

Colchester Borough Council

Community Infrastructure Levy



Report

Update to Review of Evidence Base

Prepared by

 **BPS**
Chartered Surveyors

October 2015

CONTENTS

Sections	Page No
Section 1 - Introduction	4
Section 2 - Report Summary	5
Report Findings	6
Zone 1	6
Zone 2	6
Section 4 - Method Statement	8
Changes in House Prices	10
Method 1	10
Method 2	12
Changes in Construction Costs	15
Section 5 - Appraisals Results	16
Appraisals Outputs – Sensitivity Testing Zone 1	16
Appraisals Outputs – Sensitivity Testing Zone 2	18
Impact on Land Value	21
Appendices	
Appendix 1 - Post Code Map Colchester	23
Appendix 2 - Raw Land Registry Data	24
Appendix 3 - Total value of properties by zone, year and sample size	27
Appendix 4 - Percentage difference between new and existing properties by property type, zone and year	32
Appendix 5 - Sample sizes existing and new build properties	33

Appendix 6 - Appraisals	34
-------------------------	----

Appendix 7 - Appraisal assumptions – Zone 1	38
---	----

Appendix 8 - Appraisal assumptions – Zone 2	39
---	----

Tables

Table 1 - Analysis of Existing Housing Transactions	11
---	----

Table 2 - Analysis of New Build Housing Transactions	11
--	----

Table 3 - Analysis of House price Increases – Existing Stock	12
--	----

Table 4 - Zone 1 – Changes in Value	13
-------------------------------------	----

Table 5 - Zone 2 – Changes in Value	14
-------------------------------------	----

Table 6 - Sensitivity Testing CIL levels – Zone 1	16
---	----

Table 7 - Sensitivity Testing Affordable Housing and S106 levels Zone 1	17
--	----

Table 8 - Sensitivity Testing CIL levels – Zone 2	18
---	----

Table 9 - CIL Charging levels – Impact on Residual Value	20
--	----

Charts

Chart 1 - Changes in BCIS All Tender Price Index	15
--	----

Chart 1 - Changes in Residual Value Compared to CIL	19
---	----

Charging Levels

SECTION 1 - INTRODUCTION

- 1.1 BPS Chartered Surveyors has been instructed by Colchester Borough Council (CBC) to update the evidence base used to test the generic viability of development in the Colchester administrative area and on the basis of these findings to advise as to a viable charging schedule in respect of the introduction of the Community Infrastructure Levy.
- 1.2 In preparing this report we have had regard to Community Infrastructure Levy (Amendment) Regulations 2015 which came into force in March 2015 together with further updates which came into effect in June 2015. We have also had regard to CIL Statutory Guidance - June 2014 and earlier versions of this guidance. The statutory framework for CIL is embodied within the Community Infrastructure Levy (Amendment) Regulations 2014.
- 1.3 BPS was initially instructed by the Council in 2012 to review the Colchester Community Infrastructure Levy (CIL) Evidence Base Report (EBR) produced by Roger Tym & Partners (RT) which has been used to set the proposed CIL charge tariffs in the Council's Draft Charging Schedule. We subsequently prepared a report dated October 2012.
- 1.4 The Council has yet to adopt a CIL Charging Schedule and in view of the period of time that has elapsed since our 2012 report BPS has been instructed to update our evidence base and suggested Charging Schedule.
- 1.5 BPS has been advised that the Council is no longer contemplating pursuing a levy in respect of all forms of retail development given the weak current market for this use.

SECTION 2 - REPORT SUMMARY

- 2.1 BPS has been instructed by the Council to update our assessment of viability in relation to the residential costs and values adopted in our viability testing set out in our October 2012 report into possible CIL charging levels.
- 2.2 The original report methodology has been reviewed and updated to take account particularly of the changes in local residential values and build costs over the intervening period to the end of Q3 2014, but also in response to comments from the Council and Savills.
- 2.3 Our 2012 report considered two zones namely urban and rural. The Council has since considered these designations and has taken the view that defining development purely by reference to location either inside or outside the urban area could potentially fail to reflect real division between development on Brownfield sites and development on previously undeveloped and Greenfield land. The zones have therefore been reworked as **Zone 1** broadly equating to Brownfield sites and **Zone 2** equating to previously undeveloped Greenfield land.
- 2.4 For a variety of reasons the Council wishes to promote development on Brownfield sites which accords with National planning policy guidance and more specifically meets the following requirements:
 - a) The Council's desire to promote re-use and regeneration of previously developed Brownfield sites.
 - b) The marked contrast in apparent land values for Brownfield and Greenfield sites reflecting their different planning status.
 - c) The often significant difference in site density and infrastructure requirements between developments in these two environments.
 - d) A reflection of the significant levels of development coming forward on land not previously developed but which lies within the urban area.
- 2.5 Elements of the earlier methodology have been retained, in that it sought to differentiate house price data by postcode using urban and rural areas which remains a valid basis for establishing the relative development viability of Brownfield and Greenfield development. However adopting these revised definitions would effectively capture development on previously undeveloped sites within the urban area and similarly previously developed areas within the rural post code areas and as such is much more reflective of the viability facing these form of development.

Report Findings

- 2.6 It is quite apparent that there have been modest increases in house prices for all house types, with price growth running at a higher overall level in rural locations compared to urban locations over the past 2¾ years. For new build units in rural locations these increases are 21% (caution small sample sizes) and 7% for urban and for existing housing stock 6% and 3% respectively.
- 2.7 By contrast construction costs have risen equally in both locations at a rate amounting to 25%.
- 2.8 The net effect of these changes is that rural development has become marginally more viable whereas urban development has become less viable and these changes are reflected in our appraisal findings and also in our recommendations concerning CIL charging levels.
- 2.9 Following the methodology adopted in preparation of our 2012 report we have modelled hypothetical developments from which we draw the following conclusions:

Zone 1

- 2.10 The combined impact of increasing costs when compared to some lower levels of house price growth show that developments are now less viable than in 2012.
- 2.11 Our modelling identifies that only a relatively modest level of CIL could be supported by developments but this would potentially impact on viability in some instances and could limit the ability of schemes to deliver other planning obligations such as affordable housing. Because CIL is a fixed development cost we are of the view that given the very low levels indicated by our modelling the Council and developers would be better served through individual assessments of viability and focussing on the potential of sites to deliver affordable housing and site specific S106 contributions rather than risk making development none viable.
- 2.12 Therefore in conclusion we recommend a zero CIL charge for development falling within the boundary of Zone 1.

Zone 2

- 2.13 By contrast improvements in overall development viability for rural development suggested a CIL of £185 per sq.m could be supported whilst still delivering a policy compliant level of affordable housing at 20%.

- 2.14 However we have also considered the requirement that CIL charges should not be set at the margins of viability and so consequently we have examined the relative impact of charges at a number of levels to assess their impact on over all development costs. We conclude that CIL at £185 per sq.m would not represent more than 10% of total development costs and therefore to change this impact would require significant changes to the level of CIL sought.
- 2.15 We take the view that it is appropriate to apply a reduced rate of £150 per sq.m as this would provide approximately a 3% reduction total construction costs which should be seen in context with a typical development contingency of 5%.
- 2.16 We have further sought to contrast the cost per unit represented by CIL at £150 per sq.m which averages across all unit types at a figure of £13,750. We take the view that this total compares well with the level of S.106 contributions typically achieved by the Council on recent consents for rural development and so consequently we take the view that a charge of £150 per sq.m provides for a suitable buffer against the charge being set at the margins of viability.

SECTION 3 - METHOD STATEMENT

- 3.1 The CIL report prepared by BPS on behalf of the council in September 2012 has been updated to take account particularly in changes in local residential values and build costs over the intervening period but also in response to comments from the Council and Savills.
- 3.2 The previous BPS report followed the approach initially proposed by Roger Tym & Partners in looking at two potential charging zones, zone 1 urban and zone 2 rural.
- 3.3 Further examination of development trends and market evidence suggests that these zones should now be modified to equate to Zone 1 centred on Colchester town centre and the surrounding urban areas and Zone 2, rural Colchester or more specifically sites which do not have a history of previous development.
- 3.4 We have maintained our original approach to analysing housing sales data based on a separation of postcodes into predominantly urban areas and those in predominantly rural areas as these continue to be relevant in terms of identifying the economics of development of Brownfield land which is characterised by development in the urban areas and Greenfield development which is generally focussed on development in the largely rural areas.
- 3.5 The key reason for the change of definition is that it is quite possible for development to occur on sites with no development history but which fall within the urban area. Similarly there are areas of former development within the rural areas and as such the revised definitions more accurately reflect the characteristics of the development type not simply location within a purely geographical area
- 3.6 This modified approach has been adopted to reflect a number of considerations:
 - a) The Council's desire to promote re-use and regeneration of previously developed Brownfield sites.
 - b) The marked contrast in apparent land values for Brownfield and Greenfield sites reflecting their different planning status.
 - c) The often significant difference in site density and infrastructure requirements between developments in these two environments.

- d) A reflection of the significant levels of development coming forward on land not previously developed but which lies within the urban area.

Changes in House Prices

- 3.7 In order to update our assessment of development viability we have revisited house prices as this is an area where there remains a degree of volatility. It was agreed with the Council that the most appropriate basis for assessing change would be to secure information on all residential transactions through procuring all relevant records from the Land Registry.
- 3.8 The Land Registration Act 2002 makes registration of all property sales compulsory therefore it would be possible to secure a complete picture of all transactions since the preparation of our last report and this would provide a clear indication of prices and price movements over the intervening period.
- 3.9 The Land Registry supplied information for all relevant postcodes within the Colchester administrative area. The transactional information was then separated into areas where new development was seen as being typified by Greenfield development or by Brownfield development. Appendix 1. includes a sector post code map which shows how postcodes have been distributed between rural and urban areas.
- 3.10 Land Registry transactions must by law be registered within 3 months of the transaction. The Land Registry data is generally a quarter behind registrations therefore there is a potential delay between date of the actual transaction and the availability of data for analysis purposes. However this is common to most predictive analysis where sales data is used as the data for analysis. Therefore the data represents the most reliable and comprehensive an up to date basis for determining house price trends.
- 3.11 We have revisited house prices and two alternative methods have been considered as a basis from which to update our original 2012 study. It is possible to simply take new build values and apply them to our analysis , however there is a considerable risk in using information drawn from very limited sample sizes, therefore we considered alternative methods of analysis which were likely to generate a more consistent and reliable outcome. These methods are discussed below.

Method 1

- 3.12 A detailed analysis of Land Registry of all transactions in the relevant Colchester postcodes from 2012 to the end of Q3 2014 has been undertaken. Both existing property sales and new build sales have been analysed separately. We have also analysed the variances in the values of new build and existing property sales by housing type as well as referencing the

change in prices over time for both zones. Appendix 2 includes the raw data for all CO postcodes for 2014. Appendix 3 includes the total value of properties for the relevant CO postcodes for Zone's 1 and 2, for 2012 - 2014 to derive Average Value by Property Type.

3.13 The house prices derived from these figures are then summarised in the 2 tables below for existing and new build properties for Zones 1 and zone 2. The key figures and percentage changes (see 3.15) have then been inputted into the appraisal.

Table 1: Analysis of Existing Housing Transactions

EXISTING					
	4 bed House - 120m ²	3 bed House - 95m ²	2 bed House - 80m ²	2 bed Flat - 65m ²	Total
Q's 1,2 & 3 2014 Zone 1	£293,182	£209,995	£172,542	£129,923	£192,299
2013 Zone 1	£274,784	£194,587	£171,713	£115,032	£187,400
2012 Zone 1	£287,345	£190,204	£161,613	£113,770	£185,887
Q's 1,2 & 3 2014 Zone 2	£358,148	£210,013	£195,350	£135,976	£269,137
2013 Zone 2	£327,996	£202,034	£179,951	£122,688	£250,739
2012 Zone 2	£334,977	£199,996	£188,283	£134,867	£254,983

Table 2: Analysis of New Build Housing Transactions

NEW BUILD					
	4 bed House - 120m ²	3 bed House - 95m ²	2 bed House - 80m ²	2 bed Flat - 65m ²	Total
Q1&Q2 2014 Zone 1	£265,404	£206,445	£212,600	£152,741	£209,298
2013 Zone 1	£238,013	£200,384	£195,328	£142,821	£194,136
2012 Zone 1	£253,136	£207,721	£187,588	£126,983	£193,857
					small sample size
Q1,Q2, Q3 2014 Zone 2	£377,547	£226,392	£200,700	£143,125	£236,941
2013 Zone 2	£318,659	£214,229	£230,047	£178,791	£275,128
2012 Zone 2	£306,031	£250,666	£239,319	£137,083	£244,973

Note

Where data is flagged in orange it denotes that it has been derived from a relatively small number of transactions which makes conclusions drawn less reliable.

3.14 Tables 4 and 5 below show in numbered rows. The following paragraphs provide analysis and explanation which is referenced to the row number in order to assist comprehension.

- 3.15 In order to calculate the new values to be used in the updated appraisal (4. in Tables 4 & 5 below), the price per sq.m (2. Tables 4 & 5) was derived for each house type by dividing the 2014 average value for each house type for existing properties (1. Tables 4 & 5), by the floor area for that property type. This price per sq.m based on existing values was then multiplied by the average percentage difference between the years 2012, 2013 and 2014 in new build values by housing type compared to existing values for the same period (3). Appendix 4 summarises the percentage difference between new and existing properties, by property type, zone and year, averaged to derive this percentage (3).
- 3.16 The percentage difference multiplier between new and existing properties (3) has been applied, rather than using the actual values for new house sales, due to the sample sizes for existing property sales being significantly larger and therefore much more reliable. Specifically for Zone 1, samples were 6 times higher, whilst for Zone 2 where numbers of new build sales were particularly limited sales of existing properties were 20-60 times greater than for new build. For Zone 2 in particular this was important as the sample for 2014 only included 60 properties, 32 of which were detached. See Appendix 5 for comparative sample sizes of existing and new sales.
- 3.17 Through looking to establish the approximate margin above second hand unit values it would then be possible to take a much broader sample size from across all postcodes mitigating the impact of potentially anomalies.
- 3.18 In looking at house prices on a post code level, prices have been based on the much larger samples of sales of existing stock to which the identified margin or premium for new build per unit type has then been applied.

Method 2

- 3.19 Using the same updated Land Registry data, the percentage change in values between 2012 and 2014 for existing properties, as summarised in the table below, has been applied to the new house values used in the original report and appraisal to derive an updated figure. Changes in existing house prices were used due to the increased reliability from a significantly larger sample size.

Table 3: Analysis of House Price Increases – Existing Stock

Existing	Detached	Semi-detached	Terraced	Flat/ maisonette	Total
% Ch 2014 V 2012 Zone 1	2%	10%	7%	14%	3%
% Ch 2014 V 2012 Zone 2	7%	5%	4%	1%	6%

Analysis

- 3.20 Tables 4 and 5 below highlight that whilst methods 1 and 2 represent a route to generating figures close to actual sales values for Zone 1, (appraisal values -1% below actual values method 1 compared to -5% lower than actual values method 2), for Zone 2 the percentage difference between the updated 2012 figures from the original appraisal are on average -21% lower than actual values using method 2 as compared to only -4% difference using method 1.
- 3.21 For Zone 2 sites both methods were compared with the new build prices for the average of 2013 and 14 to increase the size of the sample whilst for Brownfield sites the 2014 sample was considered sufficiently large enough to enable direct comparison.
- 3.22 Therefore as the results derived from Method 1 are generally very close to actual new house prices evidenced in the area as in Tables 1 and 2 below, the focus has been on updating our appraisals using this method.

Table 4 - Zone 1 - changes in value

Zone 1		4 bed House - 120m ²	3 bed House - 95m ²	2 bed House - 80m ²	2 bed Flat - 65m ²	Average
1	Existing Q's 1,2 & 3 2014 Zone 1	£293,182	£209,995	£172,542	£129,923	£201,411
2	Price per sq m	£2,440	£2,210	£2,160	£2,000	
3	Average % Diff New/Existing Zone 1 based on 3 years	-12%	3%	18%	18%	
4	Values of new build derived from above figures used in appraisal	£258,872	£217,297	£203,352	£153,112	£208,158
5	Actual new build Values 2014	£265,404	£206,445	£212,600	£152,741	£209,298
6	% difference values used in Appraisal (4) V New Build Values 2014 (5)	-2%	5%	-4%	0%	-1%
7	2012 Report figures New Build	£234,000	£204,250	£157,500	£130,000	£181,438
8	2012 report figures New Build * average change in values 2012-14 for existing properties (to give larger sample size)	£238,753	£225,503	£168,152	£148,457	£199,819
9	Updated Report figures (8) V New Build Values 2014 (5)	-10%	9%	-21%	-3%	-5%

Table 5 - Zone 2 - changes in value

Zone 2		4 bed House - 120m ²	3 bed House - 95m ²	2 bed House - 80m ²	2 bed Flat - 65m ²	Average
1	Existing Q's 1,2 & 3 2014 Zone 2	£358,148	£210,013	£195,350	£135,976	£224,872
2	Price per sq m	£2,980	£2,210	£2,440	£2,090	
3	Average % Diff New/Existing Zone 2 based on 3 years	-2%	16%	17%	18%	
4	Calc values of new build from appraisal	£350,900	£242,955	£227,806	£159,830	£245,373
5	Actual new build Values 2014/13 to give reasonable sample size	£348,103	£220,310	£215,374	£160,958	£256,035
6	% difference values used in Appraisal (4) V New Build Values 2014/13 (5)	1%	10%	6%	-1%	-4%
7	2012 Report figures	£245,760	£213,750	£165,410	£143,325	£192,061
8	2012 report figures New * average change in values for existing properties (to give larger sample size)	£262,760	£224,456	£171,618	£144,504	£202,723
9	% difference values used in Appraisal (4) V Updated 2012 Report figures (8)	-25%	2%	-20%	-10%	-21%
Adjusted % as small sample size resulted in larger % difference existing V new of 27%, as compared with any other property type. Therefore applied the average of % diff 3 bed house and 2 bed flat Zone 2 and same as difference in Zone 1 (17%)						

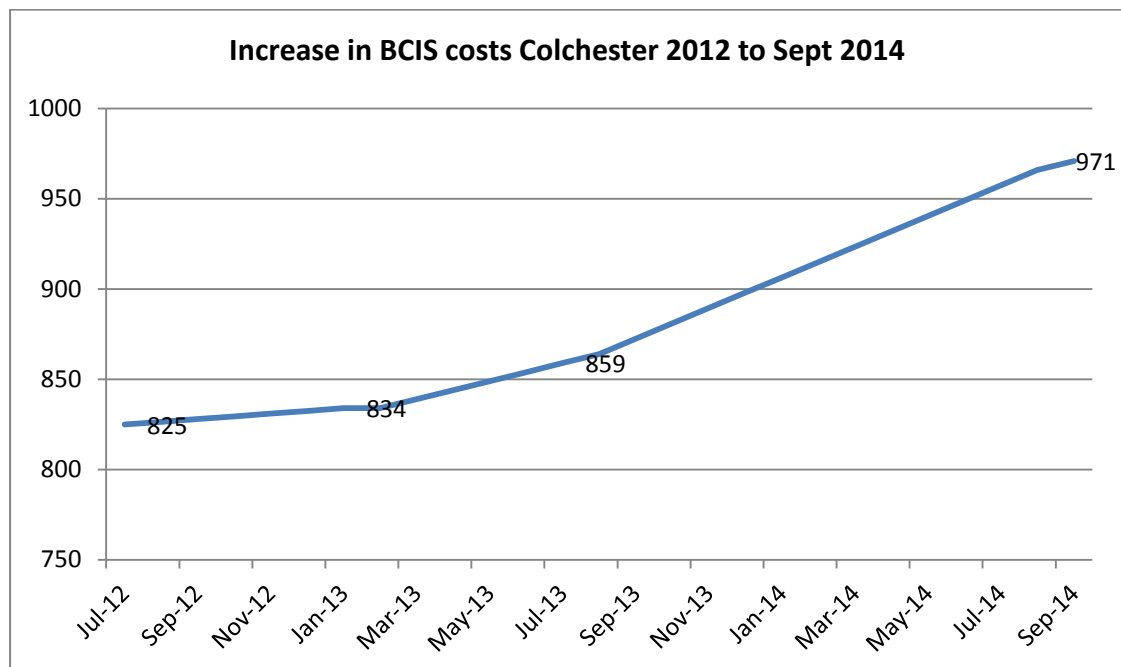
3.23 Private house prices by Zone have initially been calculated from the average house prices for existing properties for Q1 and Q2, 2014 as this represents a significantly larger sample than new build values alone.

3.24 These figures, by housing type and zone, have then been multiplied by the average differential between prices of new properties compared to existing properties, using 2012, 2013 and Q1 and 2 2014 data, in order to maximise sample size. Any anomalous values have been excluded as they could potentially skew the data. For example a few very high detached prices in rural areas in particular are not atypical of the majority of property prices. For Zone 2 caution has been applied to certain sub groups of property type for new build where annual samples sample sizes are low.

Changes in Construction Costs

- 3.25 In order to update the construction cost estimates set out in our 2012 report we have used information from the RICS Building Cost Information Service (BCIS). We use BCIS costs for benchmarking because it is a national and independent database. Construction costs have been updated from our 2012 report by reference to the BCIS All in Tender price Index (5 years) adjusted by the relevant location factor for Colchester.
- 3.26 Since July 2012 to September 2014 there have been changes to both the index and also to the location factor as shown in the table below. General movements in the index are illustrated by the following chart:

Chart 1: Changes in BCIS All In Tender Price Index



- 3.27 The location factor measures the relative costs of development in Colchester against the national average. In July 2006 the location factor stood at 100 and by September 2014 had moved to 106 indicating that relative to the rest of the country development costs had increased by 6% in Colchester.
- 3.28 BCIS median build costs and location factor have together increased by 26% between the original report in September 12 and September 14. This compares to real house price increases of 4-6% in Colchester and although the revised method of more accurately calculating house prices has resulted in some higher house prices, particularly in rural areas, there has therefore been a significant negative impact on the amount of affordable housing, CIL and S106 payments which can now be provided particularly in Zone 1.

SECTION 4 – APPRAISAL RESULTS

Appraisal Inputs & Benchmarking

- 4.1 The updated appraisals have been run using a number of assumptions for simplicity these have been summarised in Appendix 6
- 4.2 The key assumption that differentiates Zone 1 land from Zone 2 is the presumption of planning consent being secured whereas land within Zone 2 is likely to represent Greenfield development and therefore present a considerably higher planning risk. Other factors such as probability of Zone 1 land having a current development use contribute to a conclusion that Zone 1 land is likely to generate a higher land value than Zone 2.
- 4.3 Our appraisals assume £1,000,000 per hectare for Zone 1 and £600,000 per hectare for Zone 2.

Appraisal Outputs – Sensitivity Testing – Zone 1

- 4.4 The outputs generated by the appraisal have been sensitivity tested. This means that different combinations of input assumptions have been used to generate different outputs. The primary variables used for sensitivity testing purposes include:
- a) Quantum of affordable housing
 - b) Level of site specific S.106 contributions required on a per unit basis
 - c) Level of CIL per sq.m
- 4.5 In relation to the application of CIL it has been assumed that 50% of floor area developed would be eligible for CIL. Based on these assumptions sensitivity analysis generates the following results:

Table 6 - Sensitivity Testing CIL Levels - Zone 1

ZONE 1 SENSITIVITY TESTING RESULTS			
% affordable	S106	CIL	Net Residual against Land Cost
0%	£3,200	£0	£21,242
0%	£0	£70	£20,108
0%	£0	£25	£127,195
5%	£0	£25	£27,818
10%	£0	£25	-£116,302

- 4.6 It can be seen that development on sites within Zone 1 generates only a relatively small development surplus from which to fund planning obligations broadly amounting to some £3,200 per unit as represented by the standalones S.106 sum shown in the first row of the table above.
- 4.7 Translating this sum to a CIL would represent a CIL of £70 per sq.m. However this figure would fall by 50% if the modelling assumptions assumed 100% of development floor area would attract CIL.
- 4.8 There is also clearly an impact on the potential ability of schemes to deliver affordable housing as it can be seen that even with a relatively modest CIL charge a 10% affordable housing quantum would be undeliverable.
- 4.9 The following table shows the impact on affordable housing of an assumption of a nil CIL rate and either a limited or nil S.106 contribution shown on a per unit basis.

Table 7 - Sensitivity Testing Affordable Housing and S106 Levels - Zone1

ZONE 1 SENSITIVITY TESTING RESULTS			
% affordable	S106	CIL	Net Residual against Land Cost
0%	£1,000	£0	£134,986
5%	£1,000	£0	£35,415
10%	£1,000	£0	-£109,348
0%	£0	£0	£186,688
5%	£0	£0	£86,082
10%	£0	£0	-£62,817

- 4.10 It can be seen that there is likely to be a delicate balance between development's ability to fund a site specific S.106 and affordable housing contributions.
- 4.11 Recognising that the NPPF requires that the scale of planning obligations should not be a factor adversely affecting viability to the point where a scheme would not be delivered and that CIL regulations seek to ensure that any CIL charge is not set at the margins of viability it would seem appropriate that any imposition of a CIL levy could potentially adversely affect viability.

4.12 Against this backdrop it would seem that securing planning obligations from developments would be most advantageously achieved through assessments of individual scheme viability rather than through a more generic exercise.

Appraisal Outputs – Sensitivity Testing – Zone 2

4.13 The assumptions informing these appraisals are set out in Appendix 8. The primary variables used to inform the sensitivity testing are remain the same as those used for testing Zone 1 development:

- a) Quantum of affordable housing
- b) Level of site specific S.106 contributions required on a per unit basis
- c) Level of CIL per sq.m

4.14 Unlike Zone 1 development it has been assumed that 100% of developed floor area would be chargeable for CIL purposes. Based on these assumptions sensitivity analysis generates the following results:

Table 8 - Sensitivity Testing CIL Levels - Zone 2

ZONE 2 SENSITIVITY TESTING RESULTS			
% affordable	S106	CIL per sq m	Net Residual against Land Cost
10%	£1,500	£185	£250,417
15%	£1,500	£185	£197,474
20%	£1,500	£185	£8,921
10%	£0	£200	£254,473
15%	£0	£200	£201,453
20%	£0	£200	£12,430

4.15 It can be seen that a CIL of £185 per sq.m can be supported even allowing for delivery of 20% affordable housing and £1,500 per unit site specific S.106 contribution. The deliverable CIL figure increases to £200 per sq.m assuming there were no site specific S106 charges.

4.16 Allowing for a CIL rate of £185 per sq.m but no site specific S.106 shows a £50,000 surplus. As a proportion of GDV of the hypothetical scheme modelled this surplus represents approximately 1%. Therefore in our view

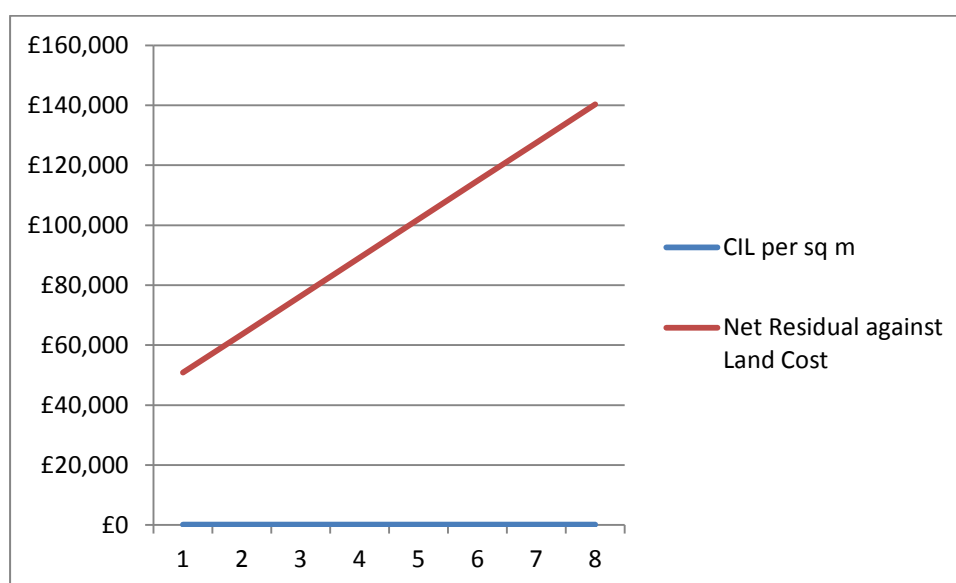
£185 per sq.m represents the ceiling for a supportable CIL charge whilst allowing for the delivery of policy target levels of affordable housing.

- 4.17 There is no specific advice issued to indicate what a suitable margin below ceiling rates would represent when setting a CIL charge rate. National planning policy guidance makes the following statement:

A charging authority's proposed rate or rates should be reasonable, given the available evidence, but there is no requirement for a proposed rate to exactly mirror the evidence. For example, this might not be appropriate if the evidence pointed to setting a charge right at the margins of viability. There is room for some pragmatism. It would be appropriate to ensure that a 'buffer' or margin is included, so that the levy rate is able to support development when economic circumstances adjust. In all cases, the charging authority should be able to explain its approach clearly.

- 4.18 We have considered the effect of variable CIL rates on the level of surplus generated by the appraisal and it can be seen from the following chart that the level of surplus shows a straight-line correlation to the level of CIL charge tested;

Chart 2: Changes in Residual Value Compared to CIL Charging Levels



- 4.19 Recognising this correlation there is no obvious tipping point which suggests where the “buffer” might be most appropriately set.
- 4.20 To further assist this consideration we have also considered the CIL payment as a proportion of total building costs and then modelled the impact on overall costs of £5 incremental changes in the CIL charge.

- 4.21 At £185 per sq.m the quantum of CIL shown as a cost in our appraisal is £457,644. As a proportion of total development costs, assuming no site specific S.106 payment this represents 9.54%. Total costs exclude the CIL payment itself and developer profit. This percentage falls to 7.74% when the charge is reduced to £150 per sq.m.
- 4.22 It can be seen from this analysis that CIL is a relatively small proportion of total development costs and that movements in the charge rate will have only a very modest impact on total overall development costs. We have illustrated this point by modelling the residual values generated by the appraisal as a percentage of total build costs using differential charge rates:

Table 9 - CIL Charging Levels - Impact on Residual Value

CIL per sq m	Net Residual as % of Total Development Costs
£185	1.06%
£180	1.33%
£175	1.59%
£170	1.86%
£165	2.13%
£160	2.39%
£155	2.66%
£150	2.93%

- 4.23 It can be seen from the above table, which models the residual value generated by the appraisal and computes its value as a percentage of total development costs, that a £35 change in rate from £185 per sq.m which broadly corresponds to a 20% rate reduction generates less than 2% reduction in overall build costs. Therefore it is clearly important that when seeking to ensure an affective “buffer” is built into the rate care is taken to avoid large scale reductions in the rate as a basis for making significant changes to scheme costs.
- 4.24 To place the percentage changes in context it is common practice for development to include a build cost contingency. This sum varies with the nature of the development and the specifics of the individual site. However a general allowance of 5% of total construction costs is commonly accepted for new build schemes. In this context a reduction from £185 per sq.m to £150 per sq.m reflects approximately 60% of a typical development contingency.
- 4.25 Reducing the charge still further to generate a 5% impact on build costs would have the effect of reducing the charge to £110 per sq.m.

- 4.26 It should be considered that cost contingencies are to cover risk on unknown or uncontrolled changes to estimated cost whereas CIL is a known cost from scheme inception, therefore in setting a charge it would not seem appropriate to seek to insulate development from normal development risk by setting an unduly low charge. In this context a reduction reflecting 5% would therefore seem too great.
- 4.27 On balance therefore a charge set at £150 per sq.m would appear to be both achievable without impact on the ability of scheme to deliver policy compliant levels of affordable housing and would not reflect a charge set at the margins of viability.

Impact on land value

- 4.28 National Planning Policy Guidance makes the following comments in respect of land value:

Land Value

Central to the consideration of viability is the assessment of land or site value. Land or site value will be an important input into the assessment. The most appropriate way to assess land or site value will vary from case to case but there are common principles which should be reflected.

In all cases, land or site value should:

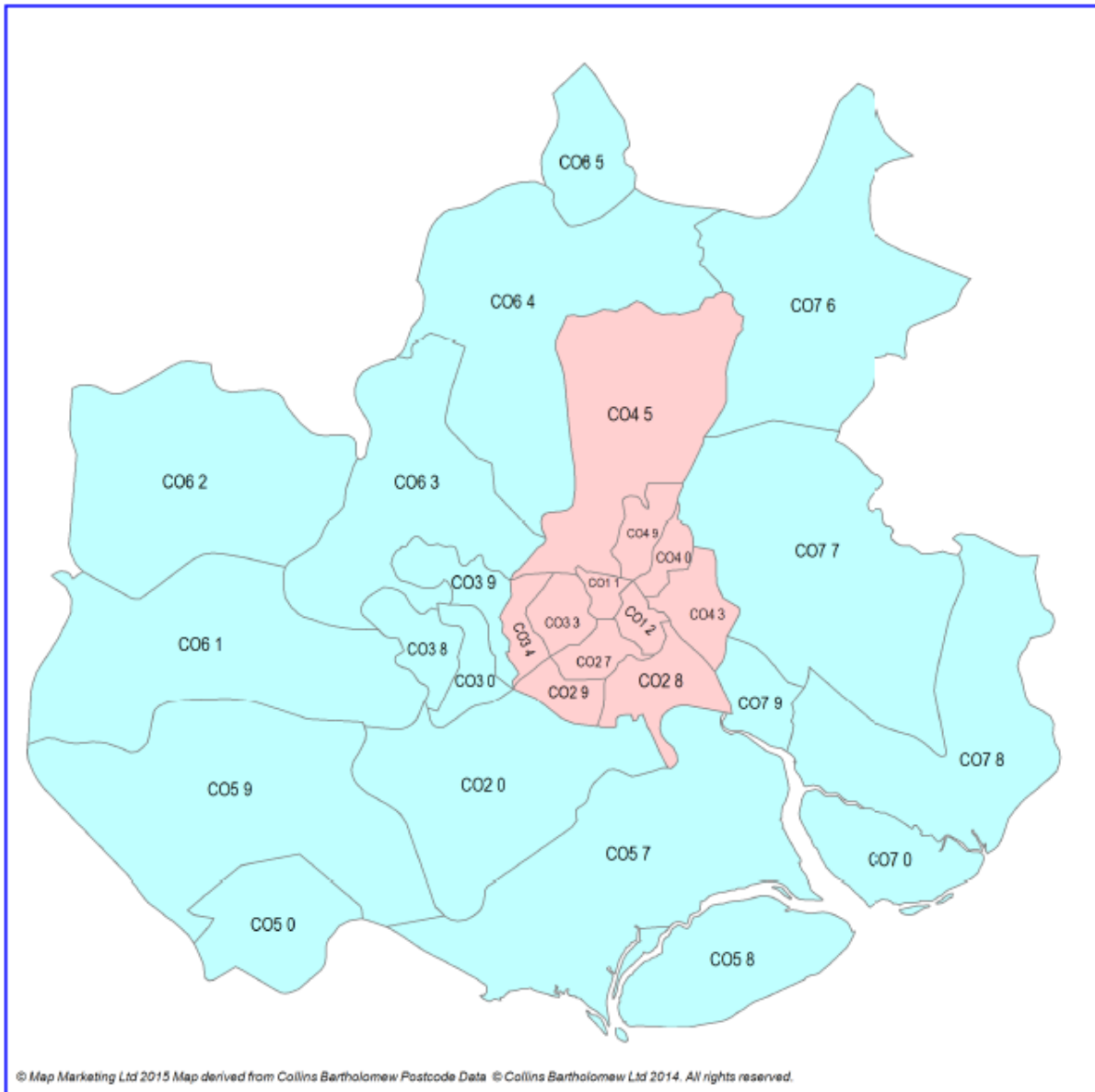
- reflect policy requirements and planning obligations and, where applicable, any Community Infrastructure Levy charge;*
- provide a competitive return to willing developers and land owners (including equity resulting from those wanting to build their own homes); and*
- be informed by comparable, market-based evidence wherever possible. Where transacted bids are significantly above the market norm, they should not be used as part of this exercise.*

- 4.29 It can be seen that the guidance anticipates land value will reflect the impact of CIL. It is therefore appropriate to consider the impact of CIL on land values. To make a fair comparison it is important to contrast the impact of CIL with levels of S.106 which might otherwise have been sought. To achieve this we have looked at some specific schemes which have recently secured consent in what could be described as Greenfield locations.
- 4.30 The assumptions relating to the level of land value have remained unchanged since our 2012 report. We are aware that land values have in

general moved in an upward direction with some parts of the UK seeing very significant rises. However land value analysis can be very misleading unless the full facts relating to the transaction are known and inevitably there are likely to be assumptions made by purchasers regarding factors such as the anticipated level of affordable housing and future sales values which remain very subjective.

- 4.31 The purpose of this report was to identify the impact of changes in time to residential development costs and values since production of our earlier report. It can be seen that although prices have risen so too have construction costs with the net effect being a reduction in overall viability. Against this backdrop it would be perverse to assume that land values had risen when they are directly related to development viability.
- 4.32 For this reason holding land values at the level assumed in 2012 has the effect of maintaining land value against a general fall in development viability accounting in part for the wider trend in land values whilst reflecting that maintaining land values has the effect of insulating land owners against movements in the market. We are of the view this position represents an appropriate balance of these competing influences on land value.
- 4.33 A CIL charge based on £150 per sq.m would generate a cash sum equivalent to £13,750 per private housing unit. This is very comparable with recent Zone 2 consents where we have seen a typical cost per private unit of approximately £14,000. Therefore we conclude there should be no net additional cost to developers and that there should consequently be no net impact on the supply or value of development land with a CIL charge at this level.

Appendix 1 - Post Code Map Colchester



Key

Zone 1

Mainly urban Brownfield



Zone 2

Rural Greenfield Areas



Appendix 2 - Raw Land Registry data - 2014 ALL Sales CO postcodes by Q1, Q2 & Q3

Q1 Jan-Mar 2014

	Detached		Semi-det		Terraced		Flat/mais		Overall Total	
CO1 1	£365,625	4			£353,333	3	£103,486	7	£231,921	14
CO1 2	£215,996	5	£194,498	2	£177,982	15	£125,000	1	£185,378	23
CO10 0	£267,249	3			£250,000	1			£262,937	4
CO10 7	£254,332	6	£195,000	1	£200,000	1			£240,124	8
CO10 9					£148,000	1			£148,000	1
CO12 3							£88,830	3	£88,830	3
CO13 9							£165,000	1	£165,000	1
CO15 1							£52,000	1	£52,000	1
CO15 4	£278,332	3							£278,332	3
CO15 6	£249,995	1	£199,995	1			£150,000	1	£199,997	3
CO16 8	£201,122	12	£174,500	2	£165,746	4			£190,303	18
CO16 9			£142,995	1					£142,995	1
CO2 7	£249,950	1	£215,993	9	£181,289	15	£146,263	15	£177,679	40
CO2 8							£140,750	10	£140,750	10
CO2 9	£218,108	9	£182,862	11	£187,347	10			£194,931	30
CO3 8	£256,667	3	£239,374	4	£230,000	2			£243,055	9
CO4 5	£301,750	3			£253,750	9			£265,750	12
CO5 0	£422,500	2							£422,500	2
CO6 1							£157,500	2	£157,500	2
CO8 5	£310,000	1	£207,500	4					£228,000	5
CO9 1	£525,000	1							£525,000	1
CO9 2					£250,000	1	£215,000	1	£232,500	2
CO9 4			£229,995	1					£229,995	1

Q2 Apr-Jun 2014

	Detached		Semi-det		Terraced		Flat/mais		Overall Total	
CO1 1	£284,231	13	£395,000	1	£300,000	1			£292,667	15
CO1 2	£227,495	2			£192,968	5	£144,496	4	£181,620	11
CO10 0	£335,377	8							£335,377	8
CO10 2			£240,000	1					£240,000	1
CO10 7	£175,000	1			£202,498	2			£193,332	3
CO10 8	£549,995	1					£157,500	1	£353,748	2
CO11 2	£335,000	1							£335,000	1
CO12 3	£230,000	1					£95,923	17	£103,372	18
CO15 4	£278,746	4							£278,746	4
CO15 6			£199,995	2					£199,995	2
CO16 8	£187,995	16	£152,498	2	£148,996	5			£176,430	23
CO16 9	£110,000	1							£110,000	1
CO2 7	£248,330	3	£232,854	7	£172,517	24	£168,745	4	£189,220	38
CO2 8			£172,000	1			£158,625	16	£159,412	17
CO2 9	£214,262	15	£186,360	11	£173,603	14	£139,995	1	£191,081	41
CO3 3							£340,000	1	£340,000	1
CO3 8	£246,750	6	£238,142	7	£193,375	8			£223,547	21
CO4 5	£255,000	3			£272,495	2	£142,733	15	£172,549	20
CO5 0	£350,000	1							£350,000	1
CO5 7	£395,000	1							£395,000	1
CO6 1	£725,000	1							£725,000	1
CO6 2	£210,000	1							£210,000	1
CO6 4	£348,000	1							£348,000	1
CO7 0	£217,500	4	£190,000	2					£208,333	6
CO7 7	£495,000	1							£495,000	1
CO7 8	£325,000	1							£325,000	1
CO7 9	£820,000	1							£820,000	1
CO8 5	£306,700	5	£257,500	4	£241,667	3			£274,042	12
CO9 1	£525,000	2			£152,500	2			£338,750	4
CO9 2					£262,500	2	£150,000	1	£225,000	3

Q3 July- Sept 2014

Postcode Sector	Detached		Semi-detached		Terraced		Flat/maisonette		Total	
	Average Price	Sales	Average Price	Sales	Average Price	Sales	Average Price	Sales	Overall Averages	Overall Sales
CO1 1	£515,000	1			£410,000	1	£204,100	6	£268,700	8
CO1 2	£249,995	2			£221,662	3	£149,328	3	£201,620	8
CO10 0	£386,839	5							£386,839	5
CO10 7	£215,000	1							£215,000	1
CO10 8	£503,749	4							£503,749	4
CO11 1	£435,000	1							£435,000	1
CO12 5	£350,000	1							£350,000	1
CO13 9							£335,000	3	£335,000	3
CO15 3			£198,000	1					£198,000	1
CO15 4	£279,995	1							£279,995	1
CO15 6	£279,995	2							£279,995	2
CO16 8	£210,723	11			£165,998	8			£191,891	19
CO16 9	£305,000	1							£305,000	1
CO2 7	£209,995	3	£210,999	10	£206,560	23	£183,737	14	£201,264	50
CO2 8							£159,909	11	£159,909	11
CO2 9	£262,998	5	£194,534	8	£187,051	9			£207,033	22
CO3 3							£160,000	1	£160,000	1
CO3 9							£147,500	1	£147,500	1
CO4 5			£265,000	1	£249,846	13	£137,667	3	£230,941	17
CO5 0	£531,000	4					£110,000	1	£446,800	5
CO5 7	£384,000	1							£384,000	1
CO7 0	£180,000	1	£165,000	1					£172,500	2
CO7 7	£650,000	1							£650,000	1
CO7 8	£320,000	1							£320,000	1
CO7 9	£790,000	1							£790,000	1
CO8 5	£297,500	2	£330,000	1					£308,333	3
CO9 2					£137,500	1	£246,250	10	£236,364	11

Appendix 3 - Total Value of Properties By Zone, Year, Sample Size to derive Average Value by Property Type

Zone 1

2012

Application										
Property Type	Detached		Semi-det		Terraced		Flat/mais		Overall Total	
C01 1	£220,000	1	£206,667	3	£191,750	17	£135,000	1	£192,488	22
C01 2	£221,076	7	£214,998	3	£185,806	40	£128,540	6	£185,643	56
C02 7	£216,792	14	£206,559	29	£186,252	44	£131,004	33	£179,530	120
C02 8	£208,665	3	£167,665	3	£192,250	4	£126,867	58	£136,121	68
C02 9	£204,378	18	£199,206	18	£184,021	25	£134,499	5	£189,962	66
C03 3							£150,000	1	£150,000	1
C03 4										
C04 5	£292,634	45	£222,145	20	£190,916	39	£76,000	4	£234,825	108
Application										
Property Type	Detached		Semi-det		Terraced		Flat/mais		Overall Total	
C01 1	£220,000		£620,000		£3,259,745		£135,000		£4,234,745	
C01 2	£1,547,535		£644,995		£7,432,230		£771,241		£10,396,001	
C02 7	£3,035,091		£5,990,224		£8,195,101		£4,323,140		£21,543,556	
C02 8	£625,995		£502,995		£769,000		£7,358,259		£9,256,249	
C02 9	£3,678,800		£3,585,700		£4,600,528		£672,495		£12,537,523	
C03 3	£0		£0		£0		£150,000		£150,000	
C03 4	£0		£0		£0		£0		£0	
C04 5	£13,168,528		£4,442,890		£7,445,705		£304,000		£25,361,123	
Total Value	£22,275,949		£15,786,804		£31,702,309		£13,714,135		£83,479,197	
Number of properties	88		76		169		108		441	
Average Value										
Zone 1	£ 253,136		£ 207,721		£ 187,588		£ 126,983		£ 189,295	

2013

Application										
Property Type	Detached		Semi-det		Terraced		Flat/mais		Overall Total	
C01 1	£242,499	14	£208,750	4	£271,667	6			£244,166	24
C01 2	£210,935	8			£181,965	31	£129,500	5	£181,270	44
C02 7	£223,629	19	£200,771	40	£184,792	92	£140,996	53	£180,164	204
C02 8	£231,125	6	£163,000	2	£161,750	2	£144,547	37	£157,117	47
C02 9	£216,551	18	£186,558	16	£178,108	18	£138,995	2	£191,977	54
C03 4	£361,500	2							£361,500	2
C04 5	£278,530	15	£227,828	9	£216,005	63	£249,950	1	£228,258	88
Application										
Property Type	Detached		Semi-det		Terraced		Flat/mais		Overall Total	
C01 1	£3,394,980		£835,000		£1,630,000		£0		£5,859,980	
C01 2	£1,687,480		£0		£5,640,916		£647,500		£7,975,896	
C02 7	£4,248,945		£8,030,857		£17,000,870		£7,472,790		£36,753,462	
C02 8	£1,386,750		£326,000		£323,500		£5,348,230		£7,384,480	
C02 9	£3,897,925		£2,984,920		£3,205,935		£277,990		£10,366,770	
C03 3										
C03 4										
	£723,000		£0		£0		£0		£723,000	
C04 5	£4,177,952		£2,050,452		£13,608,345		£249,950		£20,086,699	
Total Value	£ 19,517,032		£14,227,229		£41,409,566		£13,996,460		£89,150,287	
Number of properties	82		71		212		98		463	
Average Value Zone 1	£ 238,013		£ 200,384		£ 195,328		£ 142,821		£ 192,549	

2014 Q1, 2 & 3

Application					
Property Type	Detached	Semi-det	Terraced	Flat/mais	Overall Total
C01 1	£5,672,500	£395,000	£1,770,000	£1,949,000	£9,786,500
C01 2	£2,034,960	£388,995	£4,299,550	£1,150,970	£7,874,475
C02 7	£879,935	£4,053,925	£7,470,230	£4,766,266	£17,170,356
C02 8	£0			£3,166,495	£3,166,495
C02 9	£3,277,960	£3,567,755	£3,556,920		£10,402,635
C03 3				£160,000	£160,000
C03 4					
C04 5	£1,670,250	£265,000	£6,076,735	£2,553,995	£10,565,980
Total Value	£ 13,535,605	£8,670,675	£23,173,435	£13,746,726	£59,126,441
Number of properties	51	42	109	90	292
Average Value Zone 1	£ 265,404	£ 206,445	£ 212,600	£ 152,741	£ 202,488

Zone 2 NB Anomalous values highlighted in red exclude from analysis

Annual 2012										
	Detached		Semi-det		Terraced		Flat/mais		Overall Total	
C03 0	£251,667	6	£250,000	1	£226,615	13	£171,263	19	£204,103	39
C03 9							£110,790	5	£110,790	5
C05 0	£350,000	1					£132,125	4	£175,700	5
C05 7	£238,750	2					£165,000	2	£201,875	4
C05 8	£282,833	3							£282,833	3
C05 9	£307,000	1							£307,000	1
C06 1	£195,000	1							£195,000	1
C06 2	£446,000	1							£446,000	1
C06 3	£530,000	1							£530,000	1
C06 4	£285,888	9	£256,250	4	£315,000	1			£279,500	14
C07 0	£225,000	2	£217,400	5					£219,571	7
C07 6	£900,000	1							£900,000	1
C07 7	£317,500	1							£317,500	1
C07 8	£203,500	2	£197,000	1					£201,333	3
C07 9	£354,916	22	£300,246	4	£328,782	1			£345,849	27

C03 0	£1,510,000	£250,000	£2,946,000	£3,254,000	£7,960,000
0	£0	£0	£0	£0	£0
C03 9					
0	£0	£0	£0	£0	£0
C05 0	£350,000	£0	£0	£528,500	£878,500
C05 7	£477,500	£0	£0	£330,000	£807,500
C05 8	£848,500	£0	£0	£0	£848,500
C05 9	£307,000	£0	£0	£0	£307,000
C06 1	£195,000	£0	£0	£0	£195,000
C06 2	£446,000	£0	£0	£0	£446,000
C06 3	£530,000	£0	£0	£0	£530,000
C06 4					
0	£2,572,995	£1,025,000	£315,000	£0	£3,912,995
C07 0					
0	£450,000	£1,087,000	£0	£0	£1,537,000
C07 7	£317,500	£0	£0	£0	£317,500
C07 8	£407,000	£197,000	£0	£0	£604,000
C07 9	£7,808,144	£1,200,985	£328,782	£0	£9,337,911
Total Value	£16,219,639	£3,759,985	£3,589,782	£4,112,500	£27,681,906
Number of properties	53	15	15	30	113
Average Value					
Zone 2	£ 306,031	£ 250,666	£ 239,319	£ 137,083	£ 244,973

Annual 2013										
	Detached		Semi-det		Terraced		Flat/mais		Overall Total	
C03 0	£250,000	2	£250,000	2	£227,118	17			£231,476	21
C03 8	£266,346	26	£206,224	10	£200,000	1			£248,304	37
C04 6	£332,498	2	£275,246	4	£256,665	3			£281,775	9
C05 0	£344,688	9					£118,745	1	£322,094	10
C05 7	£178,000	1					£145,000	1	£161,500	2
C05 8	£590,000	1	£177,500	2					£315,000	3
C05 9	£250,000	1							£250,000	1
C06 1							£249,000	1	£249,000	1
C06 2			£155,000	1					£155,000	1
C06 3	£500,000	1							£500,000	1
C06 4	£324,398	15							£324,398	15
C07 0	£212,500	2	£236,875	4					£228,750	6
C07 6	£785,000	1	£234,995	1					£509,998	2
C07 7	£270,000	1							£270,000	1
C07 8	£425,000	1							£425,000	1
C07 9	£515,714	7	£235,000	1			£186,667	3	£400,454	11
	TOTAL VALUES									
C03 0	£500,000		£500,000		£3,861,000		£0		£4,861,000	
C03 8	£6,925,000		£2,062,235		£200,000		£0		£9,187,235	
C03 9										
C04 6	£664,995		£1,100,985		£769,995		£0		£2,535,975	
C05 0	£3,102,195		£0		£0		£118,745		£3,220,940	
C05 7	£178,000		£0		£0		£145,000		£323,000	
C05 8	£590,000		£355,000		£0		£0		£945,000	
C05 9	£250,000		£0		£0		£0		£250,000	
C06 1	£0		£0		£0		£249,000		£249,000	
C06 2	£0		£155,000		£0		£0		£155,000	
C06 3	£500,000		£0		£0		£0		£500,000	
C06 4	£4,865,975		£0		£0		£0		£4,865,975	
C07 0	£425,000		£947,500		£0		£0		£1,372,500	
C07 7	£270,000		£0		£0		£0		£270,000	
C07 8	£425,000		£0		£0		£0		£425,000	
C07 9	£3,609,995		£235,000		£0		£560,000		£4,404,995	
Total Value	£22,306,160		£5,355,720		£4,830,995		£1,072,745		£33,565,620	
Number of properties	70		25		21		6		122	
Average Value Zone 2	£ 318,659		£ 214,229		£ 230,047		£ 178,791		£ 275,128	

	2014 Q's 1,2 & 3				
	Detached	Semi-det	Terraced	Flat/mais	Overall Total
2014 Q's 1,2 & 3	Multiplying the above up				
C03 0	£0	£0	£0	£0	£0
C03 8	£2,250,500	£2,624,490	£2,007,000	£0	£6,881,990
C03 9				£ 147,500	£147,500
C04 6	£0	£0	£0	£0	£0
C05 0	£3,319,000	£0	£0	£110,000	£3,429,000
C05 7	£779,000	£0	£0	£0	£779,000
C05 8	£0	£0	£0	£0	£0
C05 9	£0	£0	£0	£0	£0
C06 1	£725,000	£0	£0	£315,000	£1,040,000
C06 2	£210,000	£0	£0		£210,000
C06 3	£0	£0	£0	£0	£0
C06 4	£348,000	£0	£0	£0	£348,000
C07 0	£1,050,000	£545,000	£0	£0	£1,595,000
C07 7	£1,145,000	£0	£0	£0	£1,145,000
C07 8	£645,000	£0	£0	£0	£645,000
C07 9	£1,610,000	£0	£0	£0	£1,610,000
Total Value	£12,081,500	£3,169,490	£2,007,000	£572,500	£17,830,490
Number of properties	32	14	10	4	60
Average Value Zone 2	£ 377,547	£ 226,392	£ 200,700	£ 143,125	£ 297,175

Appendix 4 - % Difference between New & existing properties, by property type, zone & year

difference % New/Existing	4 bed House - 120m ²	3 bed House - 95m ²	2 bed House - 80m ²	2 bed Flat - 65m ²	
2014 Zone 1	-9%	-2%	23%	18%	9%
2013 Zone 1	-13%	3%	14%	24%	4%
2012 Zone 1	-12%	9%	16%	12%	4%
Average % Diff New/Existing Zone 1 based on 3 years	-12%	3%	18%	18%	
2014 Zone 2	5%	8%	3%	5%	-12%
2013 Zone 2	-3%	6%	28%	46%	10%
2012 Zone 2	-9%	25%	27%	2%	-4%
Average % Diff New/Existing Zone 2 based on 3 years	-2%	16%	27%	18%	
			17%		

2 bed Zone 2 adjusted to 17% as size of % diff existing and new seems to be due sample bias therefore taken av of % diff 3 bed house and 2 bed flat zone 2 and similar to diff in Zone 1 (17%)

Appendix 5 - Sample Sizes Existing and New Build Properties

Sample sizes EXISTING	4 bed House - 120m ²	3 bed House - 95m ²	2 bed House - 80m ²	2 bed Flat - 65m ²	Total
Q's 1,2 & 3 2014 Zone 1	346	413	656	469	1,884
2013 Zone 1	428	533	700	418	2,079
2012 Zone 1	411	496	588	410	1,905
Q's 1,2 & 3 2014 Zone 2	673	441	269	105	1,488
2013 Zone 2	879	578	312	138	1,907
2012 Zone 2	701	493	220	119	1,533

Sample sizes NEW BUILD	4 bed House - 120m ²	3 bed House - 95m ²	2 bed House - 80m ²	2 bed Flat - 65m ²	Total
Q's 1,2 & 3 2014 Zone 1	51	42	109	90	292
2013 Zone 1	82	71	212	98	463
2012 Zone 1	88	76	169	108	441
Q's 1,2 & 3 2014 Zone 2	32	14	10	4	60
2013 Zone 2	70	25	21	6	122
2012 Zone 2	53	15	15	30	113

Sample size less than 10

Appendix 6 - Appraisals

Brownfield Residential Scheme - 1 Hectare		Update based on detailed study of house sales in Colchester 2012/13/14					
1. APPRAISAL SUMMARY							
1.1 VALUES		No.*				Sales value	
Private units		49				£10,249,085	
Affordable		3				£369,075	
Ground Rents (flats)						£34,255	
						£10,652,414	
<i>* Note: Rounded to 51 units, based on target density of circa.50 units per developable Ha</i>							
1.2 DEVELOPMENT COSTS						Total cost	
Construction Costs						£5,957,388	
Post-Completion Costs & Other Costs						£1,198,835	
Finance Costs						£208,660	
Developer's Profit						£2,069,140	
						£9,434,023	
NET RESIDUAL VALUE						£1,093,415	
Land Value (inclusive of purchaser's costs)						-£1,058,000	
NET RESIDUAL AGAINST LAND VALUE						£35,415	
2. RESIDENTIAL VALUES							
2.1 PRIVATE		No. of units	Avg. unit size m ² (NIA)	Sales Value per m ² using average existing 2014 * new build difference (factor land reg)	% change	Value per unit	Total Value
2 bed flats		9	65	£2,356	0.0%	£153,112	£1,378,006
2 bed houses		11	80	£2,542	0.0%	£203,352	£2,236,868
3 bed houses		21	95	£2,287	0.0%	£217,297	£4,563,233
4 bed houses		8	120	£2,157	0.0%	£258,872	£2,070,978
		49	4,420	£2,319		£209,165	£10,249,085
2.2 AFFORDABLE		No. of units	Unit size m ² (NIA)	Sales value per m ²	Value sensitivity (% change)	Sales Value per unit	Total Value
Affordable Rent		2	95	£ 1,295	0.0%	£123,025	£246,050
Shared Ownership		1	95	£ 1,295	0.0%	£123,025	£123,025
		3	285				£369,075
2.3 GROUND RENTS						Total Value	
Ground Rents						£34,255	
CAPITAL VALUE						£10,652,414	

3.0 COSTS						
					19%	24%
	No. of units	Total area (m ² GIA) inc assumption 15% Gross to net flats	Base build cost per m ² (BCIS £/m ² median Sept 14 * location factor 106)	Cost sensitivity (% change)	Build Cost per unit	Total Cost
3.1 CONSTRUCTION						
Private	49	4508	£1,130	0%	£103,954	£5,093,758
Shared Ownership	1	95	£1,130	0%	£107,350	£107,350
Affordable Rent	2	190	£1,130	0%	£107,350	£214,700
	52	4,793				£5,415,808
Abnormals/Infrastructure			10.0%			£541,581
						£5,957,388
3.2 OTHER COSTS						
Contingency			5%			£297,869
Professional Fees			10%			£595,739
						£893,608
3.3 POST COMPLETION COSTS						
Sales Costs - Agent & Legal Fees			2.5%			£256,227
CIL payments			£0 per m ² (of net additional area			£0
Section 106 payments			£1,000 per unit			£49,000
						£305,227
3.4 FINANCE COSTS						
Interest payments (excluding land finance costs)			6.75%			£208,660
Arrangement Fee			0%			£0
						£208,660
3.5 DEVELOPER'S PROFIT						
Profit on private units			20.0% on GDV		£1,422,981	£2,049,817
Profit on affordable units			6.0% on cost			£19,323
						£2,069,140
			Equivalent blended profit on GDV:	19.42%		
			Equivalent blended profit on Cost:	24.74%		
TOTAL DEVELOPMENT COST						£9,434,023
4.0 RESIDUAL VALUATION						
GROSS RESIDUAL VALUE						£1,218,391
Less LAND FINANCE COST						-£124,976
NET RESIDUAL VALUE						£1,093,415
5.0 RESIDUAL AGAINST VIABILITY BENCHMARK						
NET RESIDUAL VALUE						£1,093,415
Land Value (inclusive of purchaser's costs)						-£1,058,000
NET RESIDUAL AGAINST LAND VALUE						£35,415

Greenfield Residential Scheme - 1 Hectare Update based on detailed study of house sales in Colchester 2012/13/14

1.0 APPRAISAL SUMMARY							
VALUES		No. *				Sales value	
Private units		27				£6,485,050	
Affordable units		7				£861,175	
Ground Rents (flats)						£21,409	
						£7,367,634	
<i>*Note: Total unit No. rounded to 34, based on target density of 35 units per Ha</i>							
DEVELOPMENT COSTS							
						Total cost	
Construction Costs					£3,901,466		
Post Completion Costs & Other Costs					£1,118,409		
Finance Costs					£144,837		
Developer's Profit					£1,342,097		
						£6,506,809	
NET RESIDUAL VALUE							
						£775,127	
Land Value (inclusive of purchaser's costs)					-£634,800		
						£140,327	
2.0 RESIDENTIAL VALUES							
2.1 PRIVATE							
	No. of units	Avg. unit size (m ² NIA)	Value per m ² based on 2014 sales existing * diff New build	Value sensitivity (% change)	Sales value per unit	Total value	
2 bed flats	5	65	£2,459	0.0%	£159,830	£799,152	
2 bed houses	6	80	£2,848	0.0%	£227,806	£1,366,834	
3 bed houses	12	95	£2,557	0.0%	£242,955	£2,915,464	
4 bed houses	4	120	£2,924	0.0%	£350,900	£1,403,600	
	27	2,425	£2,674		£240,187	£6,485,050	
2.2 AFFORDABLE							
	No. of units	Unit size sq m (NIA)	Sales value per m ²	Value sensitivity (% change)	Sales value per unit	Total value	
Affordable Rent	6	95	£1,295	0.0%	£123,025	£738,150	
Shared Ownership	1	95	£1,295	0.0%	£123,025	£123,025	
	7	665				£861,175	
						Total value	
Ground Rents					£21,409		
						£7,367,634	
CAPITAL VALUE							

3.0 COSTS						
	No. of units	Total area (m ² GIA) inc assumption 15% ground works private housing 12.5% affordable	Base build cost per m ² (BCIS £/m2 median Sept 14 * location factor 106)	Cost sensitivity (% change)	Build cost per unit	Total cost
3.1 CONSTRUCTION						
Private	27	2,474	£1,130	0%	£103,531	£2,795,338
Shared Ownership	1	95	£1,130	0%	£107,350	£107,350
Affordable Rent	6	570	£1,130	0%	£107,350	£644,100
	34	3,139	£1,130			£3,546,788
Abnormals and Infrastructure			10%			£354,679
CONSTRUCTION COST						£3,901,466
3.2 OTHER COSTS						
Contingency			5%			£195,073
Professional Fees			10%			£390,147
						£585,220
3.3 POST COMPLETION COSTS						
Sales Costs - agent & legal fees			2.5%			£162,126
CIL payments			£150 per m ² (of net additional area			£371,063
Section 106 payments			£0 per private unit			£0
						£533,189
3.4 FINANCE COSTS						
Interest payments (excluding land finance)			6.75%			£144,837
Arrangement Fee (% of total borrowings)			0%			£0
						£144,837
3.5 DEVELOPER'S PROFIT						
Profit on private units			20.0% on GDV			£1,297,010
Profit on affordable units			6.0% on cost			£45,087
						£1,342,097
			Equivalent blended profit on GDV:	18.22%	7.74%	£4,793,649
			Equivalent blended profit on Cost:	23.28%		£5,164,712
TOTAL DEVELOPMENT COST						£6,506,809

4.0 RESIDUAL VALUATION						
GROSS RESIDUAL VALUE						£860,825
Less LAND FINANCE COST						-£85,698
NET RESIDUAL VALUE						£775,127
5.0 RESIDUAL AGAINST VIABILITY BENCHMARK						
NET RESIDUAL VALUE						£775,127
Less LAND VALUE (inclusive of purchaser's costs)						-£634,800
NET RESIDUAL AGAINST LAND VALUE						£140,327

Appendix 7 - Assumptions in relation to Zone 1 Development Appraisals

Assumptions for Zone 1 Modelling

- Prices for affordable housing have been updated from the original model by the average of change in Zone 1 house prices of +6% and +4% for Zone 2 between 2012 and 2014.
- Land values are currently unchanged from the original model £1,000,000 per Ha Zone 1, £600,000 per Ha Zone 2.
- The original model assumed S.106 payments of £2000 for both Zone 1 and Zone 2 private accommodation. Sensitivities in the levels of S106 payments have also now been included in the model.
- Provision of affordable housing, CIL and S.106 payments, have also been adversely affected by increasing developers profit from 17.5% in the original model to 20% on the private elements and remains unchanged at 6% for the affordable housing.

Appendix 8 - Assumptions in relation to Zone 2 Development Appraisals

Assumptions for Zone 2 Modelling

- Prices for affordable housing have been updated from the original model by the average of change in Zone 1 house prices of +6% and +4% for Zone 2 between 2012 and 2014.
- Land values are currently unchanged from the original model £1,000,000 per Ha Zone 1, £600,000 per Ha Zone 2.
- The original model assumed S.106 payments of £2000 for both Zone 1 and Zone 2 private accommodation. Sensitivities in the levels of S106 payments have also now been included in the model.
- Provision of affordable housing, CIL and S.106 payments, have also been adversely affected by increasing developers profit from 17.5% in the original model to 20% on the private elements and remains unchanged at 6% for the affordable housing.