



**Crawley Borough Council  
Whole Plan &  
Community Infrastructure Levy  
Viability Assessment**

**April 2015**



**Nationwide CIL Service**

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Appendix 1 – Heb Surveyors Valuation Study Update April 2015

(Separate Report)

Appendix 2 – Gleeds Construction Cost Study Update April 2015

(Separate Report)

Appendix 3 – NCS Approach to Developer Profit Return

# Executive Summary

1.1 The Whole Plan Viability Study provides an appraisal of the viability of the Crawley Local Plan in terms of the impact of its policies on the economic viability of development proposed to be delivered by the Plan. The study considers policies that might affect the cost and value of development (e.g. Affordable Housing and Design and Construction Standards) as well as the potential to accommodate Community Infrastructure Levy Charges.

## Study Area

1.2 The study area covers the whole of Crawley borough. The assessment first considers the existence of economic sub-market areas for residential and commercial development within the boundary to determine if the application of differential cost and value assumptions would be appropriate to the study.

## Methodology

1.3 The Whole Plan Viability Study seeks to assess whether the development proposed by the Local Plan can be delivered in an economically viable way taking account of all the cost impacts of the policies proposed by the plan. The study also includes an assessment of the ability of different categories of development within the Local Plan area to make infrastructure contributions via a Community Infrastructure Levy (having taken account of the cost impacts of Affordable Housing delivery and other relevant policies) although further work with regards to CIL may be carried out in the future. In essence, the study assesses the costs and value of development making allowance for a competitive return to both landowners and developers as required by the NPPF. If there is any additional return beyond these reasonable allowances then this is the margin available to make CIL contributions.

1.4 The study involves a comprehensive assessment of market values for all categories of development in Crawley Borough, together with an assessment of any sub-markets that might exist with differential areas of similar value. In the event that such sub-markets do exist, they will be used to guide the formation of Charging Zones in the event that the Authority wishes to adopt a Differential Rate CIL system.

1.5 The study firstly tests mixed residential and commercial development scenarios considered relevant and likely to emerge in the study area to assess the potential impacts of the proposed Local Plan policies on these developments. Proposed Site Allocations are then tested to determine if they are deliverable taking account of policy impacts and site specific mitigation, abnormal development costs and the potential impact of CIL.

1.6 The viability appraisal considers two principal land value benchmarks from which development is likely to emerge – greenfield and brownfield and also considers market land transactional evidence as part of the benchmarking exercise.

# Executive Summary

1.7 The CIL section of the study determines the maximum potential rates of CIL (per sqm) that could be applied without threatening the overall economic viability of development. This assessment will be applied to every category of development in any differential Charging Zone that might emerge over the plan period. Where a category or location of development is shown to be unviable, a zero CIL rate will be recommended.

1.8 For residential assessment, the study factors in the Affordable Housing targets proposed by the Local Plan as well as the additional Low Cost Housing requirements to determine if they are deliverable and to assess the balance with CIL.

1.9 This study also includes a more detailed assessment of all residential sites proposed to be delivered by the plan where site specific constraints and abnormal costs are considered as well as the impact of the draft CIL charges.

## Key Findings – Residential Viability Assessment

1.10 The Crawley Local Plan sets out the strategy to deliver housing over the plan period. The residential viability testing illustrated that, in general terms, housing development proposed in all locations in the Crawley Local Plan are viable and can accommodate significant CIL charges whilst maintaining the Council's Affordable Housing aspirations. The assessment of residential land and property values indicated that the Authority did not possess significant residential sub-markets that warrant differential value assumptions being made in the Whole Plan Viability Assessment or a differential rate approach to CIL based on geographical zones.

1.11 The study tests affordable housing delivery in line with the Council's policy of 40% with a tenure split of 30% Intermediate/70% Affordable Rent. In addition, and to assess a worst case position, the Council's aspiration for 10% Low Cost Housing is also included in the assessment assumptions. The study considered five different residential development scenarios to reflect the type of residential that might emerge over the plan period. These included mixed residential (apartments, 2, 3, 4 and 5 bed housing), various scales of mixed housing development and low rise apartments.

1.12 The assessments were also undertaken using an alternative approach to developer's profit return as explained at Section 4.30. The viability results are summarised in the table below. The figures represent the margin of viability per sqm taking account of all development values and costs, plan policy impact costs and having made allowance for a competitive return to the landowner and developer. In essence a positive margin confirms whole plan viability and the level of positive margin represents the potential to introduce additional CIL charges.

# Executive Summary

## Maximum Residential CIL Rates per sqm

	Mixed Residential Development	Medium Size Mixed Development	Intermediate Mixed Development	Small Housing Development	Town Centre Apartments
<b>20% Profit on All Units</b>					
Greenfield	£356	£366	£360	£428	£419
Brownfield	£208	£220	£209	£290	£345
<b>20% Profit on Market Units 10% Profit on Affordable Units</b>					
Greenfield	£469	£485	£474	£430	£548
Brownfield	£318	£337	£321	£290	£475

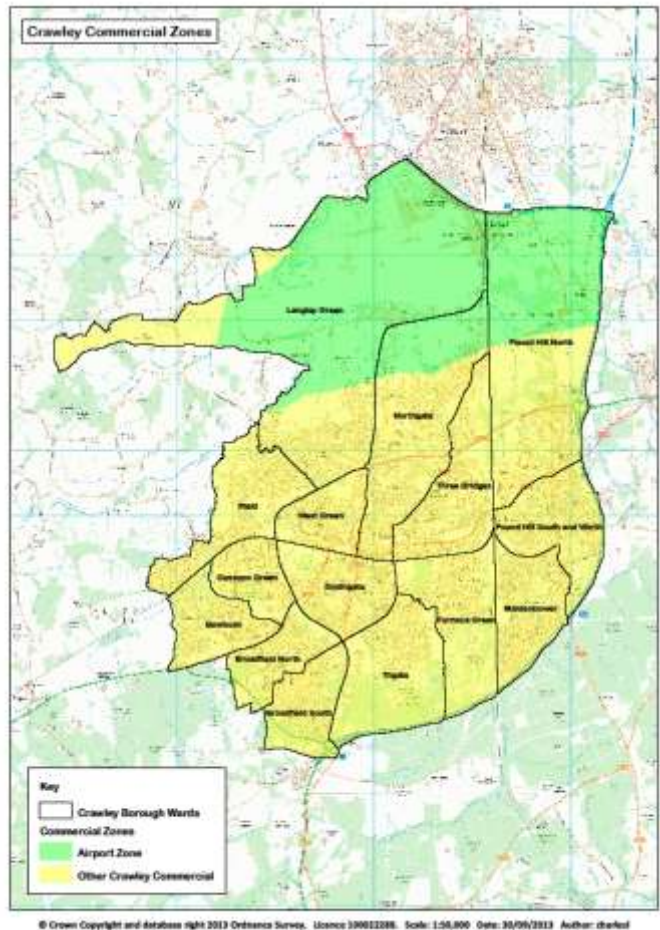
1.13 The results of the viability testing clearly demonstrate that Affordable Housing delivery at the Council's policy target of 40% plus 10% Low Cost Housing enables delivery of residential development proposed by the Plan with a substantial viability margin for flexibility and potentially permitting a significant viability margin for CIL.

1.14 The testing showed that the Crawley Local Plan Policies are viable and all forms of residential development are capable of yielding significant levels of CIL. Based on a 20% profit return on all residential development (with no profit reduction for affordable housing), Greenfield development demonstrated viable CIL rate potential of £356-£419 per sqm, Brownfield rates varied from £208 - £345 per sqm. Using the split profit methodology with a reduced return of 10% on the affordable units, Greenfield development demonstrated viable CIL rate potential of £469-£548 per sqm, Brownfield rates varied from £318 - £475 per sqm.

# Executive Summary

## Key Findings – Commercial Viability Assessment

1.15 The assessment of commercial land and property values indicated that the Authority did possess differential commercial sub-markets that warrant differential value assumptions being made in the Whole Plan Viability Assessment and a differential rate approach to CIL based on geographical zones. The sub-market areas/CIL Zones are illustrated on the map below, demonstrating an area of higher land and property value around Gatwick Airport.



Commercial CIL Zone Map

# Executive Summary



## Maximum Commercial CIL Rates per sqm

Charging Zone/Base Land Value	Industrial (B1b B1c B2 B8)	Office (B1a)	Food Supermarket (A1)	General Retail (A1-A5)	Hotel (C1)
<b>General Zone</b>					
Greenfield	£40	-£188	£899	£171	-£785
Brownfield	-£42	-£259	£772	£109	-£857
<b>Airport Zone</b>					
Greenfield	£132	£43	£899	£171	£81
Brownfield	£44	-£29	£772	£109	£9

## Maximum Commercial CIL Rates per sqm

Charging Zone/Base Land Value	Residential Institution (C2)	Community (D1)	Leisure (D2)	Agricultural (A1-A5)	Sui Generis
<b>General Zone</b>					
Greenfield	-£1,073	-1905	-588	-£442	Car Sales -£388
Brownfield	-£1,127	-1967	-717	na	Car Repairs -703
<b>Airport Zone</b>					
Greenfield	-£1,073	-1905	-588	-£442	Car Sales -£409
Brownfield	-£1,127	-1967	-717	na	Car Repairs -£703

1.16 Food supermarket retail and general retail were assessed to be viable and capable of accommodating CIL in both greenfield and brownfield development scenarios. Food supermarket retail indicated potential rates of £772-£899 per sqm and general retail of £109-£171 per sqm for general greenfield and brownfield scenarios. The retail rates are not considered to vary between the Airport Zone and the rest of the Borough. We would recommend some caution in respect of food retail rates. Whilst the study has made a reasoned assessment of land values, transactional evidence is low due to lack of activity in the sector. As specific retail projects emerge it is likely that landowners will expect significant premiums in order to release sites, which may reduce viability levels significantly and this should be taken into consideration in rate setting.



# Executive Summary

1.17 In the main Borough zone industrial development is only considered viable for CIL on greenfield sites. However in the Airport Zone both greenfield and brownfield sites are considered capable of yielding significant levels of CIL (£44-£132 per sqm). It was felt likely that office and hotel development was only likely to emerge on brownfield sites in the Airport Zone and the marginal viability of these categories indicated that CIL should not be charged.

1.18 It should be stressed that whilst the generic appraisals showed that general employment development outside the Airport Zone (i.e. B1, B2 and B8 Industrial, Office and Distribution) is not viable based on the test assumptions, this does not mean that this type of development is not deliverable. For consistency a full developer's profit allowance was included in all the commercial appraisals. In reality many employment developments are undertaken direct by the operators. If the development profit allowance is removed from the calculations, then employment development would be viable and deliverable.

1.19 With respect to CIL, all other forms of non-residential development illustrated negative viability and it is recommended that these categories should be zero rated.

## CIL Appraisal Conclusions

1.20 The study demonstrates that most of the 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. It is further considered that significant additional margin exists, beyond a reasonable return to the landowner and developer to accommodate CIL charges.

1.21 In terms of CIL, it is recommended that there are insufficient variations in residential value to justify a differential zone approach to setting residential CIL rates across the Crawley Local Plan area.

1.22 Taking account of the viability results, the generic nature of the tests, a reasonable buffer to allow for additional site specific abnormal costs we would recommend a Boroughwide residential CIL rate of £100 per sqm. This is well within both the greenfield and brownfield viability margins but also takes account of the delivery of development on the allocated sites.

Residential CIL	
Boroughwide	£100sqm

1.23 It is recommended that a two zone approach is taken to setting commercial CIL rates to reflect the potential for industrial development around Gatwick Airport to generate infrastructure funding through CIL. The viability results indicate that there should be no differential in retail rates between the zones. Food supermarket and general retail viability is significantly different but in view of the difficulties in separately defining supermarkets for the purpose of charging CIL it is recommended a single rate of £80 sqm is adopted to take account of the viability of both categories.



# Executive Summary

1.24 The development strategy for the Airport Zone is primarily brownfield so it is recommended that rates are set to reflect a reasonable buffer from the brownfield viability with a recommended rate of £20sqm for Industrial development.

Airport Zone	
Industrial B1(b) B1(c) B2 B8	£20sqm
Retail A1-A5	£80sqm
All Other Non Residential Uses	£0sqm
Boroughwide	
Retail A1-A5	£80
All Other Non Residential Uses	£0sqm

## CIL Revenue Potential

1.25 In order to estimate residential CIL over the plan period, the recommended CIL rate is applied to an average dwelling size of 90 sq metres for eligible dwellings. In Crawley it is estimated that 1394 dwellings do not currently have planning permission and would therefore potentially be liable for CIL. Assuming 40% of these are exempt as affordable Housing, the projected CIL liable floorspace is 836 x 90sqm = 87840sqm

1.26 The floorspace projections for commercial categories of development that would be liable for CIL in the Airport Zone, over the plan period, are set out in the table below. It should be noted that due to aviation safeguarding the level of industrial floorspace that may be permitted is limited (and may only relate to extensions to existing premises). At this stage therefore no firm allowance has been made for new floorspace and if Crawley decides to pursue the adoption of CIL it may decide not to adopt a separate commercial zone around the airport.

Charging Zone	Category	CIL Rate	Eligible Floorspace	CIL Revenue
Boroughwide	Residential	£100	75240	£7,524,000
Boroughwide	Retail	£80	4300	£344,000
Airport	Industrial	£20	0	£0
			<b>Total</b>	<b>£7,868,000</b>

# Executive Summary

## SHLAA Site Viability Appraisal Conclusions

1.27 The viability testing of proposed residential sites in Crawley has been undertaken, accounting for the following policy impacts and key assumptions:-

- Greenfield or Brownfield Development
- Delivery Timescale
- Affordable Housing Delivery of 40% plus Low Cost Housing delivery of 10%
- Key Planning Policy Cost Impacts (Renewable Energy, Water Recycling, Zero Carbon etc.)
- Community Infrastructure Levy
- Residual Planning Obligation Allowances
- Site Specific Abnormal Costs and Mitigation Factors

1.28 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.

1.29 The study illustrated that all greenfield and brownfield sites in the initial 0-5 year delivery period (i.e. the 5 year land supply) are viable based on the adopted assumptions.

1.30 Viability improves in both the medium term (6-10 years) and longer term (11-15 years) with all sites demonstrating positive viability.

1.31 In conclusion, the assessment of all proposed residential sites in Crawley has been undertaken with due regard to the requirements of the NPPF and the best practice advice contained in 'Viability Testing Local Plans'. It is considered that all sites are viable across the entire plan period taking account of the Affordable/Low Cost Housing requirements and all policy impacts of the Local Plan as well as the introduction of CIL in the future. It should be noted that in order to test a 'worst case' position the Developer Profit allowance is based on 20% return on GDV for all residential units and not on the split profit approach explained at Appendix 3.

1.32 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 Crawley Borough Council policy on the viability of any individual site or application of planning policy to affordable housing, CIL or developer contributions. Similarly the conclusions and recommendations in the report do not necessarily reflect the views of Crawley Borough Council.

# Executive Summary

## Employment Site Viability Appraisal Conclusions

1.33 The study undertook viability appraisals of all employment sites proposed in the Airport Zone sub-market area and the remainder of the Borough. The appraisals included the proposed CIL rate of £20sqm for industrial development and the allowance of £20sqm for ongoing planning obligation contributions.

1.34 It is considered that all employment sites proposed by the Local Plan are viable and deliverable over the plan period.

## Summary

1.35 The Whole Plan Viability Assessment, which has been undertaken in accordance with the requirements of the NPPF and in accordance with best practice contained in the Harman Report 'Viability Testing Local Plans', demonstrates that all residential and employment development proposed by the Local Plan is viable and deliverable taking account of all Local and National policy cost impacts including the latest sustainable construction requirements required to be implemented by the Government.

# 2 Introduction

2.1 The purpose of the study is to assess the overall viability of the Crawley Local Plan by assessing the economic viability of development being promoted by the Plan.

2.2 In order to provide a robust assessment, the study first uses generic development typologies to consider the cost and value impacts of the proposed plan policies and determine whether any additional viability margin exists to accommodate a Community Infrastructure Levy. The study then goes on to assess the viability of the key strategic sites which are key to the overall development strategy. The individual strategic site assessments take account of policies in the plan, affordable housing requirements, mandatory requirements to be introduced during the Plan period such as zero carbon homes, the potential Community Infrastructure Levy and site specific constraints to determine whether the proposed sites are viable and deliverable in the plan period.

## The NPPF and Relevant Guidance

2.3 The National Planning Policy Framework 2012 introduces a new focus on viability assessment in considering appropriate Development Plan policy. Paras 173-177 provide guidance on 'Ensuring Viability and Deliverability' in plan making. They state:-

*“173. Pursuing sustainable development requires careful attention to viability and costs in plan-making and decision-taking. Plans should be deliverable. Therefore, the sites and the scale of development identified in the plan should not be subject to such a scale of obligations and policy burdens that their ability to be developed viably is threatened. To ensure viability, the costs of any requirements likely to be applied to development, such as requirements for affordable housing, standards, infrastructure contributions or other requirements should, when taking account of the normal cost of development and mitigation, provide competitive returns to a willing land owner and willing developer to enable the development to be deliverable.*

*174. Local planning authorities should set out their policy on local standards in the Local Plan, including requirements for affordable housing. They should assess the likely cumulative impacts on development in their area of all existing and proposed local standards, supplementary planning documents and policies that support the development plan, when added to nationally required standards. In order to be appropriate, the cumulative impact of these standards and policies should not put implementation of the plan at serious risk, and should facilitate development throughout the economic cycle. Evidence supporting the assessment should be proportionate, using only appropriate available evidence.....*

*177. It is equally important to ensure that there is a reasonable prospect that planned infrastructure is deliverable in a timely fashion. To facilitate this, it is important that local planning authorities understand Borough-wide development costs at the time Local Plans are drawn up. For this reason, infrastructure and development policies should be planned at the same time, in the Local Plan. Any affordable housing or local standards requirements that may be applied to development should be assessed at the plan-making stage, where possible, and kept under review.”*

# 2 Introduction

2.4 In response to the NPPF, 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.

2.5 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."*

2.6 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

2.7 The guidance is not prescriptive about the use of particular financial assessment models but advises that a residual appraisal approach which tests the ability of development to yield a margin beyond all the test factors to determine viability or otherwise is widely used and accepted. The guidance sets out the key elements of viability appraisal and the factors that need to be considered to ensure robust assessment.

2.8 The current study adheres to the principles of the NPPF and 'Viability Testing Local Plans and sets out its methodology and assumptions in the following sections.

# 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 2013 and updated in 2015 (Appendix 1).

### 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 2014 and updated in 2015 (Appendix 2) In addition specific advice on reasonable allowances for abnormal site constraints was obtained from Gleeds and is outlined in the report.

### 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 Community Infrastructure Levy.

### 4) Policy Impact Assessment

3.4 The study will establish the policies proposed by the plan that 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, BREEAM standards and Zero Carbon impacts.

# 3 Methodology

## 5) Viability Appraisal – Whole Plan Assessment & Generic CIL Tests

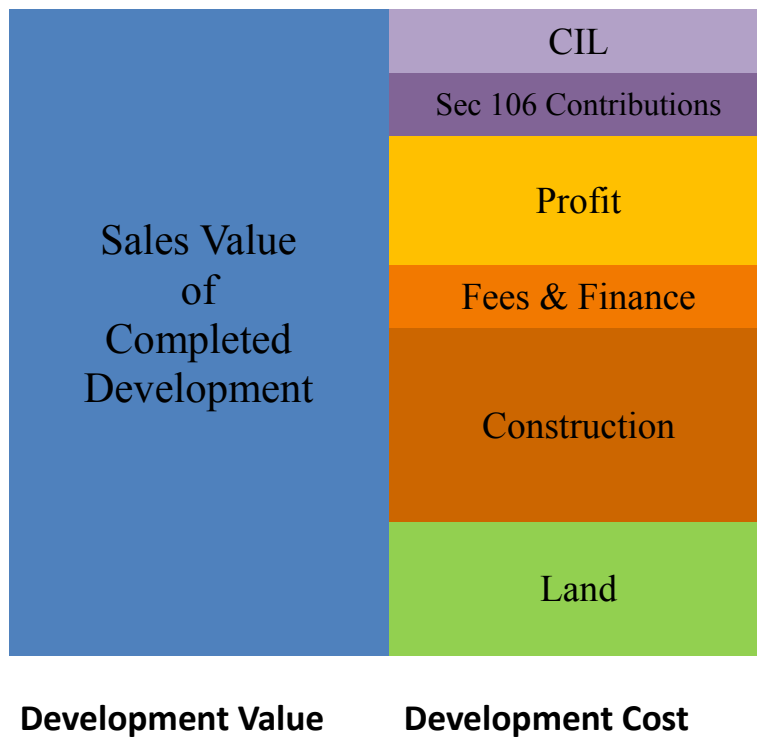
3.5 The study employs a bespoke model to assess Local Plan viability in accordance with best practice guidance (e.g. Local Housing Delivery group – Viability Testing Local Plans and the RICS – Financial Viability in Planning). The initial generic tests will be based on a series of development typologies 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 proposed by the plan 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 the introduction of CIL.

## 6) Site Specific Appraisal

3.6 The proposed allocated sites undergo very similar appraisal as outlined in the above methodology but site specific factors in terms of site area, housing numbers, housing mix, abnormal cost/mitigation factors are also assessed to ensure sites are deliverable. The tests also enable the draft CIL charges to be applied to determine if they are viable in the context of actual site delivery.

# 3 Methodology

## 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. The variable element of the value in residential development appraisal will be determined by the proportion and mix of affordable housing applied to the scheme. 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 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.



# 3 Methodology

## 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 (i.e. Zero or above) then the development being assessed is deemed viable. The principles of the model are illustrated below.

<b>Development Value (Based on Floor Area)</b> Eg 10 x 3 Bed 100sqm Houses x £2,200per sqm	<b>£2,200,000</b>
<b>Development Costs</b>	
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
<b>Total Costs</b>	<b>£2,175,000</b>
<b>Output</b>	
<b>Viability Margin</b>	<b>£50,000</b>
<b>Potential CIL Rate (CIL Appraisal only)</b>	<b>£50 sqm</b>

3.11 The model will calculate the gross margin available for developer contributions. The maximum rate of CIL that could be levied without rendering the development economically unviable is calculated by dividing the gross margin by the floorspace of the development being assessed.

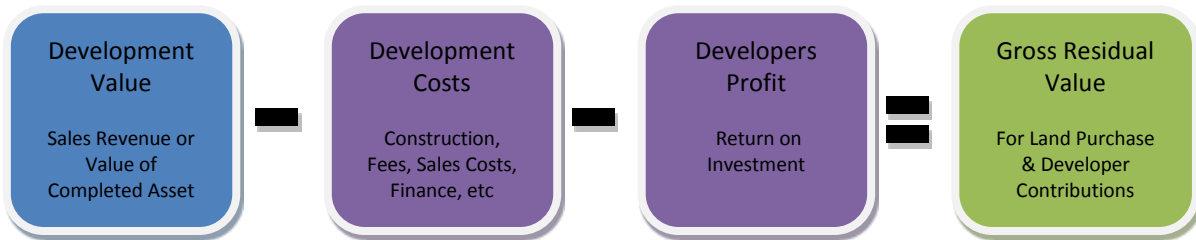
3.12 It is important to note that the model applies % proportions and further % tenure splits to the housing scenarios to reflect affordable housing discounts which will generate fractional unit numbers. The model automatically rounds to the nearest whole number and therefore some results appear to attribute 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.

# 3 Methodology

## Land Value Assumptions

3.13 It is generally accepted that developer contributions (Affordable Housing, CIL and S106), 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



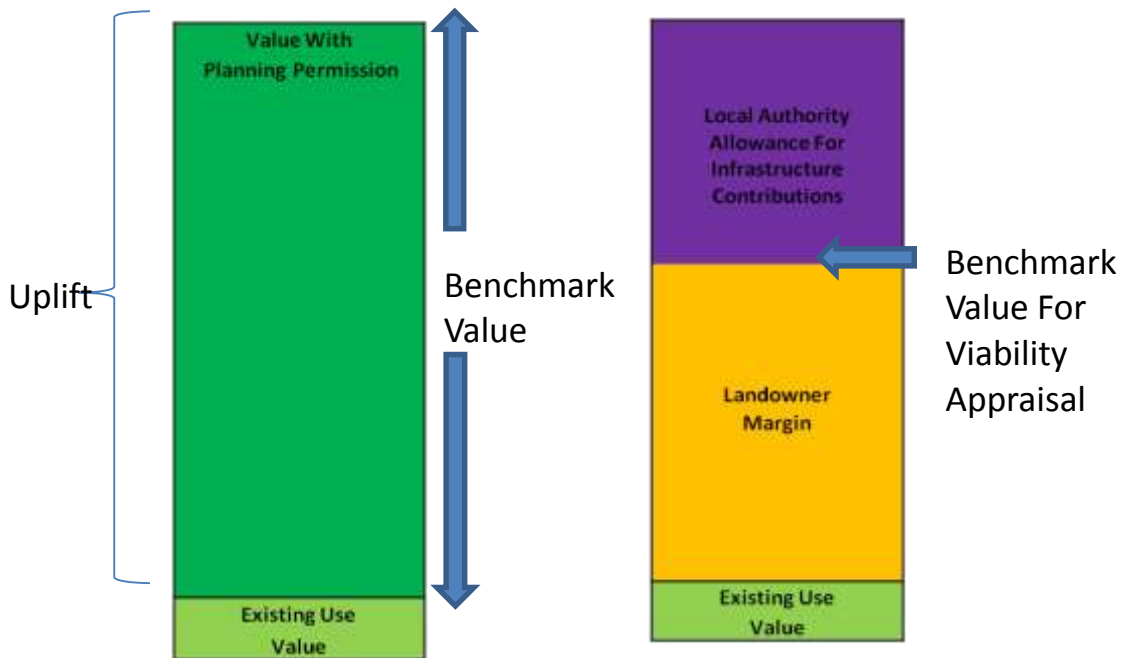
3.14 The approach to assessing the land element of the gross residual value is therefore the key to the robustness of any viability appraisal. There is no single method of establishing threshold land values for the purpose of viability assessment in planning but the NPPF and emerging best practice guidance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

### Stage 2 – Establishing Base Land Value



# 3 Methodology

## 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 Alternative Use Value is established by assessing the gross residual value 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 CIL 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 Methodology

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 Benchmarking is an approach which the Homes and Communities Agency refer to in 'Investment and Planning Obligations: Responding to the Downturn'. This guide states: *"a viable development will support a residual land value at a level sufficiently above the site's existing use value (EUV) or alternative use value (AUV) to support a land acquisition price acceptable to the landowner"*.

3.21 The NPPF has introduced a more stringent focus on viability in planning considerations. In particular para 173 states:-

*"To ensure viability, the costs of any requirements likely to be applied to development, such as requirements for affordable housing, standards, infrastructure contributions or other requirements should, when taking account of the normal cost of development and mitigation, provide competitive returns to a willing land owner and willing developer to enable the development to be deliverable"*

3.22 The NPPF recognises that, in assessing viability, unless a realistic return is allowed to a landowner to incentivise release of land, development sites are not going to be released and growth will be stifled. The most recent practical advice in establishing benchmark thresholds at which landowners will release land was produced by the Local Housing Delivery Group (comprising, inter alia, the Local Government Association, the Homes and Communities Agency and the House Builders Federation) in June 2012 in response to the NPPF. 'Viability Testing Local Plans' states:-

*"Another key feature of a model and its assumptions that requires early discussion will be the Threshold Land Value that is used to determine the viability of a type of site. This Threshold Land Value should represent the value at which a typical willing landowner is likely to release land for development, before payment of taxes (such as capital gains tax)".*

*Different approaches to Threshold Land Value are currently used within models, including consideration of:*

- *Current use value with or without a premium.*
- *Apportioned percentages of uplift from current use value to residual value.*
- *Proportion of the development value.*
- *Comparison with other similar sites (market value).*

*We recommend that the Threshold Land Value is based on a premium over current use values and credible alternative use values. The precise figure that should be used as an appropriate premium above current use value should be determined locally. But it is important that there is evidence that it represents a sufficient premium to persuade landowners to sell".*

# 3 Methodology

## NCS Approach to Land Value Benchmarking (Threshold Land Values)

3.23 NCS has given careful consideration to how the Threshold Land Value (ie the premium over existing use value) should be established.

3.24 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.

3.25 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.

***The Shinfield Appeal Decision Wokingham (APP/X0360/A/12/2179141) in January 2013 has provided clear support for this approach to establishing a ‘reasonable return the landowner’ under the requirements of the NPPF. The case revolved around the level of affordable housing and developer contributions that could be reasonably required and in turn the decision hinged on the land value allowed to the applicant as a ‘reasonable return’ to incentivise release of the site. The Inspector held that the appropriate approach to establishing the benchmark or threshold land value would be to split the uplift in value resulting from planning permission for the Alternative Use - 50:50 between landowner and the community.***

The Threshold Land Value is established as follows:-

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

3.26 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.

# 3 Methodology

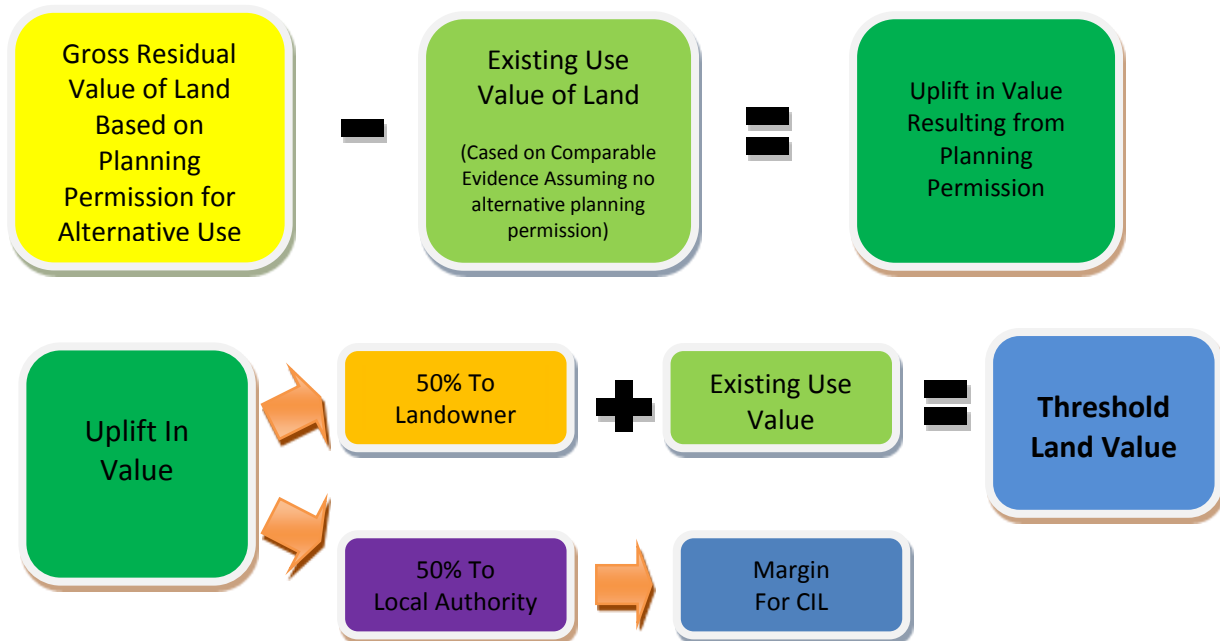
## Worked Example Illustrating % over Existing Use vs % Share of Uplift

3.27 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. Residential land is being sold in this area for £1,000,000 per Ha. For the purposes of CIL viability assessment what should this Greenfield site be valued at?

Using Fixed % 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.

### Benchmarking Based on % Share of Uplift in Land Value



# 3 Methodology

## Brownfield and Greenfield Land Value Benchmarks

3.28 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 CIL as it represents the highest uplift in value resulting from planning permission. The greenfield existing use is based on agricultural value.

3.29 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.

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

### Residential

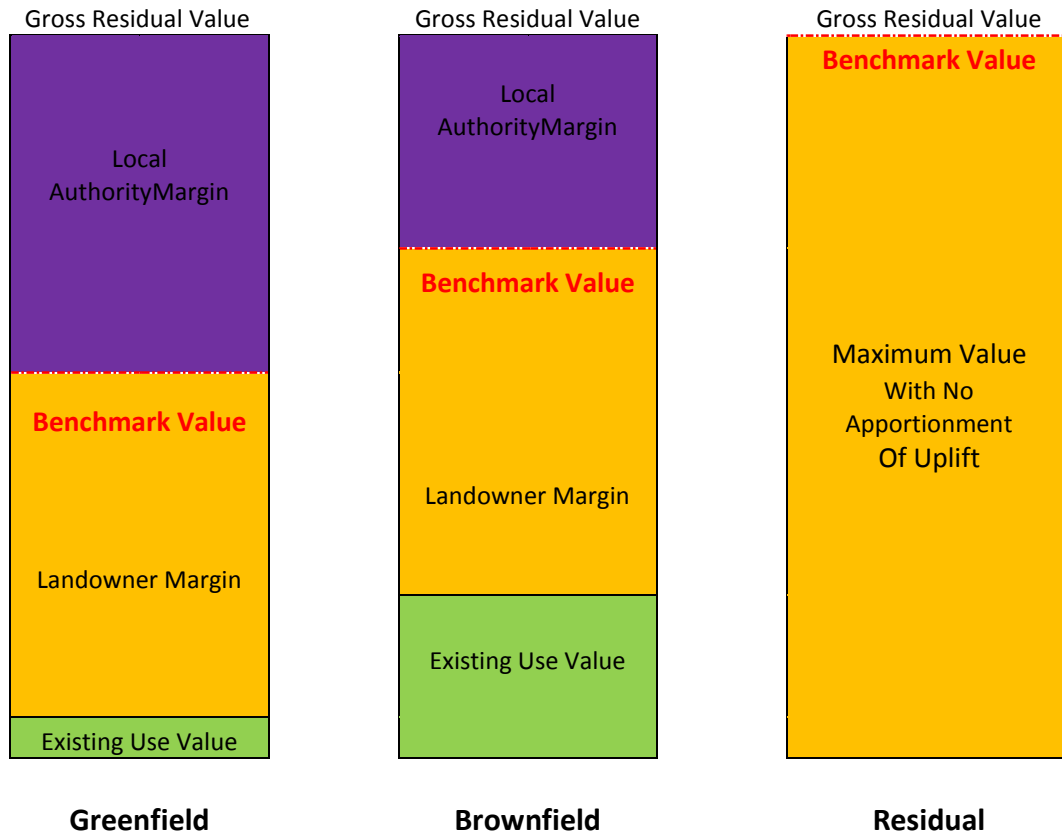
Benchmark 1	Greenfield	Agricultural – Residential (Maximum CIL Potential)
Benchmark 2	Brownfield	Industrial – Residential

### Commercial

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

3.31 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. The appraisals apply a 30% proportion of the relevant market plot value to the affordable housing plots.

# 3 Methodology



3.32 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.

3.33 Whilst brownfield land evaluation with a higher benchmark land value will necessarily indicate that less viability margin exists for CIL, it should be acknowledged that brownfield sites will often contain existing buildings which may be used to claim CIL relief in calculating the net CIL liability. This should be taken into account in setting CIL rates.



# 4 Appraisal Assumptions

## Development Categories

4.1 In order to ensure that the study is sufficiently comprehensive to inform a Differential Rate CIL system, all categories of development in the Use Classes Order will be considered, including a relevant sample of Sui Generis uses to reflect typical developments in the Crawley Local plan area, as follows :-

**Residential (C3)** – Based on varying residential development scenarios and factoring in the affordable housing requirements of the Authority. Land values are assessed based on house type plots. Sales values are assessed on per sqm rates.

**Commercial** – The following categories are considered. Land Values and Gross Development Values are assessed on sqm basis.

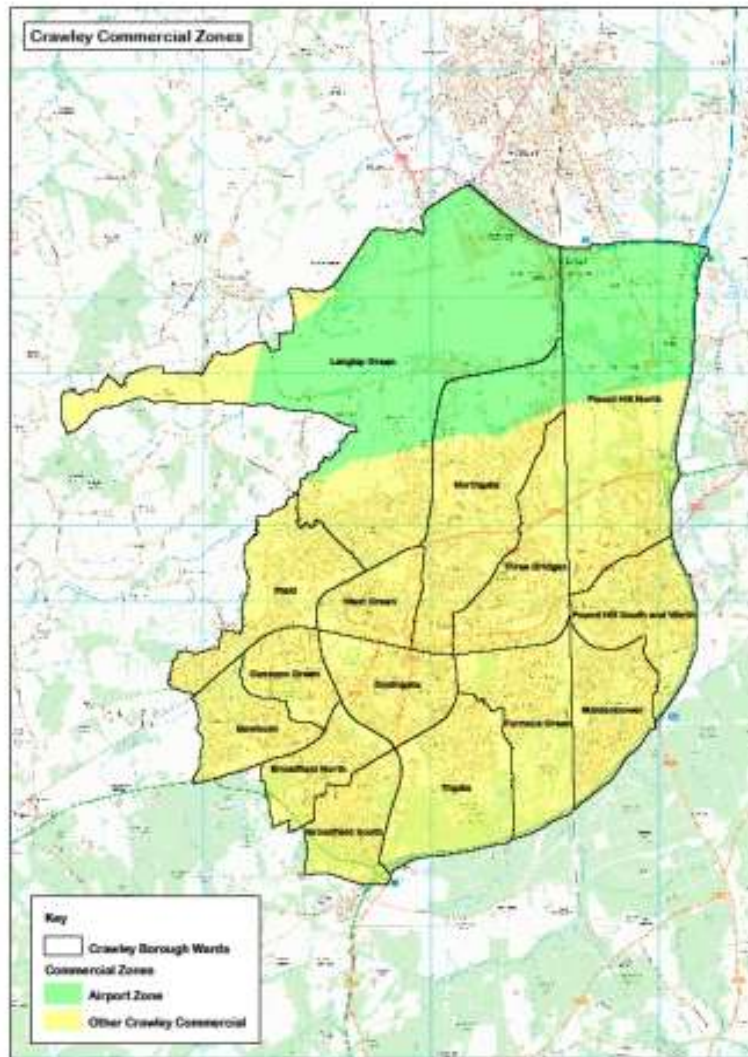
Industry (B1(b)B1(c), B2, B8)  
Offices (B1a)  
Food Supermarket Retail (A1)  
General Retail (A1, A2, A3, A4, A5)  
Hotels (C1)  
Residential Institutions (C2)  
Institutional and Community (D1)  
Leisure (D2)  
Agricultural  
Sui Generis – Vehicle Sales  
Sui Generis – Car Repairs

## Sub Market Areas and Potential Charging Zones

4.2 The Heb valuation study considered evidence of residential land and property values across the Crawley Borough and concluded that there were not sufficient distinctions between sales prices to justify testing based on differential sub-market areas.

4.3 The Heb valuation study concluded that Crawley could be divided into 2 principal sub-market areas for commercial land and property due to the influence of Gatwick Airport. These sub-market areas formed the basis for the viability testing and the Authority's draft CIL Charging Zones and are illustrated on the following plan:-

# 4 Appraisal Assumptions



Commercial Sub Markets/CIL Charging Zones

# 4 Appraisal Assumptions

## Affordable Housing

4.4 A series of residential viability tests have been undertaken, reflecting affordable housing delivery at the policy level of 40% and an additional delivery of 10% Low Cost Housing. The Council's Policy H4 requires 'approximately' 10% Low Cost Housing but the study seeks to test the worst case position to ensure the policy is entirely robust. 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.

<b>DEVELOPMENT SCENARIO</b>	Mixed Residential Development				Apartments	10
<b>BASE LAND VALUE SCENARIO</b>	Greenfield to Residential				2 bed houses	20
<b>DEVELOPMENT LOCATION</b>	Urban Zone 1				3 Bed houses	40
<b>DEVELOPMENT DETAILS</b>	100	Total Units			4 bed houses	20
<b>Affordable Proportion</b>	30%	30	Affordable Units		5 bed house	10
<b>Affordable Mix</b>	30%	Intermediate	40%	Social Rent	30%	Affordable Rent
<b>Development Floorspace</b>	6489	Sqm Market Housing	2,163			Sqm Affordable Housing
<b>Development Value</b>						
<b>Market Houses</b>						
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
<b>Intermediate Houses</b>						
		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
<b>Social Rent Houses</b>						
		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
<b>Affordable Rent Houses</b>						
		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					
<b>Development Value</b>						<b>£16,459,184</b>

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 Appraisal Assumptions

4.5 The following Affordable Housing Assumptions have been agreed for the purpose of the residential viability appraisals. The assumptions relate to the overall proportion of affordable housing, the tenure mix between Intermediate, Social Rent and Affordable Rent housing types. Finally 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.

Affordable Housing				
	Proportion %		Tenure Mix %	
		Intermediate	Low Cost	Affordable Rent
<b>Affordable Housing</b>	40%	30%		70%
<b>Low Cost Housing</b>	10%		100%	
<b>Blended Appraisal Assumptions</b>	50%	24%	20%	56%
<b>Transfer Values</b>		70%	85%	60%

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

## Development Density

4.7 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	2:1 (shopping parades, local centres etc.)
Food retail	3:1
Leisure	3:1
Hotels	2:1
Residential Institutions	1.5:1
Community Uses	1.5:1
Other Uses	2:1

# 4 Appraisal Assumptions

4.8 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.

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

Apartment	100 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

## House Types and Mix

4.10 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. The assessment is intended to provide a ‘worst case’ scenario as marginally larger unit types are unlikely to command higher plot values and so larger unit types will generally demonstrate improved levels of viability.

Apartment	60 sqm
2 Bed House	75 sqm
3 Bed House	88 sqm
4 Bed House	120 sqm
5 Bed House	150 sqm

These assumptions are considered to take account of the minimum garden standards adopted in Local Plan Policy of 45 – 90sqm for 2Bed – 5 Bed Dwellings.

4.11 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.

4.12 The generic residential appraisals adopt a general market housing mix and an affordable housing mix to reflect the aspirations of policy H3 of the Local Plan. The Mix assumptions are as follows.

Market Housing Mix	Apt	2 Bed	3 Bed	4 Bed	5 Bed
% Mix	25%	40%	20%	10%	5%
Affordable Housing Mix		1 & 2 Bed	3 Bed	4 Bed	
% Mix		75%	20%	5%	

# 4 Appraisal Assumptions

## Residential Development Scenarios

4.13 The study tests a series of residential development scenarios to reflect general types of development that are likely to emerge over the plan period.

4.14 For residential development, five scenarios were considered. The list does not attempt to cover every possible development in the Borough but provides an overview of residential development in the plan period.

Mixed Housing (Apt, 2, 3, 4 & 5 Bed Housing)	100 Units
2. Medium Scale Mixed Housing (Apt,2,3 & 4 Bed Housing)	60 Units
3. Intermediate Scale Mixed Housing (2,3 & 4 Bed Housing)	25 Units
4. Small scale Infill Housing (2 & 3 Bed Housing)	5 Units
5. Town Centre Apartments	35 Units

## Commercial Development Scenarios

4.15 The CIL appraisal tests all forms of commercial development broken down into use class order categories. For completeness the appraisal includes a sample of sui generis uses. A typical form of development that might emerge during the plan period, is tested within each use class.

4.16 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.

4.17 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.

4.18 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.

# 4 Appraisal Assumptions

Commercial Development Sample Typology					
Unit Size & Land Plot Ratio					
		Unit Size	Plot Ratio	Gross:Net	Sample
		Sqm	%		
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 A2 A3	300	150%	1.0	Roadside Retail Unit
Residential Inst	C2	4000	150%	1.2	Care Facility
Hotels	C3	3000	200%	1.2	Mid Range Hotel
Community	D1	200	150%	1.0	Community Centre
Leisure	D2	2500	300%	1.0	Bowling Alley
Agricultural		500	200%	1.0	Farm Store
Sui Generis	Car Sales	1000	200%	1.0	Car Showroom
Sui Generis	Vehicle Repairs	300	200%	1.0	Repair Garage

## Sustainable Construction Standards

4.19 It is acknowledged that the Code for Sustainable Homes are being replaced by changes to the Building Regulations based on the National Housing Standards. The latest government guidance is that forthcoming Building Regulation changes will not impose standards beyond an equivalent of CoSH 4 and the cost rates adopted in the study reflect this.

4.20 The Government's commitment to introducing Zero Carbon in 2016 is also considered by the study. The construction rates adopted based on CoSH4 have been adjusted further to reflect the impact of these requirements outlined in the Zero Carbon Hub cost analysis 'Meeting the Zero Carbon Standard' February 2014. In accordance with guidance received from Gleeds an additional cost of £40sqm has been added to apartment cost rates and £60sqm for general housing.

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

## Construction Costs

4.22 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.

The following residential construction rates are adopted in the study to reflect National Housing Standards, Zero Carbon and the accessible/adaptable dwelling and water efficiency standards of Crawley Borough Council.

# 4 Appraisal Assumptions

Construction Cost Sqm		
Apartments	1255	sqm
2 bed houses	1119	sqm
3 Bed houses	1119	sqm
4 bed houses	1119	sqm
5 bed house	1119	sqm

## Abnormal Construction Costs

4.23 Most development will involve some degree of exceptional or 'abnormal' construction cost. Brownfield development may have a range of issues to deal with to bring a site into a 'developable' state such as demolition, contamination, utilities diversion etc. Whole Plan and CIL Viability Assessment is based on generic tests and it would be unrealistic to make assumptions over average abnormal costs to cover such a wide range of scenarios.

It is considered better to bear the unknown costs of development in mind when setting CIL rates and not fix rates at the absolute margin of viability. Nevertheless, for the assessment of the SHLAA sites, where there is specific evidence of abnormal site constraint costs, these have been factored into the study. The abnormal assumptions are set out in the SHLAA Site Appraisal section.

## Policy Cost Impacts & Planning Obligation Contributions

4.24 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 determine if planned development is viable.

4.25 CIL is likely to replace some if not all planning obligation contributions. The second purpose of the study is to test the maximum margin available for CIL that is available from various types of development. CIL, once adopted, will represent the first 'slice' of tax on development. Planning Obligations may be used to top up contributions on a site specific basis subject to viability appraisal at planning application stage. Nevertheless the CIL Guidance 2014 (contained in the National Planning Practice Guidance) indicates that Authorities should demonstrate that the development plan is deliverable by funding infrastructure through a mixture of CIL and planning obligation contributions in the event that the Authority does not intend to completely replace planning obligations with CIL.



# 4 Appraisal Assumptions

4.26 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**

**£1000 per dwelling  
£20 per sqm commercial**

4.27 Historical evidence demonstrates that where planning obligations have been charged these amount to an average of £2056 per dwelling and £28 per sqm for commercial development. It is likely that CIL will replace a significant part of this funding requirement in the future. Therefore an ongoing allowance of £1000 per dwelling has been made to reflect potential future contributions for residential development. The allowance has been rounded down to £20sqm for commercial development.

4.28 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:-

**Policy ENV7 District Energy Network Connection - £500 per dwelling**

This cost relates to the additional cost of making housing 'network ready' for connection to future decentralised energy networks.

**Policy ENV9 Tackling Water Stress**

The cost impact of policy requirements in respect of water efficiency and the restriction of water usage to 110 l/p/d required by the policy are considered to be covered by the adopted construction cost rates (equivalent of CoSH Code 4) and do not require any additional allowance (see p4 of Gleeds Cost Report at Appendix 2).

**Policy CH5 Accessible and Adaptable Dwelling Standards**

Costs associated with meeting Category 2 Accessible and Adaptable Dwelling Standards are considered to be covered by adopted construction cost rates (equivalent of CoSH Code 4).

**BREAAM Standards**

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

In summary an additional cost of £1500 per dwelling has been allowed in the residential appraisals to meet planning obligation and policy impact costs (not already allowed for in the adopted construction rates).

# 4 Appraisal Assumptions

## Developers Profit

4.29 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. However it must be acknowledged that affordable housing does not carry the same speculative risk as it effectively pre-sold. There is significant evidence of this 'split profit' approach being accepted as a legitimate approach in Whole Plan Viability and Community Infrastructure Levy Examinations and Affordable Housing Sec 106 BC Appeals. Separate evidence supporting this approach will be submitted. This evidence is set out at Appendix 3 'NCS Approach to Developer Profit'

4.30 The residential viability assessments therefore test alternative approaches to developer profit allowance. Option 1 tests a 20% profit allowance on all units. Option 2 applies a 20% profit allowance to the market units and a 10% allowance to the affordable units and is considered to represent a reasonable approach to the 'competitive return' required by the NPPF. It should also be recognised that a 'competitive profit' will vary in relation to prevailing economic conditions, particularly in a buoyant location in the south east like Crawley, and will generally reduce as conditions improve, generally remaining within a 15-20% range for speculative property.

4.31 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.

## Property Sales Values

4.32 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 study uses up to date comparable evidence to give an accurate representation of market circumstances.

4.33 In view of recent Government policy changes that will impact on construction cost the study assumptions have been updated to April 2015. In order to provide a balanced comparison with the updated construction costs HEB Surveyors have undertaken updated market research to establish market sale values for residential property at April 2015. The research resulted in significant sales rate increases since the original study was undertaken in 2013 which are summarised in the following table. A more detailed summary of the update is attached at Appendix 1 – HEB Valuation Update Report April 2015.

# 4 Appraisal Assumptions

Sales Values					
Sales Value £sqm					
	Apartment	2 Bed	3 Bed	4 Bed	5 Bed
<b>Boroughwide</b>	3400	3200	3200	3100	3100

## Land Value Allowances

4.34 Following the land value benchmarking 'uplift split' methodology set out in Section 3 the following greenfield and brownfield existing 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) is also illustrated in the table below.

Land Value	£20000	Existing Greenfield (agricultural) Per Ha	Gross Residual Residential Value per Ha	Uplift	50%	
	£770,000					Brownfield (Industrial) Per Ha
	£3,738,343					

4.35 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% (£3,738,343 - £20,000)	=	£1,879,172 per Ha
Brownfields	£770,000	+	50% (£3,738,343 - £770,000)	=	£2,254,172 per Ha

Density Assumptions	Apt	2 Bed	3 Bed	4 Bed	5 Bed
	100	40	35	25	20
LAND VALUES (Plot Values)					
	Apt	2 Bed	3 Bed	4 Bed	5 Bed
Greenfield	£18792	£46979	£53691	£75167	£93959
Brownfield	£22542	£56354	£64405	£90167	£112709

# 4 Appraisal Assumptions

## Fees, Finance and Other Cost Allowances

4.36 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			1000	£ per Market Unit	
Interest	5.0%	12	Month Construction	6	Mth Sales Void
Arrangement Fee	1.0%	Cost			

# 5 Viability Appraisal Results

5.1 The results of the generic Viability Testing are set out in the tables on the following pages. In order to inform the preferred position of the Council the residential viability tests were undertaken on the assumption that schemes would deliver 40% Affordable Housing as well as 10% Low Cost Housing (though the latter would be subject to viability considerations at application stage). The small scale development of 5 units is under the prescribed threshold and includes no affordable or low cost housing.

5.2 The Viability assessments have been modelled on two alternative approaches to developer profit allowance. The first option assumes a 20% profit on GDV on all of the residential units. The second option assumes a 20% profit on the market housing units but a reduced profit of 10% on the affordable housing units.

5.3 Any positive figures confirm that the category of development tested is economically viable in the context of Whole Plan viability and the impact of planning policies. The level of positive viability indicates the potential additional margin for CIL charges. The residential tables illustrate the potential CIL rates in £ per sqm for each rate of affordable housing delivery. The commercial table illustrates the potential CIL rates across the whole Authority area.

5.4 Each category of development produces a greenfield and brownfield result in each test area. These results reflect the benchmark land value scenario. The first result assumes greenfield development which generally represents the highest uplift in value from current use and therefore will produce the highest potential CIL Rate. The second result assumes that development will emerge from low value brownfield land.

5.5 It should be recognised that the CIL Rates that have emerged from the study are maximum potential rates, based on optimum development conditions. The viability tests are necessarily generic and do not factor in site specific abnormal costs that may be encountered on many development sites. The tests produce maximum contributions for infrastructure and therefore ultimate CIL charges should consider an appropriate 'viability buffer' to account for additional unforeseen costs and site specific abnormals.

# 5 Viability Appraisal Results

## Maximum Residential CIL Rates per sqm

	Mixed Residential Development	Medium Size Mixed Development	Intermediate Mixed Development	Small Housing Development	Town Centre Apartments
<b>20% Profit on All Units</b>					
Greenfield	£232	£248	£247	£385	£257
Brownfield	£105	£125	£116	£248	£178
<b>20% Profit on Market Units 10% Profit on Affordable Units</b>					
Greenfield	£273	£292	£289	£385	£321
Brownfield	£154	£178	£168	£248	£249

5.6 The results of the viability testing clearly demonstrate that Affordable Housing delivery at the Council's policy target of 40% plus 10% Low Cost Housing enables delivery of residential development proposed by the Plan with a substantial viability margin for flexibility and potentially permitting a significant viability margin for CIL.

5.7 The testing showed that the Crawley Local Plan Policies are viable and all forms of residential development are capable of yielding significant levels of CIL. Based on a 20% profit return on all residential development (with no profit reduction for affordable housing), Greenfield development demonstrated viable CIL rate potential of £356-£419 per sqm, Brownfield rates varied from £208 - £345 per sqm. Using the split profit methodology with a reduced return of 10% on the affordable units, Greenfield development demonstrated viable CIL rate potential of £469-£548 per sqm, Brownfield rates varied from £318 - £475 per sqm.



## Maximum Commercial CIL Rates per sqm

Charging Zone/Base Land Value	Industrial (B1b B1c B2 B8)	Office (B1a)	Food Supermarket (A1)	General Retail (A1-A5)	Hotel (C1)
<b>General Zone</b>					
Greenfield	£40	-£188	£899	£171	-£785
Brownfield	-£42	-£259	£772	£109	-£857
<b>Airport Zone</b>					
Greenfield	£132	£43	£899	£171	£81
Brownfield	£44	-£29	£772	£109	£9

# 5 Viability Appraisal Results

## Maximum Commercial CIL Rates per sqm

Charging Zone/Base Land Value	Residential Institution (C2)	Community (D1)	Leisure (D2)	Agricultural (A1-A5)	Sui Generis
<b>General Zone</b>					
Greenfield	-£1,073	-1905	-588	-£442	Car Sales -£388
Brownfield	-£1,127	-1967	-717	na	Car Repairs – -703
<b>Airport Zone</b>					
Greenfield	-£1,073	-1905	-588	-£442	Car Sales -£409
Brownfield	-£1,127	-1967	-717	na	Car Repairs -£703

5.8 Food supermarket retail and general retail were assessed to be viable and capable of accommodating CIL in both greenfield and brownfield development scenarios. Food supermarket retail indicated potential rates of £772-£899 per sqm and general retail of £109-£171 per sqm for general greenfield and brownfield scenarios. The retail rates are not considered to vary between the Airport Zone and the rest of the Borough.

5.9 In the main Borough zone industrial development is only considered viable for CIL on greenfield sites. However in the Airport Zone both greenfield and brownfield sites are considered capable of yielding significant levels of CIL (£44-£132 per sqm). It was felt likely that office and hotel development was only likely to emerge on brownfield sites in the Airport Zone and the marginal viability of these categories indicated that CIL should not be charged.

# 6 SHLAA Site Viability Appraisals

6.1 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. It should be noted that in order to test a 'worst case' position the Developer Profit allowance is based on 20% return on GDV for all residential units and not on the split profit approach explained at Appendix 3.

Abnormal Site Development Costs	Budget Cost £/Hectare
<p><b>Archaeology</b></p> <p>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</p>	<b>£10,000</b>
<p><b>Flood Defence Works</b></p> <p>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</p>	<b>£25,000</b>
<p><b>Site Specific Access Works</b></p> <p>New road junction and S278 works, allowance for cycle path linking Major off-site highway works not allowed for.</p>	<b>£20,000</b>
<p><b>Land Contamination</b></p> <p>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</p>	<b>£25,000</b>
<p><b>Ground Stability</b></p> <p>Former Mining area. Allow raft foundations to dwellings, on 75% of sites Budget £2000 per unit x 35 units x 25% of sites</p>	<b>£20,000</b>
<p><b>Utilities</b></p> <p>Allowance for Infrastructure Upgrade</p>	<b>£80,000</b>
<p><b>Noise Insulation</b></p> <p>Acoustic outlets to ventilation, MHVR and no window vents</p>	<b>£100,000</b>
<p><b>Site Specific Biodiversity Mitigation/Ecology</b></p> <p>Allow for LVIA and Ecology surveys and mitigation and enhancement allowance.</p>	<b>£20,000</b>



# 6 SHLAA Site Viability Appraisals

6.2 Draft CIL charges are applied to the SHLAA site tests as well as the standard cost and value outlined in Section 4. The overall assumptions applied to the SHLAA site tests may be summarised as follows

SHLAA SITE APPRAISAL ASSUMPTIONS						
Affordable Housing						
Affordable Proportion%	50%	Note : this a blended rate that represents 40% Affordable 10% Low Cost with an Affordable Tenure Split of 70% Affordable Rent and 30% Intermediate				
Affordable Mix	24%	Intermediate	20%	Low Cost	56%	Affordable Rent
Transfer Value (% OMV)	70%	Intermediate	85%	Low Cost	60%	Affordable Rent
House Types	Apt	2 Bed	3 Bed	4 Bed	5 Bed	
House Sizes (Sqm)	60	75	88	120	150	
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		
Interest @	5.0%	12	Month Construction		6	Mth Sales Void
Arrangement Fee	1.0%	Cost				
Development Profit	Market Hsg	20.0%	of GDV	Afford Hsg	20%	of GDV
Density Assumptions	Apt	2 Bed	3 Bed	4 Bed	5 Bed	
	100	40	35	25	20	
LAND VALUES (Plot Values)						
	Apt	2 Bed	3 Bed	4 Bed	5 Bed	
Greenfield	14149	35371	40425	56594	70743	
Brownfield	17909	44771	51167	71634	89543	
Residual	28117	70293	80335	112469	140586	
SALES VALUES						
	Apt	2 Bed	3 Bed	4 Bed	5 Bed	
Sqm	3400	3200	3200	3100	3100	
CONSTRUCTION COSTS						
	Apt	2 Bed	3 Bed	4 Bed	5 Bed	
Sqm	1348	1203	1203	1203	1203	
COMMUNITY INFRASTRUCTURE LEVY					100	£ Per Sqm

# 6 SHLAA Site Viability Appraisals

Abnormal Costs							
Archlogy (Ha)	Flood (Ha)	Access (Ha)	Contam (Ha)	Sec 106 & Policy Costs(unit)	Ground Stability (Ha)	Utilities Upgrade (Ha)	Noise Insulation (Ha)
10000	25000	20000	25000	3500	20000	80000	100000

Land Value			
	18000	Existing Greenfield (agricultural) Per Ha	
	770000	Brownfield (Industrial) Per Ha	
	2811717	Gross Residual Value per Ha	Uplift <span style="border: 1px solid black; padding: 2px;">50%</span>

Greenfield Housing Mix	Apt	2 Bed	3 Bed	4 Bed	5 Bed
% Mix	25%	40%	20%	10%	5%

Greenfield Affordable Housing Mix	Apt	2 Bed	3 Bed	4 Bed
% Mix	25%	50%	20%	5%

Brownfield Apartment Mix	Apt	2 Bed	3 Bed	4 Bed	5 Bed
% Mix	100%				

Brownfield Affordable Apartment Mix	Apt	2 Bed	3 Bed	4 Bed
% Mix	100%			

6.3 Where the unit numbers projected for the individual sites indicated a density of around 100 units per Ha or above the SHLAA appraisals assume that the site will be developed solely as apartments. For all greenfield sites and other brownfield sites with lower densities a mix of housing was assumed in line with the Council's policy aspirations as set out in the above assumptions.

6.4 A small number of brownfield sites were considered capable of accommodating mixed housing development and therefore the 'greenfield' housing mix set out above was applied to the following appraisals :-

# 6 SHLAA Site Viability Appraisals

## 0-5 Year

1 Breezehurst Drive  
43 Ifield Community College  
298 Goffs Park Depot  
312 Kilnmead Car Park  
188 WSCC Professional Centre, Furnace Green

## 11-15 Year

58 Central Sussex College  
63 Ambulance Station, Ifield Avenue  
TBC Land South of Barclays Bank

## Delivery Timescale

6.5 The delivery of housing and sites has been considered over a plan period of 15 years and broken down into 5 year delivery periods from 0-5 years, 6-10 years and 11-15 years. Larger sites have assumed phased delivery across all three periods.

6.6 Based on forecasts from industry research (Savills for regional residential market trends and Gleeds for construction cost forecasts) the following broad assumption adjustments have been applied to the values and costs in the study in the three appraisal periods. There will obviously be significant fluctuations over a 15 year plan period with higher residential value growth likely in the early part of the cycle but the figures are considered to represent reasonable estimates for the purpose of the Viability Appraisal.

Assumption Adjustments			
Residential Values Av Annual Increase	2015-2030	3%	
Construction Costs Av Annual increase	2015-2030	2%	
Delivery Period	0-5 Years	6-10 Years	11-15 Years
Value Adjustment	0%	27%	46%
Costs Adjustment	0%	17%	29%

6.7 No adjustment is applied to current costs and values in the 0-5 year period or the generic CIL appraisals as required by the NPPF and Harman guidance. A period of 8 years of compounded adjustments is applied to the 6-10 year period of the SHLAA appraisals and 13 years for the 11-15 year period. Adjustments are similarly applied to CIL Rates and Abnormal Site Constraint Costs in the SHLAA appraisals.

# 6 SHLAA Site Viability Appraisals

6.8 The site specific testing indicates whether individual development sites are considered viable on a 'traffic light' red, green, amber approach (having applied draft CIL rates as well as all of the policy cost impacts outlined in Section 4).

**Green** – Site considered 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.

# 6 SHLAA Site Viability Appraisals

Viability Results		Zone 1		0-5 Year Delivery	
Ref	Site	Size	Units	Type	Viability
1	Breezehurst Drive	4.40	112	Brownfield	£1,007,268
4	Southern Counties, West Green	0.63	218	Brownfield	£1,830,891
38	Land Adj to Desmond Anderson	2.40	100	Greenfield	£1,251,057
286	North East Sector Neighbourhood, Pound Hill	46.30	1900	Greenfield	£16,720,090
197	Fairfield House, West Green Drive, West Green	0.65	93	Brownfield	£811,345
57	Brunel Place, West of Southgate Avenue, Southgate	0.14	22	Brownfield	£202,719
177	Crossways, Balcombe Road, Pound Hill	0.26	7	Brownfield	£150,612
191	Oak Tree Filling Station, 114 London Road, Northgate	0.18	17	Brownfield	£131,619
216	Former TSB Site, Russell Way, Three Bridges	0.30	40	Brownfield	£362,016
254	Langley Green Youth Centre, Lark Rise, Langley Green	0.17	9	Brownfield	£193,644
264	6 - 10 Ifield Road, West Green	0.09	14	Brownfield	£117,978
406	110-112 Spencer's Road, W Green	0.07	10	Brownfield	£90,128
401	19-21 Queensway N Gate	0.04	10	Brownfield	£90,128
400	Kingsland Court, Three Bridges	0.19	10	Brownfield	£93,371
25	5 - 7 Brighton Road, Southgate	0.44	48	Brownfield	£412,407
166	Alpine Works, Oak Road, Southgate	0.13	6	Brownfield	£129,096
326	Crawley Community Church, 40 Springfield, Southgate	0.06	8	Brownfield	£172,128
328	Former Oak, Maple & Beech House, Waterside Close, Bewbush	0.30	14	Brownfield	£129,003
43	Ifield Community College, Ifield	3.90	125	Brownfield	£1,124,184
294	15 - 29 Broadway, Northgate	0.12	57	Brownfield	£504,264
295	Land Adj to Langley Green Primary School, Langley Drive, Langley Green	0.55	30	Greenfield	£436,981
292	Zurich House, East Park, Southgate	0.30	59	Brownfield	£521,957
298	Goffs Park Depot, Old Horsham Road, Southgate	0.90	30	Brownfield	£297,073
45	Tinsley Lane Playing Fields, Three Bridges	6.00	138	Greenfield	£1,386,084
69	Telford Place/Southgate Drive, Southgate	0.75	99	Brownfield	£863,689
312	Kilnmead Car Park, Northgate	0.52	40	Brownfield	£383,978
53	Traders Market, High Street, West Green	0.04	6	Brownfield	£129,096
405	Land off Clitherow Gdns & Malthouse Rd	0.11	6	Brownfield	£88,982
188	WSCC Prof Centre, Furnace Green	2.30	76	Brownfield	£988,940
203	Gales Place, Three Bridges	0.32	9	Brownfield	£128,019
297	Crawley Station	0.89	300	Brownfield	£2,464,485
402	County Buildings	0.58	50	Brownfield	£390,724
403	Land North of the Boulevard	0.70	50	Brownfield	£116,597

# 6 SHLAA Site Viability Appraisals

Viability Results		Zone 1		6-10 Year Delivery	
Ref	Site	Size	Units	Type	Viability
370	Henty Close	0.33	24	Greenfield	£806,060
204	21, 25, 27 & 29 Tushmore Lane, Northgate	0.60	63	Brownfield	£1,283,911
58	Central Sussex College	0.04	36	Brownfield	£776,506
291	Longley Building, East Park, Southgate	0.27	48	Brownfield	£1,085,307
63	Ambulance Station Ifield	0.40	16	Brownfield	£211,401
288	102-112 London Road & 2-4 Tushmore Lane, Northgate	0.39	44	Brownfield	£411,214
289	116-136 London Road, Northgate	0.56	64	Brownfield	£164,290
311	Parkside Car Park	0.05	10	Brownfield	£230,777
341	Breezehurst Drive Playing Fields, Bewbush	4.80	65	Greenfield	£2,162,227
155	Dingle Close/Ifield Road, Rear Gardens, West Green	0.70	18	Greenfield	£604,545
156	Snell Hatch/Ifield Road, Rear Gardens, West Green	0.50	15	Greenfield	£508,599
195	2-12 Friston Walk, Ifield	0.53	21	Greenfield	£705,302
310	The Old Vicarage Church Walk	0.08	18	Brownfield	£409,793
372	Bittingham House, Orchard House	0.13	24	Brownfield	£546,390
371	1-7 Pegler Way	0.12	20	Brownfield	£447,089

Viability Results		Zone 1		11-15 Year Delivery	
Ref	Site	Size	Units	Type	Viability
290	138-144 London Road Northgate	0.27	27	Brownfield	£716,258
54	Fire Station, Ifield Road, West Green	0.35	48	Brownfield	£1,548,346
52	NES Residual Land (North), Pound Hill	5.44	75	Greenfield	£2,406,650
373	NES Residual Land to the Southeast Heathy Farm, Pound Hill	4.30	75	Greenfield	£2,220,380

# 7 Employment Site Appraisals

7.1 The study has undertaken specific Viability Appraisals of the employment 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
<b>Site Specific Access Works</b>	<b>£20,000</b>
New road junction and S278 works, allowance for cycle path linking	
Major off-site highway works not allowed for.	

7.2 The following assumptions are applied to the employment site appraisals, dependent on the relevant sub-market area (i.e. Airport Zone and remainder of the Borough).

Zone 1 Assumptions						
Sales Values Sqm			Construction Costs Sqm			
Industrial	B1b B1c B2 B8	1000	Industrial		555	
Land Values per Sqm						
		Greenfield	Brownfield	Residual		
Industrial		395000	770000	770000	Uplift	50%
Agricultural		20000		20000		
Development Sample Unit Size & Land Plot Ratio						
	Unit Size Sqm	Plot Ratio %	Gross:Net		Sample Development	
Industrial		50%	1		Factory Unit	

The development profit allowance has been reduced from a 'speculative risk' rate of 17.5% to a 10% allowance to reflect the likelihood that most development will be occupier led where only management/opportunity cost needs to be reflected.

# 7 Employment Site Appraisals

Fees & Rates					
Abnormal Costs				£ sqm	
Professional Fees @		8.0%		Build Cost	
Legal Fees		0.5%		GDV	
Statutory Fees		0.6%		Build Cost	
Sales/Marketing Costs		2.0%		GDV	
Contingencies		5.0%		Build Cost	
Planning Obligations				£	
CIL				£ sqm	
Interest @	5.0%	12	Month Build	3	Mth Sale Void
Arrangement Fee	1.0%	Cost			
Development Profit		10.0%	of GDV		

Zone 2 Assumptions	
Sales Values Sqm	
Industrial B1b B1c B2 B8	1250
Land Values per Sqm	
	Greenfield    Brownfield    Residual
Industrial	900500    1275500    1781000
Agricultural	20000       20000
	Uplift    50%

Zone 1 Community Infrastructure Levy Sqm	
Industrial	£0
Office	
Food Retail	£80
Other Retail	£80

Zone 2 Community Infrastructure Levy Sqm	
Industrial	£20
Office	
Food Retail	£80
Other Retail	£80



# 7 Employment Site Appraisals

7.3 The site specific testing indicates whether individual development sites are considered viable on a 'traffic light' red, green, amber approach (having applied draft CIL rates as well as all of the policy cost impacts outlined in Section 4).

**Green** – Site considered 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 infrastructure contributions or (c) landowner/developers accept some reduced profit return to stimulate the development.

7.4 Of the three sites that demonstrate negative viability, the GSK site has an abnormal cost allowance of £197,700. In normal circumstances these costs would be deducted from the site value (£5,074,300) and this would balance the negative viability of -£194,837. The remaining two sites demonstrate negative viability because the model calculates the site value allowance based on site area (where it is generally assumed that industrial development will yield 50% floorspace). However both sites have relatively small development floorspace in relation to site area are those where the density (11% and 13% coverage respectively). In reality this would be reflected in a reduced site value.

Ref	Site	Area Ha	Floorspace	Viability	Abnormals	Site Value
5	Former GSK Site, Phase One (CR/2013/0255/FUL)*	6.59	25317	-£194,837	£197,700	£5,074,300
16	Southways (Planning Permission)	2.83	3241	-£1,743,292	£84,900	£2,179,100
19	Forge Wood (North East Sector) Employment Land	3.93	5000	-£716,396	£117,900	£1,552,350

7.5 It is considered that all employment sites proposed by the plan, taking account of the comments in 7.4 above, are viable and deliverable in the plan period.

# 7 Employment Site Appraisals

Zone 1						
Employment Sites						
Traj Ref	Site	Employment Site Size (Ha)	Benchmark	Viability	Total Abnormal Costs	Land Value
1	Astral Towers/The White House, Betts Way (marketed as Nova)	2.7	Brownfield	£135,334	£81,000	£2,079,000
2	Premiere House, Betts Way	0.75	Brownfield	£1,429,885	£22,500	£577,500
4	Manor Royal Opportunity Area, Welland Medical Site*	1.8	Greenfield	£1,083,753	£54,000	£711,000
5	Former GSK Site, Phase One (CR/2013/0255/FUL)*	6.59	Brownfield	-£194,837	£197,700	£5,074,300
6	Former GSK Site, Phase Two (CR/2014/0415/ARM)*	7.7	Brownfield	£1,119,574	£231,000	£5,929,000
7	SECAMB, Faraday Road, Manor Royal*	0.46	Brownfield	£105,963	£13,800	£354,200
8	Former BOC Edwards site, Manor Royal	2.62	Brownfield	£582,522	£78,600	£2,017,400
9	Former BOC Edwards site (Residual Land)	1.2	Brownfield	£266,804	£36,000	£924,000
10	Thales, Gatwick Road	4.1	Brownfield	£153,875	£123,000	£3,157,000
11	Segro West, Manor Royal	2.1	Brownfield	£1,700,679	£63,000	£1,617,000
12	E2 Crawley Business Quarter*	1.43	Brownfield	£1,269,423	£42,900	£1,101,100
13	Former Pasta Reale Site, Fleming Way	1.2	Brownfield	£266,804	£36,000	£924,000
15	Harwoods Jaguar and Land Rover, Crawley	0.48	Brownfield	£110,570	£14,400	£369,600
16	Southways (Planning Permission)	2.83	Brownfield	-£1,743,292	£84,900	£2,179,100
17	Tilgate Forest Business Centre Vacant Plots	0.9	Brownfield	£228,376	£27,000	£693,000
18	Wingspan Club Residual Land	0.64	Greenfield	£404,824	£19,200	£252,800
19	Forge Wood (North East Sector) Employment Land	3.93	Greenfield	-£716,396	£117,900	£1,552,350
20	Sutherland House	1.64	Brownfield	£364,632	£49,200	£1,262,800
21	Land at Russell Way	0.9	Brownfield	£200,103	£27,000	£693,000
22	Land at Jersey Farm (Site A)	0.7	Greenfield	£755,837	£14,000	£630,350
23	Land at Jersey Farm (Site B)	2.18	Greenfield	£2,353,891	£43,600	£1,963,090
24	Land at Little Dell Farm (Not Safeguarded)	0.21	Greenfield	£232,658	£4,200	£189,105
25	Hydehurst and Windyridge Farms (Not Safeguarded)	2.32	Greenfield	£2,505,059	£46,400	£2,089,160
0	Land at Rowley Farm (Not Safeguarded)	1.25	Greenfield	£1,349,708	£25,000	£1,125,625

# 8 Conclusions

## Residential Viability Assessment

8.1 The Crawley Local Plan sets out the strategy to deliver housing over the plan period. The residential viability testing illustrated that, in general terms, housing development proposed in all locations in the Crawley Local Plan is viable and can accommodate significant CIL charges whilst maintaining the Council’s Affordable Housing aspirations. The assessment of residential land and property values indicated that the Authority did not possess significant residential sub-markets that warrant differential value assumptions being made in the Whole Plan Viability Assessment or a differential rate approach to CIL based on geographical zones.

8.2 The study tests affordable housing delivery in line with the Council’s policy of 40% with a tenure split of 30% Intermediate/70% Affordable Rent. In addition, and to assess a worst case position, the Council’s aspiration for 10% Low Cost Housing is also included in the assessment assumptions. The study considered five different residential development scenarios to reflect the type of residential that might emerge over the plan period. These included mixed residential (apartments, 2, 3, 4 and 5 bed housing), various scales of mixed housing development and low rise apartments.

8.3 The assessments were also undertaken using an alternative approach to developer’s profit return as explained at Section 4.30. The viability results are summarised in the table below. The figures represent the margin of viability per sqm taking account of all development values and costs, plan policy impact costs and having made allowance for a competitive return to the landowner and developer. In essence a positive margin confirms whole plan viability and the level of positive margin represents the potential to introduce additional CIL charges.

Maximum Residential CIL Rates per sqm					
	Mixed Residential Development	Medium Size Mixed Development	Intermediate Mixed Development	Small Housing Development	Town Centre Apartments
<b>20% Profit on All Units</b>					
Greenfield	£356	£366	£360	£428	£419
Brownfield	£208	£220	£209	£290	£345
<b>20% Profit on Market Units 10% Profit on Affordable Units</b>					
Greenfield	£469	£485	£474	£430	£548
Brownfield	£318	£337	£321	£290	£475

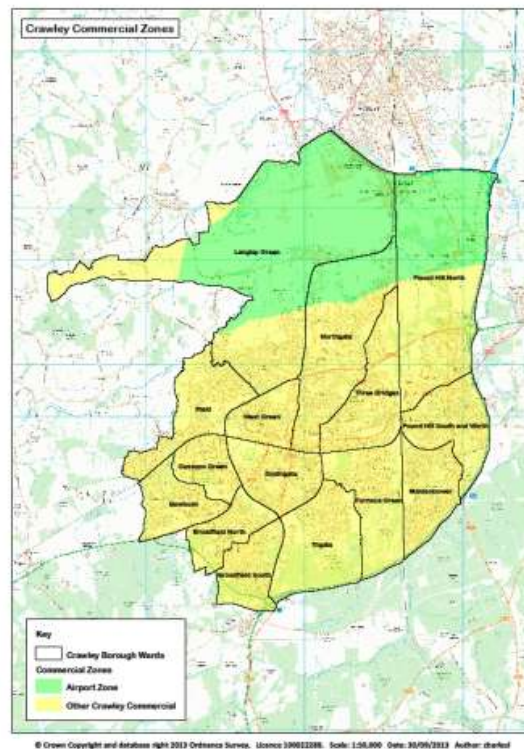
# 8 Conclusions

8.4 The results of the viability testing clearly demonstrate that Affordable Housing delivery at the Council's policy target of 40% plus 10% Low Cost Housing enables delivery of residential development proposed by the Plan and still permits a significant viability margin for CIL.

8.5 The testing showed that the Crawley Local Plan Policies are viable and all forms of residential development are capable of yielding significant levels of CIL. Based on a 20% profit return on all residential development (with no profit reduction for affordable housing), Greenfield development demonstrated viable CIL rate potential of £356-£419 per sqm, Brownfield rates varied from £208 - £345 per sqm. Using the split profit methodology with a reduced return of 10% on the affordable units, Greenfield development demonstrated viable CIL rate potential of £469-£548 per sqm, Brownfield rates varied from £318 - £475 per sqm.

## Key Findings – Commercial Viability Assessment

8.6 The assessment of commercial land and property values indicated that the Authority did possess differential commercial sub-markets that warrant differential value assumptions being made in the Whole Plan Viability Assessment and a differential rate approach to CIL based on geographical zones. The sub-market areas/CIL Zones are illustrated on the map below, demonstrating an area of higher land and property value around Gatwick Airport.



Commercial CIL Zone Map

# 8 Conclusions

The viability appraisals also illustrated that many categories of commercial development are not viable in current market circumstances in Crawley, which is evident by the lack of activity in these sectors.

 <b>Maximum Commercial CIL Rates per sqm</b>					
Charging Zone/Base Land Value	Industrial (B1b B1c B2 B8)	Office (B1a)	Food Supermarket (A1)	General Retail (A1-A5)	Hotel (C1)
<b>General Zone</b>					
Greenfield	£40	-£188	£899	£171	-£785
Brownfield	-£42	-£259	£772	£109	-£857
<b>Airport Zone</b>					
Greenfield	£132	£43	£899	£171	£81
Brownfield	£44	-£29	£772	£109	£9

<b>Maximum Commercial CIL Rates per sqm</b>					
Charging Zone/Base Land Value	Residential Institution (C2)	Community (D1)	Leisure (D2)	Agricultural (A1-A5)	Sui Generis
<b>General Zone</b>					
Greenfield	-£1,073	-1905	-588	-£442	Car Sales -£388
Brownfield	-£1,127	-1967	-717	na	Car Repairs -703
<b>Airport Zone</b>					
Greenfield	-£1,073	-1905	-588	-£442	Car Sales -£409
Brownfield	-£1,127	-1967	-717	na	Car Repairs -£703

8.7 Food supermarket retail and general retail were assessed to be viable and capable of accommodating CIL in both greenfield and brownfield development scenarios. Food supermarket retail indicated potential rates of £772-£899 per sqm and general retail of £109-£171 per sqm for general greenfield and brownfield scenarios. The retail rates are not considered to vary between the Airport Zone and the rest of the Borough. We would recommend some caution in respect of food retail rates. Whilst the study has made a reasoned assessment of land values, transactional evidence is low due to lack of activity in the sector. As specific retail projects emerge it is likely that landowners will expect significant premiums in order to release sites, which may reduce viability levels significantly and this should be taken into consideration in rate setting.

# 8 Conclusions

8.8 In the main Borough zone industrial development is only considered viable for CIL on greenfield sites. However in the Airport Zone both greenfield and brownfield sites are considered capable of yielding significant levels of CIL (£44-£132 per sqm). It was felt likely that office and hotel development was only likely to emerge on brownfield sites in the Airport Zone and the marginal viability of these categories indicated that CIL should not be charged.

8.9 It should be stressed that whilst the generic appraisals showed that general employment development outside the Airport Zone (i.e. B1, B2 and B8 Industrial, Office and Distribution) is not viable based on the test assumptions, this does not mean that this type of development is not deliverable. For consistency a full developer's profit allowance was included in all the commercial appraisals. In reality many employment developments are undertaken direct by the operators. If the development profit allowance is removed from the calculations, then employment development would be viable and deliverable.

8.10 With respect to CIL, all other forms of non-residential development illustrated negative viability and it is recommended that these categories should be zero rated.

## CIL Appraisal Conclusions

8.11 The study demonstrates that most of the 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. It is further considered that significant additional margin exists, beyond a reasonable return to the landowner and developer to accommodate CIL charges.

8.12 In terms of CIL, it is recommended that there are insufficient variations in residential value to justify a differential zone approach to setting residential CIL rates across the Crawley Local Plan area.

8.13 Taking account of the viability results, the generic nature of the tests, a reasonable buffer to allow for additional site specific abnormal costs we would recommend a Boroughwide residential CIL rate of £100 per sqm. This is well within both the greenfield and brownfield viability margins but also takes account of the delivery of development on the allocated sites.

Residential CIL	
Boroughwide	£100sqm

8.14 It is recommended that a two zone approach is taken to setting commercial CIL rates to reflect the potential for industrial development around Gatwick Airport to generate infrastructure funding through CIL. The viability results indicate that there should be no differential in retail rates between the zones. Food supermarket and general retail viability is significantly different but in view of the difficulties in separately defining supermarkets for the purpose of charging CIL it is recommended a single rate of £80 sqm is adopted to take account of the viability of both categories.

# 8 Conclusions

8.15 The development strategy for the Airport Zone is primarily brownfield so it is recommended that rates are set to reflect a reasonable buffer from the brownfield viability with a recommended rate of £20sqm for Industrial development.

Airport Zone	
Industrial B1(b) B1(c) B2 B8	£20sqm
Retail A1-A5	£80sqm
All Other Non Residential Uses	£0sqm
Boroughwide	
Retail A1-A5	£80
All Other Non Residential Uses	£0sqm

## CIL Revenue Potential

8.16 In order to estimate residential CIL over the plan period, the recommended CIL rate is applied to an average dwelling size of 90 sq metres for eligible dwellings. In Crawley it is estimated that 1394 dwellings do not currently have planning permission and would therefore potentially be liable for CIL. Assuming 40% of these are exempt as affordable Housing, the projected CIL liable floorspace is 836 x 90sqm = 87840sqm

8.17 The floorspace projections for commercial categories of development that would be liable for CIL in the Airport Zone, over the plan period, are set out in the table below. It should be noted that due to aviation safeguarding the level of industrial floorspace that may be permitted is limited (and may only relate to extensions to existing premises). At this stage therefore no firm allowance has been made for new floorspace and if Crawley decides to pursue the adoption of CIL it may decide not to adopt a separate commercial zone around the airport.

Charging Zone	Category	CIL Rate	Eligible Floorspace	CIL Revenue
Boroughwide	Residential	£100	75240	£7,524,000
Boroughwide	Retail	£80	4300	£344,000
Airport	Industrial	£20	0	£0
			<b>Total</b>	<b>£7,868,000</b>

# 8 Conclusions

## SHLAA Site Viability Appraisal Conclusions

8.18 The viability testing of proposed residential sites in Crawley has been undertaken, accounting for the following policy impacts and key assumptions:-

- Greenfield or Brownfield Development
- Delivery Timescale
- Affordable Housing Delivery of 40% plus Low Cost Housing delivery of 10%
- Key Planning Policy Cost Impacts (Renewable Energy, Water Recycling, Zero Carbon etc)
- Community Infrastructure Levy
- Residual Planning Obligation Allowances
- Site Specific Abnormal Costs and Mitigation Factors

8.19 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.

8.20 The study illustrated that all greenfield and brownfield sites in the initial 0-5 year delivery period (i.e. the 5 year land supply) are viable based on the adopted assumptions.

8.21 Viability improves in both the medium term (6-10 years) and longer term (11-15 years) with all sites demonstrating positive viability.

8.22 In conclusion, the assessment of all proposed residential sites in Crawley has been undertaken with due regard to the requirements of the NPPF and the best practice advice contained in 'Viability Testing Local Plans'. It is considered that all sites are viable across the entire plan period taking account of the Affordable/Low Cost Housing requirements and all policy impacts of the Local Plan as well as the introduction of CIL in the future.

8.23 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 Crawley Borough Council policy on the viability of any individual site or application of planning policy to affordable housing, CIL or developer contributions. Similarly the conclusions and recommendations in the report do not necessarily reflect the views of Crawley Borough Council.



# 8 Conclusions

## Employment Site Viability Appraisal Conclusions

8.24 The study undertook viability appraisals of all employment sites proposed in the Airport Zone sub-market area and the remainder of the Borough. The appraisals included the proposed CIL rate of £20sqm for industrial development and the allowance of £20sqm for ongoing planning obligation contributions.

8.25 Only three sites demonstrated negative viability. The GSK site has an abnormal cost allowance of £197,700. In normal circumstances these costs would be deducted from the site value (£5,074,300) and this would balance the negative viability of -£194,837. The remaining two sites demonstrate negative viability because the model calculates the site value allowance based on site area (where it is generally assumed that industrial development will yield 50% floorspace). However both sites have relatively small development floorspace in relation to site area are those where the density (11% and 13% coverage respectively). In reality this would be reflected in a reduced site value and the sites would be viable and deliverable

8.26 In conclusion it is considered that all employment sites proposed by the Local Plan are viable and deliverable over the plan period.

## Summary

8.27 The Whole Plan Viability Assessment, which has been undertaken in accordance with the requirements of the NPPF and in accordance with best practice contained in the Harman Report 'Viability Testing Local Plans', demonstrates that all residential and employment development proposed by the Local Plan is viable and deliverable taking account of all Local and National policy cost impacts including the latest sustainable construction requirements required to be implemented by the Government.

**Heb Surveyors  
Valuation Update Report  
April 2015**

**Gleeds Update  
Construction Cost Study  
April 2015**

## **NCS Approach to Developer Profit Return**

## Developers Profit Allowance

Two alternative approaches to Developer's profit return on residential development have been modelled in the appraisals.

The first option assumes a 20% profit on GDV on all of the residential units. The second option assumes a 20% profit on the market housing units but a reduced profit of 10% on the affordable housing units.

Developers 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. However it must be acknowledged that affordable housing does not carry the same speculative risk as it effectively pre-sold. There is significant evidence of this 'split profit' approach being accepted as a legitimate approach in Whole Plan Viability and Community Infrastructure Levy Examinations and Affordable Housing Sec 106 BC Appeals.

As a rule, and based on experience of the approach accepted in recent Local Plan Examinations (Horsham and Hastings in 2015), CIL Examinations (Worthing and Eastbourne 2014) and Sec 106 BC Appeals (East Lindsey 2015) the appropriate profit return on affordable housing is considered to be 6% to reflect a 'contractor only' profit level. Nevertheless in response to the concerns expressed by the HBF and in an attempt to reach consensus a level of 10% is used in the appraisals.

The appraisals have been undertaken with the following developer profit allowances :-

1. 20% Return on GDV of all residential units
2. 20% Return on GDV of Market residential units and 10% Return on GDV on Affordable units.

## Evidence In Support of the Differential Profit Allowance Approach

### 1. Homes and Communities Agency DAT Tool

The Homes and Communities Agency Development Appraisal Tool August 2013 which is designed to inform the viability of affordable housing, comments on this issue at para 4.14 as follows :-

#### *4.14 Developers Overheads and return for risk*

*A fixed overhead amount plus a percentage of open market capital value (including private rented units). A percentage of affordable housing build costs: as the developer is holding no sales risk then we expect a contract type profit based on costs.*

The guidance goes on to provide an example appraisal, indicating recommended profit allowances as follows :-

## DEVELOPERS OVERHEAD AND RETURN FOR RISK

Open Market Housing (% of CV)	15.0%
Affordable Housing (%)	3.7%

### 2. Worthing CIL Examination Report November 2014

The Viability Assessment supporting the CIL proposals advocated a 20% return on market housing and a 6% return on affordable housing. The Inspector commented as follows :-

*“Moreover, I accept the Council’s contention that a developer’s profit of significantly less than 20% is appropriate for, effectively pre-sold, affordable housing given the minimal risk.”*

### 3. Sec 106 BC Appeal Ref: APP/W1145/Q/13/2204429 Redrow Homes (Full Report Attached) Former Holsworthy Showground, Trewyn Road, Holsworthy.

In upholding the Appeal against the Affordable Housing requirements of Torridge District Council the Inspector commented :-

*“There are various ‘rules of thumb’ which are quoted when discussing developer profit, and these tend to vary between 15% and 25%. That would tend to support a mid range figure in the region of 20% for a ‘run of the mill’ site. But equally it is often a ‘rule of thumb’ that affordable housing carries less risk and that a profit of about 6% is reasonable. That is not the aspiration of the developer here. However, I have heard no convincing evidence that the risks of affordable housing provision on this site are such that 20% across the board profit is reasonable. Adoption of 20% for open market and 6% affordable in this case would produce a ‘blended’ margin of about 18%.”*

### 4. Sec 106 BC Appeal Ref: APP/D2510/Q/14/2228037 Langridge Homes (Full Report Attached) Land adjacent to 52 South Road, Chapel St Leonards, Skegness, Lincolnshire.

In upholding the Appeal against the Affordable Housing requirements of East Lindsey District Council the Inspector commented :-

*“The Council also indicated that the cases it had been involved with showed that a nil profit was expected on affordable housing. That is something I find very surprising. It is generally accepted that a lower profit would be acceptable because of the low risk attached to affordable housing provision, but low does not equate to nil. I consider that a return on affordable housing in the region of 5% or 6% is reasonable. The Three Dragons report referred to above assumes a return on affordable housing of 5%, and the Homes and Communities Agency assumes 6% as the ‘norm’.*

*The Council suggested that this is a location where developers 'on the ground' are taking lower profits because that is what the location can bear. Indeed, it may be that eventual outturn on investment is lower than anticipated because this is, as described at the hearing, a 'marginal area' for development. But that does not justify starting out by seeking a low profit. To do so would risk no development at all, and that would conflict with the impetus behind S106 BA applications, which is to get houses built. Taking this topic in the round I concur with the Appellant that a 20% starting point on market housing is reasonable, and that a 6% return on affordable housing is similarly reasonable."*