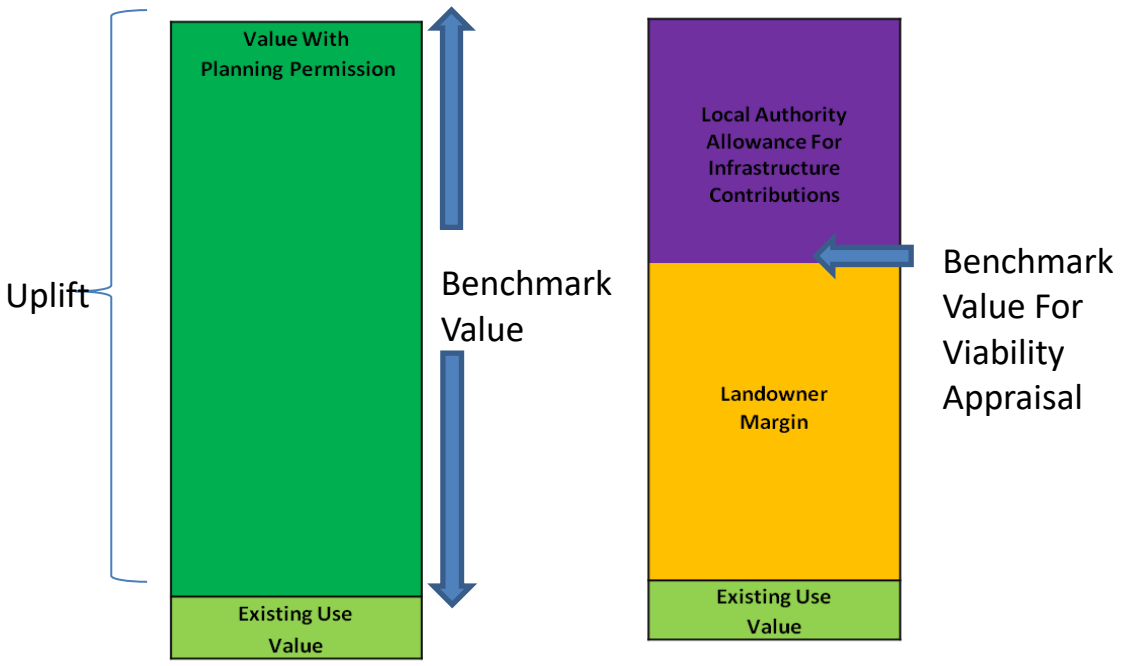
Stage 1 – Residual Valuation



3.14 The approach to assessing the land element of the gross residual value is therefore the key to the robustness of any viability appraisal. There is no single method of establishing threshold land values for the purpose of viability assessment in planning but the NPPF and emerging best practice guidance does provide a clear steer on the appropriate approach.

Stage 2 – Establishing Base Land Value

Land Value Benchmarking (Threshold Land Values)



3.15 The above diagram illustrates the principles involved in establishing a robust benchmark for land value. Land will have an existing use value (EUV) based on its market value. This is generally established by comparable evidence of the type of land being assessed (e.g. agricultural value for greenfield sites or perhaps industrial value for brownfield sites may be regarded as reasonable existing use value starting points and may be easily established from comparable market evidence)

3.16 The Gross Residual Value of the land for an alternative use (e.g. residential use) represents the difference between development value and development cost after a reasonable allowance for development profit, assuming planning permission has been granted. The gross residual value does not make allowance for the impact of development plan policies on development cost and therefore represents the maximum potential value of land that landowners may aspire to.

3.17 In order to establish a benchmark land value for the purpose of viability appraisal, it must be recognised that Local Authorities will have a reasonable expectation that, in granting planning permission, the resultant development will yield contributions towards infrastructure and affordable housing. The cost of these contributions will increase the development cost and therefore reduce the residual value available to pay for the land.

3.18 The appropriate benchmark value will therefore lie somewhere between existing use value and gross residual value based on alternative planning permission. This will of course vary significantly dependent on the category of development being assessed.

3.19 The key part of this process is establishing the point on this scale that balances a reasonable return to the landowner beyond existing use value and a reasonable margin to allow for infrastructure and affordable housing contributions to the Local Authority.

Benchmarking and Threshold Land Value Guidance

3.20 In July 2018 the Government issued the revised NPPF and published guidance on best practice in viability assessment (Planning Practice Guidance for Viability). This guidance essentially reflected principles established by the Harman Report and RICS Financial Viability in Planning. With respect to land value benchmarking the guidance states the following:-

"How should land value be defined for the purpose of viability assessment?

To define land value for any viability assessment, a benchmark land value should be established on the basis of the existing use value (EUV) of the land, plus a premium for the landowner. The premium for the landowner should reflect the minimum return at which it is considered a reasonable landowner would be willing to sell their land. The premium should provide a reasonable incentive, in comparison with other options available, for the landowner to sell land for development while allowing a sufficient contribution to comply with policy requirements. This approach is often called 'existing use value plus' (EUV+).

In order to establish benchmark land value, plan makers, landowners, developers, infrastructure and affordable housing providers should engage and provide evidence to inform this iterative and collaborative process.

What factors should be considered to establish benchmark land value?

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.*

What is meant by existing use value in viability assessment?

Existing use value (EUV) is the first component of calculating benchmark land value. EUV is the value of the land in its existing use together with the right to implement any development for which there are policy compliant extant planning consents, including realistic deemed consents, but without regard to alternative uses. Existing use value is not the price paid and should disregard hope value. Existing use values will vary depending on the type of site and development types. EUV can be established in collaboration between plan makers, developers and landowners by assessing the value of the specific site or type of site using published sources of information such as agricultural or industrial land values, or if appropriate capitalised rental levels at an appropriate yield. Sources of data can include (but are not limited to): land registry records of transactions; real estate licensed software packages; real estate market reports; real estate research; estate agent websites; property auction results; valuation office agency data; public sector estate/property teams' locally held evidence.

How should the premium to the landowner be defined for viability assessment?

The premium (or the 'plus' in EUV+) is the second component of benchmark land value. It is the amount above existing use value (EUV) that goes to the landowner. The premium should provide a reasonable incentive for a land owner to bring forward land for development while allowing a sufficient contribution to comply with policy requirements.

Plan makers should establish a reasonable premium to the landowner for the purpose of assessing the viability of their plan. This will be an iterative process informed by professional judgement and must be based upon the best available evidence informed by cross sector collaboration. For any viability assessment data sources to inform the establishment the landowner premium should include market evidence and can include benchmark land values from other viability assessments. Any data used should reasonably identify any adjustments necessary to reflect the cost of policy compliance (including for affordable housing), or differences in the quality of land, site scale, market performance of different building use types and reasonable expectations of local landowners. Local authorities can request data on the price paid for land (or the price expected to be paid through an option agreement).

NCS Approach to Land Value Benchmarking (Threshold Land Values)

3.21 NCS has given careful consideration to how the Threshold Land Value (i.e. the premium over existing use value) should be established in the light of both the existing and proposed guidance set out above.

3.22 We first adopt an appropriate benchmark for either greenfield or brownfield existing use value dependent on the type of site being assessed. These benchmarks are obtained from comparable market evidence of land sales for the relevant land use in the local area assessed as part of the valuation study undertaken by HEB Surveyors.

3.23 In determining the appropriate premium to the landowner above existing use value in the 'Existing Use Value Plus' approach, we have concluded that adopting a fixed % over existing value is inappropriate because the premium is tied solely to existing value – which will often be very low - rather than balancing the reasonable return aspirations of the landowner to pursue a return based on alternative use as required by the NPPF. Landowners are generally aware of what their land is worth with the benefit of planning permission. Therefore a fixed % uplift over existing use value will not generally be reflective of market conditions and may not be a realistic method of establishing threshold land value.

3.24 We believe that the uplift in value resulting from planning permission should effectively be shared between the landowner (as a reasonable return to incentivise the release of land) and the Local Authority (as a margin to enable infrastructure and affordable housing contributions). The % share of the uplift will vary dependent on the particular approach of each Authority but based on our experience the landowner will expect a minimum of 50% of the uplift in order for sites to be released. Generally, if a landowner believes the Local Authority is gaining greater benefit than he is unlikely to release the site and will wait for a change in planning policy. We therefore consider that a 50:50 split is a reasonable benchmark and will generate base land values that are fair to both landowners and the Local Authority (this became known as the 'Shinfield Approach' after the methodology adopted by the Inspector to establish benchmark land value in 2013 in an affordable housing appeal – ref. APP/X0360/A/12/2179141)

The Threshold Land Value is established as follows:-

Existing Use Value + 50% Share Of Uplift from Planning Permission = Threshold Land Value

EUV + Premium to Landowner = Benchmark

The 'Uplift in value from Planning Permission' is established by subtracting the 'Existing use Value' from the Gross Residual Value (as set out in paras 3.15-3.16 above)

3.25 The resultant threshold values are then checked against market comparable evidence of land transactions in the Authority's area by our valuation team to ensure they are realistic. We believe this is a robust approach which is demonstrably fair to landowners and more importantly an approach which has been accepted at CIL and Local Plan Examinations we have undertaken.

Worked Example of EUV+ Illustrating Fixed% over Existing Use vs % Share of Uplift

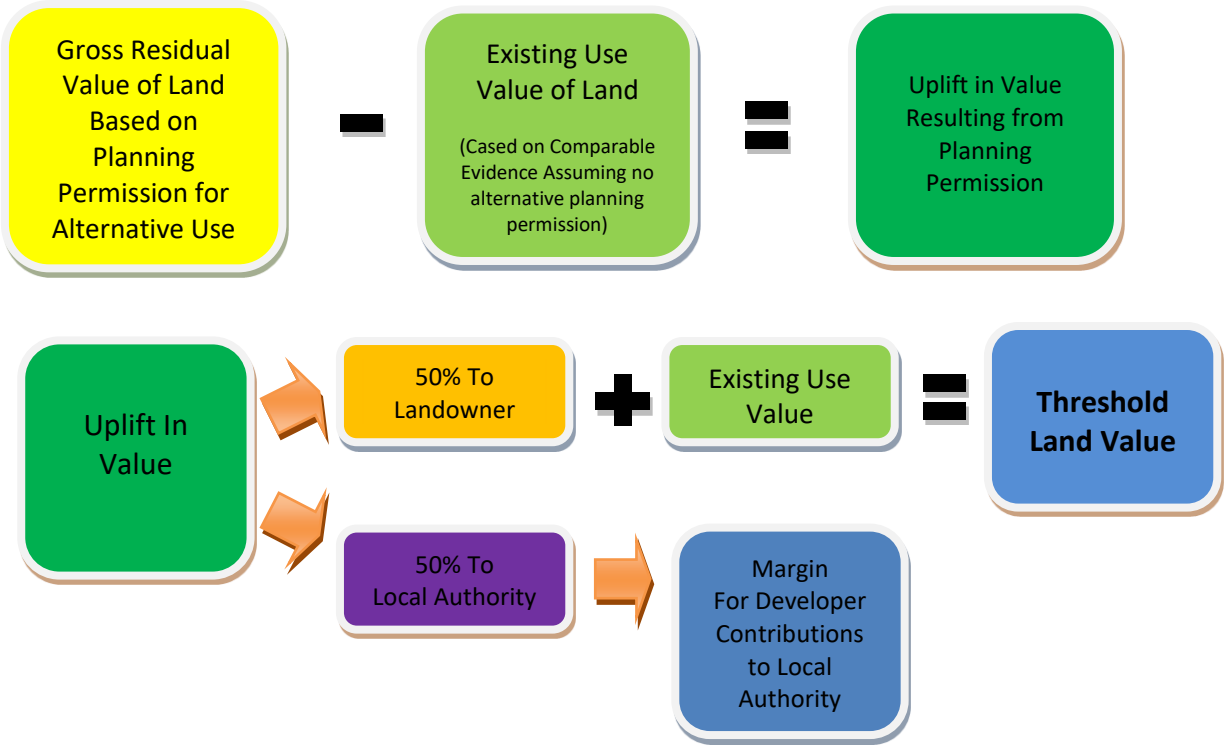
3.26 A landowner owns a 1 Hectare field at the edge of a settlement. The land is proposed to be allocated for residential development. Agricultural value is £20,000 per Ha. The Gross Residual Value of the land with residential planning permission is £1,000,000. Land sales in the area range from £400,000 per Ha to £1 Million per Ha. For the purposes of viability assessment what should this Greenfield site be valued at?

Using a fixed 20% over EUV the land would be valued at £24,000 (£20,000 + 20%)

Using % Share of Uplift in Value the land would be valued at £510,000 (£20,000 + 50% of the uplift between £20,000 and £1,000,000) – realising a market return for the landowner but reserving a substantial proportion of the uplift for infrastructure contribution.

In our view the % share of uplift method is more realistic to market circumstances than the application of a fixed premium over EUV.

Benchmarking Based on EUV + % Share of Uplift in Land Value



3.27 Whilst comparable evidence of policy compliant local land sales with planning permission is useful as a sense check, in our view it is difficult to find two sites that are directly comparable in view of the various factors that will influence the purchase price of land including precise location, abnormal site development cost, lower build cost rates enjoyed by volume housebuilders and the particular business decision of the purchaser.

3.28 The alternative method at the other end of the scale, following the part of the viability NPPG which states *'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,'* would be to calculate the total cost of all policy targets of the LPA first and determine what is left for the landowner and provided this margin offered some level of premium over EUV, accept it as a benchmark. In effect this would guarantee a positive viability result in every instance as no attempt is made to first establish 'the minimum land value at which a landowner would sell.'

3.29 We believe the purpose of viability appraisal and indeed the intention of the guidance is to ensure the total costs of policy compliance still leave enough room for the developer to make a sensible profit and for the landowner to achieve a reasonable return to induce him to sell. Since developer contributions must be extracted from the uplift in land value resulting from planning permission, unless some attempt is made to create a benchmark land value that reflects this 'reasonable return' to the landowner before the total costs of policy targets are subtracted, then the appraisal would serve no purpose. We consider the EUV + % Uplift method represents a balanced approach between the alternatives outlined above that is fair and reasonable and relies more precisely on the specific development cost and value of the site being assessed.

Brownfield and Greenfield Land Value Benchmarks

3.30 In order to represent the likely range of benchmark scenarios that might emerge in the plan period for the appraisal it will be necessary to test alternative threshold land value scenarios. A greenfield scenario will represent the best case for developer contributions as it represents the highest uplift in value resulting from planning permission. The greenfield existing use is based on agricultural value.

3.31 The median brownfield position recognises that existing commercial sites will have an established value. The existing use value is based on a low value brownfield use (industrial). The viability testing firstly assesses the gross residual value (the maximum potential value of land based on total development value less development cost with no allowance for affordable housing, sec 106 contributions or planning policy cost impacts). This is then used to apportion the share of the potential uplift in value to the greenfield and brownfield benchmarks. This is considered to represent a reasonable scope of land value scenarios in that change from a high value use (e.g. retail) to a low value use (e.g. industrial) is unlikely.

3.32 Actual market evidence will not always be available for all categories of development. In these circumstances the valuation team make reasoned assumptions.

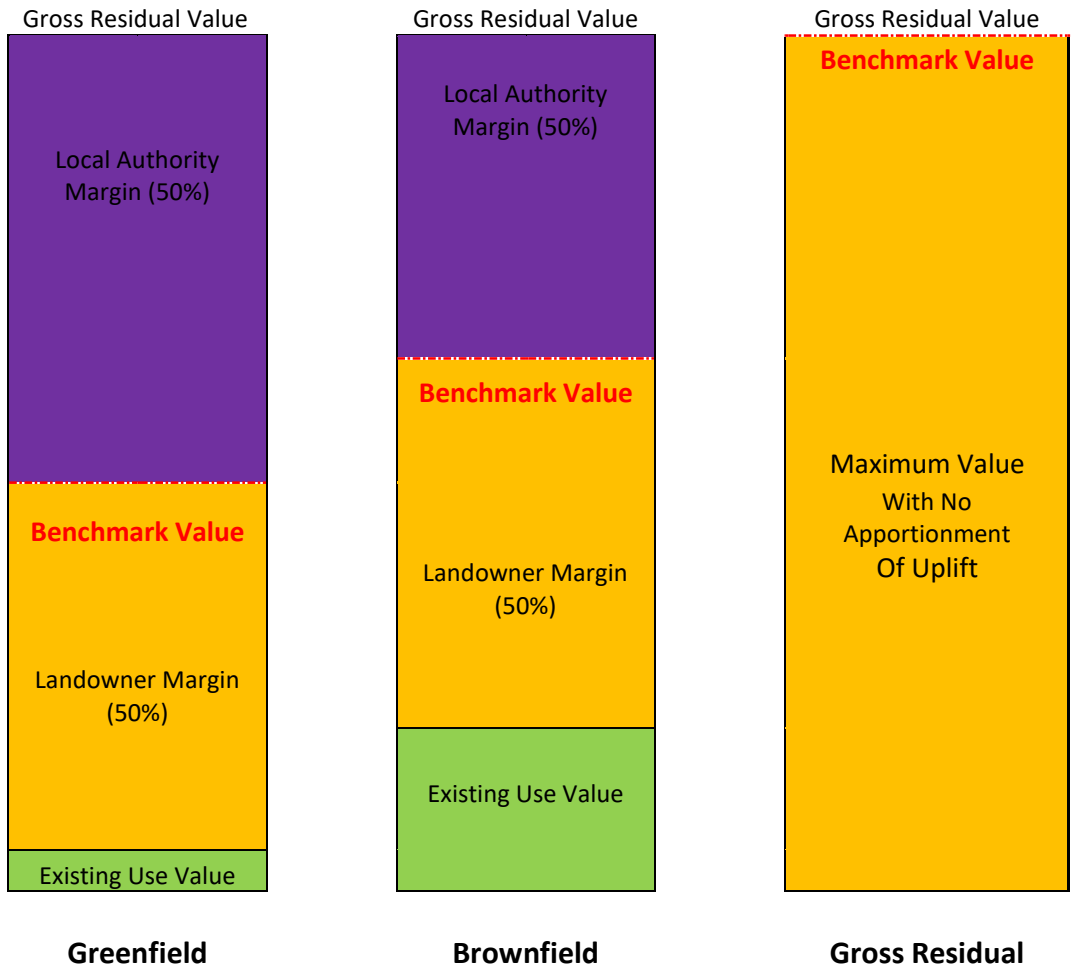
Residential

Benchmark 1	Greenfield	Agricultural – Residential (Maximum Contribution Potential)
Benchmark 2	Brownfield	Industrial – Residential

Commercial

Benchmark 1	Greenfield	Agricultural – Proposed Use (Maximum Contribution Potential)
Benchmark 2	Brownfield	Industrial – Proposed Use

3.33 The viability study assumes that affordable housing land has limited value as development costs form a very high proportion of the ultimate discounted sale value of the property.



3.34 The above diagram illustrates the concept of Benchmark Land Value. The level of existing use value for the three benchmarks is illustrated by the green shading. The uplift in value from existing use value to proposed use value is illustrated by the blue and gold shading. The gold shading represents the proportion of the uplift allowed to the landowner for profit. The blue shading represents the allowance of the uplift for developer contributions to the Local Authority. The Residual Value assumes maximum value with planning permission with no allowance for planning policy cost impacts. This benchmark is used solely to generate the brownfield and greenfield threshold values.

Affordable Housing

4.1 All residential viability tests have been undertaken to reflect affordable housing delivery and tenure mix in accordance with the relevant plan policy. The following extract from a generic sample residential viability appraisal model illustrates how affordable housing is factored into the residential valuation assessment. The relevant variables (e.g. unit numbers, types, sizes, affordable proportion, tenure mix etc.) are inputted into the appropriate cells. The model will then calculate the overall value of the development taking account of the relevant affordable unit discounts.

DEVELOPMENT SCENARIO		Mixed Residential Development					Apartments	10
BASE LAND VALUE SCENARIO		Greenfield to Residential					2 bed houses	20
DEVELOPMENT LOCATION		Urban Zone 1					3 Bed houses	40
DEVELOPMENT DETAILS		100	Total Units				4 bed houses	20
Affordable Proportion	30%	30	Affordable Units				5 bed house	10
Affordable Mix	30%	Intermediate	40%	Social Rent	30%	Affordable Rent		
Development Floorspace		6489	Sqm Market Housing		2,163	Sqm Affordable Housing		
Development Value								
Market Houses								
7	Apartments	65	sqm	2000	£ per sqm			£910,000
14	2 bed houses	70	sqm	2200	£ per sqm			£2,156,000
28	3 Bed houses	88	sqm	2200	£ per sqm			£5,420,800
14	4 bed houses	115	sqm	2200	£ per sqm			£3,542,000
7	5 bed house	140	sqm	2200	£ per sqm			£2,156,000
Intermediate Houses		60%	Market Value					
3	Apartments	65	Sqm	1200	£ per sqm			£210,600
5	2 Bed house	70	Sqm	1320	£ per sqm			£415,800
2	3 Bed House	88	Sqm	1320	£ per sqm			£209,088
Social Rent Houses		40%	Market Value					
4	Apartments	65	sqm	800	£ per sqm			£187,200
6	2 Bed house	70	sqm	880	£ per sqm			£369,600
2	3 Bed House	88	sqm	880	£ per sqm			£185,856
Affordable Rent Houses		50%	Market Value					
3	Apartments	65	sqm	1000	£ per sqm			£175,500
5	2 Bed house	70	sqm	1100	£ per sqm			£346,500
2	3 Bed House	88	sqm	1100	£ per sqm			£174,240
100	Total Units							
Development Value								**£16,459,184**

It is important to note that the model applies % proportions and further % tenure splits to the housing scenarios which will generate fractional unit numbers. The model automatically rounds to the nearest whole number and therefore some results appear to attribute value proportions to houses which do not register in the appraisal. The fractional distribution of affordable housing discounts is considered to represent the most accurate illustration of the impact of affordable housing policy on viability.

4.2 The following Affordable Housing Assumptions have been agreed for the purpose of the residential viability appraisals. The transfer values in terms of % of open market value are set out for each tenure type. The transfer value equates to the assumed price paid by the registered housing provider to the developer and is assessed as a discounted proportion of the open market value of the property in relation to the type (tenure) of affordable housing. The tenure mix reflects the new requirement of the NPPF to ensure that where Affordable Housing delivery is viable, the first 10% should deliver Low Cost Home Ownership products.

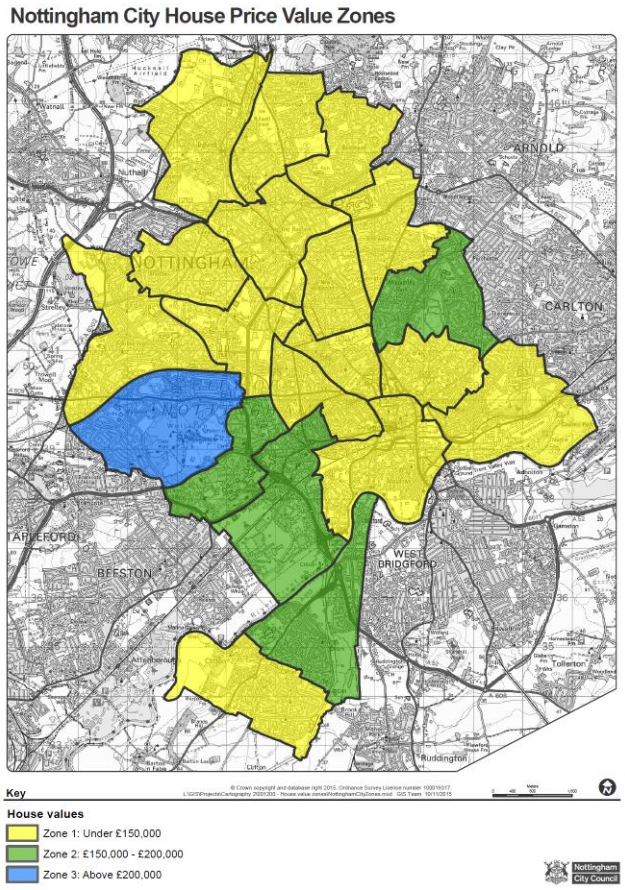
Affordable Housing				
Affordable Housing Delivery	Proportion %	Tenure Mix %		
		LCHO	Affordable Rent	Social Rent
City Wide (All Sub Markets)	20%	50%	25%	25%
% Open Market Value		80%	50%	44%

4.3 The affordable assumptions were applied to all residential scenario testing. For smaller unit number tests the proportional and tenure splits may result in fractions of unit numbers. In these cases the discounts may be considered to equate to the impact of off-site contributions.

Sub Market Areas and Differential Sale Value Assumptions

4.4 The Heb valuation study considered evidence of residential land and property values across the study area and concluded that there were not sufficient distinctions between sales prices to warrant differential value assumptions being made in the Whole Plan Viability Assessment. The sale value of the development category will be determined by the market at any particular time and will be influenced by a variety of locational, supply and demand factors as well as the availability of finance. The HEB study uses up to date comparable evidence to give an accurate representation of market circumstances. A copy of the report is attached at Appendix I. The following tables indicate sale values for sub-market areas and the sub-markets which the test sites fall within.

Residential Sales Values					
Sub Market Area	Sales Value £sqm				
	Apartment	2 Bed	3 Bed	4 Bed	5 Bed
Zone 1 Low Value	2,152	2,370	2,315	2,315	2,250
Zone 2 Medium Value	2,400	2,550	2,475	2,475	2,400
Zone 3 High Value	2,700	2,800	2,700	2,700	2,600



Residential Sub Market Areas

4.5 The variations in commercial values were not considered significant enough across the study area to justify the application of differential assumptions based on sub-market areas to the testing of commercial uses.

Commercial Sales Values £ per Sqm	
Industrial	750
Office	1615
Food Retail	3000
Other Retail	2000
Student Accommodation	3500

Development Density

4.6 Density is an important factor in determining gross development value and land value. Density assumptions for commercial development will be specific to the development category. For instance the floorplate for industrial development is generally around 50% of the site area to take account of external servicing, storage and parking, Offices will vary significantly dependent on location, town centre offices may take up 100% of the site area whereas out of town locations where car parking is a primary consideration, the floorplate may be only 25% of the site area. Food retailing generally has high car parking requirements and large site areas compared to floorplates.

The land : floorplate assumptions for commercial development are as follows:-

Industrial	2:1
Offices	2:1
General Retail	1.5:1 (shopping parades, local centres etc.)
Food retail	3:1

4.7 Residential densities vary significantly dependent on house type mix and location. Mixed housing developments may vary from 10-50 dwellings per Hectare. Town Centre apartment schemes may reach densities of over 150 units per Hectare. We generate plot values for residential viability assessment related to specific house types. The plot values allow for standard open space requirements per Hectare. The densities adopted in the study reflect the assumptions of the Local Authority on the type of development that is likely to emerge during the plan period.

4.8 The density assumptions for house types related to plot values are as follows :-

1 Bed Apartment	150 units per Ha
2 Bed Apartment	120 units per Ha
2 Bed House	40 units per Ha
3 Bed House	35 units per Ha
4 Bed House	25 units per Ha
5 Bed House	20 units per Ha
Student 1 Bed	300 units per Ha
Student 2 Bed	200 units per Ha

House Types and Mix

4.9 The study uses the following standard house types as the basis for valuation and viability testing as unit types that are compliant with National Housing standards and meet minimum Local Plan policy requirements.

4.10 Housing values and costs are based on the same gross internal area. However apartments will contain circulation space (stairwells, lifts, access corridors) which will incur construction cost but which is not directly valued. We make an additional construction cost allowance of 15% to reflect the difference between gross and net floorspace.

ALLOCATED SITE APPRAISAL MIXED HOUSING ASSUMPTIONS

House Types	Apt	2 Bed	3 Bed	4 Bed	5 Bed
House Sizes (Sqm)	NA	75	90	120	150

Density Assumptions	Apt	2 Bed	3 Bed	4 Bed	5 Bed
	NA	40	35	25	20

Housing Mix	Apt	2 Bed	3 Bed	4 Bed	5 Bed
% Mix	0%	10%	60%	20%	10%

Affordable Housing Mix	Apt	2 Bed	3 Bed	4 Bed	5 Bed
% Mix	0%	30%	70%	0%	0%

ALLOCATED SITE APPRAISAL APARTMENT ASSUMPTIONS

House Types	1 Bed Apt	2 Bed Apt
House Sizes (Sqm)	50	65

Density Assumptions	1 Bed Apt	2 Bed Apt
	150	120

Housing Mix	1 Bed Apt	2 Bed Apt
% Mix	50%	50%

Affordable Housing Mix	Apt	2 Bed
% Mix	50%	50%

Commercial Development Scenarios

4.11 The density assumptions for commercial development will be specific to the development category. For instance the floorplate for industrial development is generally around 50% of the site area to take account of external servicing, storage and parking.

Offices will vary significantly dependent on location, town centre offices may take up 100% of the site area whereas out of town locations where car parking is a primary consideration, the floorplate may be only 25% of the site area. Food retailing generally has high car parking requirements and large site areas compared to floorplates.

4.12 The viability model also makes allowance for net:gross floorspace. In many forms of commercial development such as industrial and retail, generally the entire internal floorspace is deemed lettable and therefore values per sqm and construction costs per sqm apply to the same area. However in some commercial categories (e.g. offices) some spaces are not considered lettable (corridors, stairwells, lifts etc.) and therefore the values and costs must be applied differentially. The net:gross floorspace ratio enables this adjustment to be taken into account.

4.13 The table below illustrates the commercial category and development sample testing as well as the density assumptions and net:gross floorspace ratio for each category. In acknowledgement of consultation responses to initial retail viability work more detailed assessment of retail viability has been undertaken in respect to use and scale of development to reflect the type of general retail (A1-A5) and food supermarket (A1) development considered likely to emerge over the plan period.

Commercial Development Sample Typology
Unit Size & Land Plot Ratio

		Unit Size Sqm	Plot Ratio %	Gross:Net	Sample
Industrial	B1b B1c B2 B8	1000	200%	1.0	Factory Unit
Office	B1a	1000	200%	1.2	Office Building
Food Retail	A1	3000	300%	1.0	Supermarket
General Retail	A 1 – A5	300	150%	1.0	Roadside Type Shop Unit

Sustainable Construction Standards

4.14 It is acknowledged that the Code for Sustainable Homes have been replaced by changes to the Building Regulations based on the National Housing Standards. It is considered that the latest Building Regulation changes will not impose standards beyond an equivalent of former CoSH 4 and the cost rates adopted in the study reflect this.

4.15 The Commercial Viability assessments are based on BREEAM 'Excellent' construction rates.

Construction Costs

4.16 The construction rates will reflect allowances for external works, drainage, servicing preliminaries and contractor's overhead and profit. The viability assessment will include a 5% allowance for construction contingencies. A copy of the Construction Cost Study undertaken by Gleeds is attached at Appendix 2.

4.17 The following residential construction rates are adopted in the study to reflect National Housing Standards, Category 2 Dwellings and the water and space standards of the relevant Local Authorities. Whilst the Code for Sustainable Homes standards have been withdrawn, the cost parameters that inform them remain a useful guide to the cost implications of the National Housing standards and are considered within the study. An additional cost allowance for accessible and adaptable dwellings has been made for all residential development.

Residential Construction Cost Sqm		
Apartments	1120	sqm
2 bed houses	1120	sqm
3 Bed houses	1120	sqm
4 bed houses	1120	sqm
5 bed house	1120	sqm
Student Apartments	1921	sqm

Commercial Construction Cost Sqm	
840	Industrial
1746	Office
1257	Supermarket
1104	General Retail

Abnormal Construction Costs

4.18 The study has undertaken specific Viability Appraisals of the residential sites proposed to be allocated by the Local Plan. In addition to the assumptions outlined above additional abnormal site constraint costs associated with the development of the individual sites have been applied to the individual site tests. Advice on cost allowances for these constraints was obtained from Gleeds and is summarised in the table below.

Abnormal Site Development Costs	Budget Cost £/Hectare
Archaeology Typically, Archaeology is addressed by a recording/monitoring brief by a specialist, to satisfy planning conditions Intrusive archaeological investigations are exceptional and not allowed for in the Budget cost	**£11,000**
Flood Defence Works Generally involves raising floor levels above flood level, on relevant sites Budget £2,000 per unit x 35 units/Hect, apply to 1 in 3 sites	**£28,000**
Site Specific Access Works New road junction and S278 works, allowance for cycle path linking Major off-site highway works not allowed for.	**£22,000**
Land Contamination Heavily Contaminated land is not considered, as remediation costs will be reflected in the land sales values Allow for remediation/removal from site of isolated areas of spoil with elevated levels of contamination	**£28,000**
Ground Stability Former Mining area. Allow raft foundations to dwellings, on 75% of sites Budget £2000 per unit x 35 units x 25% of sites	**£22,000**
Utilities Allowance for Infrastructure Upgrade	**£90,000**
Site Specific Biodiversity Mitigation/Ecology Allow for LVIA and Ecology surveys and mitigation and enhancement allowance.	**£11,000**

Policy Cost Impacts & Planning Obligation Contributions

4.19 The study seeks to review Whole Plan Viability and therefore firstly assesses the potential cost impacts of the proposed policies in the plan to determine appropriate cost assumptions in the viability assessments and broadly determine if planned development is viable.

4.20 Costs have been factored into the viability appraisals to reflect the impact of relevant development plan policy and the residual use of planning obligations for site specific mitigation. Based on historic evidence of planning obligation contributions over the last five years (excluding Affordable Housing which is factored in separately) the following cost allowances have been adopted in the study:-

Residual Planning Obligations for site specific mitigation **£1044 per dwelling**
£8 per sqm commercial

4.21 Historical evidence demonstrates that where planning obligations have been charged these amount to an average of £1,044 per dwelling and £8 per sqm for commercial development.

4.22 Costs have been factored into the viability appraisals to reflect the impact of relevant development plan policies and the residual use of planning obligations for site specific mitigation. The cost impact of these mitigation measures has been assessed by Gleeds and may be summarised as follows:-

ACESSIBILITY STANDARDS - £20sqm x 10%

The appraisals test the impact of requiring 10% of homes to be built to Category 2 standard for accessibility. This is estimated to add £20sqm over National Housing Standards equivalent build cost allowance for 10% of units (ie £2sqm allowance overall)

WATER CONSERVATION STANDARDS

The higher optional water standard of 110 lpd is considered to be covered by the adopted construction cost rates (equivalent of CoSH Code 4) and do not require any additional allowance.

ENERGY

No additional allowance has been made for Zero Carbon costs in view of the Government's recent policy change on this issue.

BREAAM Standards

The construction costs for commercial development make allowance for BREAAM 'Excellent' rating including additional professional fees.

SPACE STANDARDS

The residential unit sizes adopted in the appraisals comply with National Space Standards.

The following table summarises the relevant policies in the Plan deemed to have an impact on development viability, that have been considered by the assumptions in the study.

Local Plan Policy	Requirements
CC1 Sustainable Design and Construction	BREEAM excellent for non-residential development Sustainable construction methods/use of recycled materials.
CC3 Water	Optional Higher Standard for Water Consumption for residential dwellings. Sustainable Drainage Systems
EE4 Local Employment and Training Opportunities	Employment/training packages to support City residents
HO1 Housing Size, Mix and Choice	Provision of family homes on sites outside City Centre (where appropriate)
HO3 Affordable Housing	20% affordable housing on site above 15 dwellings or 0.5 hectares.
HO4 Specialist and Adaptable Housing	10% 'Accessible and Adaptable' homes on sites of 10 or more dwellings.
DE1 Building Design and Use	National Space Standard for residential dwellings
IN4 Developer Contributions	Site specific S106 to support local services such as transport, open space, education.

Developers Profit

4.23 Developer's profit is generally fixed as a % return on gross development value or return on the cost of development to reflect the developer's risk. In current market conditions, and based on the assumed lending conditions of the financial institutions, a 20% return on GDV is used in the residential viability appraisals to reflect speculative risk on the market housing units. This is in In line with the Planning Practice Guidance on viability assessment introduced by the Government in July 2018. However it must be acknowledged that affordable housing does not carry the same speculative risk as it effectively pre-sold.

4.24 In line with the guidance on viability assessment introduced by the Government in July 2018 the profit allowance on the affordable housing element has been set at 15% . It should also be recognised that a 'competitive profit ' will vary in relation to prevailing economic conditions and will generally reduce as conditions improve, generally remaining within a 15-20% range for speculative property.

4.25 In the generic commercial development assessments, a 17.5% profit return is applied in recognition that most development will be pre-let or pre-sold with a reduced level of risk. If it is considered that industrial and other forms of commercial are likely to be operator rather than developer led, this allowance may be further reduced to a 5-10% allowance to reflect an allowance for operational/opportunity cost rather than a traditional development risk.

Land Value Allowances

4.26 Following the land value benchmarking 'uplift split' methodology set out in Section 3 the following greenfield and brownfield existing residential land use value assumptions are applied to the study. The gross residual value (the maximum potential value of land assuming planning permission but with no planning policy, affordable housing sec 106 or CIL cost impacts). An example for the high value sub-market is illustrated in the table below.

Land Value	£20000	Existing Greenfield (agricultural) Per Ha			
	£600,000	Brownfield (equivalent general commercial) Per Ha			
	£2,304,918	Gross Residual Residential Value per Ha	Uplift	50%	

4.27 50% of the uplift in value between existing use and the gross residual value of alternative use with planning permission is applied to generate benchmarked land values per Ha. These land values are then divided by the assumed unit type densities to generate the individual greenfield and brownfield plot values to be applied to the appraisals.

	EUV	+	50% of Uplift in Value	=	Threshold Land Value
Greenfield	£20,000	+	50% (£2,304,918 - £20,000)	=	£1,162,459 per Ha
Brownfield	£370,000	+	50% (£2,304,918 - £600,000)	=	£1,452,459 per Ha

Density Assumptions	Apt	2 Bed	3 Bed	4 Bed	5 Bed
	NA	40	35	25	20

LAND VALUES (Plot Values)

	Apt	2 Bed	3 Bed	4 Bed	5 Bed
Greenfield	NA	29061	33213	46498	58123
Brownfield	NA	36311	41499	58098	72623

4.28 The complete set of gross residual residential values for all the residential tests from which the benchmarked threshold land value allowances were derived, is set out in the table below.

Gross Residual Land Value per Ha	Zone 1	Zone 2	Zone 3
Mixed Residential	£1,383,395	£1,768,726	£2,304,918

4.29 The approach to commercial land value allowances is the same in principle. Obviously there will be a broad spectrum of residual land values dependent on the commercial use. A number of residual land calculations for commercial categories actually demonstrate negative values – which is clearly unrealistic for the purpose of viability appraisal. Therefore where residual values are less than market comparable evidence the market comparable is used as the minimum gross residual figure. In the assessments only, retail gross residual values exceeded these market comparable benchmarks.

Commercial Residual Land Values	
Industrial Land Values per Ha	
Residual Land Value per Ha	£600,000
Office Land Values per Ha	
Residual Land Value per Ha	£600,000
Food Retail Land Values per Ha	
Residual Land Value per Ha	£3,100,357
General Retail Land Values per Ha	
Residual Land Value per Ha	£2,020,911
Agricultural Land Values per Ha	
Comparable Land Value per Ha	£20,000

Fees, Finance and Other Cost Allowances

4.30 The following 'industry standard' fee and cost allowances are applied to the appraisals.

Residential Development Cost Assumptions					
Professional Fees			8.0%	Construction Cost	
Legal Fees			0.5%	GDV	
Statutory Fees			1.1%	Construction Cost	
Sales/Marketing Costs			2.0%	Market Units Value	
Contingencies			5.0%	Construction Cost	
Planning Obligations			1104	£ per Dwelling	
			8	£ per sqm Commercial	
Interest	5.0%	12	Month Construction	3-6	Mth Sales Void

Nottingham Waterside Strategic Development Area

4.31 The viability of Nottingham Waterside, the principle strategic development proposed by the plan, has been undertaken in detail in a separate study by David Locke Associates.

4.32 Our report contains a high level assessment of the Waterside area using the same model adopted to appraise the remaining housing in the city. For the purpose of the assessment only proposed development without planning permission has been included.

4.33 It is considered that the location of the Waterside Area will generate higher sale values than other parts of the city and will also include high rise apartments that will incur higher construction costs than the assumptions used for apartments in the remainder of the study. Unit sizes for houses and apartments will also differ. The Waterside assumptions may be summarised in the table below.

4.34 The following infrastructure contribution requirements have been included – Riverside Walkway £1,000,000, Play Areas £600,000, Amenity Space £350,000. These equate to a contribution allowance of £2646 per unit.

Urban Edge	Units	Size	Value Sqm	Build Sqm	Area Ha
High Rise Apts	70	65	£2,995	£1,893	0.79
Low Rise Apts	30	65	£2,995	£1,642	0.50
Houses	0	108	£2,320	£1,120	
	100				1.29
Benchmark Value per Ha		£600,000			
New Neighbourhood	Units	Size	Value Sqm	Build Sqm	Area Ha
High Rise Apts	0	65	£3,500	£1,893	0.00
Low Rise Apts	0	65	£3,500	£1,642	0.00
Houses	432	108	£2,425	£1,120	11.31
	432				11.31
Benchmark Value per Ha		£1,320,544			
Waterside	Units	Size	Value Sqm	Build Sqm	Area Ha
High Rise Apts	65	65	£3,625	£1,893	0.71
Low Rise Apts	60	65	£3,625	£1,642	1.00
Houses	80	108	£2,650	£1,120	1.69
	205				3.40
Benchmark Value per Ha		£1,340,666			

4.34 The sites covered by this appraisal are those in the area covered by the draft Waterside SPD, i.e. PA81 Meadow Lane, PA82 Freeth Street, PA83 Trent Lane Basin and PA85 Park Yacht Club. If the number of consented units on these sites (336 units) are added to the total number of units in the Waterside Strategic Site (737 units, see table on p36), the total dwelling numbers assumed is higher than that used in the Submission Local Plan (1,073 as compared to 1,036). Separate market appraisal work has been undertaken to support the SPD.

5 Viability Appraisal Results

5.1 The results of the residential Viability Testing are set out in the tables below. In order to test the impact of Affordable Housing provision the residential viability tests were undertaken on the assumption that

5.2 The site specific testing indicates whether individual development sites are considered viable on a 'traffic light' red, green, amber approach.

Green – Site considered broadly viable having made allowance for all reasonable development impacts, a standard developers profit and return to the landowner.

Amber – Site considered capable of viable development making allowance for all reasonable development impacts, a standard developers profit but acknowledging that landowners may need to accept land value reductions for abnormal site development costs if development is to proceed.

Red – Site not currently considered viable based on implementation of Council policies and standard returns to landowners. It should be recognised that sites in this category may be viable if (a) the abnormal costs of bringing the site into a developable state (including some up front infrastructure investment) are deducted from the land value, (b) the Council is minded to relax affordable housing or infrastructure contributions or (c) landowner/developers accept some reduced profit return to stimulate the development

PA15 Any site highlighted in blue is currently under construction and therefore deemed to be viable and deliverable.

MIXED HOUSING – LOW ZONE

Mixed Housing Viability Results		**Low Zone**			
Ref	Site	Size	Units	Type	Viability
PA9	Edwards Lane - Former Haywood School Detached Playing Field	2.70	100	Greenfield	£758,343
PA15	Bulwell Lane - Former Coach Depot	0.58	32	Brownfield	-£59,646
PA17	Woodhouse Way - Woodhouse Park (Formerly Nottingham Business Park South)	4.11	112	Greenfield	£815,122
PA19	Lortas Road	1.38	35	Greenfield	£264,104
PA23	Radford Road - Former Basford Gasworks	1.68	62	Brownfield	-£150,354
PA25	Chingford Road Playing Field	3.78	140	Greenfield	£1,005,872
PA32	Beechdale Road - South of Former Co-op Dairy	0.94	36	Brownfield	-£76,056
PA33	Chalfont Drive - Former Government Buildings	12.50	433	Brownfield	-£1,317,888
PA37	Robin Hood Chase	0.30	14	Brownfield	-£23,592
PA1	Bestwood Road - Former Bestwood Day Centre	1.67	48	Brownfield	-£168,774
PA3	Eastglade, Top Valley - Former Eastglade School Site	1.19	44	Greenfield	£386,049
PA5	Ridgeway - Former Padstow School Detached Playing Field	1.76	65	Greenfield	£535,809

MIXED HOUSING – LOW ZONE

Mixed Housing Viability Results		Low Zone			
Ref	Site	Size	Units	Type	Viability
PA6	Beckhampton Road - Former Padstow School Detached Playing Field	2.30	85	Greenfield	£657,200
PA8	Padstow Road - Former Padstow School Site	6.49	240	Greenfield	£1,882,804
PA10	Piccadilly - Former Henry Mellish School Playing Field	0.97	50	Greenfield	£426,823
PA12	Highbury Road - Former Henry Mellish School Site	0.97	36	Greenfield	£315,858
PA14	Arnside Road - Former Chronos Richardson	2.58	75	Brownfield	-£198,939
PA17	Woodhouse Way - Woodhouse Park (Formerly Nottingham Business Park South)	12.20	112	Greenfield	£915,700
PA18	Vernon Road - Former Johnsons Dyeworks	2.35	87	Brownfield	-£346,025
PA20	Haydn Road/Hucknall Road - Severn Trent Water Depot	1.53	70	Brownfield	-£158,331
PA24	College Way - Melbury School Playing Field	1.15	45	Greenfield	£394,823
PA26	Denewood Crescent - Denewood Centre	2.70	105	Brownfield	-£258,209
PA29	Bobbers Mill Bridge - Land Adjacent to Bobbers Mill Industrial Estate	0.55	19	Brownfield	-£56,656
PA30	Bobbers Mill Bridge - Bobbers Mill Industrial Estate	2.70	100	Brownfield	-£430,689
PA38	Carlton Road - Former Castle College	0.40	19	Brownfield	-£31,795
PA39	Carlton Road - Former Albany Works Site and Co-op	0.30	18	Brownfield	-£27,663
PA42	Ilkeston Road - Radford Mill	0.60	314	Brownfield	-£692,061
PA43	Salisbury Street	0.52	21	Brownfield	-£56,209
PA44	Derby Road - Sandfield Centre	1.85	85	Brownfield	-£182,283
PA57	Clifton West	8.00	265	Greenfield	£1,775,068
PA58	Green Lane - Fairham House	0.40	24	Greenfield	£215,356
PA59	Farnborough Road - Former Fairham Comprehensive School	5.30	196	Greenfield	£1,537,626
PA62	Brook Street East	0.65	36	Brownfield	-£62,686
PA64	Creative Quarter - Sneinton Market	0.50	110	Brownfield	-£248,131
PA72	Canal Quarter - Waterway Street	0.60	120	Brownfield	-£290,710
PA74	Canal Quarter - Arkwright Street East	0.40	120	Brownfield	-£279,587
PA73	Canal Quarter - Sheriffs Way/Arkwright Street	1.21	125	Brownfield	-£335,359
PA27	Wilkinson Street - Former PZ Cussons	2.08	77	Brownfield	-£237,429
PA11	Stanton Tip - Hempshill Vale	13.51	500	Brownfield	-£2,620,104

APARTMENTS – LOW ZONE

Apartments Viability Results		Low Zone			
Ref	Site	Size	Units	Type	Viability
PA41	Alfreton Road - Forest Mill	1.20	310	Brownfield	-£11,732,097
PA65	Creative Quarter - Bus Depot	0.55	135	Brownfield	-£5,112,978
PA66	Castle Quarter - Maid Marian Way, College Site	0.5	75	Brownfield	-£2,823,128
PA70	Canal Quarter - Queens Road, East of Nottingham Station	0.5	175	Brownfield	-£6,624,814
PA69	Canal Quarter - Station Street/Carrington Street	0.25	50	Brownfield	-£1,899,048

MIXED HOUSING – MEDIUM ZONE

Viability Results		Medium Zone			
Ref	Site	Size	Units	Type	Viability
PA45	Prospect Place	0.5	22	Brownfield	£76,517
PA46	Derby Road - Former Hillside Club	1.08	35	Brownfield	£36,677
PA47	Abbey Street/Leen Gate	3.68	100	Brownfield	-£2,817

APARTMENTS – MEDIUM ZONE

Apartments Viability Results		Medium Zone			
Ref	Site	Size	Units	Type	Viability
PA56	Sturgeon Avenue - The Spinney	0.85	50	Brownfield	-£1,012,327

MIXED HOUSING – HIGH ZONE

Viability Results		High Zone			
Ref	Site	Size	Units	Type	Viability
PA36	Russell Drive - Radford Bridge Allotments	3.85	110	Greenfield	£2,070,847
PA35	Woodyard Lane - Siemens	2.43	90	Brownfield	£668,887

STUDENT HOUSING

Student Housing Viability Results		Low Zone		0-5 Year Delivery	
Ref	Site	Size	Units	Type	Viability
Talbot	Talbot Street	0.27	434	Brownfield	£5,430,318
NSS	245 North Sherwood Street	0.01	4	Brownfield	£50,773
Siegel	B Siegel I Maiden Lane	0.60	113	Brownfield	£1,422,069

WATERSIDE STRATEGIC SITE

Apartments Viability Results					
Ref	Site	Size	Units	Type	Viability
UE	Urban Edge Low Rise Apartments	0.5	30	Brownfield	-£506,380
UE	Urban Edge High Rise Apartments	0.79	70	Brownfield	-£2,761,176
NN	New Neighbourhood Housing	11.31	432	Brownfield	£4,382,692
WAT	Waterside Low Rise Apartments	1.00	60	Brownfield	£450,940
WAT	Waterside High Rise Apartments	0.71	65	Brownfield	-£976,975
WAT	Waterside Housing	1.69	80	Brownfield	£2,237,760

5.3 The following table illustrates the results of the commercial typology assessments. The figures represent the viability margin beyond standard returns to landowner and developer.

NCS Commercial Viability Margin per sq m		
Base Land Value	Greenfield	Brownfield
Industrial (B1b B1c B2 B8)	-£401	-£533
Office (B1a)	-£1,054	-£1,107
Food Supermarket Retail A1	£393	£295
General Retail A1-A5	£128	£80

6 Conclusions

Residential Viability Assessment

6.1 The assessments of residential land and property values indicated that there were significant differences in value across the Study area for new build development to justify the application of differential value assumptions in the viability appraisal.

6.2 The study demonstrates that all greenfield housing and brownfield housing in the medium and high value sub-markets is viable and deliverable taking account of the cost impacts of the policies proposed by the plan and the requirements for viability assessment set out in the NPPF. The viability of both apartment development and brownfield housing in the lower value sub-market area is challenging under current market circumstances and some relaxation of Affordable Housing and infrastructure contributions may need to be considered at application stage for these forms of development to be delivered.

6.3 The study indicates that all proposed student housing is viable and deliverable.

Strategic Site Viability Assessment

6.4 The assessment of the Waterside Strategic Site indicated that all proposed housing would be viable. The viability of high rise apartments and low rise apartments is challenging outside the higher value locations adjacent to the waterside. Overall though the strong positive viability of the housing outweighs the negative viability of the apartments and the overall strategy may be considered viable and deliverable

Commercial Viability Assessment

6.5 The initial assessment of commercial land and property values indicate that there are no significant differences in values to justify differential sub-markets. The commercial category viability results demonstrate that only retail development has a significant viability margin. This is typical of our experience of most Local Authorities' commercial viability assessments where only retail development shows strong positive viability. In order for viability assessment to be consistent between residential and commercial development, full development profit allowances are contained within all appraisals (assuming all development is delivered by third party developers requiring a full risk return). In reality much commercial development is delivered direct by business operators who do not require the 'development profit' element. As such many commercial categories of development are broadly viable and deliverable despite the apparent negativity of the results. In addition, it is common practice in mixed use schemes for the viable residential element of a development to be used to cross subsidise the delivery of the commercial component of a scheme.

6.6 The study is a strategic assessment of whole plan viability and as such is not intended to represent a detailed viability assessment of every individual site. The study applies the general assumptions in terms of affordable housing, planning policy costs impacts and identified site mitigation factors based on generic allowances. It is anticipated that more detailed mitigation cost and viability information may be required at planning application stage to determine the appropriate level of affordable housing and planning obligation contributions where viability issues are raised. The purpose of the study is to determine whether the development strategy proposed by the Plan is deliverable given the policy cost impacts of the Plan.

6.7 It should be noted that a number of the sites illustrating negative viability (highlighted in blue in the results tables in Section 5) are under construction and are being delivered with full affordable housing and developer contributions. This serves to illustrate the limitations of high level viability assessment and that 'negative viability' does not necessarily mean that sites cannot be delivered. It may be the case that developers, in particular volume house builders, can obtain construction prices below the rates illustrated as a 'plan-wide' average for the purpose of the study. There are also many other factors which determine deliverability, not least the commercial decisions of developers who may take a view on construction contingencies, profit levels or use internal funding sources to reduce the 'cost' of development to enable projects to proceed.

6.8 In conclusion, the assessment of all proposed residential sites in Nottingham has been undertaken with due regard to the requirements of the NPPF and the best practice advice contained in the Viability Planning Practice Guidance July 2018. The study demonstrates that the majority of the housing development proposed by the Local Plan is viable and deliverable taking account of the cost impacts of the policies proposed by the plan and the requirements for viability assessment set out in the NPPF. The viability of both apartment development and brownfield housing in the lower value sub-market area is challenging under current market circumstances and some relaxation of Affordable Housing and infrastructure contributions may need to be considered at application stage for these forms of development to be delivered.

6.9 It should be noted that this study should be seen as a strategic overview of plan level viability rather than as any specific interpretation of Nottingham City Council policy on the viability of any individual site or application of planning policy to affordable housing or developer contributions. Similarly the conclusions and recommendations in the report do not necessarily reflect the views of Nottingham City Council.

Heb Surveyors
Valuation Report
2018

LOCAL PLAN VIABILITY
&
COMMUNITY INFRASTRUCTURE LEVY

LAND AND PROPERTY VALUE APPRAISAL STUDY

AS PART OF EVIDENCE BASE

FOR AND ON BEHALF OF
NOTTINGHAM CITY COUNCIL, BROXTOWE BOROUGH COUNCIL
& RUSHCLIFFE BOROUGH COUNCIL

REPORT PREPARED BY
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Registered Valuers

4 MAY 2018

CONTENTS

Appendices

TERMS OF REFERENCE

As part of our instruction to provide valuation advice and assistance to Nottingham City Council, Broxtowe Borough Council and Rushcliffe Borough Council in respect Local Plan testing and possible Community Infrastructure Levy adoption, we are instructed to prepare a report identifying typical land and property values for geographical locations within the study area.

These typical land and sale prices are to reflect 'new build' accommodation and test categories have been broken down into land use types reflecting the broad divisions of the use classes order reflecting common development land use types specifically:-

1) Residential (C3 houses)
2) Residential (C3 apartments, including dedicated student housing)
3) Other residential institutions (C1, C2)
4) Food retail (supermarkets)
5) General retail (A1, A2, A3, A4, A5)
6) Offices (B1a Cat A fit out)
7) Industrial (B1, B/C, B2, B8)
8) Institutional and community use (D1)
9) Leisure (D2, including casinos)
10) Agricultural
11) Sui Generis (see later notes)

It should be noted that although food supermarket retail falls under an A1 use, we have specifically assessed it as a separate category since it generally commands a much higher value than other retail categories. We have provided valuation guidance however it is up to each Authority to decide whether they wish to adopt a separate charging category for this use, or adopt a general retail charge, more reflective of all retail uses.

The purpose of this value appraisal study is to provide part of the Evidence Base in support of Local Plan viability testing and the potential preparation of the Community Infrastructure preliminary draft charging schedules.

We have assessed evidence from across the administrative areas to consider whether separate value zones may be appropriate, or whether a single zone rate can be applied.

The report also provides evidence to justify whether a fixed rate or variable (by use type) CIL rate charging scheme might be appropriate within the district.

AN INTRODUCTION TO CIL

The Community Infrastructure Levy (CIL) is a charge which local authorities in England and Wales can apply to new development in their area. CIL charges will be based on the size, type and location of the development proposed. The money raised will be used to pay for strategic and other infrastructure required to support growth.

Authorities wishing to charge CIL are required to produce a CIL charging schedule that sets out the rates that will be applied. This must be based on evidence of need for infrastructure and an assessment of the impact of CIL on the economic viability of development. If an Infrastructure Delivery Plan is in place, it will provide the underlying evidence for establishing a CIL system but it is not essential.

CIL is intended to contribute to the Infrastructure intended to support new development as part of the Authority's development strategy. Relevant infrastructure might include:-

- Highways and Transport Improvements;
- Educational Facilities;
- Health Centres;
- Community Facilities & Libraries;
- Sports Facilities;
- Flood Defences; and
- Green Infrastructure

CIL may be used in conjunction with planning obligation contributions to make up an identified funding deficit. CIL cannot currently be used to fund affordable housing.

THE EVIDENCE BASE

The CIL Guidance advises that a charging authority must provide evidence on economic viability and infrastructure planning as background for examination. The legislation (Sec 212 (4) B) of the 2008 Planning Act requires that '*appropriate available evidence'* must inform a draft charging schedule.

It is up to each individual charging authority to determine what valuation evidence is appropriate to demonstrate they have struck an appropriate balance between infrastructure funding and the potential effect of CIL on economic viability development within the District. A report commissioned from Royal Institution of Chartered Surveyors (RICS) Registered Valuers (as in this instance) is generally deemed appropriate.

Our evidence takes an area based view, by a broad sample of value to establish a fair indicative value 'tone' for the study area.

The CIL Guidance recommends that standard valuation models should be used to inform viability evidence.

Where differential rates of CIL are proposed (rather than a flat fixed rate) then Guidance advises that market sector sampling will be required to justify the boundaries of charging zones and the rates of different categories of development.

The Guidance also confirms that the an Authority may adopt a pragmatic approach when assessing value evidence, and that adopted value judgments need not necessarily exactly mirror available evidence.

The purpose of this report is to provide a bespoke valuation Evidence Base, specifically for assessing possible implementation of CIL. Whilst it is possible to assemble an evidence base from many different (and in some instances existing) information sources, we believe there is an inherent danger in this approach. The underlying assumptions for valuation or costs assessment in each data source may be different and a 'mix and match' approach may be flawed when comparable evidence is scrutinised.

We consider our approach herein to be far reaching and sufficiently robust to be defensible at a CIL Examination (as evidenced by previous Inspector approvals elsewhere).

The valuation evidence obtained to produce this report takes the form of an area wide approach as recommended by the guidance, and allows for economic viability of development to be considered as a whole, whereby all categories of development have been assessed. Land and property valuation evidence has been assembled for the following categories:-

- Residential (C3) – land values per hectare, and development value based on dwelling type.

- Commercial – land values per hectare and completed development values in the following categories:-

Food Retail (supermarket)
General Retail (A1, A2, A3, A4, A5)
Bespoke Student accommodation
Industrial (B1, B, B1c, B2, B8)
Hotels (C1)
Institutional and Community (D1)
Offices (B1a)
Residential Institutions (C2)
Leisure (D2)
Agricultural
Sui Generis (sample based on indicative recent planning history)

Valuation methodology has consisted primarily of collecting recent comparable transactions within all of the identified development categories prior to full analysis (more fully outlined under 'Procedure and Methodology').

Where evidence may be lacking or unavailable, reasoned valuation assumptions have been taken.

The key to our approach is to assess at what value land and property may reasonably come forward. Where appropriate, residual valuations have been undertaken to incorporate and verify figures.

It should be noted that there will inevitably be scope for anomalies to be identified within the charging area. This is to be expected (and is allowable under the CIL guidance). The values identified herein provide a fair and reasonable 'tone' across the study area.

This approach and methodology is deemed wholly acceptable under the CIL regulations and guidance, whereby it is accepted that inevitably valuation at an area wide level cannot be taken down to a 'micro economic' geographical level.

THE STUDY AREA

The study area comprises the administrative boundaries of Nottingham City and the Boroughs of Broxtowe and Rushcliffe.

Situated in Central England it comprises three of the forty four councils that make up the East Midlands region, and the eight of Nottinghamshire.

The study area includes the settlements of Nottingham City, West Bridgford, Eastwood, Bingham, Cotgrave and Beeston amongst several others.

Nottingham City covers an area of some 29 sq miles, and has an estimated population (2011 census) of 305,000 persons.

Broxtowe Borough covers an area of 31 sq miles, and has an estimated population of 110,000 persons.

Rushcliffe Borough covers an area of 158 sq miles, and has and estimated population of 111,000 persons.

The study area is well served by road, rail and other transport links, including the M1 motorway, East Midlands airport, and numerous main line train stations.

London is approximately 120 miles to the South, with the conurbations of Derby, Leicester, Sheffield, Lincoln and Birmingham all easily accessible.

LOCAL PROPERTY MARKET OVERVIEW

The local economy is generally buoyant, and the location as a whole is largely prosperous although pockets of deprivation exist.

Nottingham City tends to dominate the local economy, with Beeston and West Bridgford acting as the administrative centres for Broxtowe and Rushcliffe.

Across the study area a wide range of property values can be demonstrated.

Nottingham City tends to command the highest commercial property values, but has a slightly weaker housing market (The Park and Wollaton being notable exceptions).

Rushcliffe has a much more rural landscape, outside the urban area of West Bridgford and the main towns and villages. Rushcliffe is a much sought-after residential location, with many high value areas.

Broxtowe has a combination of urban and rural landscapes, as well as a cross section of high – lower value areas.

Nottingham City dominates the market for retail and offices, while other commercial uses are more evenly distributed across the study area, often linked to the road network, especially the M1.

PROCEDURE & METHODOLOGY

The CIL Guidance recommends that standard valuation models should be used to inform viability evidence, and this approach has been adhered to for the purpose of this report.

Inevitably our methodology has varied to some extent with each property sector addressed, primarily due to the differing valuation techniques appropriate and required for that property type. More specific clarification is given within the chapter outlining methodology for each specific market category.

Our methodology favours an approach which is pragmatic and balances the reasonable expectations of landowners return with the contributions expected by the Local Authority for the infrastructure needs generated by new development, as advocated by the National Planning Policy Framework. Our approach pays due regard to 'market comparison' evidence available in each of the charging categories to provide a 'sense checked' output, bespoke to the study area.

Our methodology is more thoroughly outlined later in this report under the residential valuation commentary. We believe this approach best reflects the realities of the property market and is therefore compliant with the best practice guidance in 'Viability Testing Local Plans' (LHDG 2012) and 'Financial Viability in Planning' (RICS 2012).

Wherever possible we have incorporated an assessment of the transactional market comparison information that is available, adapting it through justifiable assumptions where necessary. This market sampling can then be used to confirm validity of our residual valuations.

It should be appreciated that it has not always been possible to find a definitive piece of evidence for every property type in every potential location. The CIL guidance accepts that this may inevitably be the case on occasion, and where appropriate, reasoned assumptions have been taken.

Methodology varies slightly between commercial property and residential property.

With commercial property we have scrutinised and adopted evidence from actual sales transaction evidence where possible, this is backed up where appropriate by market rent capitalisation whereby rental evidence (and estimated market rental levels) are capitalised through multiplication reflecting appropriate investment yield profiles to produce a capital value.

Our residential sales values are based upon actual market comparable evidence, due to the fact that housing tends to offer a much more 'uniform' product, with more easily identifiable sales value market evidence being available. This is backed up with stakeholder opinion where appropriate.

Members of our professional team have made a number of visits to appropriate locations within the study area to back up our extensive desktop research.

We are locally based (Nottingham) Chartered Surveyors, valuers and property agents, and accordingly have extensive local knowledge and expertise.

For the purposes of this report we have identified, assembled and fully analysed substantial amounts of individual comparable market evidence.

Clearly it would be impractical to tabulate and include *all* of the information obtained within this report, however we will be happy to provide more detailed evidence on any aspect of our comparable database upon request.

For reasons of simplicity in reporting we have focussed on publishing data primarily for those categories where the subsequent viability tests have demonstrated a potential for levying a CIL charge. We should make clear however that we have also obtained and analysed market transactional data and valuation evidence for other use categories including those where our subsequent viability tests have indicated a lack of sufficient viability for a charge to be considered.

All of the above information has been analysed, considered then distilled into the tabulated figures appended to this report which confirm our opinion as to appropriate indicative values in each category.

It should be borne in mind that as with any study where artificial boundaries are imposed, certain anomalies may arise.

There is inevitably a limit to the scale with which this study can be reduced to, and accordingly it is entirely feasible that certain 'hot' or 'cold' spots may exist above or below the overall tone identified for the study area as a whole. Similarly, within the study area an individual site, building or piece of market evidence could fall outside the established 'tone'.

In addition to the above market research, we have sought market evidence from a variety of data points including:-

- Contact / interview of House Builders and property agents active within the study area
- CoStar System – a nationwide subscription database covering commercial property issues
- Zoopla / Rightmove (professional user subscriptions)
- EGI – a further subscription database covering commercial property uses
- heb's own residential and commercial database of transactions – we are locally based Surveyors, values and agents, and accordingly have an excellent working knowledge of the location.
- Land Registry – subscription data tables where appropriate
- RICS Commercial Market Survey (quarterly)
- RICS Rural Land Survey 2018 (quarterly)

We have further sought local market information and 'market sentiment' from local Stakeholders including:-

Avant Home	Barratt Homes	Balfour Beatty (Homes)
Bellway Homes	Longhurst Housing	Peveril Homes
Keepmoat Homes	Westleigh Homes	Peter James Homes
Miller Homes	Bloor Homes	Peveril Home
Crest Nicholson	Inside Land (Nottingham based developers and land agents)	

All of the above parties were contacted with a view to discussing market activity and an appropriate value tone for the study area.

In the majority of instances full cooperation was forthcoming although a small number of potential Stakeholders did not respond or were unable to fully engage in consultations (typically due to a lack of recent market activity). We are grateful to all parties for their assistance.

We believe this methodology has produced accurate and recent evidence available to support the attached indicative values.

On occasion we have been obliged to make reasoned subjective judgements as to our opinion of the likely use value for certain locations and uses. Similarly parts of our research comprises market opinion and value judgements gathered from the Stakeholders and property agents active within the study area to form a likely value achievable.

Similarly on occasion it has been appropriate to value on the basis of ‘alternative use’. An example of this might be D1 (clinical), where in real market situations a D1 user will typically acquire a B1 (office) building by way of a ’subject to planning’ deal. After an allowance has been made for alteration, the values would typically be broadly similar.

The figures reported herein may appear to be somewhat ‘irregular’. This is primarily due to the fact that in practice the property market still operates largely through imperial measurements which we have been obliged to convert to metric for the purposes of this report. By way of example ‘£60 per sq ft’ becomes ‘£645.83 per sq m’.

EVIDENCE DATES

As with any property valuation the date of comparable evidence is critical in terms of achieving a realistic outcome to the study. For this reason we have strived to obtain the most up to date information available.

The majority of our comparable evidence was obtained from January to May 2018.

Where it has been necessary to analyse older evidence, appropriate judgements have been made by a fully qualified valuation team to adapt the evidence to an appropriate ‘present day figure’.

We are happy to discuss any individual piece of market evidence upon request, to provide full details including data information where appropriate.

BASIS OF VALUATION

Unless stated otherwise, we have prepared our valuation figures on the basis of Market Value (stated on a £/Sq m basis) which is defined in the valuation standards published by the Royal Institution of Chartered Surveyors as:-

"The amount for which a property should exchange at the date of valuation between a willing buyer and willing seller in an arm's length transaction after proper marketing wherein the parties had both acted knowledgably, prudently and without compulsion".

POTENTIAL CIL CHARGING ZONES

Residential

From our own local market knowledge, we are aware that values range considerably across what is a large and varied geographical area. This is verified further by opinion provided by house builder stakeholders.

It is accepted that within the study area there are particularly high value 'hot spots". Inevitably appraisals must take a 'high level' approach with a limit to the scale at which geographical zones can be assessed.

To more forensically assess potential zones and confirm the opinion of stakeholders, we obtained Land Registry data for average house price sales.

The data was tabulated and analysed on a 'by Ward' basis to produce the 'heat maps' attached at **Appendix 1.**

The findings very much confirm our own and stakeholder opinions, and have also been "sense-checked" by each authority.

Following the "sense-check" process, the following issues were considered further.

i) The Park and Radford Ward in Nottingham City, where one of the study area's highest value addresses (The Park) falls within the same ward as one of the lowest (Radford). This produced a relatively high over-all average house price figure. It was considered that this would unduly threaten potential development in the Radford area, and accordingly a pragmatic decision was taken to include the ward in a lower banding. The Park is a relatively small, well established location, unlikely to produce further development of any significance.

ii) Beeston Central ward initially produced a lower than unexpected average price, especially in comparison to the adjoining Beeston Rylands ward. Concern was raised that the "town centre" location contained a higher proportion of flats in the sample, than other locations. This in turn had potential to skew the figure to a lower overall average (since typically a flat will sell at a lower price than a house). To address this, the house price data set was re-run to exclude all apartment sales and ensure that wards were being assessed on a like for like basis.

The resulting figures were in fact very similar to those produced in the initial appraisal, and made little or no difference to potential value zone boundaries.

iii) An anomaly in the data set suggested that Brinsley Ward (to the north of Broxtowe) should be included in Band 2. When sense checked against "local knowledge" it was agreed that this was inappropriate. Local market conditions and socio-economics very much confirm that Brinsley is more realistically placed in Band 1.

iv) Clifton North ward in Nottingham City is bisected by the A52 ring road. It is very distinctly "West Bridgford fringe" (high values) to the North of the A52, and "Clifton" (much lower values) to the south. Accordingly for pragmatism we have divided the ward on this basis.

Commercial

Our research has identified a much less noticeable range for commercial property.

The majority of commercial activity is contained within the urban areas, especially Nottingham City.

Retail, office, hotel and other commercial functions tend to favour the urban locations, although the M1 junctions act as a draw for Business Parks and warehousing.

Within the rural locations, more limited commercial activity exists across all sectors, predominantly convenience retailing.

In summary we do not believe that there is sufficient 'fine grained' evidence to warrant a subdivision into separate CIL charging zones for commercial property.

Inevitably the overall lack of tangible quality new build market evidence would mean an arbitrary decision is required as to where boundaries should be drawn which may not be defendable at Examination.

While it is certainly the case that retail uses will be at a premium in the urban areas, "high street" retail is seldom developed from new (more typically a refurbishment of long established existing stock), and even if it were, the established high street locations would not attract CIL since there would be little or no increase in floor area. The most typical retail likely to emerge is from the roadside / convenience sector.

Commercial zoning may produce other anomalies, for example a low value retail location near the motorway, would produce strong warehouse demand. Accordingly a "one size fits all" approach to adopting catch all "commercial" zoning would be flawed.

Accordingly in our opinion a single commercial rate should be applied where appropriate, at a level which does not unduly threaten development as a whole across the entire study area.

SECTOR SPECIFIC VALUATION COMMENTARY

1) Residential C3 (houses and apartments)

Base Land Values

When assessing an appropriate tone for residential development land values, our viability testing carries out a residual land appraisal whereby a typical development scenario is appraised. In simplified terms this is achieved by assessing the 'end' property value (total projected value of sales), then deducting from this figure the cost of construction, including professional fees, finance and other standard costs of development.

The resultant figure is the maximum price which may be available for land acquisition, which in turn determines likely aspirational market values.

As a starting point for viability testing, this residual appraisal is carried out *without* deduction for Affordable Housing, Section 106 contributions or any other Local Authority policy based contributions, to give an indication of the theoretical 'maximum' possible land value which could be appropriate in the study area, before any impact of planning policy.

The residual approach in context with the land value benchmarking methodology adopted in the Viability Appraisals is more thoroughly outlined within the 'Development Equation' section of the Viability Testing report.

Once the residual land value figure has been calculated it is provided as the basis for the land value benchmarking exercise in the viability assessments. As a secondary 'sense check' values are also assessed along with other sources of land value information. Qualified property valuers reasoned assumptions and judgement is applied to the market information that is available to produce an estimate of 'Comparable Market Value' which is both fair and realistic in current market conditions.

It is recognised that comparable market values do not necessarily reflect the true costs of planning policy impacts and of course cannot factor in new land taxes such as CIL.

This pragmatic approach balances the reasonable expectation of land owners' return with the contributions expected by a Local Authority for infrastructure needs generated by new development, as advocated by the National Planning Policy Framework.

This methodology is replicated for *all p*roperty use types, with a 'minimum' land value (typically based on market value figure) adopted for uses where the residual suggests a negative value or one below market value.

It is a fact of real market activity that sites are purchased when a residual may suggest a negative value.

Buyers often 'over-pay' for a variety of reasons – the market does not function perfectly with the benefit of perfect information, developers may be optimistic in a rising market, or special purchaser / ransom situations. A specific development type may show a negative residual value, but the fact of competition from other possible uses will ensure a minimum level is achieved.

Furthermore, a self-builder will not need to demonstrate a developer's profit.

Accordingly market evidence can on occasion suggest a figure above residual levels, which is sensible and pragmatic to adopt.

The value data contained within this report has been adopted in the NCS Viability Study for the location, and thereafter subjected to 'Benchmarking' to establish a minimum allowance for land that represents a 'reasonable return for the landowner', as required by the NPPF.

In greenfield development scenarios, this is quite straightforward in that the benchmark is established by considering the existing 'greenfield' use value – generally taken to be agricultural land value.

The benchmark for brownfield land is more complex. It assumes that land has some form of established use and therefore value (which will be much higher than an undeveloped greenfield plot).

The range of established brownfield land values is obviously quite wide dependent on location and use. However for the purpose of viability appraisal it must be assumed that the land has a low value or redundant use that makes it available for alternative use.

Industrial land value is therefore generally used as a relatively low value use that might be brought forward for more lucrative alternative development (often residential use).

Where a residual appraisal demonstrates negative or marginal land values (usually due to low market sale values), it is accepted that all land must have a basic value and a reasonable base value will be allocated by the valuer. This may often be the market value of the land based on comparable evidence.

<u>New Build Residential Values per Sq m</u>

CIL and other Planning charges are applied to future *new build* housing within the location.

It therefore follows that the methodology used for viability testing is applied using real evidence collated from the new / nearly new homes market wherever possible. An extensive survey of this market was conducted within the study area and immediate surround (undertaken January – May 2018).

We have focused on 'new build' evidence since this generally attracts a premium over and above existing stock, and more particularly over Land Registry average figures where the results may be skewed by an unknown sample size and where no reference is available to the size, number of bedrooms and quality of the constituent properties.

New home developments are predominantly built by larger volume developers and tend to offer a relatively uniform size style and specification across any geographical area. It also follows that the majority of proposed developments that will attract CIL will constitute similar construction and styles.

Having established like for like comparable evidence, this was further analysed and tabulated to specify new home types, i.e. apartments and 2, 3, 4 and 5 bed units.

Market research was therefore focused on the above criteria by identifying new or 'nearly new' home developments in the study area or surrounding comparable locations, that were under construction or recently completed. Data for individual house types on these developments was analysed and sale prices achieved obtained from developer / house builders, Land Registry Data, or other sources (typically Zoopla / Rightmove).

Where necessary, additional supporting information was gathered on each development using asking prices with an assumed reduction made according to negotiated discounts as provided by the developer, local agents and professional judgement / assessment of the results. Adjustments for garages were made where present, to ensure like for like comparison.

Where new home data was found lacking, nearly new or 'modern' transactions and asking prices were analysed and adapted.

We have contacted contact home builders currently or recently active within the location, as listed in 'Procedure and Methodology' and again in Appendix 3.

In most instances we were grateful to receive full assistance and cooperation although in a few instances the developer was unavailable for comment or unable to provide assistance.

Market value opinion obtained from stakeholders (house builders, other land agents) generally confirmed our suggested sub-markets approach and values as appropriate, and a range between £1883- £3,875 sq m (£175- £360 per sq ft) as appropriate for houses across the study area, marginally less for apartments.

Our adopted values for appraisal are shown at Appendix 2, with numeric sales data obtained tabulated at Appendix 3, with stakeholder comment.

By way of a further 'sense check' the ***Zoopla Price Index**** for pin-point locations within the study area currently suggests average prices of **£2,347 sq m** for Bingham (Rushcliffe), **£2,594 sq m** for Radcliffe on Trent (Rushcliffe), **£2,433 sq m** for Cotgrave (Rushcliffe), **£3,078 sq m** for West Bridgford (Rushcliffe), **£2,250 sq m** for East Leake (Rushcliffe), **£2,731** for Ruddington (Rushcliffe), **£2,583** for Keyworth (Rushcliffe) **£2,411 sq m** for Nottingham City, **£2,572** for Wollaton (Nottingham City suburb), **£2,454 sq m** for Beeston (Broxtowe) **£1,948 sq m** for Kimberley (Broxtowe) and **£2,712 sq m** for Chilwell (Broxtowe).

Figures are based on averages for all sales, not limited to new build. This will generally produce a *lower* average price than new build figures alone, since the averages will include varying degrees of age and quality. After adjustment to reflect a new build "premium", our figures are further verified as being appropriate.

**As at 22/5/18, detached housing.*

Additional Stakeholder and background evidence is listed at **Appendix 3**.

2) Other Residential (C1, C2, Student Accommodation)

Bespoke Student Accommodation

Nottingham is home to two major universities, and accordingly the student residential sector is a major feature of the local property market.

New development is focused towards the city centre, both in terms of new build and conversion of obsolete offices. Residents are increasingly drawn from the more traditional established “student suburbs”.

The city centre tends to serve Nottingham Trent University. More peripheral locations in the city and Broxtowe are likely to see ongoing demand for development, where in reach of the main Nottingham University campus.

Weekly gross rents are currently in the region of £90 -£150 per week (albeit often for a 50 week rental), depending on location and specification. Rents are generally charged inclusive of utilities and broadband.

Capital values are in the region of £50,000 - £80,000 per bed space, again depending on location and specification.

Typical room sizes are 10-15 sq m, or 25 sq m for studios.

Capital values per sq m will typically range from £2,500 - £4,500.

3) Hotels

The most likely scenario for hotel development within the Study area is from the budget - mid range sector of the hotel market for example Premier Inn and Travelodge, and our evidence base is therefore drawn from the budget – mid range sector.

Our evidence on sales values per sq m for hotels is based on our comparable evidence and market knowledge which shows that budget hotel operators pay in the region of £3,000 per room per annum which when capitalised at a rate of 7.5% produces a maximum sales value per room of approximately £40,000.

The average budget hotel room is approximately 17 sq m which also equates to an overall sales value figure per m in the region of £2,500.

4) Food Retail (Supermarket)

The majority of the larger food store retailers, including Sainsburys, Asda, Tesco, and Morrisons are all represented within the area, operating from large store formats. The “budget” operators are also well established.

In terms of valuations, our food retail valuations are based on the comparable / comparison and investment methods.

For supermarket / food retail outlets, we have appraised a typical food store format of 3,000 sq m – (32,000 sq ft) with a total site area of 1 hectare – (2.5 acres).

The sales figures that we have quoted within our report are based on a rental level per sq m multiplied by the appropriate capitalisation level to provide a gross sales figure per sq m.

We have adopted a rental figure of £170 per sq m with a capitalisation yield of 5.5%. This produces a sales value per m of £3,000. This capitalisation yield is appropriate bearing in mind that the food stores will be most likely occupied by one of the major supermarket brands such as Tesco, Sainsburys, Asda or Morrison’s, by way of an institutional lease.

Typically, food store values are driven by the availability of planning consent (triggering competitive bidding), rather than exact location specifics. This tends to level values to a similar tone, region wide and accordingly we have considered some evidence from outside the study area.

We consider our figures to be considered a ‘conservative’ assessment. Both regionally and nationally substantial evidence exists to demonstrate typical rental values paid by large format food operators from £150 to £300 per sq m, with yields often at 5% or lower.

5) General Retail (A1, A2, A3)

The city and town centres dominate the other retail sectors.

The rural areas have a more limited demand, mainly providing local and smaller convenience shopping.

Our retail valuations are primarily based on the comparable / comparison and investment methods.

For the purpose of this report, we have categorised other retail as all other retail except supermarket food stores. Other retail therefore encompasses high street retail, edge of town and out of town retail as well as restaurants and drive through and so forth. In practice, High Street development will be mainly limited to re-development of existing buildings, therefore limiting CIL charging (which is only levied on new, additional floor area).

In terms of producing a sales value per sq m, we have again utilised a rental level per sq m and capitalised this using appropriate yield to arrive at a sales value per sq m. However, town centre retail units are valued on a Zoned Area basis as opposed to arterial road, edge of town or out of town retail, which use an overall rental per sq m.

Our methodology has therefore included an assessment of Zone A rentals for the principal suburbs within the urban area and from these Zone A rentals we have calculated an average rental figure per sq m for the suburbs that takes in to account our assessment of the ratio of prime, secondary and tertiary retail stock within each centre. The resultant figure is one consistent with retail rents for edge of centre and arterial road retail and can therefore be applied across all geographical retail locations.

We have then considered rentals for arterial roadside retail units within the urban areas, which again using comparable evidence produces a rental in the region of £135 per sq m (£12.50 per sq ft), capitalised at a yield of 7%.

All of the above methodology has been considered then applied to the 'test' assumed property, i.e. a 300 sq m roadside unit.

We believe that this is the most likely form of new retail development to emerge. Established 'high street' retail is seldom developed from new (more typically a refurbishment of long established existing stock), and even if it were, the established high street location would not attract CIL since there would be little or no increase in floor area.

We believe the figures adopted can be considered as being 'safe' and conservative. Within the general retail category other occupier types for example bulky goods warehouse style retail can command significantly higher figures than those specified, often to a similar level to supermarket retail. To assess a fair 'tone' for the category and the area as a whole we have been more conservative in our assessments.

6) Offices (B1a, Cat "A" fit out)

New build office development is still lacking in the market locally, primarily due to the relationship between build costs vs prime rental levels.

Demand for modern space is reasonably robust, especially in the City, but there is a noticeable lack of supply.

Our office valuations are primarily based upon the capital comparison and investment methodology. Where appropriate, rental evidence has been capitalised through the adoption of investment yields.

With regards to the valuation figures quoted we have made the following assumptions:-

- That land values are given for cleared sites, free from contamination and generally ready for development without undue remedial works and with services connected or easily available.

- Office values quoted are for a newly constructed, grade "A" office development, capable of sub division if required into units of 2,500 sq ft – 5,000 sq ft (this size range will exclude abnormally high premium prices for small units, whilst not unduly discounting for quantum).

7) Industrial (B1b/c, B2, B8)

Our methodology is again based largely on the capital comparison method, through assessment of transactional evidence, and investment capitalisation where appropriate.

Where appropriate, rental evidence has been capitalised through adopting investment yields.

The industrial market is more evenly spread across the study area, with ease of access to the main road network typically an influencing factor on price.

When preparing our figures we have assumed:-

- The land is cleared and ready for development without unduly onerous remediation being required, with sites generally serviceable and appropriate planning available.

- Our appraisal assumes a new build industrial/warehouse development of c. 10,000 sq ft and capable of division into units of approximately 5,000 sq ft (to avoid premium or discount for quantum) with say 5% office content.

8) Agriculture

The recent RICS rural land market survey (H2, 2017) has suggested that for the East Midlands region average agricultural land prices are approximately £20,000 per hectare.

Our report has allocated an average figure across the whole of the region, which should be considered as being for guidance and information purposes only.

We do not believe it appropriate within the scope of this report to provide more detailed, area specific banding.

The valuation of agricultural land is extremely site specific, down to a ‘field by field’ basis. The quality of soil for each individual plot of land is paramount, with other factors being taken into account for example the existence of sporting rights. Accordingly to give a truly accurate reflection on values across the area with this estate analysis down to a micro level which we do not believe is desirable or appropriate for the purposes of this report.

With regards to unit sale values, we have assumed that the theoretical valuation applies to a ‘barn’ of simple warehouse type construction for example a 500 sq m farm store. Obviously our figures would need adjusting for anything more specific and bespoke for example cold storage, milking facilities etc.

New build agricultural buildings rarely appear individually on the open market as they are typically sold as part of larger farm sales.

Conclusions

Subsequent to the matters discussed above, the conclusions of our report can be summarised as follows:-

- We can confirm that sufficient evidence has been found to justify considering a variable rate CIL regime with differing value levels appropriate across the various development categories and across four separate residential value bands and a single commercial zone (subject to further viability appraisals).

- heb Chartered Surveyors are fully accredited RICS Registered Valuers, and our conclusions as to appropriate 'tone' indicative values across development categories within the study area are tabulated and summarised within the value tables and zone map appended.

Limitation of Liability

For limitation of liability this report is provided for the stated purpose and is for the sole use of the named client. The report may not be disclosed to any other party (unless where previously authorised) and no responsibility is accepted for third parties relying on the report at their own risk.

Neither the whole or any part of this report nor any reference to it may be included in any published document, circular or statement nor published in any way without prior written approval of the form and context of which it may appear. We shall be pleased to discuss any aspect of this report.

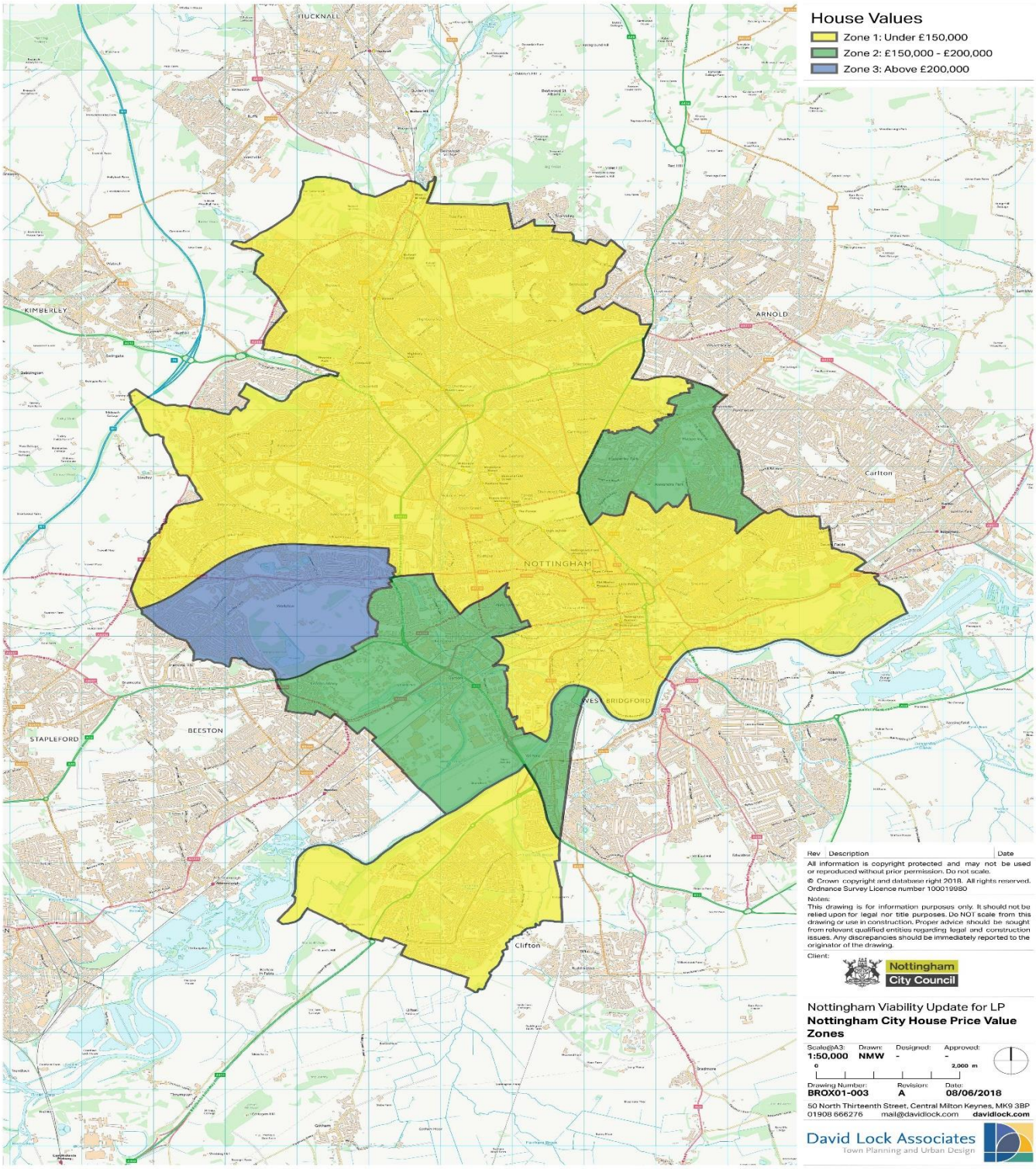
Yours faithfully

heb

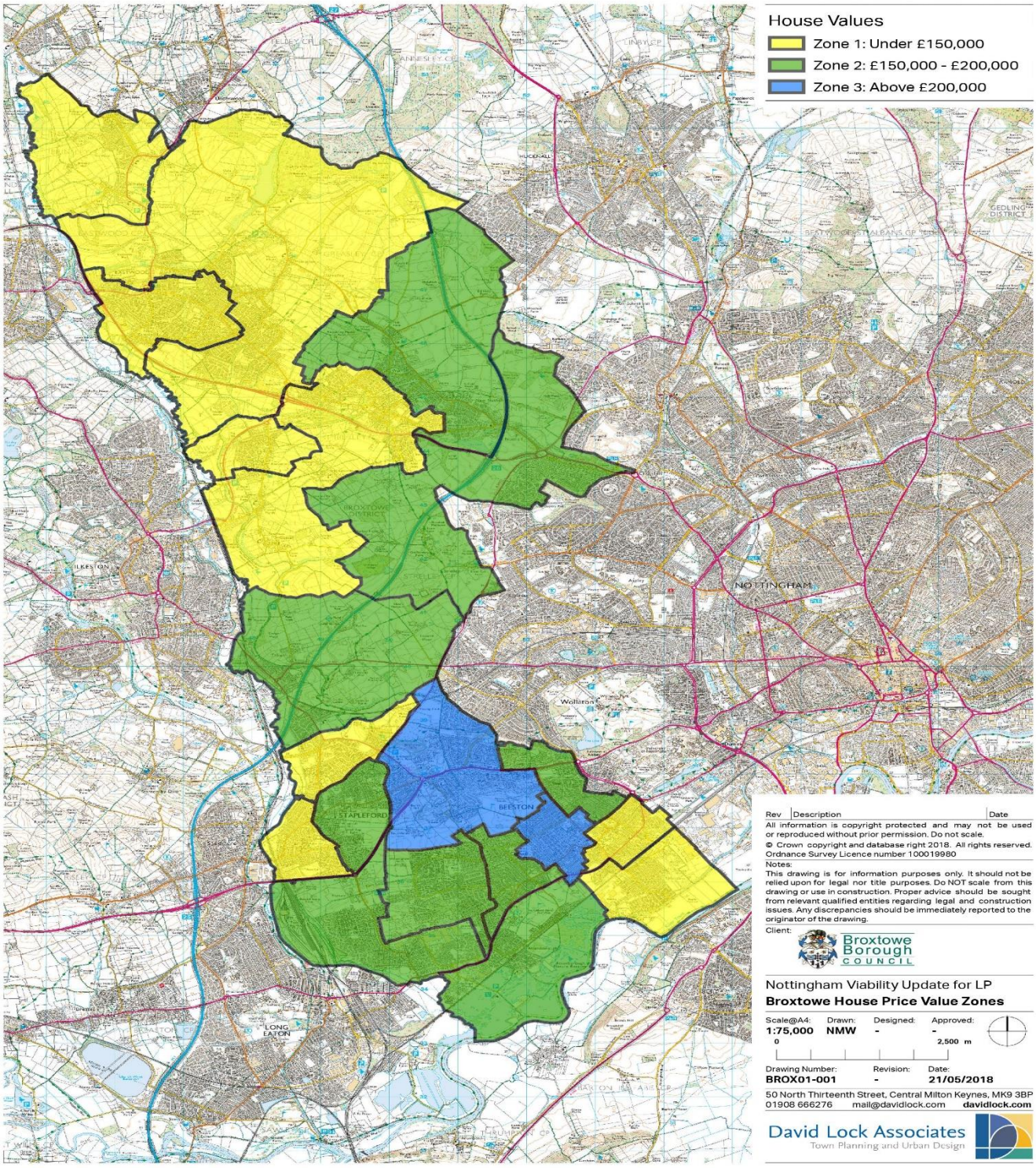
heb Chartered Surveyors

APPENDIX 1

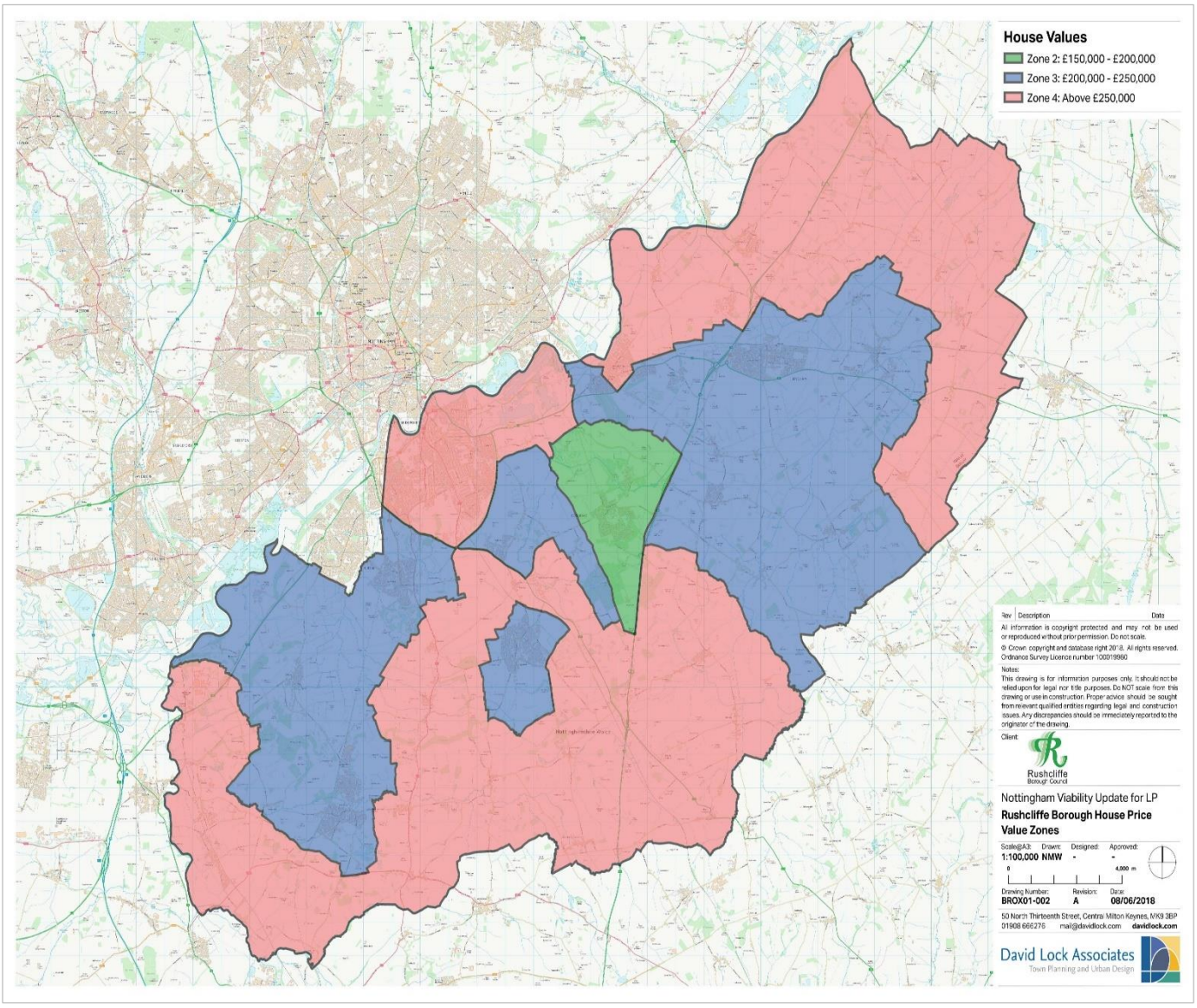
Sub-Market Map – Nottingham



Sub-Market Map – Broxtowe



Sub-Market Map – Rushcliffe



APPENDIX 2

INDICATIVE RESIDENTIAL PROPERTY VALUES

Sales Values					
Charging Zone	Sales Value £sq m				
	Apartment	2 Bed	3 Bed	4 Bed	5 Bed
Band 1	2,152	2,370	2,315	2,315	2,250
Band 2	2,400	2,550	2,475	2,475	2,400
Band 3	2,700	2,800	2,700	2,700	2,600
Band 4	2,853	3,390	3,337	3,122	2,906

INDICATIVE COMMERCIAL PROPERTY VALUES

Sales Values £ per sq m		
Industrial		750
Office		1615
Food Retail		3000
Other Retail		2000
Residential Inst		1350
Hotels		2500
Student Apartments		3,500
Community		1200
Leisure		1400
Agricultural		400
Sui Generis	Car Sales	1500
Sui Generis	Vehicle Repairs	750

INDICATIVE COMMERCIAL LAND VALUES

Commercial Land Values	
Industrial Land Values £ per Ha	
Comparable Land Value £ per Ha	600,000
Office Land Values per Ha	
Comparable Land Value £ per Ha	600,000
Supermarket Land Value £ per Ha	
Comparable Land Value £ per Ha	3,000,000
General Retail Land Value £ per Ha	
Comparable Land Value £ per Ha	1,650,000
Residential Institution Land Values per Ha	
Comparable Land Value £ per Ha	600,000
Hotel Land Values per Ha	
Comparable Land Value £ per Ha	1,000,000
Community Use Land Values per Ha	
Comparable Land Value £ per Ha	600,000
Leisure Land Values per Ha	
Comparable Land Value £ per Ha	700,000
Agricultural Land Values per Ha	
Comparable Land Value £ per Ha	20,000
Sui Generis Land Values £ per Ha	
Car Sales	900,000
Sui Generis Land Values £ per Ha	
Vehicle Repairs	600,000

APPENDIX 3

ADDITIONAL VALUATION DATA AND STAKE-HOLDER COMMENTS

DEVELOPMENT NOTTINGHAM CITY COUNCIL	DEVELOPER	SALES RANGE PER SQ M	SALES RANGE PER SQ FT	NOTES
Martins Reach, Wollaton	Avant Homes	£2,582 - £2,936	£240 - £272	Nottingham / Broxtowe borders
Woodhouse Park, Nottingham	Barratt Homes	£2,153 - £2,843	£200 - £263	Nottingham / Broxtowe borders
Province Wood Road, Nottingham	Ashberry Homes	£2,260 - £2,696	£210 - £250	
Daleside Road, Colwick	Truelove Property	£2,200 - £2,435	£204 - £226	
Plains Road, Mapperley*	Private	£2,292 & £2,528 (x2)	£213 & £235	* Nottingham City borders (Gedling Borough) 3 new build executive houses available
Carriage Close, Nottingham NG3	Bailey Rhodes	£2,558 - £3,481	£240 - £323	
The Kentwood, Nottingham	Private	£2,850	£265	Gated development – contemporary design – 5 bed town houses (3 available)
Standhill Road, Carlton	Private	£2,036	£189	Single plot 4 bed newbuild town house
Chalfont Drive, Nottingham	Bellway Homes	£2,422 - £2,476	£225 - £230	Prices confirmed by **Simon Maddison** at Bellway
Chase Farm, Gedling*	Keepmoat Homes	£2,170 & £2,651	£202 & £246	*Gedling Borough - Nottingham City study area border Limited availability, currently 2 homes – both 4 bed detached **Shaun Fielding** at Keepmoat confirms historically an approx. range from £2,152 - £2,691 per sq m being achieved

DEVELOPMENT **BROXTOWE BOROUGH COUNCIL**	DEVELOPER	SALES RANGE PER SQ M	SALES RANGE PER SQ FT	NOTES
Elm Avenue, Attenborough	Private	£2,668	£248	Single new build 4 bed
Mulbury Close, Beeston	Private	£3,147	£292	First release – 5 bed detached house (high spec)
Hansons View, Kimberley	Fairgrove	£2,176 - £2,558	£202 - £238	
Linby*	Bellway Homes	£2,476 - £2,691	£230 - £250	* Broxtowe borders. **Simon Maddison** at Bellway confirmed price range
Hassocks Lane, Beeston	Bellway Homes	£2,508 - £2,800	£233 - £260	Site completed in 2016 / 2017. (Most recent prices confirmed for 3 & 4 bed properties) **Simon Maddison** at Bellway confirms our proposed indicative figures for the study area as a whole as sensible in conjunction with the sub-market approach
Pentrich Fields, Giltbrook	Peter James Homes	£2,368 - £2,583	£220 - £240	**Simon Gardner** at Peter James Homes confirmed prices being achieved. Our proposed indicative figures for the study area & sub market approach also confirmed as 'appropriate'
Toton	Peveril Homes	£2,691 - £2,799	£250 - £260	**James Smith** at Peveril advises that sales have not commenced on site, however they are hopeful of achieving figures in this region
Fritchley*	Peveril Homes	£2,852	£265	* Broxtowe borders. James Smith at Peveril confirms that site is currently achieving this approx. value tone

DEVELOPMENT RUSHCLIFFE BOROUGH COUNCIL	DEVELOPER	SALES RANGE PER SQ M	SALES RANGE PER SQ FT	NOTES
Wilford Fields, Wilford Lane, West Bridgford	Linden Homes	£3,257- £3,464	£302 - £322	First releases.
Edwalton Fields, Edwalton	Bovis Homes	£2,642 - £3,880	£245 - £360	Range for 3 beds to 6 beds
Edwalton Park, Edwalton	Bloor Homes	£3,374 - £3,401	£313 - £315	
Edwalton Park, Edwalton	Barratt Homes	£3,304 - £3,559	£307 - £330	
Edwalton Park, Edwalton	David Wilson Homes	£2,575 - £2,960	£239 - £275	Current availability limited to 4-6 bed homes
Hollygate Park, Cotgrave	Barratt Homes	£2,430 - £2,496	£226 - £231	
Hollygate Park, Cotgrave	David Wilson Homes	£2,191 - £2,500	£203 - £232	Limited availability – 4/5 bed houses remain.
Aslakr Park, Aslockton	Avant Homes	£2,624 - £2,850	£244 - £264	
Meadowcroft, East Leake	Persimmon	£2,367 - £2,886	£220 - £250	
Main Street, Kinoulton	Private	£2,583	£240	Single new build 4 bed detached house
Grange Road, Edwalton	North Sands	£3,632	£337	New build 6 bed detached house
Storkit Meadows, Wymeswold*	Barwood Homes	£2,705 - £3,201	£251 - £297	* Rushcliffe borders
Greythorne Drive, West Bridgford	Bellway Homes	£2,767	£350	Approximate net prices achieved for 3 bed properties, confirmed by **Simon Maddison** at Bellway.
Greythorne Drive, West Bridgford	Bellway Homes	£2,444 - £2,552	£320 - £330	Approximate net prices achieved for 4 bed properties, , confirmed by Simon Maddison at Bellway.
Nottingham Road, Southwell*	Miller Homes	£3,660	£340	*Newark & Sherwood - Rushcliffe study area border **Tom Roberts** at Miller Homes confirms approx. sales rates achieved

DEVELOPMENT RUSHCLIFFE BOROUGH COUNCIL	DEVELOPER	SALES RANGE PER SQ M	SALES RANGE PER SQ FT	NOTES
Farnsfield, Newark*	Miller Homes	£2,852 - £3,069	£265 - £285	*Newark & Sherwood – Rushcliffe study area border **Tom Roberts** also confirmed approx. sales rates achieved Our suggested indicative figures are confirmed as being broadly appropriate along with the proposed sub-market approach. Tom indicated that a 5% discount on quoting prices is 'generous' – market improvements have meant 0% to 1% currently more appropriate

Note: Where not specifically confirmed by developer, quoting prices allow a 5% deduction for negotiations / incentives and exclude garages.

OTHER CONSULTEES	DEVELOPER	SALES RANGE PER SQ M	SALES RANGE PER SQ FT	NOTES
-	Westleigh Homes	-	-	**Brett Casswell** at Westleigh – no current developments in study area, but verifies our proposed values and sub-market approach as "fair"
-	Inside Land	-	-	Inside Land are Nottingham based developers and residential land agents **Gareth Staff** at Inside Land confirms our proposed figures and sub-market approach as appropriate
-	Crest Nicholson	-	-	**Edward Elliman** at Crest Nicholson – no current developments in the study area, however, our proposed indicative figures were verified as being broadly appropriate

Gleeds
Construction Cost Study
February 2018

International
Management &
Construction Consultants

WHOLE PLAN VIABILITY ASSESSMENT

CONSTRUCTION COST STUDY

For NOTTINGHAM AREAS:

BROXTOWE BOROUGH COUNCIL
NOTTINGHAM CITY COUNCIL
RUSHCLIFFE BOROUGH COUNCIL

Whole Plan Viability Assessment

Order of Cost Study

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21/02/18

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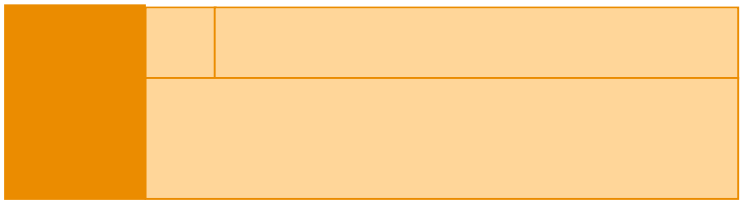
Document Type:	*Order of Cost Study*
Client:	*Broxtowe Borough Council / Nottingham City Council / Rushcliffe Borough Council*
Project:	*Whole Plan Viability Assessment*
RIBA Stage:	***N/A***
Gleeds Ref:	*NTCM1235*
Revision: (Document issues are given in Appendix A)	*0.4*
Date:	*21/02/18*
Prepared by:	*Matt Miles*
Checked by:	*Phil Wright*



Contents

Executive Summary

1. The Project

This Cost Study provides an estimate of construction costs over a range of development categories, to support a Whole Plan Viability Assessment.

2. Allowances

The Estimate includes on-cost allowances for the following:

- Consultants
- Building Regulations and Planning fees
- NHBC Insurance where applicable

3. Basis of Estimate

The basis of the Estimate is in Section 2 of this report.

4. Detailed Construction Cost Study

The detailed Cost Study is given in Section 3 of this report.

5. Risk Allowance

A Risk Allowance of 5% of construction cost is recommended

Project Description

NCS have been appointed by Broxtowe Borough Council, Nottingham City Council and Rushcliffe Borough District Council for the production of the Council's Community Infrastructure Levy Charging Schedule, through to adoption.

Gleeds are acting as part of the NCS team, to provide indicative construction costs, over the range of development categories, to inform the Appraisal.

The range of development categories are as agreed with NCS.

Basis of Cost Study

Base Date

Rates for Construction Costs in the Estimate have been priced at a Base Date of 1st quarter (January to March) 2018. Allowances must be made for inflation beyond this date dependent on the mid-point date of construction.

Procurement

The costs included in this Estimate assume that procurement is to be achieved on a single stage competitive tender basis, from a selected list of Contractors.

Scope of Development Types

The scope of development types within the various categories varies between categories.

This is reflected within the range of construction values stated for a particular category.

For the purposes of undertaking the Viability Appraisal, average rates for construction have been given for each development category; the range of values have also been stated.

Basis of Costs

The following benchmarking data was used in the preparation of the estimate:

1. Analysis of construction costs over a range of projects within the Gleeds Research and Development Data Base.

2. Where insufficient data is available within any particular category cross-reference is also made to BCIS construction cost information.

3. The rates adopted in the study are based on research of local construction projects to the region, the costs associated with these and Gleeds own national database of construction costs by construction type. The report recognises that different types of construction company incur different levels of costs due to differences in buying power, economies of scale etc. The rates assume that substantial new residential development (House and Bungalows) will be undertaken primarily by regional and national house builders and the adopted rates reflect this. The adopted rates therefore tend to fall below median BCIS construction rates which cover building cost information from all types of construction company to individual builders. This is considered to be a more realistic approach than the adoption of median general rates, to reflect the mainstream new build residential development particularly since smaller schemes undertaken by smaller scale construction companies will enjoy exemption from zero carbon and affordable housing requirements.

4. Reference is also made to the Communities and Local Government Cost Analysis for Code for Sustainable Homes, in respect of dwelling costs. For all future reports from October 2015 onwards the figures presented will be based upon the upcoming National Housing Standards that are estimated to come into force at this time. Early indications and analysis suggest that there will be little cost variance beyond an equivalent CoSH Code 4 as a result although we will continue to monitor the situation.

All construction costs have been adjusted for Location Factor (Broxtowe Borough Council, Nottingham City Council and Rushcliffe Borough, Nottinghamshire)

Note: the cost allowances are based on current building regulations.

Assumptions/Clarifications

The following assumptions/clarifications have been made during the preparation of this Estimate:

- The costs included in this Estimate assume that competitive tenders will be obtained on a single stage competitive basis.
- There are no allowances in the Estimates for Works beyond the site boundary.
- All categories of development are assumed to be new build.
- It is assumed development takes place on green or brown field prepared sites, i.e. no allowance for demolition etc.
- All categories of development include an allowance for External Works inc drainage, internal access roads, utilities connections (but excluding new sub-stations), ancillary open space etc
- Site abnormal and facilitating works have been excluded and are shown separately.

Access Standards

Category 2

Costs in respect of meeting Category 2 Standards have been considered within the report.

Category 2 dwellings are in essence very similar to Lifetime Homes with a couple of minor enhancements such as step free access, a minimum stair width of 850mm and amendments to WC layouts to ensure no obstructed access.

The design solutions (And therefore cost) of meeting Category 2 standards will vary from site to site and will potentially range from relatively small on a good site with some innovative design to between 1% and 2% on a less favourable site which includes apartments. There is potentially a more significant impact on the cost of apartments due to the requirement for a lift but again this can be minimised through design, the accessible units may be allocated on the ground floor for example thus negating the need for a lift.

Some of the requirements impact on actual size of the dwelling, our costs are provided on a £/m² basis so any increase in dwelling size is automatically picked up within the rate.

For the purpose of the assessment we would recommend an uplift of 1% across the board (Except bungalows) on all residential costs be applied in order to meet Category 2 standards.

Category 3 Adaptable

Costs in respect of meeting Category 3 Adaptable Standards have been considered within the report.

Category 3 dwellings are suitable or potentially suitable through adaptation, to be occupied by wheelchair users. Issues which need to be considered include wheelchair storage space, maximum inclines of ramps, provision of services for power assisted doors (Developments with communal entrances), room sizes, provision for a through floor lift including power, kitchen design, bedroom ceilings being capable of taking the load of a hoist, door entry system connected to main bedroom and lounge.

The design solutions (And cost) for meeting category 3 standards will also vary from site to site, some of the requirements will be dealt with by increasing the area of the dwellings, the cost of this will therefore be picked up in the GIFA used and will not affect the overall £/m².

There are some specific requirements that will directly impact on costs such as power for assisted doors, provision for through floor lifts, door entry systems, kitchen designs and ceiling loadings. For the purpose of this assessment we would recommend an uplift of 9% be applied in order to meet category 3 adaptable standards for houses, 6% for apartments and 2% for bungalows..

Exclusions

The Order of Cost Study excludes any allowances for the following:

- Value Added Tax
- Finance Charges
- Unknown abnormal ground conditions including:
    - Ground stabilisation/retention
    - Dewatering
    - Obstructions
    - Contamination
    - Bombs, explosives and the like
    - Methane production
- Removal of asbestos
- Surveys and subsequent works required as a result including:
    - Asbestos; traffic impact assessment; existing buildings
    - Topographical; drainage/CCTV; archaeological
    - Subtronic
- Furniture, fittings and equipment
- Aftercare and maintenance
- Listed Building Consents
- Service diversions/upgrades generally
- Highways works outside the boundary of the site

Detailed Construction Cost Study

Development Type, to achieve Breeam Excellent	Construction Cost £/m²		
	Min	Max	Median
Residential, bungalows	1,221	1,419	1,286
Additional cost for Cat 2 accessible dwellings			-
Additional cost for Cat 3 wheelchair adaptable			26
Residential, 2-5 bed	1,062	1,234	1,118
Additional cost for Cat 2 accessible dwellings			11
Additional cost for Cat 3 wheelchair adaptable			101
Low Rise Apartments Code 4 Equivalent	1,494	2,350	1,640
Additional cost for Cat 2 accessible dwellings			16
Additional cost for Cat 3 wheelchair adaptable			98
Office to residential conversion	682	1,770	1,560
Care Homes	1,378	1,993	1,521
Extra Care (Sheltered Housing)	1,175	2,168	1,362
General Retail, shell finish	807	1,168	1,104
Food Retail supermarket, shell finish	939	1,548	1,257
Retail refurbishment	614	1,042	736
Food Retail refurbishment	714	1,408	842
Hotels, 2,000m² mid-range, 3* inc. F&Ftgs	1,652	2,111	1,716
Offices, Cat A fit-out	1,475	2,878	1,746*
Industrial, general shell finish	628	1,171	840
Institutional / Community D7 (museums, library, public halls, conference)	2,515	3,268	2,964
Leisure D5 (cinema, bowling alleys, shell)	1,122	1,264	1,192**
Agricultural shells	442	1,384	892
SUI Generis			
Vehicle Repairs	1,418	2,071	1,662
Vehicle Showrooms	1,573	2,324	1,734
Builders Yard	614	1,708	1,166

Note:

* Offices, Cat A are based on speculative office development, of cost efficient design

** Leisure D5 development is based on shell buildings (bowling alleys, cinemas and the like) and exclude tenant fit-out

On-costs

Professional fees		
- Consultants (excluding legals)	7.25%	
- Surveys etc	0.75%	8%
Planning / Building Regs		
Statutory Fees		0.6%
NHBC / Premier warranty (applies only to Residential		
and Other Residential)		0.5%
Contingency / Risk Allowance		5%

Abnormal Site Development Costs, Broxtowe Borough Council, Nottingham City Council and Rushcliffe Borough Area.

	Budget Cost £/Hectare
Abnormal Costs, by their very nature, vary greatly between different sites.	
Budget figures are given, for typical categories relevant to the study area.	
The Budgets are expressed as costs per hectare of development site.	
Archaeology	11,000
Typically, Archaeology is addressed by a recording / monitoring brief by a specialist, to satisfy planning conditions.	
Intrusive archaeological investigations are exceptional and not allowed for in the budget cost.	
Site Specific Access Works	22,000
New road junction and S278 works; allowance for cycle path linking locally with existing	
Major off-site highway works not allowed for.	
Site Specific Biodiversity Mitigation / Ecology	
Allow for LVIA and Ecology surveys and mitigation and enhancement allowance.	22,000
Flood Defence Works	
Allowance for raising floor levels above flood level, on relevant sites	28,000
Budget £2,000 per unit x 35 units, apply to 1 in 3 sites.	
Utilities, Gas, Electric	
Allowance for infrastructure upgrade	90,000
Land Contamination	
Heavily contaminated land is not considered, as remediation costs will be reflected In the land sales values	28,000
Allow for remediation/removal from site of isolated areas of spoil with elevated levels Of contamination	
Ground Stability	
Allow for raft foundations to dwellings on 25% of sites	
Budget £2,200 x 35 units x 25%	20,000