PATHFINDER
DEVELOPMENT CONSULTANTS

MALINS
Associates Limited

Economic Viability Study

Prepared for

Uttlesford District Council

In relation to

Local Plan New Settlement and Neighbourhood Proposals

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Report Prepared by

Martin Aust BSc (Hons) DMS MRICS CIHCM CEnv

Doug Malins BSc (Hons)

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Section 1

1.0. Introduction

1.1. Malins Associates Limited and Pathfinder Development Consultants have been commissioned by Uttlesford District Council to undertake economic viability assessments on eight New Settlement/Neighbourhood proposals put forward by promoters/developers in the Call for Sites.

1.2. The Uttlesford Local Plan was adopted in 2005. It still forms the basis for making planning decisions within the District alongside the National Planning Policy Framework published in March 2012 and the Planning Practice Guidance but it is becoming increasingly out of date and a replacement plan is being prepared.

1.3. A local development scheme was approved by the Council in February 2016, and is the project plan for producing the new Local Plan. It has three main functions:

- To provide information on the documents the Council intends to prepare together with timescales for preparation.
- To establish the Council's priorities and to allow the Council to programme the work needed to prepare the new plans.
- To set out the timetable for the review of documents.

1.4. In terms of the timetable, it is proposed that the Plan is submitted for public examination in November/December 2016. Following that, and subject to the Inspectors Report, it is anticipated that the Plan will be adopted towards the end of 2017.

1.5. In the Call for Sites, eight proposed New Settlement/Neighbourhood options were submitted to the Council for consideration. If the Council were to promote a New Settlement or Neighbourhood as part of its Local Plan, it would need to have robust evidence that it could be delivered, and could deliver housing throughout the Plan period. The Council therefore commissioned an independent economic viability study.

1.6. This report sets out the methodology and assumptions used to carry out the economic viability assessment of these proposals within the Uttlesford District Council area, and a summary of the findings.

2.0. **Context**

2.1. The viability study was commissioned as part of the overall process of developing the Uttlesford District Local Plan, which is ongoing.

2.2. This study is part of an evidence base that is required when the Plan is submitted to the Planning Inspectorate. The Council must demonstrate that it has made adequate plans to meet objectively assessed needs for housing and other development within the district as far as is consistent with National Planning Policy. This includes identifying a five year supply of specific deliverable sites.

2.3. New Towns, Eco-Towns, Garden Cities and Garden Villages are all examples of free standing new settlements. In recent years, the concept of New Settlements has become popular. The Council will fully assess the potential for New Settlements in Uttlesford. Alongside this, a number of New Neighbourhoods were also proposed, which will be assessed using the same methodology.

2.4. Those who support New Settlements/Neighbourhoods argue that they are more sustainable because they enable infrastructure to be planned, allow comprehensive master planning and design, and include provision for landscaping and green infrastructure, as well as the provision of a range of community, commercial and employment facilities. They may also have the advantage of taking development pressure off otherwise constrained existing settlements.

2.5. This Economic Viability Appraisal study will look at each of the proposals in isolation, and make recommendations as to their deliverability over the period of the Plan. This information will feed into the evidence base that will form the Local Plan Pre-Submission for public consultation.

3.0. Our approach to this study

3.1. Our overall approach to this study reflects government and industry guidance, takes into account the stage of the process of the Local Plan development within Uttlesford District Council, and the wish of the Council to engage positively with developers, landowners and agents.

3.2. In the Call for Sites, eight New Settlement/Neighbourhood options were submitted to the Council for consideration. The proposed New Settlements and Neighbourhoods are of differing sizes and include residential, commercial, retail and employment uses. All proposals also include infrastructure, community and open space land use. These New Settlements/Neighbourhoods are summarised in Appendix A.

3.3. We developed a bespoke assessment framework for this viability study taking into account Planning Guidance and consideration of the local market conditions and planning policies.

3.4. During February and April 2016 we held a series of meetings with individual promoters specific to this study, at Uttlesford District Council Offices. Appendix B lists the attendees. Those promoters not able to attend consultation meetings were contacted via other means, so that their input was included within the study.

3.5. The purpose of the consultation meetings was to present the proposed methodology and specifically the assumptions that we had included in our bespoke framework, and to listen to feedback from the promoters. That would allow us to amend aspects of the modelling framework if required, before proceeding to use it in the assessment of each site. The meetings allowed us to be transparent about our approach and, as far as possible, ensure that promoters – and others – would understand in due course the basis for the conclusions we would draw on each of the sites assessed.

3.6. At the meetings we presented and discussed with the promoters present a range of issues including:

- Viability theory and definitions of terms used
- Assumptions that we proposed making in relation to:
    - The property types and sizes we anticipate on sites
    - Sales rates
    - Sales values
    - Costs in relation to site acquisition, construction, marketing and sales, finance and how abnormal costs would be taken into account
    - Policies relating to affordable housing and the use of the Strategic Housing Market Assessment (SHMA)
    - Residual and Target Land Values
    - S106 infrastructure costs
- Reasonable adjustments that might be made to achieve viability

3.7. Promoters attending the meetings were able to question us and put forward ideas on the day. They were also offered the opportunity to come back to us with further information - particularly important to allow for submission and consideration of commercially sensitive or confidential information.

3.8. As a result of the feedback we reviewed and adjusted some assumptions. Specifically we:

- Amended the % assumed for plot external costs
- Amended the % assumed for site wide costs
- Clarified the definition of net and gross developable areas
- Clarified what is included in the base build cost and clarified that an element for overhead and profit is allowed for, albeit separately, rather than as part of the base building costs
- Increased the margin between the residual land value and the Target Land Value (as defined further in 8.2) to give additional comfort
- Reviewed the profit we were proposing on Gross Development Value (following feedback from one promoter). Having also reviewed previous Inspector's decisions in regard to this matter, we did not make any changes to the industry accepted 20%.

3.9. This input from promoters is therefore reflected in the assumptions and methodology set out in detail in Section 2 of this report.

3.10. Finally we individually assessed each of the proposals which had been identified for inclusion in the submission to the Planning Inspectorate following the Preferred Options consultation (as detailed in Appendix A).

4.0. The scope of this report

4.1. This is a summary report. It sets out the key guidance and standard methodology that should be used in any viability study. It explains the specific assumptions we have made for this study in drawing up a bespoke modelling framework for sites within Uttlesford District Council, and the sources and rationale for those assumptions.

4.2. This report summarises the findings of the assessment. This sets out, on a site specific basis whether a site is considered viable (and on what terms), or not viable. It includes caveats as appropriate.

4.3. Although the report includes assumed figures for build costs and land /property values etc. it does not include the detailed data sets or information that sit behind those assumptions. Nor does the report include actual calculations/spreadsheets for each site. This information is considered to be technical or overly detailed for publication and is likely to contain confidential/commercially sensitive information provided in confidence.

4.4. Limitations

4.4.1. This report does not constitute a formal 'Red Book' valuation (RICS Valuation - Professional Standards, March 2012) or should not be relied upon as such. It is a viability study carried out in line with RICS guidance note, Financial Viability in Planning 2012. Specifically, it should be noted that viability assessments of each site and conclusions detailed in Section 3 of this report, were carried out on the basis of a broad based study, given the limited detailed site information available. This report is confidential to the Client and the authors accept no responsibility of whatsoever nature to third parties to whom this report or any part thereof is made known. Any such party relies upon the report at their own risk.

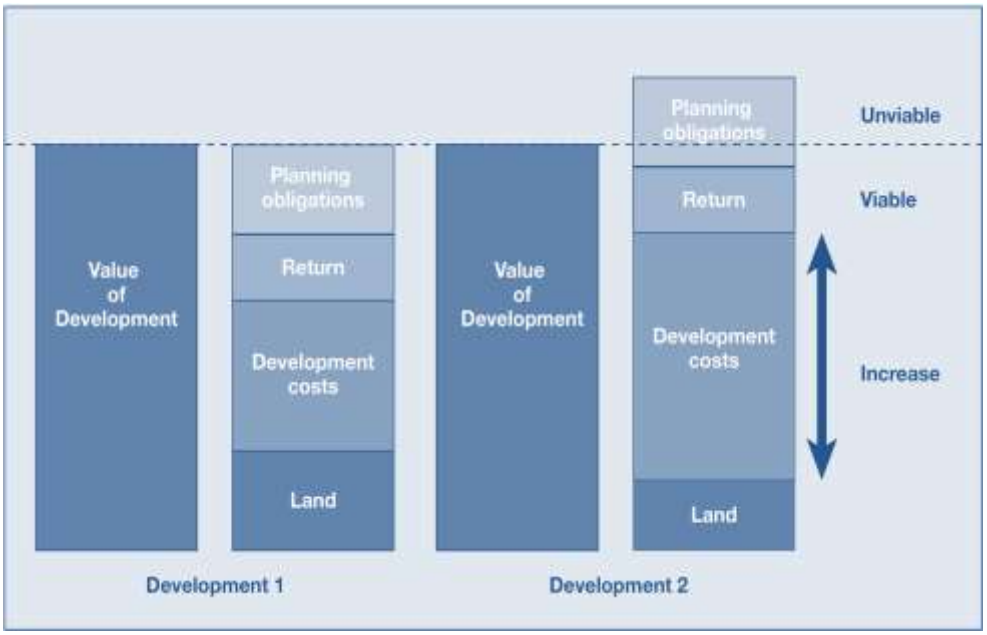
Section 2

5.0. Standard Methodology in assessing viability

5.1. Economic Viability Analysis (EVA) is based upon a residual land value calculation, supported by a design and build cost estimate in as much detail as possible, and a scheme cash flow plotting the pattern of likely cash spend and income to generate interest on development finance.

5.2. The difference between gross development value and total cost equates to a residual land value. The model runs over a development period from the date of commencement of the project, to completion when the development has been constructed, sold and occupied. In order to assess whether a development scheme can be regarded as economically viable, it is necessary to compare residual land values produced with target land values. If the development proposal generates a residual land value that is higher than the target land value for the scheme, it can generally be regarded as economically viable and therefore deliverable. However, if the scheme generates a residual land value which is lower than the target, it should not be deemed as economically viable (as illustrated in Diagram 1 below). The standard convention of working with current values and costs is used rather than those predicted in the future.

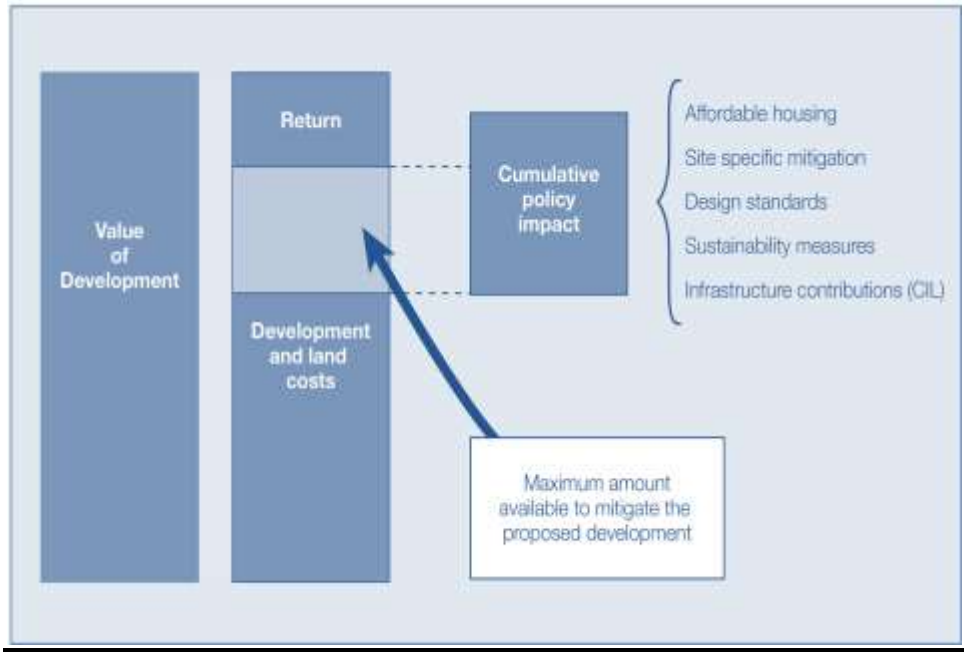
Diagram 1 - Comparative development viability



5.3. Diagram 1 illustrates the balance required to achieve a viable scheme – Development 1. It also shows how a scheme becomes unviable where there are increased development costs, due to site considerations, along with planning obligations – Development 2.

5.4. A viability assessment will have regard to not just single policy impacts but a cumulative impact of policy and planning obligations as illustrated in Diagram 2.

Diagram 2 - Cumulative impact of policy and planning obligations



6.0. Planning Guidance

6.1. There is strong policy background detailing the objectives and methodology for undertaking Economic Viability Assessments. This includes:

6.1.1. In the context of achieving sustainable development the National Planning Policy Framework (NPPF) March 2012, refers to ensuring viability and deliverability at sections 173 – 177.

> "*To ensure viability, the cost of any requirement likely to be applied to development, such as requirements for affordable housing, standards, infrastructure contributions and other requirements should, when taking into account the normal cost of development and mitigation, provide competitive returns to a willing land owner and willing developer to enable a development to be deliverable." (Paragraph 173)*

6.1.2. The NPPF also refers to the use of Planning Conditions and obligations of Sections 203-206 and advises that where obligations are being sought:

> *"…local planning authorities should take account of changes in market conditions over time and wherever appropriate be sufficiently flexible to prevent planned development being stalled."* (Paragraph 205)

6.1.3. The National Planning Practice Guidance notes:

> *"A competitive return for the land owner is the price at which a reasonable land owner would be willing to sell their land for the development. The price will need to provide an incentive for the land owner to sell in comparison with the other options available. Those options may include the current use value of the land or its value for a realistic alternative use that complies with planning policy."*

6.1.4. The Royal Institution of Chartered Surveyors (RICS) has produced a guidance note, Financial Viability in Planning (August 2012). This is now being referred to by planning inspectors in appealed decisions. The RICS guidance note defines viability and the context of undertaking appraisals of financial viability for the purpose of town planning decisions as:

> "*An objective financial viability test of the ability of a development project to meet its costs including the costs of planning obligations, by ensuring an appropriate site value for the land owner at a market risk adjusted return to the developer in delivering that project."*

6.1.5. The guidance goes on to note:

> "*site value should equate to the market value subject to the following assumption: that the value has regard to the development plan policies and all other material planning considerations and disregard that which is contrary to the development plan."*

6.1.6. Any assessment of site value however will have regard to prospective planning obligations, and the point of the viability appraisal is to assess the extent of these potential obligations and also have regard to the prevailing property market. The fundamental issue in considering viability assessments in a town planning context is whether an otherwise viable development is made unviable by the extent of planning obligations and other requirements.

6.1.7. The RICS guidance emphasises that a proper understanding of financial viability is essential in ensuring that:

- Land is willingly released for development by land owners
- Developers are capable of obtaining an appropriate market risk adjusted return for delivering the proposed development.
- The proposed development is capable of securing funding

6.1.8. Where planning obligation liabilities reduce the site value to the landowner and return to the developer below an appropriate level, land will not be released and therefore development will not take place.

6.1.9. In their April 2012 topic paper practice note, the Homes and Community Agency (HCA) Advisory Team for Large Applications (ATLAS) Team note:

> *"The issue of viability is a material consideration in decision making. The weighting attached to it needs to be balanced with the circumstances of any specific project, the underlined policy basis and all the other relevant material planning considerations. In the current economic climate, when project viability is often a key barrier preventing development from proceeding and potentially hindering its ability to meet all established policy objectives, it is critical…(have a good understanding of the use of financial appraisals to test viability)".*

6.1.10. The Department for Communities and Local Government (DCLG) publication "Section 106 affordable housing requirements – Review and Appeal, April 2013" notes the following:

- The test for viability is that the evidence indicates that the current cost of building out the entire site (at today's prices) is at a level that would enable the developer to sell all the market units on the site (in today's market) at a rate of build out evidenced by the developer, and make a competitive return to a willing developer and a willing landowner.
- Any purchase price used should be benchmarked against both market values and sale prices of comparable sites in the locality.

7.0. Assumptions used in our modelling framework

7.1. The inputs for viability appraisals are hard to determine at an early stage for specific proposed site allocations as they are generally without the benefit of detailed designs, surveys or enquiries undertaken by the developer (as demonstrated by the complexity of many S106 negotiations). Therefore our viability assessments are necessarily broad approximations, subject to a margin of uncertainty.

7.2. The assumptions are primarily made in the context that the majority land use of the sites proposed, are for residential development. In 7.8 below we set out the specific assumptions we have made in respect of commercial use (and commercial elements within other sites); related caveats to the assessment of commercial sites are also included in the conclusions section of this report. The assumptions below take into account feedback from promoters at the consultation workshop as set out in 3.8 above.

7.3. Property Type and Sizes

Diagram 3 sets out the number of homes, bedroom size and gross internal floor area we expect to see on a typical residential site. The market dwelling sizes align with discussions held with developers/promoters at our consultation events. The affordable dwelling sizes align with the DCLG Nationally Described Standards. The proportion of different house types is in line with data contained within the Strategic Housing Market Assessment (SHMA) September 2015.

Diagram 3 – Property Types and Sizes for a typical phase of 100 dwellings

	Market Housing	ART	Shared Ownership	Total
1 Bed Flat GIFA m2	46	50	50	
Number	2	4	2	8
Total GIFA m2	92	200	100	392
2 Bed Flat GIFA m2	55	70	70	
Number	0	4	0	4
Total GIFA m2	0	280	0	280
2 Bed House GIFA m2	74	79	79	
Number	5	8	5	18
Total GIFA m2	370	632	395	1397
3 Bed House GIFA m2	85	93	93	
Number	26	10	5	41
Total GIFA m2	2210	930	465	3605
4 Bed House GIFA m2	130	106	106	
Number	19	2	0	21
Total GIFA m2	2470	212	0	2682
5 Bed House GIFA m2	150			
Number	8	0	0	8
Total GIFA m2	1200	0	0	1200
Total Homes	60	28	12	100
Total GIFA m2	6342	2254	960	9556

7.4. Gross Development Value

7.4.1. For open market properties we have assumed sales values based on postcode averages for the last 12 months, less a maximum of a 5% discount. This to represent risk associated with build volumes and uncertainty in developing new communities and is applied to new build sales prices being achieved, where sales data indicates that this is appropriate. The key sources for this information were Rightmove, Zoopla, and Land Registry data.

7.4.2. Values used for affordable housing are based on market rates over the last 12 months – we have evidence of these rates through our close working with Registered Providers who are active in the area, and notional offer prices received from them.

7.5. Gross Development Costs

7.5.1. Site Acquisition Costs

We have included site acquisition costs to cover agent and legal fees at a total of 2% of the residual land value. Stamp duty at the prevailing rate has been allowed for, calculated on the residual value.

7.5.2. Construction Costs

We have assumed that all design costs (site survey, architecture, engineering, planning consultant and fees), are included within the design and build cost.

Base build costs have utilised the location adjusted *Building Cost Information Service (*BCIS) data, with a 25% enhancement for external works. We have not deducted an allowance for a contractor's profit contained within base BCIS costings but have, separately, also allowed for overhead and profit elsewhere. This represents an additional 6 - 10% uplift on base prices to cover plot external costs.

Rates used are adjusted to reflect the location factor for Uttlesford and are at the higher, mean level for estate housing. (Significant evidence exists on larger developments that volume house builders' rates are lower than this due to the economies they deliver - we have not taken this into account).

7.5.3. Abnormal and Additional Construction Costs

Abnormal costs have been allowed for in line with detailed information made available by individual developers/promoters. Contingency costs have been allowed for at a rate of 5%.

7.5.4. Design & Professional Fees

Allowances have been included to cover all design and professional fees, at 7.5%. This is in the middle of the standard range of 5 to 10% of fees typically assumed in Economic Viability testing, and takes into account the nature of the development.

7.5.5. Labour Uplift

Uttlesford is geographically placed between the buoyant construction markets of Cambridge and London, both within commuting distance for labour. BCIS rates in North London are in excess of 20% higher than Uttlesford, which must be attributed to labour costs. Considerable concern exists due to the combination of proximity to these markets and well-publicised labour shortages and the aging workforce.

Due to this we believe it prudent to allow for an uplift to BCIS rates for large projects which will require relatively large labour forces. An uplift of 5% is therefore viewed as prudent.

7.5.6. S106 Contributions

S106 contributions have been allowed for in line with detailed advice received from Essex County Council. This advice reflects the infrastructure requirements of New Settlements/Neighbourhoods. Appendix C contains the S106 and Infrastructure Schedule in relation to these proposals.

For each scheme, we have considered a typical phase of 100 homes:

- An average phase spreading all costs evenly, with a residual land value, which if viable should be no less than the target land value.
- An early phase delivered in the first 35% of the development, where S106 contributions are much higher than the average, enabling the early delivery of infrastructure.
- A later phase of the development, occurring in the last third of the development, with much lower S106 contributions. This generates land values considerably in excess of the target.

They key is to ensure that early phases break even with a notional land value, which may require delivery timescales for infrastructure being slightly delayed or staggered, in comparison to advice received from ECC. For most infrastructure items, as advised by ECC, an indicative cost was provided. We have appraised schemes with these indicative costs. There are a small number of items where costs are not available, where we have assumed a notional additional contribution of £5,000 per dwelling, which we have also appraised.

7.5.7. Marketing and Sales Costs

We have adopted full marketing sales and disposals costs within the appraisal, including:

- Marketing costs of the private properties
- Agent's fees
- Legal fees associated with private sales

On this basis we have assumed a sales and marketing cost of 2.75% of the gross development value of the open market sales properties plus £600.00 per property for legal fees. For affordable housing we have assumed agent fees of £1,500 for the scheme with legal costs at the same level as market value sales.

7.5.8. Finance Costs.

Where development finance is available, lenders are currently charging minimum rates of at least 7%. Arrangement (1%), monitoring (2%) and exit fees (1%) are also charged. These onerous lending terms persist due to on-going resistance to lending on residential development in the current market. We have adopted an interest rate of 7% with no additional allowance for fees, which we consider to be a standard assumption for development in the current economic climate.

It is conventional to assume finance on all costs in order to reflect the opportunity cost (or, in some cases, the actual cost) of committing equity to the project.

7.6. Development Programme

7.6.1. For the purpose on undertaking the Economic Viability Assessment only, we have assumed that a standard development phase of 100 homes, occurs over a 24 month period with the land being acquired in month one, and construction taking 23 months.

7.6.2. We have assumed sales of open market homes occur from month 13 to month 24 on an even basis (at approximately a rate of 5 sales per month). The rate of sales directly links to the assumed sales prices of individual homes. Affordable housing development assumes payment over a 9 month contract, commencing once initial infrastructure is in place.

7.6.3. These assumptions are particularly important in the calculation of development interest. The accounting for development interest on the land acquisition is from month one of the programme, not allowing for any historic holding costs of the site, in line with best practice.

7.7. Overhead & Profit

7.7.1. When considering the changing economic climate, financial institutions have tightened their requirements for overhead and profit returns on all schemes. Banks have raised their expectations in terms of risk and required returns that new developments offer. It is currently deemed likely that any private residential development proposals predicting an overhead and profit return of less than between 17.5% and 25% of gross development value would not be considered viable. We have therefore adopted an overhead and profit rate of 20% of gross development value for the scheme, at the midpoint of the acceptable range.

7.7.2. As affordable housing contains less commercial risk, typically with a JCT Design & Build Contract or a Development Agreement being signed at the commencement of works, and monthly valuations of construction work, borrowing and risk are reduced and so lower levels of overhead and profit are the norm. We have therefore allowed an overhead and profit of 6% in relation to the delivery of affordable housing.

7.7.3. At the planning appeal for Shinfield, Reading (APP/X0360/A/12/2179141) the inspector deemed that “the usual target being in the range 20-25%” of gross development value. We have therefore adopted an overhead and profit rate of 20% of gross development value for the scheme, at the bottom of the acceptable range. This is in line with the recent appeal decision Chapel St Leonards APP/D2510/Q/14/2228037 noting that this level of return is reasonable.

7.8. Assumptions used in assessing employment elements

7.8.1. Paragraphs 7.1 to 7.7 above set out the assumptions we used in relation to the assessment of the residential sites. We have used a different set of assumptions for the

commercial sites (and commercial elements within other sites) which are standard to the Commercial Development Industry:

- The net developable area per hectare = 80% of the gross developable area per hectare
- Of the net developable area per hectare – 60% is floor area (GIFA) and 40% is for car parking/ yards / planting etc.
- Of the 60% floor area – 15% is for office use; 85% is for commercial units
- The Target Land Value per net development hectare is assumed to be £500,000
- Gross Development Value for offices is £160 per annum per m2; for commercial units £80 per annum per m2
- For investment purposes – Year's Purchase @ an assumed 8% interest rate
- Build costs for offices - £1,312 per m2 and for commercial units £665 per m2
- 5% contingency
- 10% design fees
- 10% letting agents fees
- 5% legal fees for letting
- Interest rate of 6.5% on capital employed
- Profit of 18% of Gross Development Value

7.9. Assumptions for assessing retail elements

7.9.1. The retail element is being based on comparable evidence from similar projects in the Region, rather than on a residual basis. The rationale being that schemes are not sufficiently worked up in detail, with retail uses ranging from small individual shops to big super stores depending on the requirements of the area.

8.0. Methods for Assessing Land Values

8.1. Overview

8.1.1The minimum land value judged as capable of ensuring a site is brought forward is important in our calculations of scheme viability.

8.1.2. As noted in 6.1.1 Para 173 – 177of the NPPF notes that developments should

> *"provide competitive returns to a willing land owner and willing developer to enable a development to be deliverable."*

8.1.3. The 'Harman Report' (June 2012) notes that Threshold Land Value (TLV) should represent the value at which a typical willing landowner is likely to release land for development. The report notes that TLV needs to take account of the fact that future plan policy requirements will have an impact on and values and landowner expectations.

8.1.4. Market values provide a useful 'sense check' on the TLV, but 'Harman' recommends an approach based on a premium over current use values and credible alternative use values.

8.1.5. The report goes on to note that if local market evidence shows that minimum price provisions are substantially in excess of initial assumptions, the TLV will require adjusting to reflect market evidence.

8.1.6. The RICS report 'Financial Viability in Planning,' defines Benchmark Land Values (BLV) as equating to the market value, subject to having regard to development plan policies and other material planning considerations and disregards that which is contrary to the Local Plan. It goes on to note for area wide viability testing, site value may need to be further adjusted to reflect emerging policy, at a level, which would not prejudice delivery.

8.1.7. The report also notes the BLV must be at a level which makes a landowner willing to sell. Comparable evidence is important in establishing BLV for scheme specific **as well** as area wide assessments.

8.1.8. It is common to refer to both Threshold Land Value (TLV) and Benchmark Land Values (BLV), as terms that are often interchangeable. For the sake of clarity and to avoid confusion, we have sought to differentiate these two terms, with a degree of clarity that perhaps goes beyond the intent of the authors of the reports referred to above which is in line with increasingly commonly used practice.

- TLV – Value at which a typical willing landowner is likely to release land for development, and based typically on existing use value plus a premium
- BLV – Market value subject to considering planning policy and based on market evidence.

8.1.9. In this context we note the Examiner's report in relation to Greater Norwich Development Partnership CIL charging schedule (December 2012)

> "*…it is necessary to establish a threshold land value i.e. the value at which a typical willing landowner is likely to release land for development. Based on market experience…a landowner would expect to receive at least 75% of the benchmark value… It is reasonable to see a 25% reduction in benchmark values as the maximum that should be used…*

8.1.10. This approach was also uncontested and accepted at the Sandwell CIL examination in July 2014. In short if land trades today at the BLV, the TLV should be no less than 75% of this.

8.2. Determining the land value

8.2.1. In assessing viability we want to establish a **Target Land Value** that is appropriate in ensuring landowners receive a competitive return (as distinct the separate approaches adopted in setting Threshold Land Value (TLV) or Benchmark Land Value (BLV).

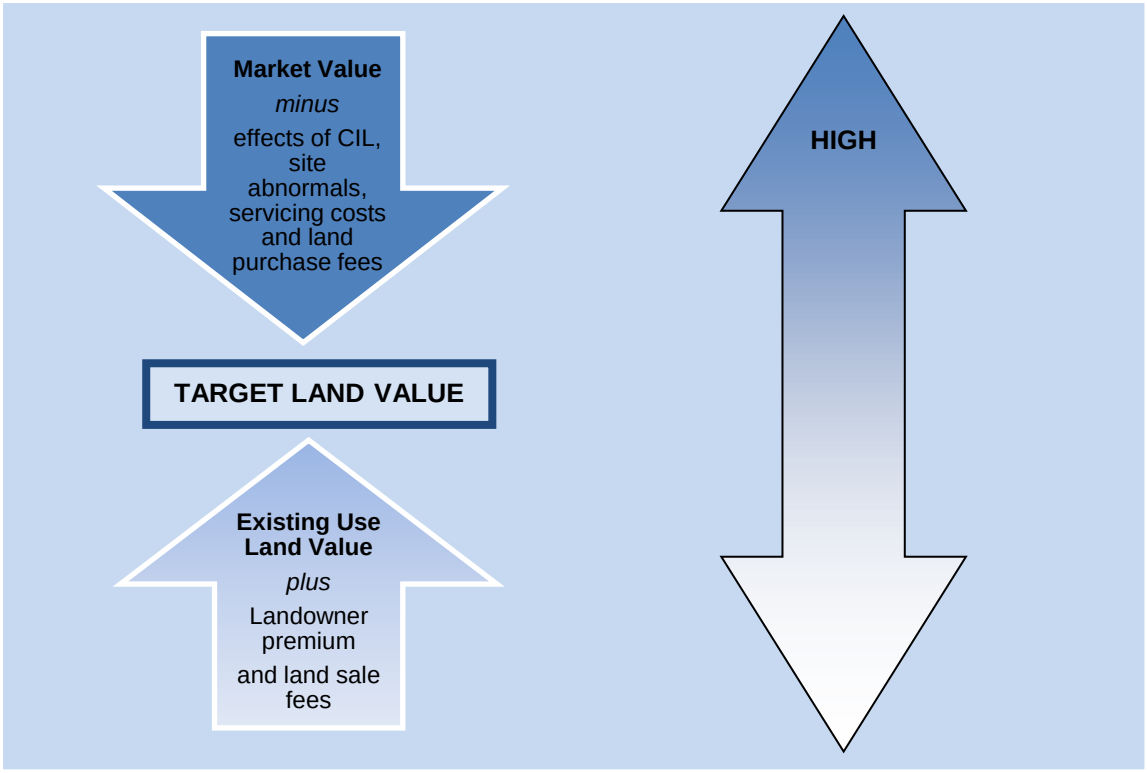
8.2.2. Broadly speaking there are two different approaches to arrive at an appropriate Target Land Value:

- Assessing the uplift from an existing or known alternative use value - TLV.
- Assessing the discount from the market value of a site, adjusted to allow for the costs

of planning policy - BLV.

8.2.3. Diagram 4 illustrates how the two approaches start from different bases, but should theoretically produce a similar figure.

Diagram 4 – Approaches to arriving at a Target Land Value



8.2.4. A further explanation, along with the issues to take into account when considering both Threshold Land Values (TLV) and Benchmark Land Values, are set out in 8.3 and 8.4 below before returning to the issue of how the Target Land Value is determined.

8.3. Threshold Land Values (TLV)

8.3.1. To derive an appropriate TLV from the existing use value, it is necessary to work upwards in value. Harman and the RICS acknowledge that in order for development to come forward over the existing use, a 'competitive return' (also referred to as a premium) is necessary.

8.3.2. There is no set rule as to how much of a premium should be applied on top of the existing use value. We can sensibly expect that a minimum uplift in value would be required in order to allow the seller to pay stamp duty, sales fees, legal costs and disruption. But that bare minimum is usually not incentive enough to persuade a landowner to sell.

8.3.3. Beyond that bare minimum, an incentive (referred to as a 'premium') is required to encourage the landowner to sell. It is difficult to say what premium a seller would require in

order to sell the land. This is because there are inevitable differences in each deal. For example, the motivations of the parties involved in the transaction may vary, as might perceptions of future market prospects. Some landowners (say family trusts, or Oxbridge Colleges) take a very long-term view of land holdings, and can only be persuaded to sell at a high price. We cannot know these individual circumstances, so Harman stipulates that an appropriate premium should be determined by local precedent - another way of saying market value.

8.3.4. In some instances an alternative use may be considered over residential development, e.g. employment, retail etc. Assuming that the alternative use is realistic, then it may be prudent to consider land values for this alternative use, in addition to its existing use. This may give a more accurate view of the TLV, because a rational landowner will always seek to maximise site value.

8.3.5. Regarding existing use values, sites coming forward for development in can typically comprise green field sites. Guidance issued by the HCA in "Transparent Assumptions: Guidance for the Area Wide Viability Model" 2010 states that for green field land, benchmarks tend to be in a range of 10 to 20 times agricultural value. In Knight Frank's report, *The Rural Report*, Winter 2014, typical agricultural land value per hectare, in the East of England, are noted as being £25,946. This would give a TLV of between £259,460 per hectare and £518,920 per hectare.

8.3.6. As well as the *existing* use of the site, credible *alternative* uses should also be taken into account. Should an alternative use derive a higher land value, it is logical that a landowner would seek this higher value.

8.3.7. The alternative use depends on planning policy to a good degree. If a landowner knows that his site appears (or is likely to appear) in the development plan for residential land, he or she would only sell for this value (if greater than the existing use). The alternative use value sought will be particularly high in areas where the landowner is aware that high sales values for residential properties make land particularly valuable.

8.3.8. If sites in Uttlesford District Council area have a realistic alternative use value for residential development (having been allocated in the emerging Local Plan) then landowners will anticipate this is the value sought for the site. We do not foresee other use types coming forward on the sites. In the Uttlesford District Council area land values for residential development are higher than the existing use values; it is therefore prudent to also understand market values, as described in greater detail in 8.5 below.

8.4. Benchmark Land Value

8.4.1. To derive an appropriate BLV from market values (as opposed to existing land use value) it is necessary to work downwards in value. Market values based on transactional evidence of sites being bought and sold, represents the value at which land can be delivered, with the knowledge of current planning policy. Thus BLV benefits from being

based on comparable market evidence.

8.4.2. However, the BLV cannot be straightforwardly derived from current market values. The market value / BLV should be adjusted to allow for any future changes in planning policy. Furthermore, it may also be necessary to reduce the market value / BLV to allow for risk in obtaining planning permission, dependent upon comparable evidence. There is no set rule for the amount of discount that should be applied to the market value of a site.

8.4.3. This market comparable based approach considers land traded in the area. This market performance will inform landowners' 'hope values' for sites. After adjustment for various factors (such as time and various flavours of risk, such as whether the land had planning permission), we can start to make judgments about how comparable sites might trade.

8.4.4. We have been able to obtain a number of comparables from developers and agents in the area. This information was provided on a confidential basis and therefore the actual comparables used cannot be made available to the public.

8.5. Which method of estimating the land value does this study use?

8.5.1 We seek to determine a Target Land Value used to compare to Residual Land Values (RLV) on site specific proposals as outlined below, using a combination of both methods (i.e. a combination of TLV and BLV).

8.5.2. We examined a wide range of comparables, looking at residential development site values whilst taking into consideration existing uses. This is to ensure that the Target Land Value is as accurate as possible. Given the complexities of development across a whole plan area, and limited nature of publically available transactional data, we have based this assessment on appropriate available evidence for a strategic assessment of this nature.

8.5.3. From our recent work we would highlight several key issues in assessing the land value, as follows.

- It is important to stress that there is no single Target Land Value at which land will come forward for development. Much depends on the land owner and their need to sell or wait in the hope that land values might improve and on the condition and location of the site.
- All sites vary in terms of the degree to which they are serviced or free of abnormal development conditions. Such associated costs vary considerably from site to site and it is difficult to adopt a generic figure with any degree of accuracy. Our starting point is to assume that the value of sites relates to a fully serviced development plot.

8.5.4. The land transaction market is not transparent. Very little data is in the public domain and the subjective influences behind the deal are usually not available. We have therefore placed a strong emphasis on consultation with both landowners and developers to get as accurate a picture as possible as to what the Target Land Value might be, as well as data supplied by developers in making viability arguments to the council on site specific cases at

a development control level.

8.6. Treatment of site abnormal development costs

8.6.1. Abnormal development costs or site servicing costs will be met by developers once the land is purchased. Careful analysis of transactions is required to assess the split between abnormal development and servicing costs (as a discount from the market value) from the premium sought by the land owner above the existing use value, or adjustments to the benchmark value to reflect the additional costs.

8.6.2. In short, sites with significant abnormal costs (contamination remediation, poor ground condition and exceptional servicing costs etc.), would lead to these costs being deducted from a BLV, or result in a lower premium for a TLV.

8.7. Bringing together the Target Land Value and the Residual Land Value

8.7.1. Having estimated the residual value on individual schemes, we compare this residual value with the Target Land Value the landowner will accept to release his or her land for the development.

8.7.2. If the residual land value shown by the appraisals is below the Target Land Value, the development is not financially viable. That means that unless the circumstances change the development will not be delivered. We have considered if a reduced affordable housing requirement would lead to viability in such circumstances.

8.7.3. If the residual value and the Target Land Value are equal, or if the residual value exceeds the Target Land Value, the development is viable.

8.8. Setting a Target Land Value

8.8.1. Having observed market transactions, the RICS guidance paper notes that we need to deduct an amount in order to take account of policy requirements.

8.8.2. The Inspector in the report on the examination of the London Mayoral CIL (January 2012) commented:

> '*Finally the price paid for development land may be reduced. As with profit levels there may be cries that this is unrealistic, but a reduction in development land value is an inherent part of the CIL concept. It may be argued that such a reduction may be all very well in the medium to long term but it is impossible in the short term because of the price already paid/agreed for development land. The difficulty with that argument is that if accepted the prospect of raising funds for infrastructure would be forever receding into the future. In any event in some instances it may be possible for contracts and options to be re-negotiated in the light of the changed circumstances arising from the imposition of CIL charges*.' (paragraph 32)

8.8.3. The question, therefore, is how much we should adjust the land value downwards, in order to take account of policy costs such as the continuing requirement for affordable

housing. RICS guidance requires us to comment on the state of the market and delivery targets as at the date of assessment and to set out our 'professional opinion underlying the assumptions adopted'.

8.8.4. If we look at the state of the market, our discussions with developers showed that effective demand for homes (i.e. demand from people willing and able to pay) is relatively strong in the area. However if we over-value land, the RICS report points out that we will reduce the amount available for planning contributions. This was taken into account when suggesting the Target Land Values below.

8.9. Target Land Values used

8.9.1. In suggesting a Target Land Value we are basing it on the gross developable area rather than net[1]. We have reviewed the evidence above, and triangulated between existing use value, alternative use value and market value. Using our professional judgement, we believe that a sensible Target Land Value assumption for the area is as follows:

- £250,000 to £350,000 per gross developable hectare

8.9.2. For the commercial sites, we have set the Target Land Value at £500,000 per net hectare (as defined further in the reference footnote to 8.9.1 above)

8.9.3. These land values quoted are a broad average across each value zone. Site specific viability, including dealing with the costs of site specific constraints and landowners individual aspiration on land value, will of course vary. Any site abnormals which are not reflected in our appraisals should be deducted from the land values assumed.

8.9.4. However, it is acknowledged that there will always be a minimum return that a landowner will require to release a site for development, which may not be sufficient once the cost of abnormals are deducted.

[1] A net developable area is a more refined estimate than a gross developable and includes only those areas which will be developed for housing and directly associated uses. This will include:

- access roads within the site;
- private garden space;
- car parking areas;
- incidental open space and landscaping; and
- children's play areas where these are to be provided.

It therefore excludes:

- major distributor roads;
- primary schools;
- adult/youth play spaces or other open spaces serving a wider area; and
- significant landscape buffer strips.

We have assumed a net developable area equates to 80% of the equivalent gross developable area. The definition above reflects discussions at the consultation event (see also 3.8)

SECTION 3

9.0. Conclusions – are the sites viable?

9.1. Section 2 of this report sets out the assumptions, methodology and model we used in this study. Each of the 8 sites identified through the Call for Sites process have been assessed within this framework.

9.2. Fundamentally we were looking for the residual land value to be equal to or exceed the Target Land Value to prove the scheme's financial viability.

9.3. As schemes are in the early stage of development, it is consider prudent to allow a 10% buffer so that on an average phase, the residual land value of a viable scheme achieves a minimum of 110% of the target land value. This is to account for the level of uncertainties that still exists relating to the cost of developing these New Settlements/Neighbourhoods.

9.4. Some developers have far more detailed information relating to development and infrastructure costs for their site, resulting in some schemes (with less detailed information) appearing to perform better, but in effect containing more risk due to these uncertainties. It is thought unlikely that this risk will outweigh the higher levels of value shown in our analysis.

9.5. For each scheme, we have considered a typical phase of 100 homes:

- An average phase spreading all costs evenly, with a residual land value, which if viable, should be no less than the target land value.
- An early phase delivered in the first 35% of the development, where S106 contributions are much higher than the average, enabling the early delivery of infrastructure.
- A later phase of the development, occurring in the last third of the development, with much lower S106 contributions. This generates land values considerably in excess of the target.

9.6. The commercial sites were assessed using a different set of assumptions from those used for residential sites (as set out in 7.8 of this report). The assessment concluded that the sites are viable however our view is that they are very sensitive to the market. Our opinion is that development will only occur in the current market if pre–lets at the top end of the range are available. Lower profits may well be acceptable if covenants are strong. These issues are no different from any commercial development in the current market. We have assumed all large infrastructure costs have been carried in their entirety by the residential element of the schemes, due to the sensitive nature of the commercial appraisal. Therefore, as you can see in the results table in 9.8 below, all commercial schemes perform to the same level of viability.

9.7. The retail element is being based on comparable evidence from similar projects in the Region, rather than on a residual basis. The rationale being that schemes are not sufficiently worked up in detail, with retail uses ranging from small individual shops to big super stores depending on the requirements of the area. Due to recent significant changes to the retail market, and in particular food retail, there is considerable uncertainty about the level of land value that can be achieved. For this reason, we have ensured that the Target Land Value can be fully achieved by the residential elements of the developments. Any retail land value will therefore enhance the viability of the developments in addition to that shown in table 9.8 below.

9.8. Table: Residual land value as a percentage of Target Land Value.

The table below shows residual land values as a percentage of Target Land Values. For the average phases, it is essential that the residual land value is in excess of 110% of the Target Land Value, as detailed in 9.3 above. For early phases, which carry the majority of the infrastructure costs, the minimum requirement is to achieve a positive figure. The latter phases should achieve significant land values well in excess of the Target, due to the earlier completion of major infrastructure. This viability assessment has been modelled in current market conditions, and does not take account of enhanced property values on an established development.

	Commercial	Average phase – costed S106 items only	Average phase – costed S106 items plus £5,000 per unit	Early phase in first 35% of development	Latter phase in remainder of development
Chelmer Mead	123%	132%	111%	3%	176%
Andrewsfield	123%	141%	124%	59%	182%
Boxted Wood	123%	130%	109%	8%	190%
Elsenham	123%	164%	142%	74%	194%
Easton Park	123%	150%	129%	67%	195%
Takeley	123%	152%	111%	43%	172%
Birchanger	123%	163%	121%	53%	183%
Gt Chesterford	123%	177%	136%	67%	197%

9.7 From our assessment of the information available and following the detailed methodology contained with Section 2 of this report, it can concluded that all of the proposed new settlements/neighbourhoods are financially viable and therefore able to delivered over the Local Plan period if allocated. As stated previously in this report, this assessment is based on current market conditions.

Appendix A

Summary of New Settlement/Neighbourhood Proposals

1. **Chelmer Mead**
   This is a site located to the North-West and East of Little Dunmow, and to the North of Flitch Green, Essex. This is a New Settlement proposal for up to 1,700 residential dwellings. The proposal also includes a Local Centre, with shops, health centre, community facilities and offices, a Business Park, a new Primary School, Country Park and other areas of public open space. The proposal also includes primary road infrastructure and an enhanced bus service.

2. **Andrewsfield**
   This site is centred on Saling Airfield, between Stebbing and Rayne. The majority of this proposed New Settlement is located within the Braintree District. The proposal is for up to 7,500 new residential dwellings across the whole site. It is anticipated that there will be two district centres with shops, a food store and community uses. There will also be four other smaller local centres. The proposal also includes two employment parks, five Primary schools and one Secondary school, formal sports areas, village greens and a Country Park. All primary road infrastructure, and a new bus service, is also proposed.

3. **Boxted Wood**
   This site is centred on Boxted Wood, Stebbing Green and to the South-West of the Andrewsfield proposal above. A large proportion of this proposed New Settlement is located within the Braintree District, as can be seen from the plan below, the site butts up against the Andrewsfield proposal. It is anticipated that this New Settlement can deliver up to 4,500 new residential dwellings. The proposal also includes a main centre providing shops, offices and communal facilities. There will also be a number of smaller, local centres. The New Settlement will also provide employment parks, three primary schools, one secondary school and includes all primary road infrastructure.

4. **Elsenham**
   This site is located on land to the North-East of Elsenham. This is a New Settlement proposal for up to 4,000 new residential dwellings. The proposal includes a new Town Centre with shops, health centre, employment and community uses. Furthermore, it is proposed to deliver two Primary schools, one Secondary school, an Employment Park and dedicated formal sports facilities. Alongside all primary road infrastructure, it is planned to provide rail interchange facilities, including a bus stop, taxi waiting area and drop-off point.

5. **Easton Park**
   This New Settlement is centred on Easton Park Estate, Little Easton Parish. The proposal is to deliver up to 10,000 new residential dwellings. There will be a new main centre with shops, services, health centre and library provision. Four other local centres, with smaller shops and community facilities are also proposed. Alongside

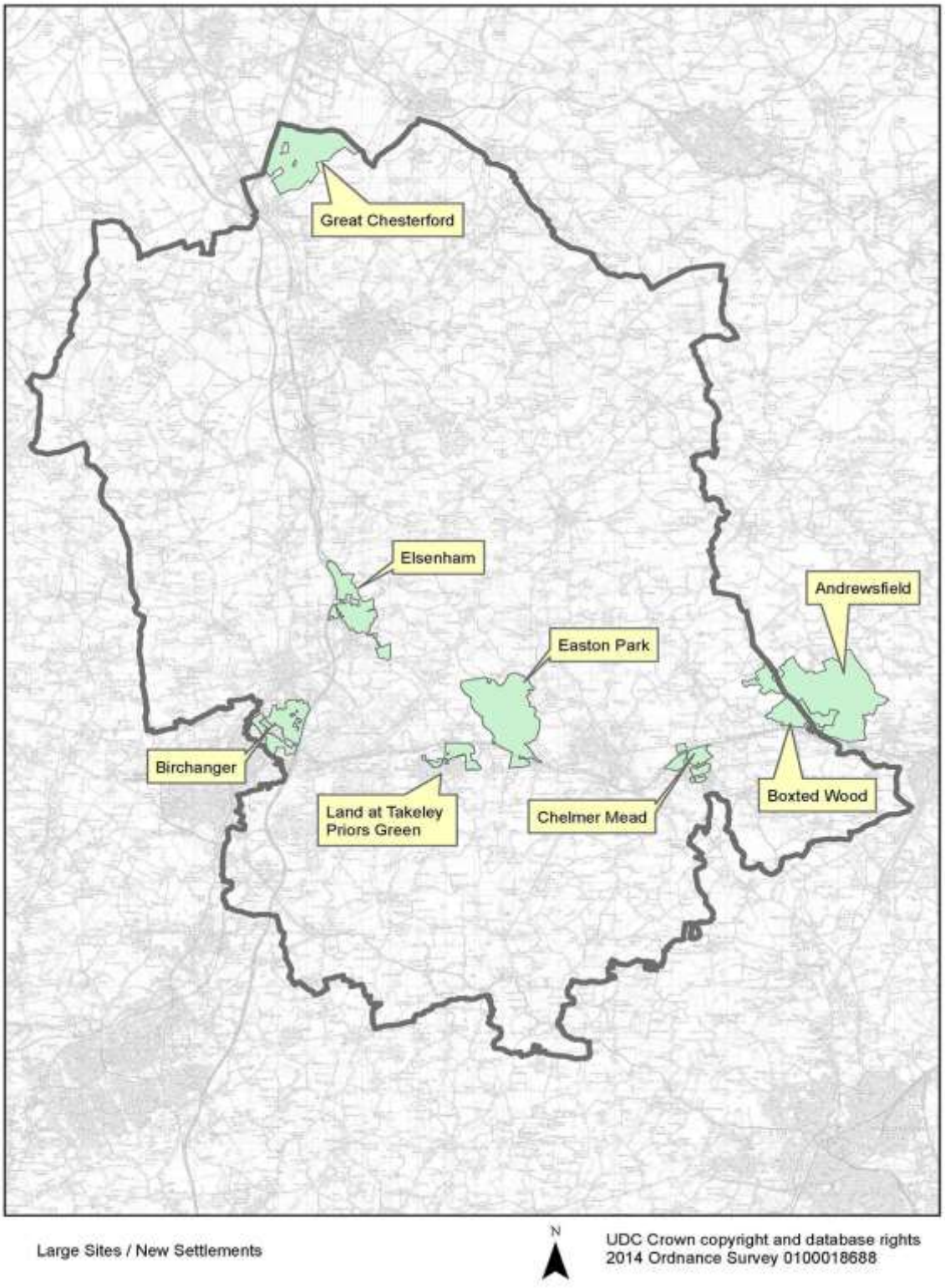
this, there will be a dedicated employment park and business space, four new Primary schools, one new Secondary school, a Country Park, village greens and formal sports facilities. Apart from primary road and rail infrastructure, there will also be the provision of a new rapid bus route.

6. **Priors Green, Takeley**
   This proposed New Neighbourhood is located on land North of Priors Green, and South-West of Priors Wood. The proposal is to deliver up to 1,700 new residential dwellings. There will be a new local centre, with shops, health centre and community uses. There will also be a dedicated employment area, one new primary school, Pocket Parks and allotments/community orchard. The proposal will build on and enhance the existing primary road infrastructure associated with the existing Priors Green development.

7. **Parsonage Spring, Birchanger**
   This New Neighbourhood is proposed on land located between Stansted Mountfitchet, Birchanger and the M11, Junction 8. The proposal is to deliver up to 3,500 new residential dwellings. The proposal will provide an employment area, 2 new Primary schools and a Secondary school extension. There will be social and community infrastructure, along with new woodland publically accessible open space.

8. **Great Chesterford**
   This New Settlement is proposed on land to the South-East of the A11, and to the North-East of the B184. The proposal is to deliver up to 5,000 new residential dwellings. The proposal will meet all primary road infrastructure requirements, and will deliver a mixed development including employment use, schools, health centre, shops, community use, sports and recreation and publically accessible open space.

New Settlement/Neighbourhood Location Map



Appendix B

Attendees at consultation events held from February to April 2016 at UDC offices, and contributors to correspondence.

Promoters/land owners/agents and consultants

Robin Meakins – Barton Willmore

Colin Campbell – Savills

Adam Halford – Bidwells

Craig Nelson – Ptarmigan Land

James Brierley – Gerald Eve

John August – Galliard Homes

Martin Herbert – AECOM

David Maxwell – Capita

Richard Mabb – Mabb Planning

Jonathan Harris – GL Hearn

Robert Bucknall

Ian Chater – Chater Homes

Harry Jones – David Lock Associates

Philip Copsey – David Lock Associates

The Fairfield Partnership

Essex County Council Officers – Infrastructure Advice

Neil Keylock – School Places Data and Intelligence Manager

David Sprunt – Principal Transport Strategy and Engagement Officer

Gill Holland – Children's Community Development Officer

Keith Blackburn – Senior Infrastructure Planning Officer

Blaise Gammie – Infrastructure Planning Manager

Matthew Bradley – Strategic Development Manager

Zhanine Smith – Principal Spatial Planner

Other (authors of this report)

Martin Aust – Pathfinder Development Consultants

Doug Malins – Malins Associates Limited

Appendix C

Uttlesford District Council Infrastructure Delivery Schedule and Financial Viability Study – ECC Input

The information outlined within the tables below is indicative figures, and may be subject to change.

Site – Chelmer Mead (1, 700 dwellings)

Utility	Nature of Infrastructure	Timescales for Delivery	Responsible Authority(S)	Cost	Notes
Transport	B1256 Station Road – roundabout (capacity)	Up to occupation of 400 dwellings	Delivery by developer	£1 million	
Transport	B1256 – Braintree Road – mitigation necessary, likely signalised junction (safety scheme)	Up to occupation of 400 dwellings.	Delivery by developer	£1 million	
Transport	Passenger Transport Infrastructure and subsidised bus services to and from – local transportation interchanges, key community and economic centres. Frequency of service – Peak period (7am – 10am and 4pm – 7pm) every 20 minutes, inter peak and evening minimum hourly service (all subject to viability of bus service provision).	First occupation to occupation of final dwelling plus 5 years	Delivery of developer	£1.2 million*	Note – that concern about the viability of bus services after the subsidised bus services – the quantum of the development limits the viability.
Transport	Essex Regiment Way contributions for capacity and sustainability transport mitigation	Contribution receipt from first occupation.	Contribution from developer – delivery ECC.	£1.5 million	Includes P and R contributions for Chelmer Valley
Transport	Felsted – contributions for	Contribution receipt	Contribution from developer	£150,000	

	traffic management and safety	from first occupation	– delivery ECC.		
Transport	Flitch Way – contribution for improvements between the site and Great Dunmow and Braintree.	Contribution receipt from first occupation	Contribution from developer – delivery ECC.	£100,000	
Transport	Local level highway infrastructure enhancements will also be required.	Contribution decided following further site information.	Contribution from developer – delivery ECC.	X	
Transport	M11 J8 capacity improvement (reference from figure 1 is A)	Contribution decided following further site information.	Contribution from developer – delivery HE / ECC	Substantial funding required.	
Transport	A120 Braintree junctions (A120/B1018 Galleys Corner; A120/B1256 Marks farm Roundabout (reference from figure 1 is primarily but not exclusively D and E)	Contribution decided following further site information.	Contribution from developer – delivery HE / ECC	Anything less than £250,000 would be non-compliant to ECC requirements due to CIL regulations.	
Transport	Sustainable travel promotion and package	From first occupation to build out of the site plus 5 years following completion of the final dwelling	Delivery by developer - ECC Travel planning team?	£220,000 bond.	
Primary Schools & EY	Preference for 2.5ha site for 2-2½ fe primary school with commensurate early years and childcare facilities.	To be delivered by 300th occupation, transfer of site at least one year prior.	ECC (costs to be borne by developer)	£8.5M index linked to April 2015 costs per facility. Land to be provided at nil cost.	Sites to be provided in compliance with ECC developer's guide.
Secondary	The pupil numbers that would be produced by a development of this scale would too large to be accommodated by existing secondary schools, and too small to sustain a new secondary school. (The minimum size for a new	Funding to be provided prior to 1st occupation.	ECC (costs to be borne by developer)	Cost of school expansions estimated at £18,500 per place, 0.2 places per house. Index linked to April 2015 costs per facility. Cost of	ECC would potentially object to this allocation.

	secondary school would be 600 pupils. A development of 3,000 houses would be required to generate this number of pupils.)			transportation to nearest available secondary school.	
Early Years and Childcare	Facilities to provide parental choice and serve employment areas. Approximately 0.26ha split over two sites.	First facility potentially to be provided in conjunction with employment site.	ECC (costs to be borne by developer)	£1.2M index linked to April 2015 costs per facility.	Sites to be provided in compliance with ECC developer's guide
Youth Facilities	Youth shelters, skate facilities etc.	To be provide throughout development.	ECC (costs to be borne by developer)	£0.2M index linked to April 2015 costs per facility.	Sites to be provided in compliance with ECC developer's guide
Flexible community facilities	Facility to house a range of services e.g. day-care for the elderly, playgroups and youth clubs.	To be provided mid-way through development.	UDC (costs to be borne by developer)	£2M index linked to April 2015 costs per facility.	Sites to be provided in compliance with ECC developer's guide

Site – Elsenham (4,000)

Utility	Nature of Infrastructure	Timescales for Delivery	Responsible Authority(S)	Cost	Notes
Transport	Grove Hill capacity – relocation of on-street parking and signal upgrade. Note that this requires additional land outside site	Contribution receipt from first occupation	Delivery by developer	£500,000	
Transport	Monitoring of vehicle routing over time to capture impacts of rat-running traffic on unsuitable roads	Build out of site plus 5-10 years following completion of final dwelling	Delivery by developer - ECC Travel planning team?	£500,000 bond to ensure delivery of mitigation should impacts be greater than predicted	
Transport	Additional infrastructure to minimise vehicle impact in Stansted Mountfitchet, extent to be determined by detailed modelling, could require new link to B1383	Post 800 dwellings.	Delivery by developer.	£10 million	

Transport	Sustainable travel promotion and package	From first occupation to build out of the site plus 5 years following completion of the final dwelling	Delivery by developer - ECC Travel planning team?	£500,000 bond.	
Transport	Accessibility and interchange improvements at rail station	No more than 150 dwelling occupations.	Delivery by developer.	£3 million.	
Transport	Accessibility and interchange improvements at rail station, and internal highway links, associated with level crossing closure	On closure of the existing level crossing this will be required.	Delivery by developer.	£7 million.	
Transport	Traffic management within Elsenham to manage vehicle routeing and speeds	No more than 150 dwelling occupations.	Contribution from developer and delivered by developer.	£500,000 +	
Transport	Passenger Transport Infrastructure and subsidised bus services to and from – local transportation interchanges, key community and economic centres. Frequency of service – Peak period (7am – 10am and 4pm – 7pm) every 20 minutes, inter peak and evening minimum hourly service (all subject to viability of bus service provision).	First occupation to occupation of final dwelling plus 5 years	Delivery by developer	£2.4 million*	
Transport	M11 J8 capacity improvement (reference from figure 1 is A)	Contribution decided following further site information.	Contribution from developer – delivery HE / ECC	Substantial funding required.	
Transport	Local level highway infrastructure enhancements will also be required.	Contribution decided following further site information.	Contribution from developer – delivery ECC.	£500,000	
Transport	New southern link road.	Review the 800 planning application for further information.	Contribution and delivery by developer.	See developer's proposals.	Note this forms part of the scheme for the 800 homes; therefore

					assume this part of the access route for the larger development proposals. It is also noted that UDC are still awaiting the 800 dwellings inquiry decision.
Primary Schools & EY	Preference for 3 x 2fe primary schools with commensurate early years and childcare facilities. Each site tom be 2.1ha	1st primary school needs to be delivered by 300 occupations, transfer of site at least one year prior. Second to be delivered at 1700 occupation and then third to be delivered at 3100 occupation.	ECC (costs to be borne by developer)	£7.29M index linked to April 2015 costs per facility. Land to be provided at nil cost.	Sites to be provided in compliance with ECC developer's guide.
Secondary School	Preference for 9ha site. If this development gained approval, then ECC would wish to conduct a review of secondary provision within the area. Consideration would be given to the possible re-location and expansion of Forest Hall Academy onto the development to reduce the level of home to school transport required in the area.)	Secondary school needs to be delivered by 800 occupations	ECC (costs to be borne by developer)	£15M index linked to April 2015 Land to be provided at nil cost	Sites to be provided in compliance with ECC developer's guide.
Early Years and Childcare	Facilities to provide parental choice and serve employment areas. Approximately 0.5ha split over four sites.	One provision to be provided in early phases of employment centre.	ECC (costs to be borne by developer)	£1.2M index linked to April 2015 costs per facility.	Sites to be provided in compliance with ECC developer's guide
Youth Facilities	Youth shelters, skate facilities etc.	To be provide throughout development.	ECC (costs to be borne by developer)	£1M index linked to April 2015 costs per facility.	Sites to be provided in compliance with ECC developer's guide
Flexible	Facilities to house a range of	One per	UDC (costs to be borne by	£2M index linked to	Sites to be provided in

community facilities	services e.g. day-care for the elderly, playgroups and youth clubs.	neighbourhood	developer)	April 2015 costs per facility.	compliance with ECC developer's guide

Site – Easton Park (Gt Dunmow) 10,000 dwellings

Utility	Nature of Infrastructure	Timescales for Delivery	Responsible Authority(S)	Cost	Notes
Transport	Passenger Transport Infrastructure and subsidised bus services to and from – local transportation interchanges, key community and economic centres. Frequency of service – Peak period (7am – 10am and 4pm – 7pm) every 20 minutes, inter peak and evening minimum hourly service (all subject to viability of bus service provision).	First occupation to occupation of final dwelling plus 5 years	Delivery by developer	£3.4 million*	
Transport	Guided busway connection to Stansted Airport	Upper range of build-out	Delivery by developer?	£10 million	
Transport	Improvement to A120 junction / access – A120/B1256 (W) (reference from figure 1 is B).	Before occupation of first dwellings.	Developer funded and delivered.	£2 million	Note this will require HE approval.
Transport	Direct pedestrian and cycle linkage to town centre	Provision of mitigation measures at early occupation but dependent on phasing and precise location of build.	Developer	£1 million.	
Transport	M11 J8 capacity improvement (reference from figure 1 is A)	Contribution decided following further site information.	Contribution from developer – delivery HE / ECC	Substantial funding required see note.	
Transport	Local level highway	Contribution decided	Contribution from developer	X	

	infrastructure enhancements will also be required.	following further site information.	– delivery ECC.		
Transport	Essex Regiment Way contributions for capacity and sustainability transport mitigation	Contribution receipt from first occupation.	Contribution from developer – delivery ECC.	£1.5 million	Note that includes P and R at Chelmer Valley.
Transport	A120 Braintree junctions – A120/B1018 Galleys Corner; A120/B1256 marks Farm Roundabout (reference from figure 1 is primarily but not exclusively D and E).	Contribution decided following further site information.	Contribution from developer – delivery and approval from HE	Substantial funding required see note.	
Transport	Sustainable travel promotion and package	From first occupation to build out of the site plus 5 years following completion of the final dwelling	Delivery by developer - ECC Travel planning team?	£1.25 million bond.	
Transport	Essex Regiment Way contributions for capacity and sustainability transport mitigation	Contribution receipt from first occupation.	Contribution from developer – delivery ECC.	£1.5 million	Includes P and R contributions for Chelmer Valley
Primary Schools & EY	Preference for 7x 2fe primary schools with commensurate early years and childcare facilities. Each site 2.1ha	1st primary school needs to be delivered by 300 occupations, transfer of site at least one year prior. Second to be delivered at 1700 occupation and then every 1400 houses thereafter.	ECC (costs to be borne by developer)	£51M index linked to April 2015 costs. Land to be provided at nil cost.	Sites to be provided in compliance with ECC developer's guide.
Secondary School	Preference for 13.6ha site	Secondary school needs to be delivered in phases. Site to be available prior to commencement of phase 2.	ECC (costs to be borne by developer)	£41.5M index linked to April 2015 Land to be provided at nil cost	Sites to be provided in compliance with ECC developer's guide
Early Years and Childcare	Facilities to provide parental choice and serve employment	One provision to be provided in early	ECC (costs to be borne by developer)	£1.2M index linked to April 2015 costs	Sites to be provided in compliance with ECC

	areas. Approximately 1ha split over a number of sites.	phases of employment centre.		per facility.	developer's guide
Youth Facilities	Youth shelters, skate facilities etc.	To be provide throughout development.	ECC (costs to be borne by developer)	£1M index linked to April 2015 costs per facility.	Sites to be provided in compliance with ECC developer's guide
Flexible community facilities	Facilities to house a range of services e.g. day-care for the elderly, playgroups and youth clubs.	One per neighbourhood	UDC (costs to be borne by developer)	£2M index linked to April 2015 costs per facility.	Sites to be provided in compliance with ECC developer's guide

Site – Boxted Wood 4,500 dwellings

Utility	**Nature of Infrastructure**	**Timescales for Delivery**	**Responsible Authority(S)**	**Cost**	**Notes**
Transport	Re-configuration and improvements to existing junctions on the A120 – adjacent to the development site – B1256/B1417/A120 (reference from figure 1 is C).	Up to occupation of 1000 dwellings.	Developer – ECC and Highways England	£25 million	
Transport	B1256 – Braintree Road – mitigation necessary likely signalised junction (safety scheme)	Up to occupation of 400 dwellings.	Delivery of developer	£1 million	
Transport	Passenger Transport Infrastructure and subsidised bus services to and from – local transportation interchanges, key community and economic centres. Frequency of service – Peak period (7am – 10am and 4pm – 7pm) every 20 minutes, inter peak and evening minimum hourly service (all subject to viability of bus service	First occupation to occupation of final dwelling plus 5 years following completion of the final dwelling	Delivery of developer	£3.2 million*	

	provision).				
Transport	Essex Regiment Way contributions for capacity and sustainability transport mitigation	Contribution receipt from first occupation.	Contribution from developer – delivery ECC.	£1.5 million pro rata – await confirmation of cost.	
Transport	Braintree/Rayne – contributions for traffic management and safety	Contribution receipt from first occupation	Contribution from developer – delivery ECC.	£150,000	
Transport	Flitch Way – contribution for improvements between the site and Great Dunmow and Braintree.	Contribution receipt from first occupation	Contribution from developer – delivery ECC.	£100,000	
Transport	Local level highway infrastructure enhancements will also be required.	Contribution decided following further site information.	Contribution from developer – delivery ECC.	X	
Transport	Traffic management for the local rural road network to discourage inappropriate use	Contribution receipt from first occupation	Contribution from developer – delivery ECC.	£500,000	
Transport	A120 Braintree junctions – A120/B1018 Galleys Corner; A120/B1256 Marks Farm Roundabout (reference from figure 1 is primarily, but not exclusively D and E).	Contribution decided following further site information.	Contribution from developer – delivery and approval from HE	Substantial funding of the order of £10m required, study currently being undertaken.	
Transport	M11 J8 capacity improvement (reference from figure 1 is A)	Contribution decided following further site information.	Contribution from developer – delivery HE / ECC	Substantial funding required see note.	
Transport	Sustainable travel promotion and package	From first occupation to build out of the site plus 5 years following completion of the final dwelling	Delivery by developer - ECC Travel planning team?	£562,000 bond.	
Transport	Essex Regiment Way contributions for capacity and sustainability transport mitigation	Contribution receipt from first occupation.	Contribution from developer – delivery ECC.	£1.5 million	Includes P and R contributions for Chelmer Valley
Primary Schools & EY	Preference for 2x 2fe and 1x 2½fe primary school, with	1st primary school needs to be delivered	ECC (costs to be borne by developer)	£23M index linked to April 2015 costs	Sites to be provided in compliance with ECC

	commensurate early years and childcare facilities. 2fe sites to be 2.1ha, 2½ fe site to be 2.5ha.	by 300 occupations, transfer of site at least one year prior. Second to be delivered at 1700 occupation and third to be delivered at 3100 occupations.		per facility. Land to be provided at nil cost.	developer's guide.
Secondary School	Preference for 6.75ha site	Secondary school needs to be delivered by 1500 occupations. Site to be available two years prior.	ECC (costs to be borne by developer)	£25M index linked to April 2015 Land to be provided at nil cost	If there is an intention for the settlement to become larger, a larger secondary site would be required.
Early Years and Childcare	Facilities to provide parental choice and serve employment areas. Approximately 0.5ha split over four sites.	One provision to be provided in early phases of employment centre.	ECC (costs to be borne by developer)	£1.2M index linked to April 2015 costs per facility.	Sites to be provided in compliance with ECC developer's guide
Youth Facilities	Youth shelters, skate facilities etc.	To be provide throughout development.	ECC (costs to be borne by developer)	£1M index linked to April 2015 costs.	Sites to be provided in compliance with ECC developer's guide
Flexible community facilities	Facilities to house a range of services e.g. day-care for the elderly, playgroups and youth clubs.	One per neighbourhood	UDC (costs to be borne by developer)	£2M index linked to April 2015 costs per facility.	Sites to be provided in compliance with ECC developer's guide

Site – Andrewsfield (7,500 dwellings)

Utility	Nature of Infrastructure	Timescales for Delivery	Responsible Authority(S)	Cost	Notes
Transport	Re-configuration and improvements to existing junctions on the A120 – to allow access all directions – B1256/B1417/A120 (reference from	Up to occupation of 1000 dwellings.	Developer – ECC and Highways England	£25 million	

	figure 1 is C).				
Transport	B1256 – Braintree Road – mitigation necessary likely signalised junction (safety scheme)	Up to occupation of 400 dwellings.	Delivery of developer	£1 million	
Transport	Subsidised bus services to and from – local transportation interchanges, key community and economic centres. Frequency of service – Peak period (7am – 10am and 4pm – 7pm) every 20 minutes, inter peak and evening minimum hourly service (all subject to viability of bus service provision).	Build out of the site plus 5 years following completion of the final dwelling	Delivery of developer	£3.3 million*	
Transport	Essex Regiment Way contributions for capacity and sustainability transport mitigation	Contribution receipt from first occupation.	Contribution from developer – delivery ECC.	£1.5 million pro rata – await confirmation of cost.	
Transport	Braintree/Rayne – contributions for traffic management and safety	Contribution receipt from first occupation	Contribution from developer – delivery ECC.	£150,000	
Transport	Flitch Way – contribution for improvements between the site	Contribution receipt from first occupation	Contribution from developer – delivery ECC.	£100,000	

	and Great Dunmow and Braintree.				
Transport	Local level highway infrastructure enhancements will also be required.	Contribution decided following further site information.	Contribution from developer – delivery ECC.	X	
Transport	Traffic management for the local rural road network to discourage inappropriate use	Contribution receipt from first occupation	Contribution from developer – delivery ECC.	£500,000	
Transport	M11 J8 capacity improvement (reference from figure 1 is A)	Contribution decided following further site information.	Contribution from developer – delivery HE / ECC	Substantial funding required see note.	
Transport	A120 Braintree junctions – A120/B1018 Galleys Corner; A120/B1256 Marks Farm Roundabout (reference from figure 1 is primarily but not exclusively D and E).	Contribution decided following further site information.	Contribution from developer – delivery and approval from HE	Substantial funding of the order of £10m required, study currently being undertaken.	
Transport	Sustainable travel promotion and package	From first occupation to build out of the site plus 5 years following completion of the final dwelling	Delivery by developer - ECC Travel planning team?	£940,000 bond.	
Transport	Essex Regiment Way contributions for capacity and sustainability transport mitigation	Contribution receipt from first occupation.	Contribution from developer – delivery ECC.	£1.5 million	Includes P and R contributions for Chelmer Valley
Primary Schools & EY	Preference for 4x2fe primary schools and 1x3 fe primary school with	1st primary school needs to be delivered by 300 occupations, transfer of site at least one year prior. Second to be delivered at 1700	ECC (costs to be borne by developer)	£7.29M index linked to April 2015 cost per 2fe facility.	Sites to be provided in compliance with ECC developer's guide.

	commensurate early years and childcare facilities. Each 2fe site - 2.1ha, the 3fe - 2.9ha.	occupation and then every 1400 houses thereafter.		£8.5M index linked to April 2015 cost per 3fe facility. Land to be provided at nil cost.	
Secondary School	Preference for 10.5ha site	Secondary school needs to be delivered by 1500 occupations. Site to be available two years prior.	ECC (costs to be borne by developer)	£35M index linked to April 2015 Land to be provided at nil cost	Sites to be provided in compliance with ECC developer's guide
Early Years and Childcare	Facilities to provide parental choice and serve employment areas. Approximately 0.9ha split over a number of sites.	One provision to be provided in early phases of employment centre.	ECC (costs to be borne by developer)	£1.2M index linked to April 2015 costs per facility.	Sites to be provided in compliance with ECC developer's guide
Youth Facilities	Youth shelters, skate facilities etc.	To be provide throughout development.	ECC (costs to be borne by developer)	£1M index linked to April 2015 costs per facility.	Sites to be provided in compliance with ECC developer's guide
Flexible community facilities	Facilities to house a range of services e.g. day-care for the elderly, playgroups and youth clubs.	One per neighbourhood	UDC (costs to be borne by developer)	£2M index linked to April 2015 costs per facility.	Sites to be provided in compliance with ECC developer's guide

- The passenger transport contribution is a guide only. In reality the support needed is based on the number of places served, existing services, journey time, frequency, buildout rate of development, passenger take up of service, fare base. The viability of the service is also dependant on these factors.

Site – Andrewsfield and Boxted Wood combined (12, 000 dwellings) – For education and Early Years Only

Utility	Nature of Infrastructure	Timescales for Delivery	Responsible Authority(S)	Cost	Notes
Primary Schools & EY	Preference for 7x2fe and 1x3fe primary schools with commensurate early years and childcare facilities. Each 2fe school site - 2.1ha, the 3fe site – 2.9ha	1st primary school needs to be delivered by 300 occupations, transfer of site at least one year prior. Second to be delivered at 1750 occupation and then every 1400 houses thereafter.	ECC (costs to be borne by developer)	£7.29M index linked to April 2015 costs per facility. Land to be provided at nil cost.	Sites to be provided in compliance with ECC developer's guide.
Secondary School	1 large secondary school (16.1 ha) or 2 smaller secondary schools (8.1 ha each), depending on the nature of the development.	A secondary school needs to be delivered by 1500 occupations. Site to be available two years prior.	ECC (costs to be borne by developer)	£60M index linked to April 2015 Land to be provided at nil cost	Sites to be provided in compliance with ECC developer's guide
Early Years and Childcare	Facilities to provide parental choice and serve employment areas. Approximately 1ha split over a number of sites.	One provision to be provided in early phases of employment centre.	ECC (costs to be borne by developer)	£1.2M index linked to April 2015 costs per facility.	Sites to be provided in compliance with ECC developer's guide
Youth Facilities	Youth shelters, skate facilities etc.	To be provide throughout development.	ECC (costs to be borne by developer)	£1M index linked to April 2015 costs per facility.	Sites to be provided in compliance with ECC developer's guide
Flexible community facilities	Facilities to house a range of services e.g. day-care for the elderly, playgroups and youth clubs.	One per neighbourhood	UDC (costs to be borne by developer)	£2M index linked to April 2015 costs per facility.	Sites to be provided in compliance with ECC developer's guide

Site - Great Chesterford / North Uttlesford Garden Village (c.5,000 homes)

Utility	Nature of Infrastructure	Timescales for Delivery	Responsible Authority(S)	Cost	Notes
Transport (road)	A505 Newmarket Rd/A1301 (capacity) – roundabout junction improvements (PBA)	3-5 years (Peter Brett Associates - PBA)	Contribution from developer	£ 1,000,000	In S Cambs This will likely necessitate further land take, and it could be explored together with the research parks.
Transport (road)	Establish the A11 as the preferred route for northbound travel, to be accessed from the existing junctions at Stump Cross and at Granta Park.	To be agreed	Contribution from developer	To be assessed	
Transport (road)	Provide road connectivity from site to surrounding highway network, including the A1307, B184 and A1301 roads	1-3 years	Contribution from developer	To be assessed	
Transport	Need to provide electric car charging points				
Transport (rail)	Expand the limited facilities at the station, including shelters, car and cycle parking, and improve the wider public realm and provide a true multi-modal hub.	1-3 years	Contribution from developer	£750,000	
Transport (rail)	Explore the potential to make Great Chesterford a stop for semi-fast trains through consultation with National Rail, TOCs and West Anglia Task Force.	3-5 years	Network Rail and Rail Operator to be engaged in discussions.	To be assessed	
Transport (bus)	Increased frequency on Citi 7 services south of Sawston, to be routed through the core of	1-3 years	Contribution from developer	£450,000 p.a.	

	the site as well as to the railway station.				
Transport (bus)	Extend Park & Ride services towards walking/cycling distance of Great Chesterford and the site.	1-3 years	Contribution from developer	To be assessed	
Transport – sustainable (footways & cycleways)	Improve the B184 Walden Road by introducing an off-road bi-directional cycleway alongside the site frontage. This could be shared with pedestrians considering the quiet location. Improve the B1383 Newmarket Road by introducing cycle lanes adjacent to the existing footways, thereby facilitating access to the railway station. Introduction of off-road bi-directional cycleway to connected with the existing infrastructure along the northern A1301.	1-3 years	Contribution from developer	£2,750,000	
	Introduction of high-quality cycling connections between the site and the Wellcome Genome Campus, Chesterford Research Campus, by making use of existing Public Rights of Way and local access roads. Introduction of cycling links to the A1307 and the Granta Park to ultimately tie with any future cycling infrastructure along the Cambridge to Haverhill corridor. This would involve	1-3 years	Contribution from developer	£750,000	

	making use of the existing Public Rights of Way on the site.				
	NB Full Transport Assessment would be required – i.e. standard requirement for larger schemes like this				
Education Primary Schools & EY	Preference for 4 x 2fe primary schools, with commensurate early years and childcare facilities. 2fe sites to be 2.1ha. EY&C would also need four standalone facilities	1st primary school needs to be delivered by 300 occupations, transfer of site at least one year prior. Second to be delivered at 1700 occupation and third to be delivered at 3100 occupations.	ECC (costs to be borne by developer)	£29.2m at 2016 costs + EYC Sites circa 0.1ha sites / £1.2m each Land to be provided at nil cost.	Sites to be provided in compliance with ECC developer's guide.
Education Secondary School	7fe new school with sixth form Preference for 6.75ha site	Secondary school needs to be delivered by 1500 occupations. Site to be available two years prior.	ECC (costs to be borne by developer)	£30M at 2016 cost Land to be provided at nil cost 9ha. site	Sites to be provided in compliance with ECC developer's guide. If there is an intention for the settlement to become larger, a larger secondary site would be required.
Youth Facilities	Youth shelters, skate facilities etc.	To be provide throughout development.	ECC (costs to be borne by developer)	£1M index linked to April 2015 costs.	Sites to be provided in compliance with ECC developer's guide
Flexible community facilities	Facilities to house a range of services e.g. day-care for the elderly, playgroups and youth clubs.	One per neighbourhood	UDC (costs to be borne by developer)	£2M index linked to April 2015 costs per facility.	Sites to be provided in compliance with ECC developer's guide