



East Herts: Infrastructure Delivery Plan

2017



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Introduction:

- 1.1** An Infrastructure Delivery Plan (IDP) sets out the infrastructure needed to deliver planned growth sustainably, effectively and at the right time. In order to successfully deliver the identified level of growth across the District, new housing must be supported by improvements to existing infrastructure, and where necessary, creation of new infrastructure. This document reviews and outlines the infrastructure needed to support the growth and objectives set out in the East Herts District Plan.
- 1.2** This document pulls together information from key delivery partners, including developers and service providers and in doing-so identifies where infrastructure improvements or new schemes are needed. Alongside this, information on costs, funding and phasing is provided where it is currently available. This area of the IDP will be continually updated as is the expectation of IDP monitoring.

Structure of the IDP:

- 2.1** Version 2 of the IDP has been divided into 2 parts to assist the reader;
- 2.2 Part 1:** Explains the context, expectations and different backgrounds to the provision of infrastructure. There are also summaries of how the different infrastructure areas are planned and managed by the various providers and how funding for infrastructure schemes are secured and applied.
- 2.3 Part 2:** Provides information related to specific infrastructure requirements for each main settlement and strategic site.
- 2.4** A full list of known infrastructure schemes is included in the Appendices. Each settlement or development has a schedule of infrastructure schemes and this includes funding information and phasing where this is known.

PART 1:

The East Herts IDP 2017

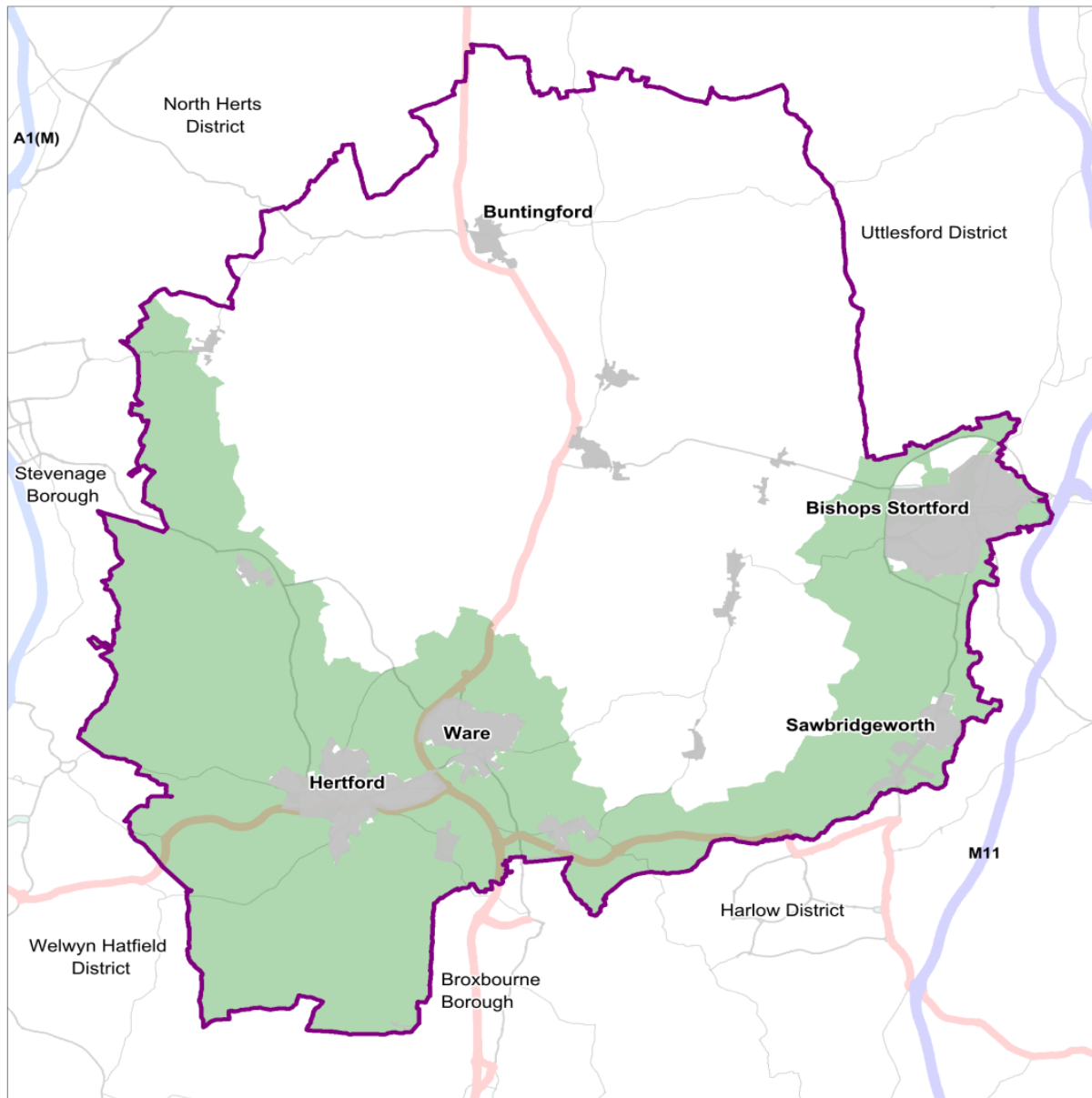


Figure 1: East Herts District and Surrounding Area

Background to Version 2 of the IDP:

- 3.1** This document will replace and update Version 1 of the IDP which was published in September 2016. Version 1 set out an initial brief of the infrastructure schemes expected to supplement the level of growth indicated in the District Plan. In the period since Version 1's inception more information has become available and so this second iteration of the IDP provides a more comprehensive picture of the future of East Herts from an infrastructure perspective.

East Herts in Context

- 3.2** East Herts is predominantly a rural district comprising an area of 477 square kilometres (184 square miles) and covering approximately a third of the area of Hertfordshire. There are over 100 small villages and hamlets in the district in addition to the five historic market towns of Bishop's Stortford, Buntingford, Hertford, Sawbridgeworth and Ware. These market towns provide a range of services to the nearby rural area. Approximately the southern third of the district lies within the London Metropolitan Green Belt, while the rest of the northern and central area lies within the Rural Area Beyond the Green Belt (Local Plan Policy GBC2).
- 3.3** The larger town centres are in Bishop's Stortford, Hertford and Ware, though the smaller settlements support a healthy number of shops and related services. The District is bordered by larger towns, with Stevenage and Welwyn Garden City to the west and Harlow to the south-east. **Figure 1** illustrates the main features of the District in its wider geographical context.
- 3.4** The District has good road and rail transport links and is well connected to the wider area. The A1M and M11 run close to the western and eastern boundaries of the district respectively. In addition, the M1 and M25 are located in close proximity to the district. Within the district, the A414 runs from west to east whilst the A10 cuts the district from north to south. The district benefits from two mainline rail links into London. Stansted Airport lies adjacent to the north-eastern boundary of the district within Uttlesford district. However, the location of Stansted Airport does have strategic implications for the district in terms of economic development; housing and aircraft generated noise pollution. The district's excellent transport links make it an attractive place to live and as such continue to create pressure for new development, particularly housing.

The East Herts Pre-Submission District Plan 2016

- 3.5** The East Herts Pre-Submission District Plan sets out the Council's planning framework for the District and identifies how East Herts will grow and develop during the plan period; 2011-2033. The document itself contains three parts; The Development Strategy; Development Management Policies; and Delivery and Monitoring.
- 3.6** The Development Strategy in the Pre-Submission Plan facilitates a spatial strategy for 18,040 new homes alongside further economic and retail growth. This level of growth will place additional demands on the existing infrastructure network and therefore infrastructure planning is an essential part of the Development Strategy. The IDP is designed to support the growth ambitions of the plan by identifying the specific needs of key sites and to support the overall strategic-level and pattern of growth outlined in the Development Strategy.
- 3.7** The District Plan, once adopted, will form the key part of the Development Plan for the District alongside the Minerals and Waste Local Plans for Hertfordshire and any adopted Neighbourhood Plans. The Development Plan is the basis upon which future planning applications will be determined.
- 3.8** The plan was published in November 2016 and a six-week consultation on the document took place between 3rd November and 15th December. The Council received just short of 4000 responses to the Pre-Submission consultation and anticipates that the plan and these comments will be submitted to the Secretary of State on the 31st March 2017, as stated in the Council's latest Local Development Scheme (LDS¹).

What the IDP Does Do

- 3.9** The IDP identifies infrastructure schemes which will be required in order to support identified growth. Such schemes include site specific infrastructure, settlement specific infrastructure and other schemes which are more strategic in nature and are required in order to help deliver growth across the wider sub-region.
- 3.10** The IDP seeks to present information on costs, funding and phasing where it is known. Some schemes will provide more information than others but in all cases, as

¹ <http://www.eastherts.gov.uk/lds>

schemes move further forward information becomes clearer and will be included within the IDP.

What the IDP Does Not Do

- 3.11** In order to keep the schedule of infrastructure schemes manageable and focused, general on site costs associated with building works have not been identified. These include site preparation costs, connections to utilities, sustainable drainage and basic site access arrangements. These are considered to be general costs which are required as part of any development scheme and it is therefore unnecessary to identify them separately. Such costs have been considered through the Delivery Study ² which assessed the financial viability of development sites. In addition it is recognised that developments would be required to make financial contributions towards general infrastructure costs in accordance with the Council's Planning Obligations SPD and the Hertfordshire County Council Toolkit. These generic contributions have not been included within the IDP, unless a specific infrastructure scheme has been identified.
- 3.12** Infrastructure schemes associated with the Bishop's Stortford North site have not been included in the IDP as planning permission has been granted. As such, infrastructure requirements have been considered through the application process.

² <http://www.eastherts.gov.uk/deliverystudy>

Policy and Legislative Context:

3.13 The NPPF sets out the principle of achieving sustainable development. Paragraph 162 specifically deals with infrastructure stating that:

‘Local planning authorities should work with other authorities and providers to:

- assess the quality and capacity of infrastructure for transport, water supply, wastewater and its treatment, energy (including heat), telecommunications, utilities, waste, health, social care, education, flood risk and coastal change management, and its ability to meet forecast demands; and*
- take account of the need for strategic infrastructure including nationally significant infrastructure within their areas.*

3.14 Paragraph 177 of the NPPF also sets out that infrastructure and development policies should be planned at the same time in a Local Plan to ensure there is a reasonable prospect that planned infrastructure is delivered in a timely manner.

3.15 The Government also published National Planning Practice Guidance (referred to as ‘the Guidance’). The Guidance states that:

‘The detail concerning planning infrastructure provision can be set out in a supporting document such as an infrastructure delivery programme that can be updated regularly. However the key infrastructure requirements on which delivery of the plan depends should be contained in the Local Plan itself.’

3.16 As such, Chapter 3 (Development Strategy) of the District Plan does identify the key strategic schemes that are required to deliver the strategy for the District. Certain schemes are also referenced in the relevant settlement specific chapters.

3.17 The NPPF also sets out a duty to cooperate (para. 179). This identifies that public bodies should work collaboratively across administrative boundaries to ensure infrastructure identified in the Local Plan is deliverable. The Council has worked closely with its neighbouring authorities and service providers throughout the Plan making process, and will continue to do so in order to finalise the IDP over the coming months.

3.18 Local Planning Authorities have only been required to prepare an IDP since the introduction of the NPPF. The IDP provides a mechanism that will enable the Council to closely monitor infrastructure provision. Therefore, the timely delivery of these schemes can be managed more effectively than has been the case previously. Where issues are identified, suitable interventions can be made.

Planning for Infrastructure:

- 4.1** This section seeks to explain how key aspects of infrastructure are planned for by service providers. In particular, it focuses on how requirements for transport, education, healthcare facilities and water supply/disposal are determined.

Primary and Secondary Education

- 4.2** Hertfordshire County Council (HCC) is the local education authority and is subject to a number of statutory duties and responsibilities including:

- Promoting high standards of education;
- Planning and commissioning school places in its local authority area;
- Extending diversity and choice;
- Co-ordinating admissions in the normal admissions round for all maintained and some academy schools; and
- Resourcing the shared maintenance, improvement to, and provision of, the built school environment, and securing value for money.

- 4.3** HCC has a duty to secure sufficient school places in its area, ensuring that every child has access to a school place. HCC fulfils these planning responsibilities by forecasting the demand for school places in order to identify an appropriate balance between supply and demand. It negotiates the right number of places on an annual basis, whilst in parallel undertaking longer terms strategic planning.

Meeting the Demand

- 4.4** Hertfordshire has experienced a significant rise in the demand for primary places across the county in recent years in line with the picture nationally. The rise is not consistent across the county, with some areas experiencing substantial increases in the primary aged population, whilst in some more rural areas demand is less pressing or currently remains fairly static. More information on the rising demand is available through HCC's strategy document 'Meeting the Demand for School Places' available at:

<http://www.hertfordshire.gov.uk/mm/15529307/15744647/item3app1171209.pdf>

Forecasts

- 4.5** HCC produces regular pupil forecasts for both Reception and Year 7 demand. At a primary level, HCC publish forecasts four years ahead and secondary forecasts stretch to 10 years in the future.

- 4.6** These forecasts are based on actual data of 0-5 year olds in an area, historic pupil movement, as well as an assumed pupil yield from new housing developments. The secondary forecasts take account of an assumed housing growth trajectory for the longer term, based on information provided by District and Borough Councils.
- 4.7** Latest forecasts were provided to East Herts Council as part of HCC's response to the Pre-Submission District Plan. The forecasts project demand for admissions into Reception and Year 7 (or Reception, Year 5 and Year 9 in areas which operate a three tier system).

New Schools

- 4.8** The way in which new schools are set up has undergone significant change in recent years. The County Council's role as a commissioner of places is such that where it is considered there is a basic need for a new school it must:
- Seek proposals to establish an academy/free school; or (if unsuccessful)
 - Hold a statutory competition; or (if unsuccessful)
 - Publish its own proposals for a new maintained school.
- 4.9** The County Council remains responsible for providing the site and meeting all associated capital and pre/post opening costs, in instances where the new school provision is meeting basic need. Therefore, the County Council continues to hold the key role in negotiating S106 contributions for, and the provision of, all school infrastructure.

Principles

- 4.10** School provision is often described in terms of 'forms of entry'. 1 form of entry (FE) equals 30 places per year group.
- 4.11** Primary schools have seven year groups from Reception through to Year 6. HCC has a preference for primary schools of 2FE or more, as this larger size provides improved opportunities for delivery of a broad education curriculum and staff development, as well as offering the ability to better manage fluctuations in demand. A 2FE primary school will have 7 year groups of 60 pupils (420 in total), plus a Nursery class where offered.
- 4.12** Secondary schools have five year groups, from Year 7 through to Year 11. With few exceptions, the secondary schools within Hertfordshire operate sixth forms, providing lower and upper year's groups at Years 12 and 13. HCC has a preference for secondary schools of 6 to 10FE, again because this offers improved opportunities for delivery of a broad education curriculum. A 6FE school will have 6 year groups of 180 pupils (1,080 in total) plus a Sixth Form.

- 4.13** When undertaking high level school place planning related to new residential development, HCC determines child yield based on a ratio of 1FE per 500 dwellings to be 97.5% confident of not underestimating yield.
- 4.14** This is based on a study of 49 Hertfordshire developments undertaken by HCC's demographer (c.2008). This work produced a yield range of 1FE per 500 dwellings (42 children per 100 dwellings/97.5% confidence) to 1FE per 850 dwellings (24.7 children per 100 dwellings/50% confidence). This position was confirmed by the County Council in a letter to the District and Borough Councils in April 2016.
- 4.15** The County Council applies the upper end of the range, 1FE per 500 dwellings, in the first instance to ensure prudent planning. When considering actual proposals or planning applications, the County Council uses specific development forecasting models to ascertain more tailored demographic profiles, including pupil yields.

Special Schools

- 4.16** The County Council also plans for school places in relation to Special Schools, of which there are three in East Herts. HCC does not have a standard formula in order to assess need for Special Schools. This is largely due to the complexity of doing so. For instance, some children may be able to access mainstream schooling on a permanent basis, whereas other children may need to access Special Schools all the way through their education, or for part of their education. Nevertheless, the need to adequately plan for sufficient capacity within Special Schools is an issue that HCC is aware of. However at present, capacity is not regarded to be a concern.

Free Early Education and Childcare Provision and Children's Centres

- 4.17** Section 6 of the Childcare Act 2006 places a duty on all local authorities to secure sufficient childcare for working parents, or parent who are studying, or training for employment, for children aged 0 to 14 years (19 years for children with special educational needs and disabilities (SEND)). The County Council also has a statutory responsibility to provide universal Free Early Education (FEE) for 3 and 4 year olds. Since September 2013 HCC has had a statutory responsibility to provide 15 hours FEE to eligible vulnerable 2 year old children across Hertfordshire.
- 4.18** In September 2017 a new extended entitlement of an additional 15 hours free childcare will be introduced for working parents in Hertfordshire. HCC is currently working on the likely demand across Hertfordshire linked to the number of places available. Consequently demand for these services is forecast to increase, in addition to the increasing population of young children in the county. Provision for this new entitlement will be within schools preschools and day nurseries and childminders.

- 4.19** In addition to FEE places, HCC has a duty to ensure there are sufficient childcare places for 0 to 14 year old children (age 19 for children with SEND) in preschools, day nurseries and out of school clubs, which can run either from school locations or other community facilities . The need for early years education can be met in various ways.
- 4.20 Maintained Nursery Schools** are funded by the state where only children aged 3 and 4 receive their free early education entitlement before attending primary school. There are 15 such schools in Hertfordshire.
- 4.21 Maintained Nursery Classes** are based in primary schools where children aged 3 and 4 receive their free early education entitlement until they move up to reception.
- 4.22 Preschool/Playgroup** provision usually educates children between the ages of 2 years and school age. These settings are often able to offer free early education to eligible 2 year olds as well as all 3 and 4 year olds. These settings are run by Private, Voluntary and Independent (PVI) providers in local communities, and some children attending will be accessing their FEE place, while others will be accessing additional services for which parents pay. These settings will usually be set up in community buildings or schools and will usually be open term time only.
- 4.23 Day Nurseries** offer childcare and early education for children from 0 to 5 years old. These settings are used predominately by working parents for childcare purposes. They also usually offer FEE for eligible children but with most children accessing additional services for which parents pay. This provision is market led.

Hertfordshire Sure Start Children's Centres

- 4.24** Legislation about Children's Centres is contained in the Childcare Act 2006. The Act places a duty on local authorities to improve the well-being of young children in their area and reduce inequalities between them. Specifically they must:
- ensure there are sufficient Children's Centres to meet local need
 - ensure each Children's Centre is within the remit of an Advisory Board
 - ensure there is consultation before any significant changes are made to Children's Centre provision in their area
 - ensure that the local authority, local commissioners of health services and Jobcentre Plus jointly consider whether the early childhood services they provide should be provided through Children's Centres in the area
 - ensure that after receiving a report from Ofsted following the inspection of a children's centre an Action plan is prepared and published.
- 4.25** The core purpose of Children's Centres, as defined by the Department for Education, is to improve outcomes for young children and their families, with a particular focus on those families in greatest need of support.

- Child development and school readiness - supporting personal, social and emotional development, physical development and communication and language from pre-birth to age 5, so children develop as confident and curious learners and are able to take full advantage of the learning opportunities presented to them in school.
- Parenting aspirations and parenting skills - building on strengths and supporting aspirations, so that parents and carers are able to give their child the best start in life.
- Child and family health and life chances - promoting good physical and mental health for both children and their family; safeguarding; supporting parents to improve the skills that enable them to access education, training and employment; and addressing risk factors so that children and their families are safe, free from poverty and able to improve both their immediate wellbeing and their future life chances.

Highways

4.26 Highways England operates, maintains and improves England's strategic road network (SRN) – the country's motorways and major A roads. Hertfordshire County Council (HCC) is the local Highways Authority and, as such, is responsible for all other adopted roads in the county.

4.27 From a transport perspective, HCC supports the local plan making process by undertaking strategic modelling work. The purpose of the modelling is to identify areas of the highway network that will come under stress as a result of planned growth. In doing so, required mitigation measures can be identified.

Paragraph 32 of the National Planning Policy Framework (NPPF) states that:

'Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe'.

4.28 The NPPF is silent on what 'severe' might mean. However, it seems clear that a small to moderate increase in congestion, and therefore journey times, is likely to be considered acceptable in planning terms.

4.29 HCC has recently created a transport model known as COMET in order to assess the high level impacts of growth on the strategic network across Hertfordshire. In 2016, HCC published a '2050 Transport Vision' document for consultation which sought to identify strategic schemes that could be delivered up to 2050. The Vision goes beyond highways schemes and seeks to look at transport provision in a comprehensive manner. The Vision document will inform Local Transport Plan 4 (LTP4).

4.30 Essex County Council (ECC) has also produced a strategic transport model known as VISUM. This model is of relevance because it assesses impacts on the highway network, both within Essex and also the eastern section of East Herts District. Crucially, unlike COMET, it takes into account proposed growth within both administrative areas. Therefore, in terms of identifying capacity issues on that side of the District, VISUM is considered to be a more robust source of information.

4.31 Advice from the two County Councils, which has been based on the emerging results of the two strategic models, has been taken into account in preparing the District Plan. More information on this is provided within the settlement specific sections of this document.

4.32 In addition to COMET and VISUM, more detailed modelling has also taken place in respect of certain settlements and sites. Again this is further explained later in this document.

Rail

- 4.33** Network Rail is responsible for the maintenance and enhancement of the rail network. Upgrades to infrastructure are planned through 'Control Periods'. At present we are within Control Period 5 (CP5) which runs from 2014 through to 2019. A number of schemes are already planned for future Control Periods. The need for additional capacity on the West Anglia Line, which runs through East Herts, has been highlighted through several mechanisms and the four-tracking of the line between the Tottenham Hale and Broxbourne areas has been included in Network Rail's Anglia Route Study, March 2016. This currently anticipates potential commencement within Control Period 6 (i.e. between 2019-2024).
- 4.34** Hertfordshire County Council has prepared a Rail Strategy which was published in July 2016. This document identifies the current challenges and future priorities with regards to the railways in Hertfordshire. The document can be viewed online here: <http://www.hertfordshire.gov.uk/docs/pdf/r/HCCrailstratjuly16.pdf>

Buses

- 4.35** In a similar vein to the Rail Strategy, identified above, HCC has also published a Bus Strategy. Bus provision has been a particularly challenging area of transport provision in recent times, and in some areas services have been cut. New services can be provided as part of new developments, and in many cases, these services can be funded for an initial period by developers. Ultimately though, bus services need to be sustainable in terms of the number of passengers that use them.
- 4.36** The bus strategy sets out the challenges with service provision and identifies the priorities for investment and improvement. The document can be viewed here: <http://www.hertfordshire.gov.uk/docs/pdf/b/busstrategy.pdf>

Open Space and Green Infrastructure

4.37 Open spaces and green infrastructure perform vital roles in terms of social cohesion and health and wellbeing.

4.38 The main types of open space are defined as follows:

- Parks and Gardens
- Natural and semi-natural open space: Open space that is not actively managed as amenity space and tends towards wilder land. Examples often include woodland, grasslands, watermeadow, commons, informal copses and, often, buffer land to roads and railways.
- Amenity Green Space: Typically formed of smaller pieces of open land, generally under one hectare, ordinarily grass. They are available for spontaneous and informal use and often have no specific function, and may or may not have trees and/or bushes.
- Children's play space / Children and young people: Unsupervised, equipped play space.
- Allotments: Council owned and managed areas where residents are able to rent space for growing their own produce.
- Outdoor sports pitches: primarily sites used for formal games (principally football, rugby and cricket) and include private sports clubs, school playing fields and municipal playing pitches.

4.39 All new development would be expected to deliver green spaces in some form on site. These might be small scale play areas or larger green spaces. For very large strategic developments, parklands and sports pitches will be provided. These schemes are planned for as part of the masterplanning/planning application process. However the framework for their delivery is established at the plan making stage.

4.40 The Council maintains a number of green spaces across the District. Two of the larger parks have received Green Flag status over recent years: Southern Country Park in Bishop's Stortford and the Ridgeway in Hertford.

4.41 HCC's Countryside Management Service oversees the delivery of green infrastructure schemes across the county. Information about these schemes has been incorporated within the IDP where relevant.

4.42 East Herts is currently undertaking an update to its Open Spaces and Sport Assessment which will advise on future requirements across the District. It is likely that this will be completed in Summer 2017, and as such the outcomes can be included in an updated IDP prior to Examination of the District Plan.

Water Supply

4.43 There are two companies that are responsible for water supply in East Herts: Thames Water and Affinity Water. The water companies have a statutory duty to provide water to households. Each company prepares a Water Resources Management Plan that identifies what the demand will be over the period covered by the Plan, and also how this demand will be met. This is particularly important in water stressed areas such as the South East.

4.44 There are a number of ways in which water supply can be managed in order to ensure that new developments can be serviced. The main methods are:

- Repairs to the existing infrastructure. This involves investing in improvements to mains pipe work in order to reduce leakage.
- Progressive Metering. Introducing water meters is an effective way of reducing water use as consumers become more aware of the amount of water that they are using.
- Enhanced Water Efficiency. New technologies and household fittings can be included within new developments in order to reduce usage. This may include measures such as low-flush toilets and tap fittings. The District Plan includes a policy which seeks to reduce water consumption to 110 litres per person, per day.
- Water Transfers. It is common for companies, particularly those in water stressed areas, to transfer water resource from other water companies across the country in order to ensure a continuous supply. Increasing the volumes of water traded between organisations is a key Government initiative, designed to increase flexibility in supply systems and the efficiency with which available resources are used.

4.45 The current respective Water Resources Management Plans can be viewed online:

Thames Water: <https://corporate.thameswater.co.uk/about-us/our-strategies-and-plans/water-resources/our-current-plan-wrmp14>

Affinity Water: <https://stakeholder.affinitywater.co.uk/docs/FINAL-WRMP-Jun-2014.pdf>

Wastewater Treatment

- 4.46** Thames Water is responsible for wastewater treatment across the whole of East Herts. There are a number of local sewage treatment works which Thames Water maintains. However, the main strategic facility serving the District is Rye Meads Wastewater Treatment Works.
- 4.47** Rye Meads was built in the 1960's to serve the new towns of Stevenage and Harlow. It currently treats a population equivalent of 410,000. The works consists of primary sedimentation, activated sludge and secondary sedimentation processes. Effluent is passed through eight tertiary lagoons prior to discharge to the Toll House Stream which, within a short distance, joins the River Stort.
- 4.48** In recent years, there has been significant investment at Rye Meads in order to increase capacity and efficiency, as well as meeting new discharge consents which are governed by the Environment Agency. Further upgrade works, due for completion in 2018, will increase capacity to a population equivalent of 447,000.
- 4.49** Based on Thames Water's current growth forecasts, their high level assessment indicates that they currently expect the site to have headroom until 2024. This is a worst case scenario and this high level assessment is based on Thames Water's latest understanding of housing requirements. This is subject to change over time as more information becomes available regarding development within the Rye Meads catchment and is dependent on factors such as approved local plans, timing of planning permissions, phasing and final timing of development.
- 4.50** Thames Water will plan for future upgrades to Rye Meads, working with the Environment Agency and local authorities as required, in order to cater for further growth beyond 2024.

Libraries and other Community Facilities

- 4.51** Each of the five main towns in the District are served by library facilities. HCC is responsible for planning library services and set out the requirements for enhancements to service provision.
- 4.52** There are a number of other community facilities across the District which perform important roles, including village halls and community centres. These are often managed at the local level by Town and Parish Councils.

Funding Infrastructure:

- 5.1** Infrastructure schemes can be funded in a variety of ways. Where funding sources for specific schemes are known, these are reflected within the IDP. However, it should be recognised that the Council is still in the plan-making process, and therefore funding may not necessarily be agreed until post adoption of the District Plan during the planning application process. This section does not present a definitive list of funding sources, but does provide an indication of the way in which infrastructure schemes can be financed.
- 5.2** On large sites, such as the Gilston Area and East of Welwyn Garden City among others, developers will often be required to deliver infrastructure on site in order to serve that development. The developers will fund the complete cost of infrastructure as part of the overall development scheme. The identification, delivery and phasing of these schemes are included within Section 106 agreements at the time planning permission is given. Section 106 agreements are legally binding and therefore any given development must be built out in conformity with the requirements set out within the agreement. This provides certainty to the developers, local authority, service providers and the public in terms of what will be provided.
- 5.3** On occasion, a particular development might help provide for a specific piece of on-site infrastructure without financing the whole scheme itself. For example, a developer might provide land for a new school and only provide part of the finance, again through a Section 106 agreement, to deliver the buildings. This would be the case where the school is required to serve the needs of the wider area, not just those emanating from the development itself. In this instance, other developments in the local area would also be expected to make financial contributions towards the delivery of the school.
- 5.4** Financial contributions secured through Section 106 agreements are one of the main methods of financing infrastructure. At this stage of plan making it is difficult to identify the level of funding that may be secured through this mechanism. This is because Section 106 agreements are negotiable on a case by case basis, and therefore they would not be agreed until the planning application stage. In addition, payments vary depending on the number, size and tenure of houses and this information would not normally be known until later in the planning process. Nevertheless, both East Herts and HCC have online calculators which provide a starting point for negotiation. The payments required cover a number of different areas including education, healthcare and transport.
- 5.5** More information on Section 106 agreements can be found here:
<http://www.eastherts.gov.uk/article/24676/Adopted-Planning-Obligations-SPD>

- 5.6** Beyond Section 106 payments, there are a number of other ways of delivering infrastructure. The Hertfordshire Local Enterprise Partnership (LEP) is one of 38 such bodies set up across the country in order to drive forward job and growth creation. The Hertfordshire LEP was first set up in 2010 and was recognised by Government in 2012. LEPs bid for funding, known as the Growth Deal, through a competitive process. The period of funding runs from 2015/2016 to 2020/21. To date the Hertfordshire LEP has secured a £221.5 million Growth Deal, with a further round of Growth Deal funding allocation anticipated for funding projects from 2017/18. Hertfordshire has also secured just over £60 million from the European Structural and Investment Funds, for investment into projects from 2015 onwards. In addition to Growth Deal and EU funding, the LEP has also been allocated £16.2 million Growing Places Fund, a loan scheme to unlock developments and enable the delivery of new jobs, commercial space and homes.
- 5.7** The Council can liaise with the LEP in order to seek funding for infrastructure schemes that would unlock growth. For example, the LEP is providing a significant proportion of funding for the Little Hadham bypass. As well funding infrastructure directly, the LEP can also ‘forward fund’ schemes in the form of a loan in order to deliver infrastructure at an earlier stage. The loan would then be paid back at a later date through Section 106 agreements as development comes forward.
- 5.8** Other forms of national funding are also available. In terms of strategic highways schemes, such as those involving the M11 junctions, Essex and Hertfordshire County Councils are able to bid for Road Investment Strategy (RIS) funding. RIS 1 funding, which was announced by Government in December 2014, covered investment in England’s motorways and major roads (the ‘strategic road network’) during the 2015 to 2020 period. It provided £15.2 billion of investment in over 100 major schemes. Of importance to East Herts was a commitment to provide £34 million towards upgrading Junction 7 of the M11. It has since been agreed by Government that this funding should be transferred to the provision of a new Junction 7a instead. The identification of schemes for the second phase of funding, RIS 2, is currently underway.
- 5.9** Other forms of national funding for strategic highways schemes include the Strategic Roads Pinch Point Fund. This funding of £220 million has been identified to improve congestion hotspots on the strategic road network managed by Highways England. Within its Autumn Statement in 2016, the Government also announced an additional £1.1 billion to be allocated for local highway improvements which will reduce congestion at key locations, upgrade or improve the maintenance of local highway assets across the country, or unlock economic and job creation opportunities.
- 5.10** Service providers often also provide direct funding for infrastructure. For instance statutory providers such as utilities companies have a legal obligation to provide services to new developments. For instance Thames Water, which is responsible for wastewater treatment in East Herts, has a legal obligation to invest in its

infrastructure in order cater for growth. Hertfordshire County Council may also provide funding for certain schemes, and in particular can help 'forward fund' projects such as expansions to primary schools.

- 5.11** Finally, of significance to East Herts is a £2.3 billion Housing Infrastructure Fund that was also announced within the Autumn Statement. The funding pot will be used to help deliver up to 100,000 new homes in areas where they are needed most. The Council could apply for this funding in relation to strategic infrastructure schemes.
- 5.12** When identifying these large national funding sources, it is also important to consider the recent Harlow and Gilston Garden Town bid that was supported by Government in January 2017. While the successful bid does not guarantee access to national funding, it does raise the profile of development in that location, and as such required schemes are more likely to benefit from Government funding than would have been the case had the Garden Town bid not succeeded.
- 5.13** The IDP will be updated as and when more detail becomes available with regards to infrastructure funding.

NHS – Planning for Infrastructure and East Herts Requirements:

- 6.1** This section focuses on the primary, community and secondary healthcare needs of East Herts District. Primary healthcare includes; General Medical Services (GMS), delivered by GPs, dentistry, pharmacy and optometry; Community Services e.g. community nurses, chiropody, phlebotomy, community midwives and some mental health services operate out of some GP premises as well as other community based clinics. Secondary healthcare is treatment by specialists to whom a patient has been referred by primary care providers. It covers general acute care (typically provided in a hospital), intermediate care (short-term support to prevent an admission to hospital) and mental healthcare (provided in a range of settings).

Structure of the NHS

- 6.2** The 2012 Health & Social Care Act has redefined the way in which healthcare in England is structured and delivered since it came into force on April 1st 2013. Prior to that date a single Primary Care Trust (PCT) for Hertfordshire commissioned the provision of healthcare in the county.
- 6.3** The new arrangements see NHS England retaining responsibility for the overall health budget and the planning, delivery and day to day operation of the NHS in England, in addition to retaining direct responsibility for commissioning a range of primary care services from self-employed providers such as GPs, dentists, optometrists and pharmacists. NHS England also provides offender healthcare and some services for members of the armed forces. It has a number of regional teams, but exists as one single organisation, NHS England, operating to a common model, under one board. East and North Hertfordshire CCG (ENHCCG) is situated within the regional team NHS England – Midlands & East (Central Midlands).
- 6.4** All other healthcare services are now commissioned by the 211 Clinical Commissioning Groups (CCGs) operating across England, including two covering Hertfordshire. East Herts is covered by ENHCCG which also covers the districts of Broxbourne, North Herts, Stevenage, and Welwyn-Hatfield. ENHCCG commissions a wide range of hospital and community based healthcare including; district nurses, mental health and learning disability services; and urgent, emergency and elective care, much of which but not exclusively is provided in hospitals. CCGs are increasingly moving the delivery of these services out of hospitals and into the community.
- 6.5** CCGs are led by local clinicians (doctors and nurses) supported by administrators. ENHCCG is currently working on a co-commissioning basis with NHS England.

Although ENHCCG is the responsible organisation for commissioning services in the East Herts area, an important exception to the commissioning remit of the CCG is that of primary care contracts which currently remains with NHS England. In 2016/17 the member practices of ENHCCG were invited to consider taking on the role and responsibilities of the full delegated commissioning of primary care services and they voted to remain in joint co-commissioning. However, the option for the CCG to take on the full delegated commissioning of primary care services remains an option going forward subject to a future member vote and agreement by NHS England.

- 6.6** ENHCCG serves approximately 580,000 people registered at 60 GP Practices (operating out of 82 premises) across east and north Hertfordshire. ENHCCG is made up of six locality groups; Lower Lea Valley, North Herts, Stevenage, Stort Valley and Villages, Upper Lea Valley and Welwyn Hatfield.
- 6.7** Each area has an allocated health budget. GPs are elected by the local practices to lead and represent the local area. These elected GPs come together at the CCG Governing Body meetings to make decisions about health services for the whole of east and north Hertfordshire.
- 6.8** East Herts sits within two localities; Stort Valley and Villages, and Upper Lea Valley. The Stort Valley and Villages locality is made up of 6 practices covering the areas of Sawbridgeworth, Bishop's Stortford and Much Hadham. They provide care for a population of around 60,000 with a budget for 2014/15 of £57.9m. The Upper Lea Valley Locality is made up of 16 practices, covering the area of Hertford, Hoddesdon, Ware and Buntingford. They provide care for a population of over 122,000 with a budget for 2014/15 of £117.5m.
- 6.9** The majority of the budget for the Stort Valley and Villages and Upper Lea Valley localities is spent on acute hospital care which includes emergency treatment, planned operations, tests and investigations.
- 6.10** In addition to the above, public health functions have now transferred to local authorities (in Hertfordshire's case, the County Council) providing them with a duty to take such steps as are considered appropriate to improve the health of people in its area, including the provision of information, services or facilities to promote healthy living.
- 6.11** In addition the County Council now has the task of coordinating the local NHS, social care, children's services and public health functions through a new Health and Wellbeing Board (HWB), whose aims include the development, interpretation and use of Joint Strategic Needs Assessments (JSNAs) to shape health commissioning and spending plans, as well as the preparation of a health and wellbeing strategy. The Hertfordshire HWB includes representatives from NHS Hertfordshire and clinical commissioning groups, Hertfordshire Healthwatch, and county and district councils.

- 6.12** A final general point concerns the ownership of assets. As of April 2013 the former PCT assets transferred to either NHS Property Services, Community Health Partnerships or Foundation Trusts. The majority of GPs in Hertfordshire do not operate out of NHS owned facilities, with GPs owning or leasing their premises and receiving rent and rate reimbursement from NHS England. All acquisitions, disposals and requests for funding are submitted to the Midlands and East (Central Midlands) team by GPs and are considered in conjunction with the relevant GP, NHS England's Five Year Forward View and CCG health and estates strategies.

Primary Healthcare

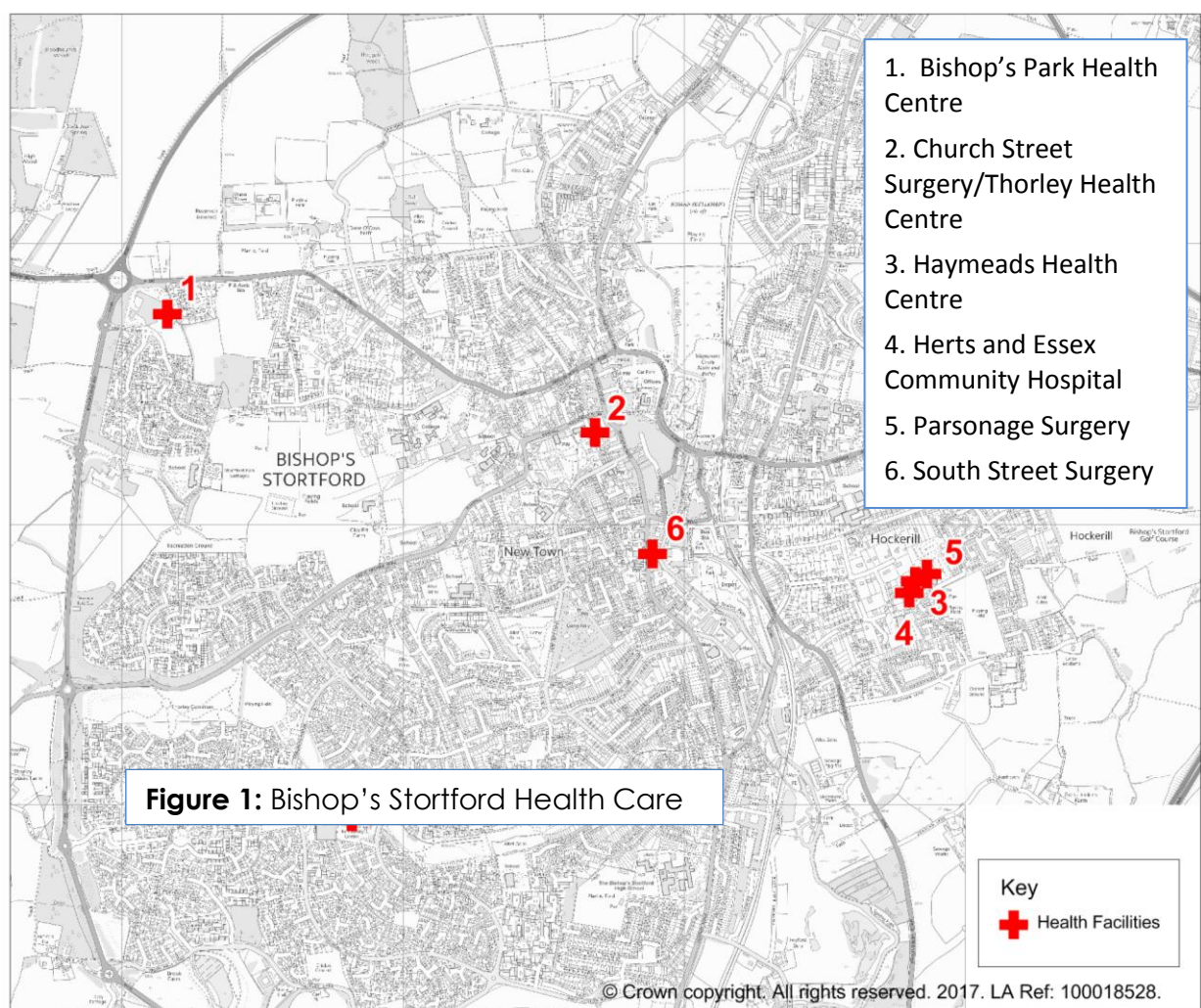
- 6.13** Primary care includes a range of clinicians including doctors, nurses, dentists, pharmacists and opticians.
- 6.14** GPs look after the health of people in their local community and deal with a whole range of health problems. They also provide health education, offer advice on smoking and diet, run clinics, give vaccinations and carry out simple surgical operations. GPs are 'independent contractors' meaning that whilst they have a contract for service with the NHS, they are not directly employed by them.
- 6.15** Dentists are responsible for looking after patients' oral health. The NHS enters into a contract with dentists to provide health services under the NHS, however there are no ongoing capital and revenue issues. Dentists are contracted to provide an agreed level of units of dental activity, for which they receive an income. All running costs are charged against this income. A number of dentists also operate privately however and do not provide an NHS service.
- 6.16** Pharmacists play a key role in providing quality healthcare as they ensure the safe supply and use of medicines by the public. A pharmacist has to be registered with the General Pharmaceutical Council (GPhC) to practice and as an independent contractor works under a contractual arrangement with NHS England and may receive reimbursement for pharmaceutical services provided. The NHS does not financially support the initial provision or ongoing costs of pharmaceutical premises. This is therefore a private sector function.
- 6.17** Opticians (NHS General Ophthalmic Service contractors) provide the following services to eligible patients: provide NHS sight tests; Issue NHS optical vouchers which help towards the costs of glasses or contact lenses; Issue NHS vouchers for repairs or replacements of glasses or contact lenses; Refer patients onto specialist services i.e. secondary care (optometrists can refer directly into secondary care) There are two types of GOS contracts:
1. Mandatory Services - NHS services provided from accredited premises

2. NHS Additional Services - NHS services provided to patients who meet eligibility criteria for a domiciliary visit.

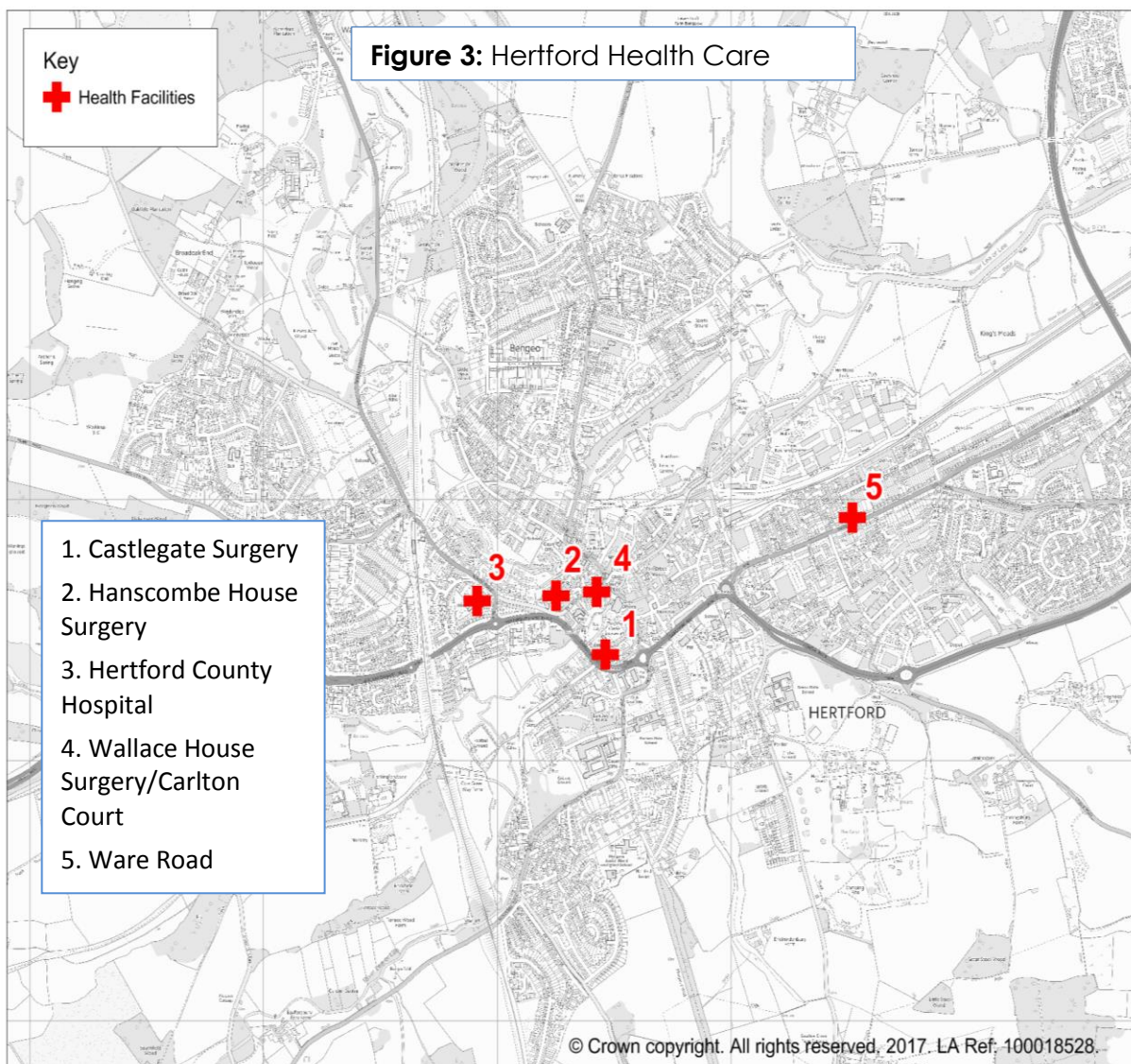
Anyone can apply for a GOS contract i.e. optician, dispensing optician or lay person as an individual, partnership, practice liability partnership or body corporate.

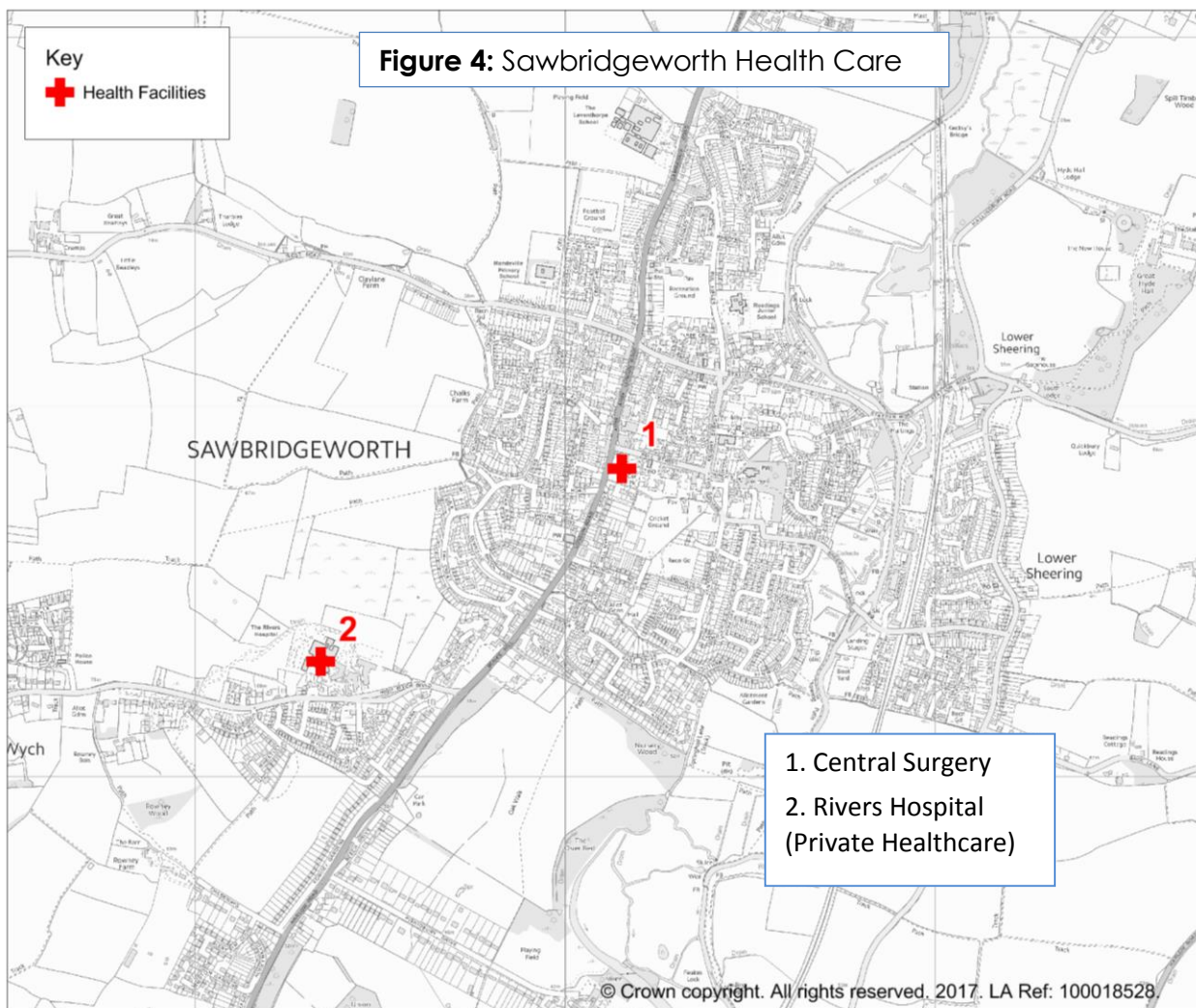
Existing Provision

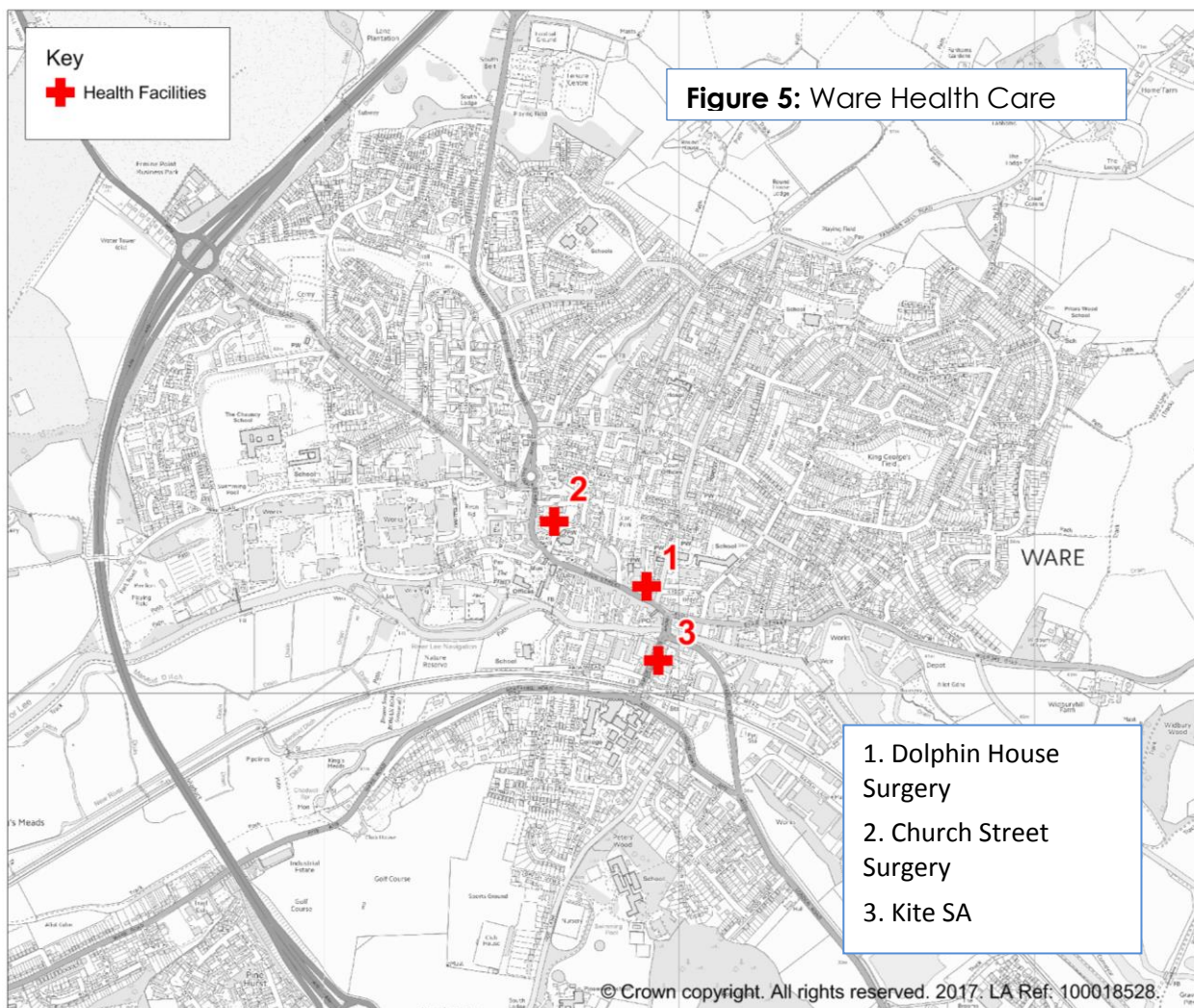
6.18 There are 15 GP practices in East Herts. These practices operate out of 24 premises across the District. The locations of surgeries within the main settlements are shown on the maps below.











Of these 24 premises:

- 7 are at general capacity (fewer than 20 patients per m2)
- 8 are 'constrained' (between 20 - 25 patients per m2)
- 9 are 'very constrained' (25+ patients per m2)

6.19 In addition, there are 17 dental practices, 25 pharmacies and 20 opticians.

Service Planning

6.20 Given how primary healthcare is commissioned, this section is primarily concerned with the provision of GP practices in the District to respond to the proposals set out in the District Plan, together with underlying demographic changes.

6.21 There are a range of factors which will influence the provision of new GP practices necessary to serve new development, as follows:

- GP practices accept patients from within an agreed practice boundary, meaning that the location of new development within a District will impact on some practices more than others, particularly in more rural areas, where the demand for services from the increased population may fall on only one or two practices covering that area
- The solution sometimes proposed to this is the opening of branch surgeries to treat a smaller, more local population, but healthcare provision has moved away from this model as branch surgeries are not considered to be fully effective if the core services provided do not replicate the main surgery. They are also not sustainable in terms of available workforce and the range of services on offer.
- Indeed in recent years, healthcare provision has moved towards the establishment of larger surgeries, which are often co-located with other health services and cover a greater area, although recognise that this isn't suitable in all cases and each case needs its own individual consideration.
- Such surgeries will have a number of GPs and nurse practitioners and as such are sometimes able to pool existing surplus capacity and can absorb some new housing growth. This can be a combination of physical extension of premises, or more intensive use of existing premises but this isn't always so.

6.22 Given this, it will be important for new development in the District to consider the 'net' capacity of existing services in the area on a case by case basis.

6.23 The development of new housing in East Herts will take place over many years, and the timing and phasing of such developments will need to be discussed with health providers as they are planned to agree the best way of ensuring that there are appropriate local primary health care resources in place to cope with the increased

demand and in accordance with clinical strategies. This additional capacity can be delivered in a number of ways and this will be taken forward in dialogue with health providers. In order to plan health it is important to understand where housing is proposed, types of housing and when.

Health Infrastructure Needs - Primary Healthcare

- 6.24** NHS England regularly provides an assessment of GP primary care general medical services (GMS) future capacity in relation to new development (for planning applications, local plans and the preparation of CIL Regulation 123 lists). NHS England is also responsible for primary care General Dental Services (GDS), Optometry and Pharmacy Services and will need to provide evidence on the potential implications of future capacity requirements in relation to new development in respect of these services.
- 6.25** GPs deal with 90% of all patient contact with the NHS, and therefore require the necessary premises to support and enable future GMS primary needs to be met. This will come increasingly under pressure, given the changing nature of patient care pathways and the requirement that more services are provided locally within the community (rather than in a secondary care setting), and that development may take place in locations where there is currently no (or limited) health coverage.
- 6.26** Set out below is the capacity planning calculation, based on GMS provision, which can be used to calculate the contribution required to support new GP provision for the development levels set out in the District Plan. This calculation is based on a formula adopted across the NHS England Midlands and East (Central Midlands) team to provide consistency for all the 25 local authorities it works with and as part of the single operating model of best practice it has developed. In time the build cost figure will need to be reviewed but this should only happen when fresh and robust evidence can be presented by the health agencies.
- 6.27** The calculation is derived as follows:

$w \times 2.4 = x$ <p>Multiply the numbers of dwellings in any given development (w) by 2.4 to give x new patients</p>
$x/2000 = y$ <p>Divide the number of patients by 2000 to give the numbers of GP's needed (y) based on the ration of 2,000 patients per 1 GP (as set out in the NHS England 'Premises Principles of Best Practice, Part 1 Procurement & Development)</p>
$y \times 199 = z \text{ square metres of additional GMS space}$ <p>Multiply the number of GP's required by 199 to convert to new GMS space (199 square metres) being the amount of floorspace required by each GP (againas set out in the NHS England 'Premises Principles of Best Practice, Part 1 Procurement &</p>

Development)
$z \times £2,600 = £$ <p>Multiply the floorspace by £2,600 which represents build cost per square metre including fit out and fees to give a total cost (£)</p>
$£/\text{number of dwellings} =$ <p>Dividing the total build cost by the number of dwellings provides a standard contribution required from each new dwelling towards the cost of providing GMS services for that development.</p>

6.28 Using this formula, for the development anticipated in the scenario currently detailed in the emerging District Plan will give rise to the following requirements:

Targeted housing supply accordance with District Plan

Type of Site	Anticipated Number of Dwellings	GP's (full time equivalent)	Cost to Primary Care
Other (Windfall, Completions, Commitments and villages)	6,390	7.632	£3,948,797
SLAA Sites	88	0.106	£54,637
Site Allocations	11,592	13,910	£7,197,241
Total Housing supply 2011 - 2033	18,040	21,648	£11,200,675

6.29 The headline figure for new GMS development associated with the District Plan growth scenarios is therefore approximately **22 additional GPs, at a cost of £11.2m for new surgery provision**. However precise numbers and costs will ultimately be influenced by a variety of considerations:

- available GP capacity within East Herts and the extent to which this can absorb the needs of new development
- individual decisions taken by existing and new GP practices on the scale, nature and location of any new or expanded surgery provision
- spare capacity outside East Herts relevant to meeting its future GMS needs (but equally the implications on GP provision arising from new development beyond the District boundary)
- Other factors, including future changes in the way in which GMS and all health services are provided
- People living longer but with more complex long term conditions.

Secondary Healthcare

- 6.30** Secondary healthcare is treatment provided by specialists to whom a patient has been referred by primary care providers. It covers general acute care (typically provided in a hospital), intermediate care (short-term support to prevent an admission to hospital) and mental healthcare (provided in a range of settings).
- 6.31** Secondary healthcare is provided by NHS trusts, including foundation trusts (which have more financial and operational freedom than other NHS trusts), children's trusts and mental health trusts.
- 6.32** Hospitals and other secondary care facilities are not restricted to local authority boundaries or catchment areas, so patients outside of the area are treated. These facilities have much wider catchment and planning area than primary healthcare, which is provided at a more localised level.

Existing Provision

- 6.33** ENHCCG commissions secondary healthcare from a number of bodies.
- 6.34** East North Herts Hospital NHS Trust (ENHHT) is responsible for managing the Lister Hospital, which is the main hospital in east and north Hertfordshire, providing the core location for inpatient emergency care, and for all patients who need the specialist emergency facilities (such as intensive care) of a major district general hospital. It also provides elective care for higher risk patients together with a full range of outpatient and diagnostic services. ENHHT also is responsible for managing Hertford County Hospital, the new QEII hospital in Welwyn Garden City, and the Mount Vernon Cancer Centre. A number of patients in east and north Herts also access services from the Princess Alexandra Hospital in Harlow.
- 6.35** Mental healthcare in Hertfordshire is provided by the Hertfordshire Partnership NHS Foundation Trust, which provides the majority of health and social care for people with mental ill health and learning disabilities.
- 6.36** The Hertfordshire Community NHS Trust provides community health services across Hertfordshire. These services are targeted at adults and children and young people and range from community nursing to health education.

Service Planning

- 6.37** It is anticipated that increases in the population of East Herts by 2031 will place additional pressure on all secondary healthcare services in the District and surrounding areas. The changing age profile of the District's population is also likely to have an impact on secondary healthcare needs, as certain age groups are likely to utilise healthcare services more than others.
- 6.38** Admission/attendance rates per 1,000 population for acute services within ENHCCG as at 2013/14 are as follows:

Activity type	Attendees per 1,000 population
Non Elective Admissions Exec Maternity	82.57
Maternity Admissions	17.17
Elective Admissions	23.79
Day Case Admissions	78.83
A&E Attendances	325.50
Outpatients First Attenders	334.37
Outpatient Follow Up Attenders	704.20

- 6.39** By applying a 10 year population growth figure for ENHCCG area (86,115 persons) and then dividing this with an occupancy rate of 2.4 gives a figure for a total increase in dwelling numbers (35,881) from which it is possible to calculate the additional space requirements arising from this growth, as shown below:

Infrastructure Type	Number Required (total area in square metres in brackets)	Build Cost per square metre (£)	Total Capital Cost (£m)
Wards	6.8 (7,818)	6,820	£53,317,548
Theatres	3.9 (1,927)	6,957	£13,405,516
A&E Space	28% (1,067)	5,833	£6,222,816
Outpatients Suite/consulting room	2.1 (1,609)	4,998	£8,039,525
MRI CT and X Ray Equipment	N/A	N/A	£12,650,000
Total			£93,635,405

- 6.40** Dividing the total capital cost with the total number of additional dwellings gives a per dwelling infrastructure cost of **£2,609 for each new dwelling for the provision of growth related acute services**
- 6.41** A similar calculation using the same methodology for mental health provision establishes a per dwelling infrastructure cost of **£201.75 per dwelling for the provision of growth related mental health services.**

- 6.42** A final secondary healthcare consideration relates to community services and here the methodology establishes a cost of **£272.30 per dwelling for community services.**
- 6.43** Applying the these per dwelling figures to the housing growth scenario (18,040 dwellings) proposed in the District Plan over the period 2011-2031 establishes the following secondary healthcare infrastructure capital costs:

Activity	Infrastructure Costs 2011 – 2031 (£M)
Acute Services	47.08
Mental Health Services	3.64
Community Services	4.91
Total	55.63

Summary

- 6.44** A number of agencies are involved in the provision of secondary healthcare facilities in east and north Hertfordshire, including the East North Herts Hospitals NHS Trust, the Hertfordshire Partnership NHS Foundation Trust and Hertfordshire Community NHS Trust.
- 6.45** The limited availability of information, at this stage, makes a comprehensive assessment of future secondary healthcare requirements difficult. However, population increase related to planned housing development will increase pressure on services. This is especially so given the likely increase in the proportion of the population over 65.
- 6.46** ENHCCG strategic vision will need to consider the demand for and supply of healthcare infrastructure, and will plan services accordingly. East Herts District Council will continue to engage with secondary healthcare providers in order to emphasise the importance of medium to long term strategic planning, and to ensure that secondary healthcare requirements are built into the wider strategic planning and planning obligations process.

The future of healthcare provision - the Stevens Report Five Year Forward View

- 6.47** There is considerable expectation that there will be further future changes in healthcare provision which will have considerable implications for health infrastructure planning and delivery. In October 2014 NHS Chief Executive Simon Stevens published the NHS Five Year Forward View to 2020/21 which identifies a range of radical changes considered necessary to make healthcare provision fit for

purpose in the future. In addition to calls for an additional injection of public funding and major efficiency savings (which collectively should have the effect of increasing the available budget by £30bn p.a.) the Forward Review calls for:

- **a radical upgrade in prevention and public health** with national action on obesity, smoking, alcohol and other major health risks, workplace incentives to promote employee health and cut sickness-related unemployment, and the advocacy of stronger public health-related powers for local government and elected mayors.
- **giving patients greater control of their own care**, including the option of shared budgets combining health and social care, support for unpaid carers and improved partnerships with voluntary organisations and local communities.
- **more care being delivered locally**, which will involve breaking down traditional barriers between GPs and hospitals, between physical and mental health, and between health and social care, but with some services in specialist centres, organised to support people with multiple health conditions, not just single diseases.
- **new options to permit groups of GPs** to combine with nurses, other community health services, hospital specialists and perhaps mental health and social care to create integrated out-of-hospital care (the Multispecialty Community Provider); or the integration of hospitals and primary care providers (Primary and Acute Care Systems) combining for the first time general practice and hospital services
- **The redesign across the NHS of urgent and emergency care services** to integrate A&E departments, GP out-of-hours services, urgent care centres, NHS 111, and ambulance services.
- **Smaller hospitals being granted new options** to help them remain viable, including forming partnerships with other hospitals further afield, and partnering with specialist hospitals to provide more local services
- **Clinical Commissioning Groups being given the option of more control** over the wider NHS budget, enabling a shift in investment from acute to primary and community services.
- **An improved focus on health technology** coupled with expansions in research and innovation (including by developing new 'test bed' sites for worldwide innovators, and new 'green field' sites where completely new NHS services will be designed from scratch).

6.48 Whereas the 2012 Health and Social Care Act's primary focus was on the structure of health care provision and its procurement, the Forward Review looks in detail at its operation and as such, stands to revolutionise the way in which such services operate in the District in the future.

Responding to the 5 Year Forward View

- 6.49** To assist in meeting these challenges NHS England and others produced in December 2015 *Delivering the Forward View: NHS Planning Guidance 2016/17 - 2020/21*. This requires local NHS teams to produce a five year Sustainability and Transformation Plan (STP), place-based and driving the Five Year Forward View; as well as a one year Operational Plan for 2016/17, organisation-based but consistent with the emerging STP.
- 6.50** The December 2015 guidance identifies 9 'must dos' for every local system, all of which are highly relevant to the provision of health infrastructure in the future, a summary of which is listed below.
- 6.51** The 9 'must dos' for 2016/17 for every local system in responding to the Forward View:
1. Develop a high quality and agreed STP, achieving locally critical milestones for accelerating progress in 2016/17 towards achieving the aims of the Forward View
 2. Return the system to aggregate financial balance. This includes secondary care providers delivering efficiency savings.
 3. Develop and implement a local plan to address the sustainability and quality of general practice, including workforce and workload issues
 4. Get back on track with access standards for A&E and ambulance waits, ensuring more than 95 percent of patients wait no more than four hours in A&E, and that all ambulance trusts respond to 75 percent of Category A calls within eight minutes
 5. Improvement against and maintenance of the NHS Constitution standards that more than 92 percent of patients on non-emergency pathways wait no more than 18 weeks from referral to treatment, including offering patient choice
 6. Deliver the NHS Constitution 62 day cancer waiting standard, including by securing adequate diagnostic capacity; continue to deliver the constitutional two week and 31 day cancer standards and make progress in improving one-year survival rates
 7. Achieve and maintain the two new mental health access standards, ensuring more than 50 percent of people experiencing a first episode of psychosis will commence treatment within two weeks of referral, and continuing to meet a dementia diagnosis rate of at least two-thirds of the estimated number of people with dementia

8. Deliver actions to transform care for people with learning disabilities, including implementing enhanced community provision, reducing inpatient capacity, and rolling out care and treatment reviews in line with published policy.

9. Develop and implement an affordable plan to make improvements in quality

6.52 As noted in 7.6, an additional consideration is with regard to the current commissioning arrangements. Currently over 50% of CCGs across England have agreed full delegated commissioning with NHS England. ENHCCG were invited to consider taking on the role and responsibilities of the full delegated commissioning of primary care services and they voted to remain in joint co-commissioning. However, the option for the CCG to take on the full delegated commissioning of primary care services remains an option going forward subject to a future member vote and agreement by NHS England.

6.53 Future health infrastructure provision also needs to reflect the publication in April 2016 of the *General Practice Forward View* which acknowledges underinvestment in GP services and defines the following actions to address it, including:

- accelerating funding for primary care
- expanding and supporting GP and wider primary care staffing
- reduce practice burdens and help release time
- develop the primary care estate and invest in better technology
- provide a major programme of improvement support to practices

6.54 In responding to the General Practice Forward View and the quest to secure a steady improvement in the quality of primary care provision the ENHCCG's Primary Care Strategy (April 2016) recognizes the following challenges. NHS England has grouped CCGs into 44 areas and tasked them with producing Sustainable Transformation Plans (STP). ENHCCG has been grouped with Herts Valleys CCG and West Essex CCG. The objective of the STPs is to identify cross border opportunities for improvements and efficiencies on the delivery of health services.

Funding and Delivery

6.55 Infrastructure funding and delivery is considered in detail elsewhere in this document, so this chapter considers the headline issues associated with funding and delivering growth.

6.56 Funding sources are variable and NHSE capital is limited. Where the need arises for health infrastructure caused by the impact of new housing, ENHCCG and NHSE seek the full support of the Local Authority to secure developers contributions through S.106 or CIL.

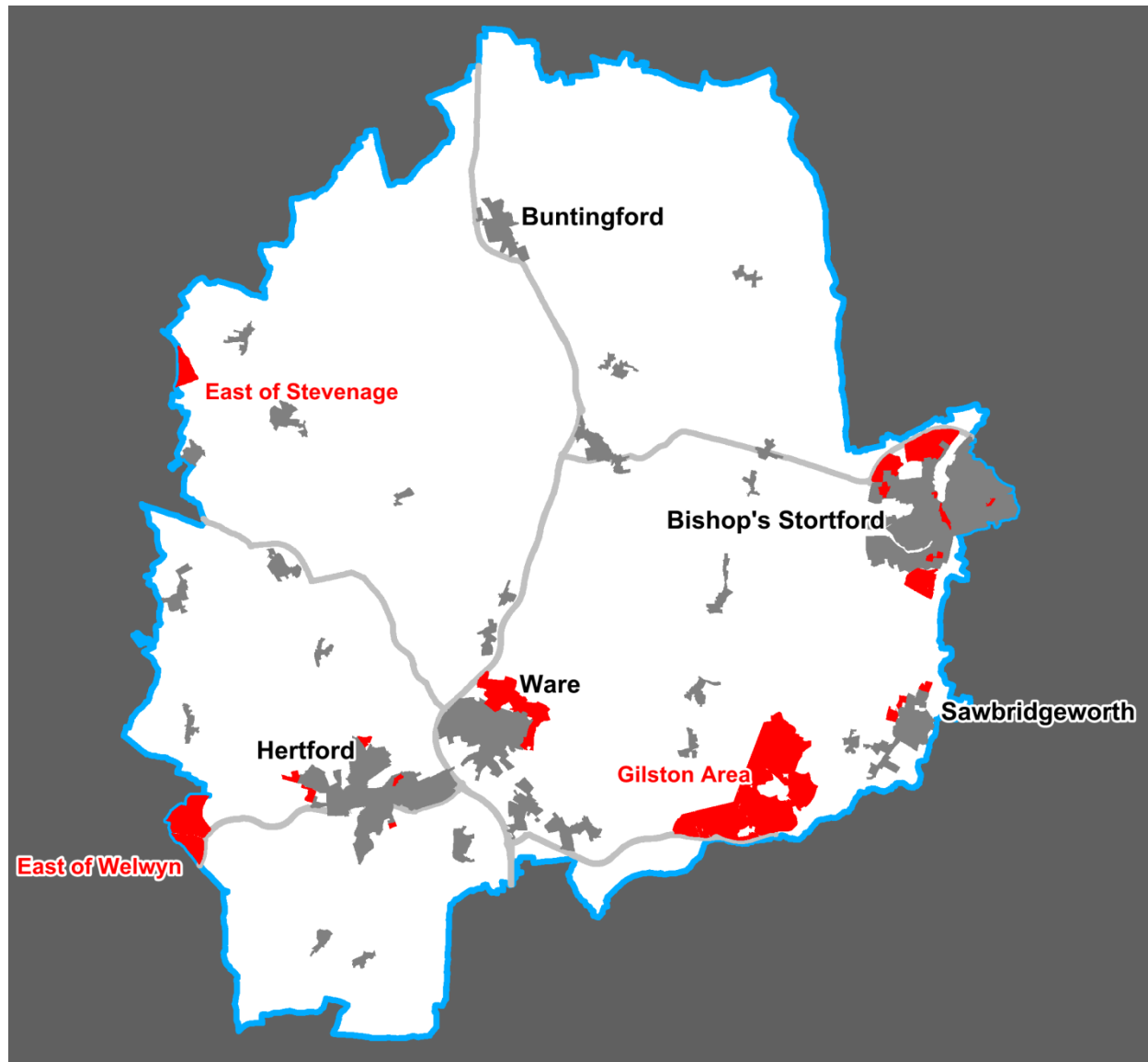
6.57 In the light of this the use of s106 agreements has become increasingly important to enable primary health infrastructure. The advantage with s106 is that it is possible to translate development numbers via an evidenced formula into health investment needs and identify from that a cost to be secured from the development promoters. The CCG works with its services providers and requests s106 contributions, based on evidenced formulae, as appropriate.

6.58 The introduction of CIL introduces some uncertainty with the forthcoming limitations on s106 as the health bodies cannot be certain whether they will achieve access to similar levels of developer contributions via CIL, although it is able to make a case for CIL revenues to the District council as charging authority under whatever governance arrangements are adopted.

- 6.59** Even with the eventual introduction of CIL s106 will however remain relevant for the securing of site specific health infrastructure through developer contributions and there is an emerging consensus that for large development sites (of 500 dwellings or more as well as potentially smaller schemes) site related health needs will continue to be met by this means (subject to viability considerations and the application of the 'rule of 5', the rule which prevents the collection of more than 5 obligations towards a project or type of infrastructure).
- 6.60** Given this it might mean that most of the health infrastructure needs of the proposed urban extensions and some of the larger urban capacity/windfalls/village developments will be funded via s106, assuming this source of funding continues to remain available.
- 6.61** For the health infrastructure needs arising from all other development CIL (when introduced) can contribute, although it will be competing for such funds with other forms of infrastructure such as schools and transportation projects.

PART 2:

Infrastructure by Settlement and Development



Bishop's Stortford

Introduction:

7.1 Bishop's Stortford is the largest town within East Herts, the development strategy sets out plans for the town to accommodate approximately 4,000 dwellings. This includes the largest site to the north of the town which was initially identified for development within the adopted Local Plan (2007) and has since been granted planning permission for 2,529 homes. Other sites proposed for Bishop's Stortford include:

- Bishop's Stortford South – 750 homes
- Bishop's Stortford High School Site – 150 homes
- East of Manor Links – 50 homes
- Reserve Secondary School Site, Hadham Road – 163 homes
- The Causeway/Old River Lane – 100 homes
- The Goods Yard – 400 homes

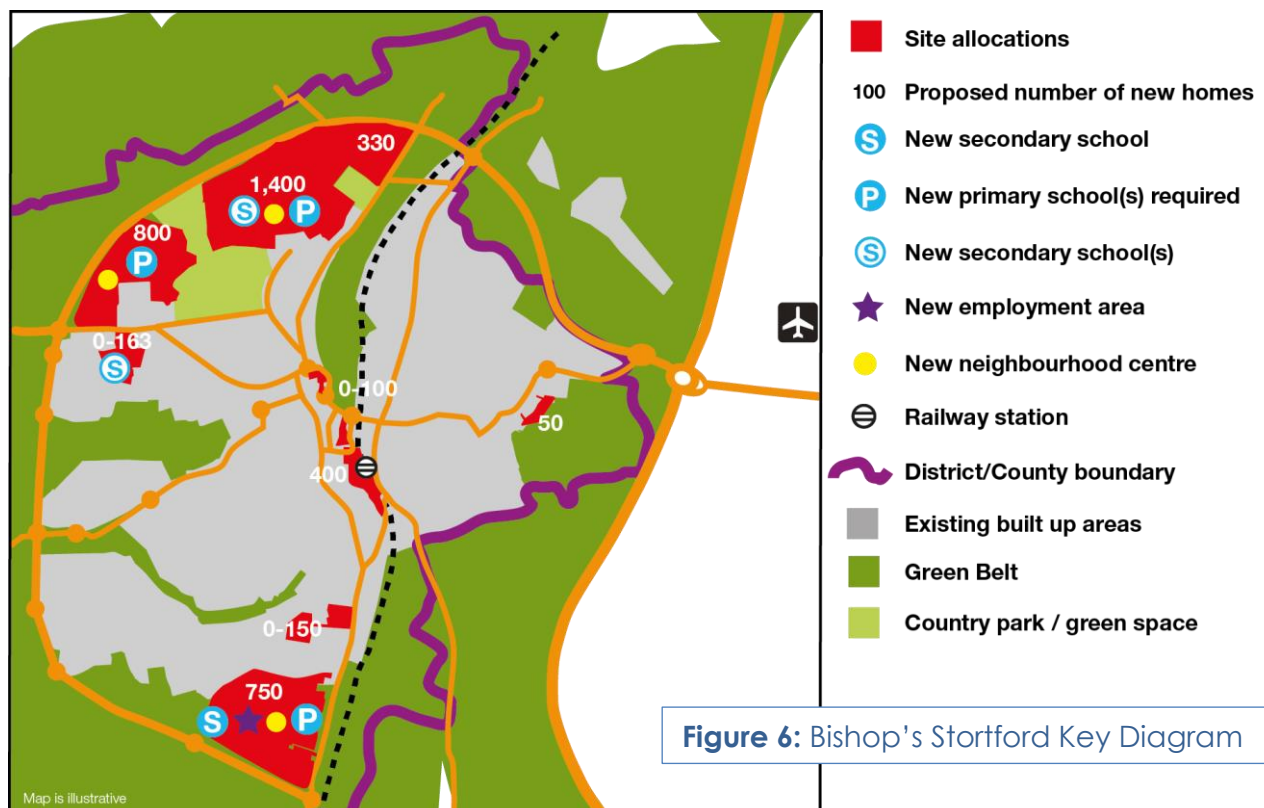
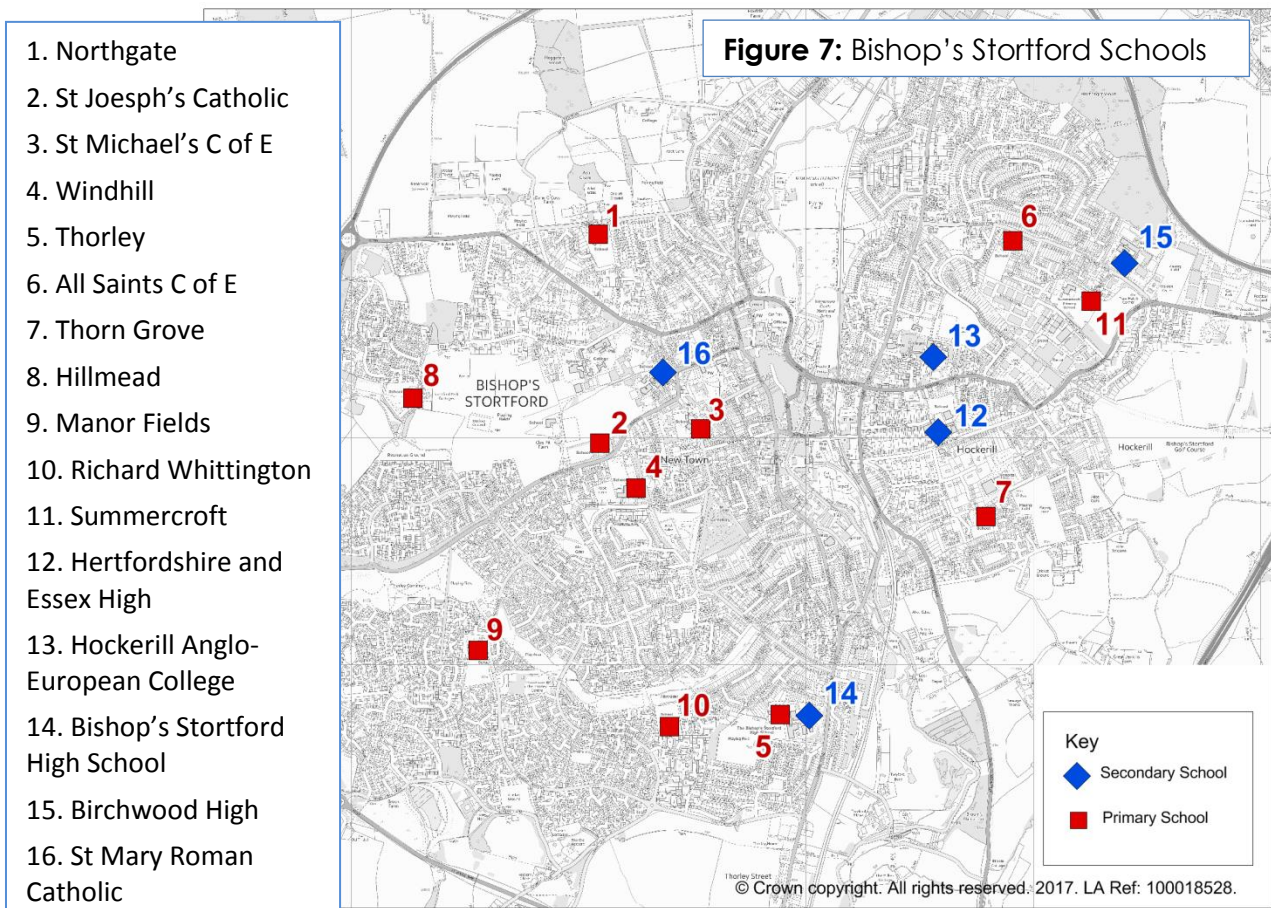


Figure 6: Bishop's Stortford Key Diagram

Education in Bishop's Stortford:

- 7.1** Bishop's Stortford has 11 Primary Schools across the town. The existing schools are either full or nearing full capacity. The town, which has 5 Secondary schools, is located within the same education planning area as Sawbridgeworth and therefore includes Leventhorpe Secondary School in Sawbridgeworth.



Education Requirements:

- 7.2 Primary:** If all allocations are built-out then the total increase in dwellings will be 4,142 for Bishop's Stortford. This would result in a demand for 8.3FE of primary school places. As mentioned above, all existing primary schools are at or near capacity and therefore new or expanded schools will be required.
- 7.3 Secondary:** Taking account of proposed development in Sawbridgeworth of 500 homes, the resulting demand across the education planning area is for 9.3FE of additional capacity.

Education Delivery:

- 7.4 Primary:** The site to the north of the town has received planning permission. Development will include the provision of 3 new primary schools with a total capacity of 5FE (2 x 2FE and 1 x 1FE). In addition, Bishop's Stortford South will deliver a 2FE school. Finally, the re-development of the existing Bishop's Stortford High School Site will allow the expansion of Thorley Hill Primary School by 1FE. This gives a total additional provision of 8FE in Bishop's Stortford.
- 7.5 Secondary:** The permitted development to the north of the town includes a 6FE secondary school. The Bishop's Stortford South development includes land for a 6FE secondary school that can be expanded to 8FE when there is demand. In addition, Leventhorpe School is currently considering expansion by 2FE. Taking into consideration the loss in terms of re-location of Bishop's Stortford High School (a 5.6FE facility), the result is a net gain of 10.4FE. HCC has also advised that through high level feasibility work, there is potential for 4FE of expansion within the existing school estate in the town. However, this is dependent on more detailed work and also reaching agreement with those schools as they are their own admitting authorities.

Education Funding:

- 7.6 Primary:** The two 2FE primary schools at Bishop's Stortford North will be fully funded by the developers. The third 1FE school will be partially funded by the developer with the remainder coming from Section 106 agreements from other developments in the town. The 1FE expansion of Thorley Hill primary will also be delivered through Section 106 agreements, while the 2FE school at Bishop's Stortford South will be funded directly by the developers.
- 7.7 Secondary:** The 6FE school at Bishop's Stortford North will be delivered by the developers. The 6FE school to the south will be funded by Section 106 contributions plus potentially some of the profit made by the County Council with regards to re-developing the existing High School site. Leventhorpe School is currently exploring various options with regards to funding as well as partly funding the development itself.

Transport Infrastructure:

- 7.8 Bishop's Stortford is well located to the existing highway network, particularly the A120 and M11. The A120 has capacity issues, particularly the B1383 Birchanger junction, while Junction 8 of the M11 will also reach capacity in the near future. A number of locations within the town also currently experience congestion, including the Hockerill Junction near the town centre. The Bishop's Stortford Town Centre Planning Framework contains suggestions to rationalise traffic flows in the town centre and also to encourage walking and cycling.

Highways Infrastructure:

- 7.9 Essex County Council has identified two solutions to capacity issues at Junction 8 of the M11. The first is an interim solution that would provide extra capacity for a number of years. The proposals would cost in the region of £13 million.
- 7.10 The second would involve more significant works and can take place following the interim solution. At present, the likely cost is unknown.
- 7.11 The provision of a Little Hadham bypass is also of relevance to residents of Bishop's Stortford. This scheme will cost in the region of £30 million and is largely being funded by the Hertfordshire LEP (£27.4 million), with further funding being provided by the Environment Agency for a flood alleviation scheme. It is anticipated that the scheme will be delivered by 2020.
- 7.12 Other works in Bishop's Stortford involve the creation of suitable access points for the various development sites.
- 7.13 In addition, to highways measures, provision will be made for new bus services and walking and cycling.

Highways Funding:

- 7.14 The interim solution for Junction 8 has attracted £1 million of funding from the Greater Cambridge/Greater Peterborough LEP. Essex County Council has also bid for Road Investment Strategy 2 funding as well as money from the Growth and South East LEP (Local Growth Fund Round 3).
- 7.15 As noted above, the Little Hadham bypass is funded. Works required for site access will be delivered by the developers of the respective sites.

Open Space and Green Infrastructure:

- 7.16 The planning permission at Bishop's Stortford North includes provision for a substantial amount of open space and green infrastructure. In particular, a new Country Park will be provided on land to the north and south of Dane O'Coy's Road, including Hoggate's Wood and Ash Grove. The development will also provide a range of other open spaces including sports pitches and play areas.
- 7.17 All other proposed sites in the town will provide a range of open space provision commensurate to the size of the respective developments. It is currently intended that the playing pitches associated with the Hadham Road site and the existing Bishop's Stortford High School site be maintained.

Buntingford

Introduction:

- 8.1 Buntingford's development strategy differs from the other towns within East Herts, due to a number of planning applications that have received permission prior to the adoption of the District Plan. Buntingford will see approximately 1,100 new dwellings built across a number of sites and therefore the development strategy is focussed upon mitigating and managing the impacts of this level of development.

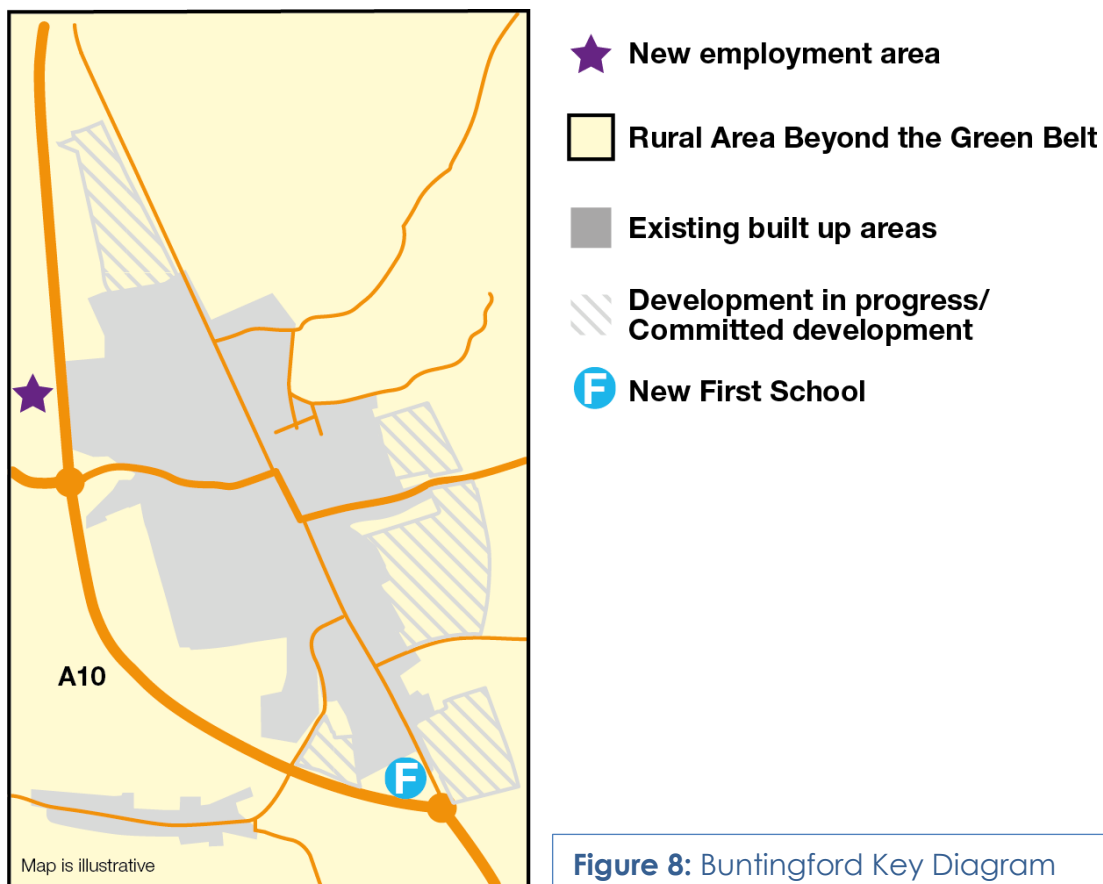
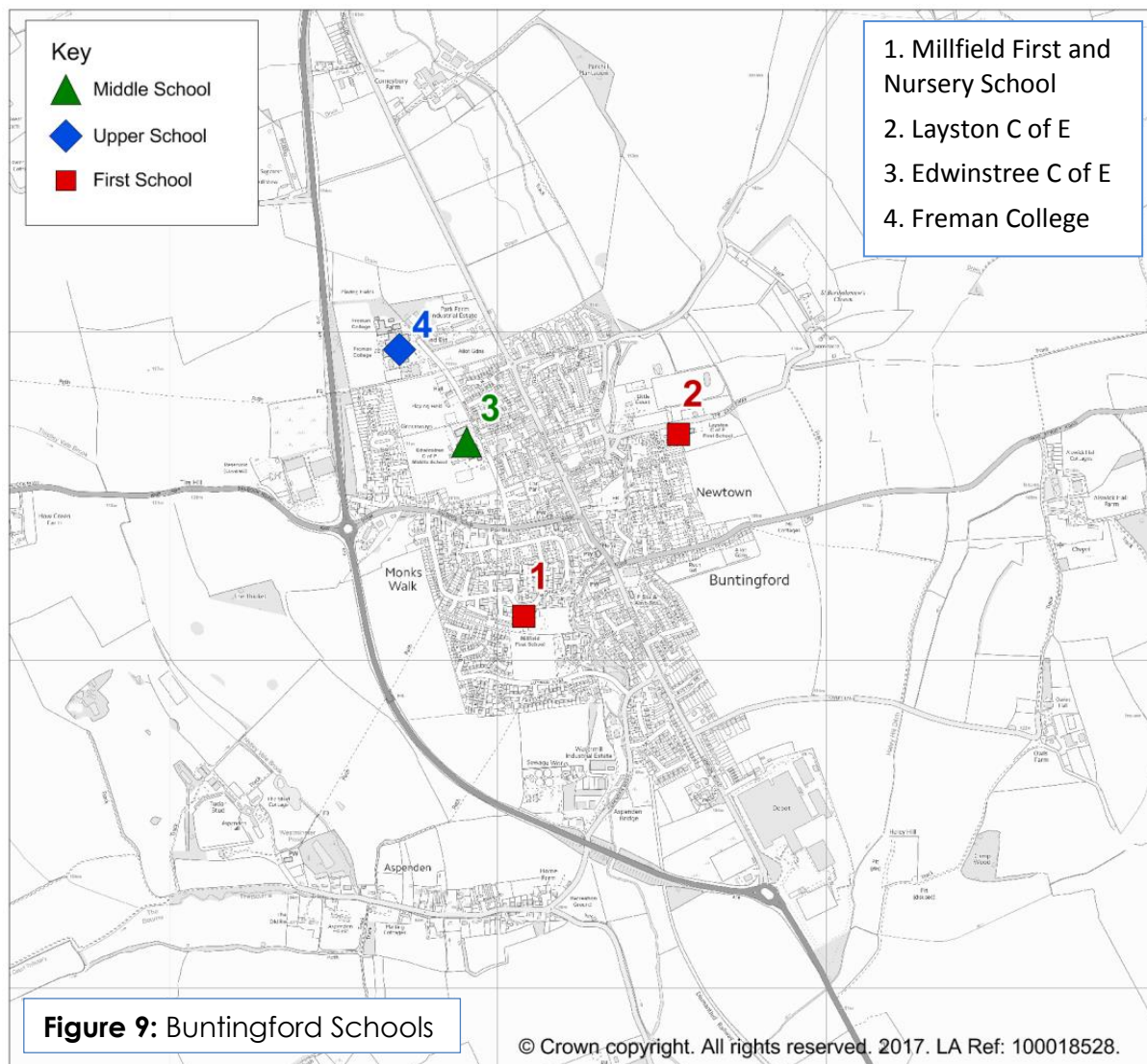


Figure 8: Buntingford Key Diagram

Education in Buntingford:

- 8.2 The town and surrounding area are served by a three tier education system. There are two First schools; Millfield First and Nursery School and Layston C of E First School. Edwinstree C of E provides middle school education (years 5 to 8) and Freman College providing upper level education (years 9 to 11 and sixth form). Ralph Sadlier is a middle school that services the Buntingford school planning area but is situated outside of Buntingford in the village of Puckeridge.



Education Requirements:

- 8.3 **First Schools:** To meet the demand arising from the planned developments in Buntingford a new First School must be opened by September 2019. Policy BUNT2 within the Pre-Submission District Plan identifies land west of London Road for a 2FE First School. HCC is currently undertaking a further options appraisal comparing potential first school sites.
- 8.4 In addition, HCC is currently consulting on proposals to expand Millfield First School by 0.5FE from September 2018.
- 8.5 **Middle Schools:** Edwinstree C of E and Ralph Sadler have sufficient school places in the short-term to accommodate the increase from the development. HCC feel that adding more places at this time would be likely to draw more pupils from communities outside the planning area.

- 8.6 **Upper level:** Education at the upper level can be enhanced via the expansion of Freman College within the Plan period, if there is a need to do so.

Education Delivery:

- 8.7 As noted earlier, Buntingford has had a number of developments approved in recent times. Each development has contributed towards education needs in the form of a Section 106 agreement. With regards to delivery of the First School, HCC consider that enough money has been collected through the Section 106 process in order to purchase the necessary land. HCC is considering how funding can be secured for the remainder of the cost. This could involve applying to the Department for Education for example.

Transport Infrastructure:

- 8.8 Buntingford is the only town within East Herts that doesn't have a railway station but does have good access to the A10 which runs to the west of the town.

Highways Infrastructure

- 8.9 There are two main highways schemes identified to improve the capacity of the A10 around Buntingford. Firstly, enhancements to the A10/London Road roundabout to the south of the town will be delivered in order to improve traffic flow in that location.
- 8.10 Secondly, dualling of the A10 south of Buntingford would also be beneficial in transport terms.

Highways Funding

- 8.11 The Hertfordshire Local Enterprise Partnership (LEP) has recently confirmed that it will provide £1.96 million of funding to deliver the required upgrades to the A10/London Road roundabout.
- 8.12 It is not yet clear how much dualling of the A10 would cost, and there is not yet any funding secured for this scheme. The Council will continue to work with HCC in this regard and any updates will be reflected in the IDP in due course.

Hertford

Introduction:

9.1 The development strategy for Hertford states that the town will accommodate approximately 950 dwellings spread over 5 separate site allocations:

- West of Hertford (Welwyn Road) – 300 homes
- West of Hertford (Thieves Lane) – 250 homes
- Mead Lane Area – 200 homes
- North of Hertford – 150 homes
- South of Hertford – 50 homes

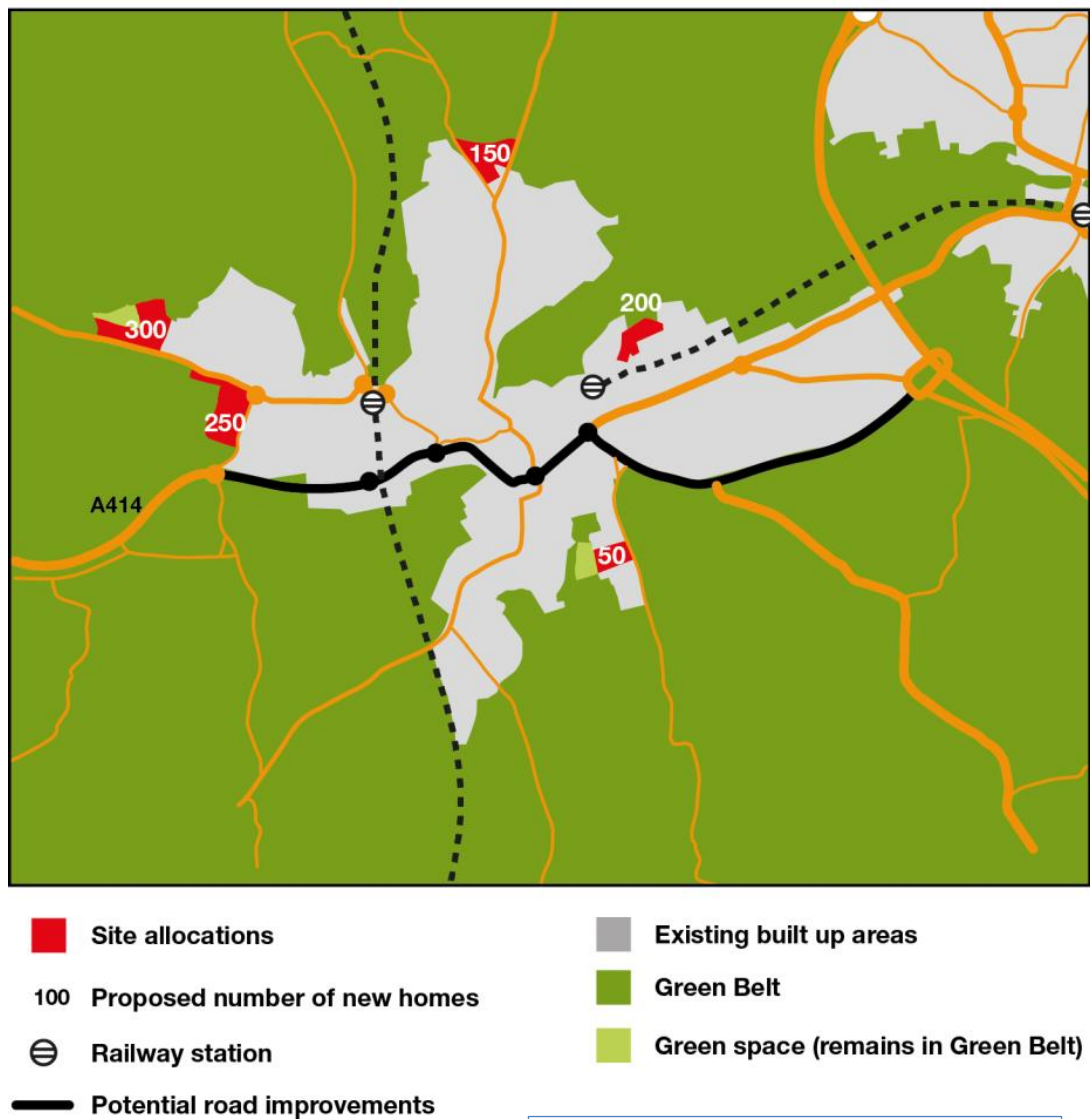
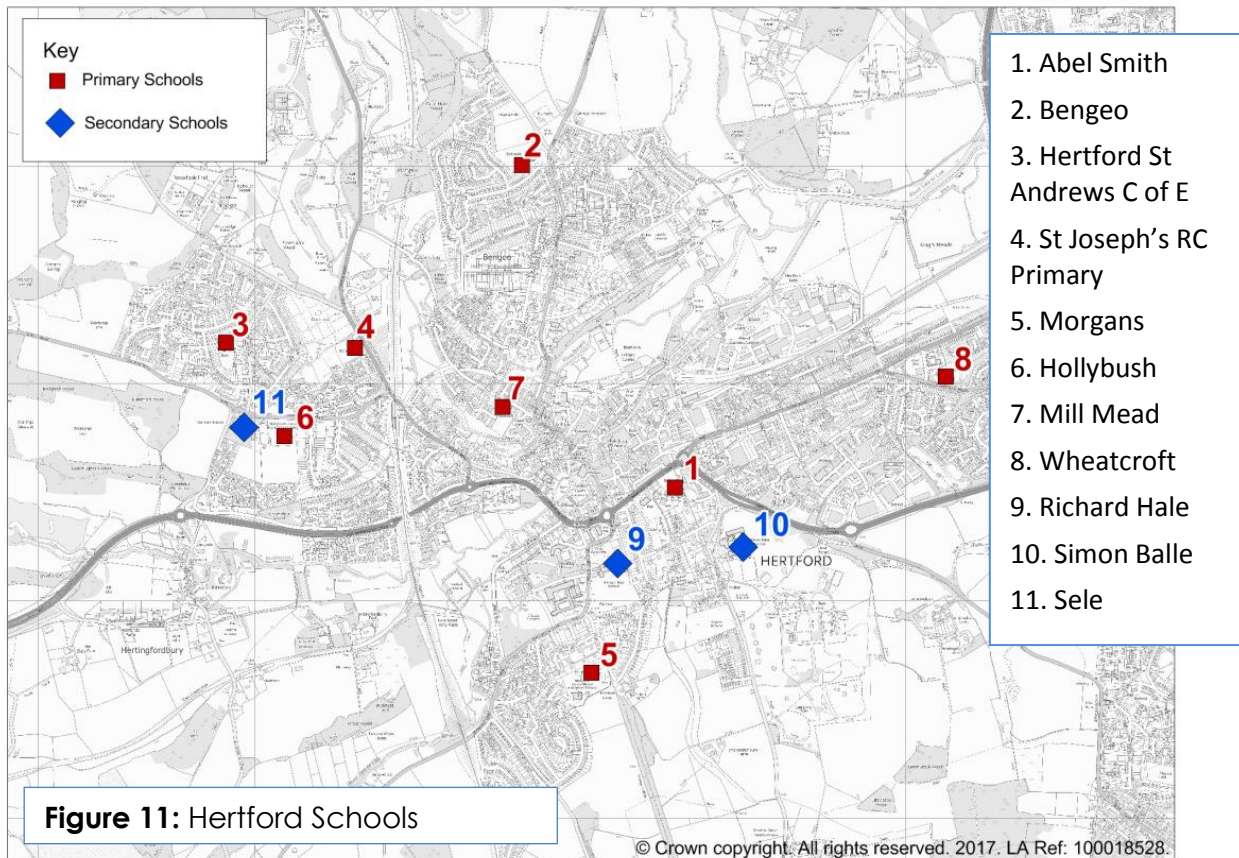


Figure 10: Hertford Key Diagram

Education in Hertford:

9.2 Hertford currently has nine Primary Schools and three Secondary Schools. Hertford experienced recent pressure on primary places and Simon Balle School was expanded in 2015 to include primary facilities, thereby becoming an all-through school. In terms of Secondary school provision, Hertford and Ware operate as one Education Planning Area and therefore includes a further two secondary schools in Ware.



Education Requirements:

- 9.3 **Primary:** The total accumulated development within Hertford results in 950 dwellings; this would produce an increased demand of around 2.0FE, whilst there is some capacity in existing primary schools there is not a sufficient enough level to meet the anticipated growth.
- 9.4 **Secondary:** Secondary education considers housing allocations in Hertford as well as Ware due to the shared Education Planning Area. Both settlements together will be delivering 2450 dwellings (Hertford; 950) which equates to a need of 5FE.

Education Delivery:

- 9.5 **Primary:** Expansion of Hollybush Primary School would provide a further 1FE of primary education; this, along with capacity in the current schools will provide for the level of anticipated growth in the Hertford area.
- 9.6 **Secondary:** Existing secondary schools in the Hertford and Ware area could be expanded to deliver new capacity. However, the preferred approach of HCC is to provide a new secondary school within the North and East of Ware development. This is explained further in the Ware section below.

Education Funding:

- 9.7 At primary level, the developers of the two West of Hertford sites will provide sufficient funding to deliver the expansion of Hollybush Primary School.
- 9.8 In relation to the secondary school, the North and East of Ware development will contribute an amount that is commensurate with the level of development proposed (3FE of provision). The remainder will come forward using contributions from other developments. In this case, the 5 site allocations coming forward within Hertford will be contributing towards the development of the secondary school along with any other windfall developments in the area. At present, the number of financial contributions that can be 'pooled' to pay for individual infrastructure schemes is limited to five. However, within the Housing White Paper, the Government has committed to reviewing the existing Section 106 regime. In addition, it is possible to split a scheme into smaller projects. For instance for a new secondary school, a specific project could be the provision for Sixth Form education or the delivery of sports pitches.

Transport Infrastructure:

- 9.9 Hertford has good transport connections, including a bus station and two rail stations that provide links to London and the wider area. Despite this Hertford suffers from traffic congestion at peak times focussed on the A414 running centrally through the town. Because of this it is important that future development doesn't exacerbate these problems.

Highways Infrastructure:

- 9.10 Advice from Hertfordshire County Council, initially received in July 2015 and supplemented by further information in January 2016, stated the capacity of the A414 through Hertford to cater for future growth was limited. Based on the housing trajectory contained within the District Plan, the County Council consider that the

A414 can support planned growth identified within the first seven years up to 2024. Beyond that date a strategic solution, potentially in the form of a Hertford bypass, will be required to deliver further growth in the Hertford and Ware area. The County Council is currently preparing a 2050 Transport Vision which will inform the Local Transport Plan 4. A strategic scheme in Hertford will be identified as part of the work.

- 9.11** Further works may be required in relation to specific junctions to cater for proposed development, particularly in the Mead Lane area in accordance with the requirements contained in the adopted Urban Design Framework.
- 9.12** In addition, to highways measures, provision will be made for new bus services and walking and cycling.

Highways Funding:

- 9.13** While a preferred route for a Hertford strategic solution has not yet been identified, it is likely that such a scheme would cost in the region of £155 million to £175 million. It is therefore clear that a scheme of this scale would require national funding.
- 9.14** Site specific junction improvements will be fully funded and delivered by the developers of the respective sites.

Open Space and Green Infrastructure:

- 9.15** The proposed developments in Hertford are not of a size that would provide significant new open space. However, developments should provide play areas and green infrastructure relating to sustainable drainage.
- 9.16** In addition, land to the south of Hertford (HERT5) will provide public open space on the western parcel of the site which will benefit the local community in that area, but also help protect the integrity of the Green Finger, of which the site forms part.

Sawbridgeworth

Introduction:

10.1 The development strategy for Sawbridgeworth will see the town accommodate approximately 500 dwellings across 3 sites. 300 dwellings will be split between two sites either side of West Road and a further 200 dwellings will be provided to the north of the town.

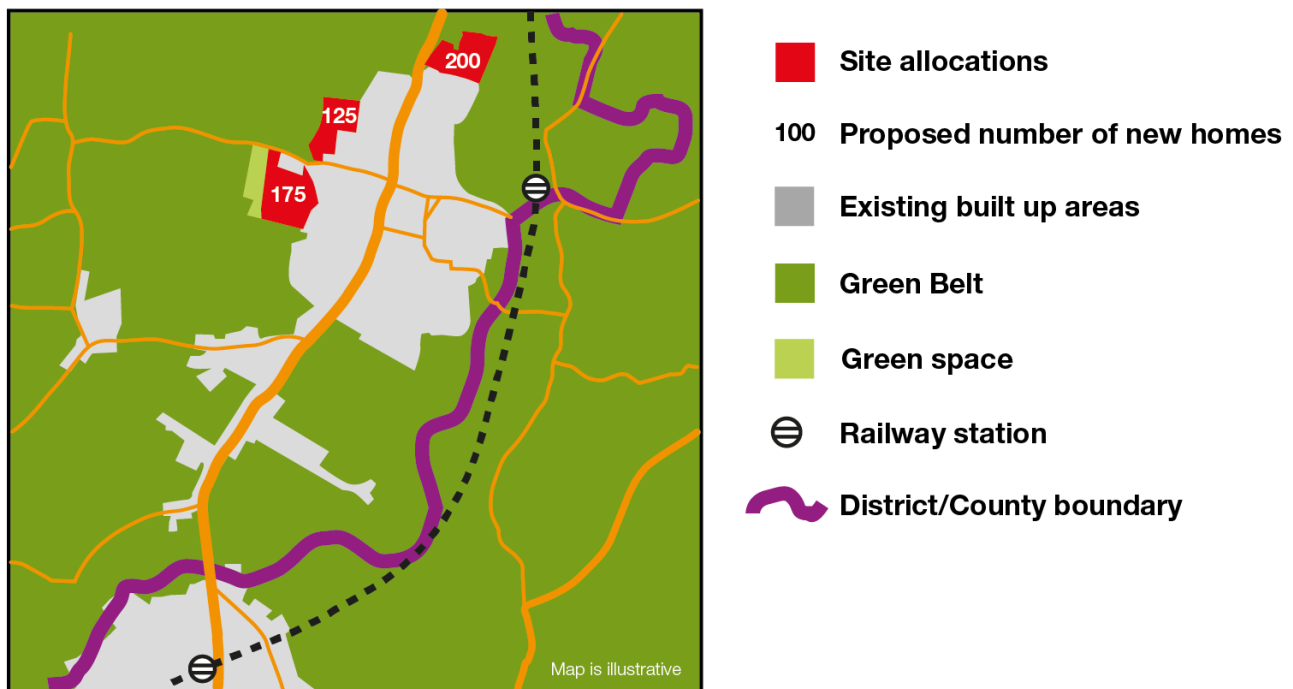
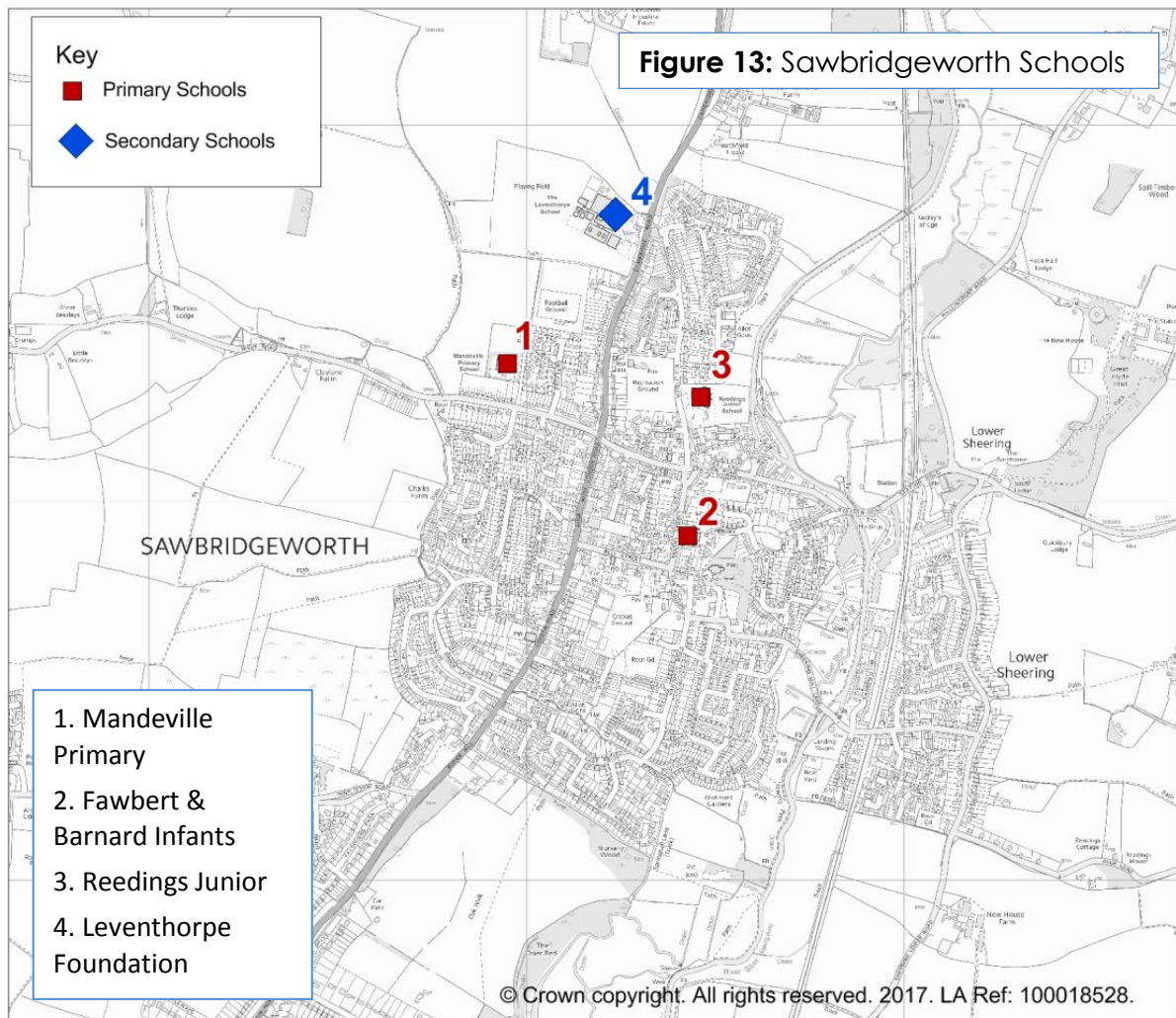


Figure 12: Sawbridgeworth Key Diagram

Education in Sawbridgeworth:

10.2 There are currently three primary schools in Sawbridgeworth; Mandeville, Reedings Junior and Fawbert and Barnard. To the north of the town is Leventhorpe Secondary School which has a current capacity of 6FE. In terms of secondary education, Sawbridgeworth is located within the same Education Planning Area as Bishop's Stortford.



Education Requirements:

- 10.3 **Primary:** The development of 500 homes would lead to a requirement for an additional 1FE of primary provision in the town.
- 10.4 **Secondary:** Taking account of proposed development in Bishop's Stortford, the resulting demand across the education planning area is for 9.3FE of additional capacity.

Education Delivery:

- 10.5 **Primary:** The additional 1FE of provision will be made by expanding Mandeville Primary School by 1FE. Given that there have been capacity issues in the town, there is also potential to provide for additional primary education on the site of Leventhorpe School.
- 10.6 **Secondary:** The additional required capacity would largely be delivered in Bishop's Stortford, this is explained more fully in the Bishop's Stortford section. However,

Leventhorpe School has aspirations to expand by 2FE and is currently seeking funding to achieve this.

Education Delivery:

- 10.7 **Primary:** The expansion of Mandeville Primary School will be achieved through the receipt of Section 106 contributions from the three proposed developments in the town.
- 10.8 **Secondary:** Leventhorpe School is currently in the process of seeking funding to expand by 2FE in addition to using some of its own resources. It is therefore unlikely that this expansion would require Section 106 contributions.

Transport Infrastructure:

- 10.9 Sawbridgeworth is located between Harlow and Bishop's Stortford with the M11 running to the east of the town. The A1184 runs through Sawbridgeworth. There is a train station in the town that provides services to Cambridge and London Liverpool Street.

Highways Infrastructure:

- 10.10 At present congestion is experienced at peak times on the A1184. The existing 'double roundabout' arrangement at the West Road/Station Road/A1184 junction can exacerbate this issue. Delivery of a new Junction 7a is expected to alleviate some of these issues by reducing the amount of through trips on the A1184 in the town.
- 10.11 Nevertheless, in order to ease traffic flow, it is also considered the signalisation of the existing double roundabout junction would be beneficial.
- 10.12 In addition, it is also necessary to undertake upgrade works to the A1184/High Wych Road junction on the southern side of the town on the form of signalisation.

Highways Funding:

- 10.13 The funding arrangements for Junction 7a are explained further in the Gilston Area section. The signalisation of the West Road/Station Road/A1184 junction and A1184/High Wych Road junction is directly linked to the development of the three proposed sites in the town. As such it will be funded through Section 106 contributions from those developments.

Open Space and Green Infrastructure:

- 10.14 All three developments will be expected to deliver elements of open space, including play areas. The design and nature of these spaces will be agreed at the planning application stage.
- 10.15 In addition, part of the allocation to the South of West Road includes a requirement to deliver a larger area of open space to the west of the site.
- 10.16 A large area of land to the north of Leventhorpe School is allocated for sports pitch provision. This allocation has been carried forward from the adopted Local Plan 2007. The proposed developments will be expected to deliver financial contributions towards this scheme.

Ware

Introduction:

- 11.1 The development strategy for Ware states that the town will accommodate 1,000 dwellings on a site to the North and East of Ware by 2033. A further 500 dwellings could be delivered beyond the plan period, should the necessary mitigation for highways constraints be implemented.

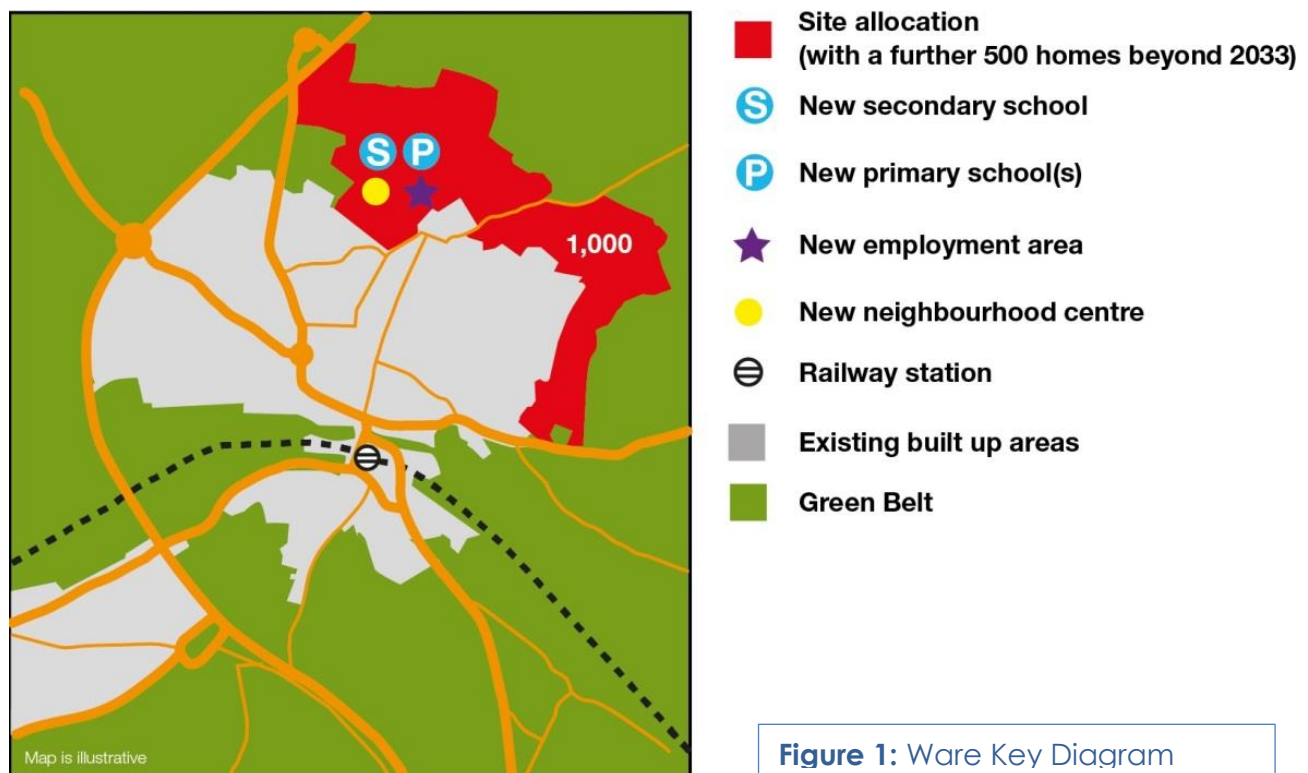
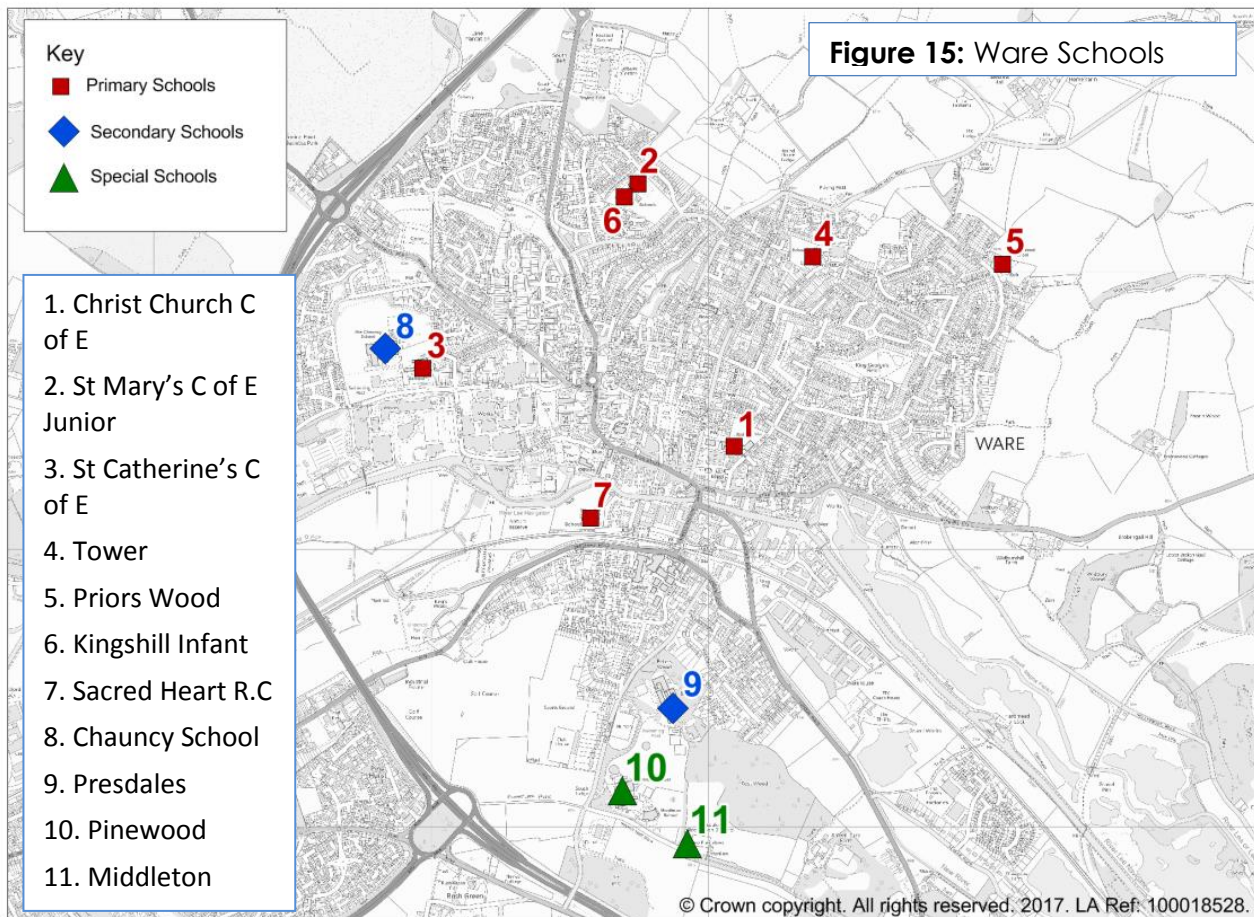


Figure 1: Ware Key Diagram

Education in Ware:

- 11.2 Ware currently has seven Primary Schools and two Secondary Schools. In addition there are a further two schools in Ware that provide for special educational needs. The location of each school is shown in Figure 14 below. In terms of Secondary school provision, Hertford and Ware operate as one Education Planning Area and therefore includes a further 3 secondary schools in Hertford.



Education Requirements:

- 11.3 **Primary:** The initial development of 1,000 dwellings would result in a need for 2FE of primary provision. Should the additional 500 homes come forward, then a further 1FE of provision will be required.
- 11.4 The 7 primary schools within Ware are all currently at capacity and therefore the need arising from the new allocation would have to be accommodated through new facilities or expansion to existing schools.
- 11.5 **Secondary:** Secondary education considers housing allocations in Hertford as well as Ware due to the shared Education Planning Area. Both settlements together will be delivering 2450 dwellings (Hertford; 950) which equates to a need of 5FE.

Education Delivery:

- 11.6 **Primary:** The Ware allocation will provide one 2FE Primary school (along with early years provision). The school will be provided within the development boundary with the exact location to be agreed through the master planning process. The timing of the delivery of the new school will be set out in the Section 106 agreement.

- 11.7 However, indicative trigger points have been provided by the developer: The construction of the primary school is expected to begin after 100 dwellings occupations, which is estimated to take place around 2022.
- 11.8 The additional 1FE of provision linked to the potential delivery of a further 500 homes beyond 2033 could be delivered in one of two ways. Firstly, the new 2FE school could be expanded to become a 3FE facility. Alternatively, the existing Priors Wood primary school could be expanded by 1FE. However, the land to expand the school is not currently within the ownership of HCC.
- 11.9 The Council will continue to work with HCC in order to identify the preferred option.
- 11.10 **Secondary:** Existing secondary schools in the Hertford and Ware area could be expanded to deliver new capacity. However, the preferred approach of HCC is to provide a new secondary school within the North and East of Ware development. Therefore the allocation will provide sufficient land for a 6FE secondary school, which will have potential to expand to 8FE. Again, the commencement of construction of the secondary education facilities will be set out in the Planning Obligations of the planning application process, there will be an agreed commencement linked to the delivery of a certain number of dwellings.
- 11.11 The developers provided trigger points for the secondary school construction; this is anticipated to start after 100 dwellings are occupied which will be around 2022. However, further discussions are required with HCC in this respect.

Education Funding:

- 11.12 At primary level, the developers will fund the school provision as it is directly linked to need arising from that site.
- 11.13 In relation to the secondary school, the development will contribute an amount that is commensurate with the level of development proposed (3FE of provision). The remainder will come forward using contributions from other developments. In this case, the 5 site allocations coming forward within Hertford will be contributing towards the development of the secondary school along with any other windfall developments in the area. At present, the number of financial contributions that can be 'pooled' to pay for individual infrastructure schemes is limited to five. However, within the Housing White Paper, the Government has committed to reviewing the existing Section 106 regime. In addition, it is possible to split a scheme into smaller projects. For instance for a new secondary school, a specific project could be the provision for Sixth Form education or the delivery of sports pitches.

Transport Infrastructure:

- 11.14 Ware benefits from good transport connections to both local and wider destinations both in terms of road links and train services. The town is closely located to the A10, A414 and A602 as well as train station with links to London Liverpool Street and Stratford.

Highways Infrastructure:

- 11.15 As noted above in the Hertford section, there are constraints related to the A414 in Hertford. Given its proximity to Hertford, this issue is also relevant to proposed development in Ware. The delivery of a further 500 homes beyond the initial 1,000 is dependent on the implementation of a strategic solution at Hertford.
- 11.16 The scheme to the North and East of Ware would deliver an internal spine road (indicatively illustrated in Figure 15) that would reduce the impact of the development on Ware High Street and provide some relief to other local roads. The road would be routed between Widbury Hill in the south-east to the A10/A1170 junction in the north west of the development. The entirety of the road will be provided within the boundary of the development.
- 11.17 Improvements to the Rush Green roundabout, located to the east of Hertford on the A10/A414 junction, will also be required. This work would involve the widening of the northern slip road where it meets the roundabout, to 3 lanes in order to accommodate the added traffic flows from the development.
- 11.18 In addition, to highways measures, provision will be made for new bus services and walking and cycling.



Figure 16

Highways Funding:

- 11.19 The spine road's exact location will be agreed through the master planning process. The commencement of construction will be set out in the Section 106 agreement, linked to the delivery of a certain number of dwellings.
- 11.20 Indicative trigger points have been provided by the developer who anticipates that the construction of the spine road will take place after the 750th dwelling is occupied, estimated to be in 2026, although sections of the link road are expected to be delivered as each phase comes forward. The spine road has been estimated to cost around £6,250,000 and will be funded in its entirety by the developer.
- 11.21 Rush Green roundabout improvements have been estimated to cost around £200,000 and will be funded in its entirety by the developer.

Open Space and Green Infrastructure:

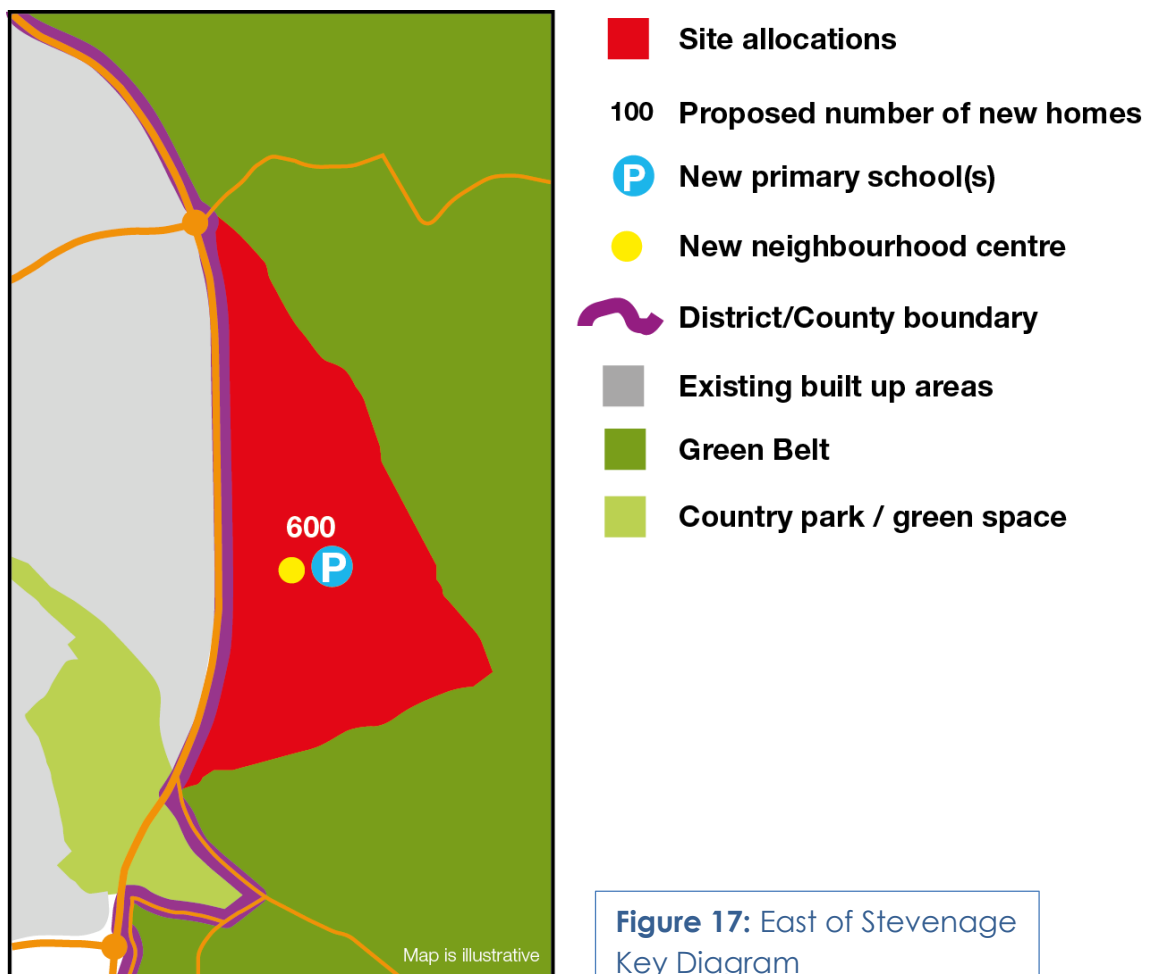
- 11.22 This development provides an opportunity to provide a significant amount of open space.

- 11.23 The site will also make provision for playing pitches and play spaces as well as allotments. The design and location will be identified through future masterplanning.

East of Stevenage

Introduction:

12.1 This development comprises 600 dwellings on the eastern edge of Stevenage, within East Herts District. The Council has worked in a collaborative way with Stevenage and North Herts Councils, as well as HCC, in order to plan for necessary infrastructure provision, both on site and in the wider Stevenage area.



Education Requirements:

- 12.2** In itself the development would only need just over 1FE of provision for both primary and secondary needs. However, the site must be looked at in the context of educational capacity elsewhere in Stevenage.

Education Delivery

- 12.3** The development will make provision for a 2FE primary school which will meet the needs arising from the site, as well as a part of the undersupply elsewhere in Stevenage.
- 12.4** With regards to secondary education, a new school is required in order to meet the needs of the wider Stevenage area, taking into account development on this site, but more importantly, larger scale development in Stevenage itself and on the edge of the town within North Herts. HCC has indicated that its preferred location for a new school is on the northern edge of the town, within North Herts. All four authorities are continuing discussions in order to find the most appropriate solution to this issue.

Education Funding

- 12.5** The development will provide a suitable level of financial contribution commensurate to the amount of development proposed. The rest of the funding for both primary and secondary education will be delivered through Section 106 agreements from other developments in Stevenage/on the edge of Stevenage within North Herts.

Transport Infrastructure:

- 12.6** The site is well located to the existing road network in Stevenage with three accesses currently proposed on Gresley Way.

Highways Infrastructure

- 12.7** In terms of access, the two existing junctions with Uplands and The White Way would be upgraded to allow access to the site, while a new third access point, to the south of The White Way would also be provided.
- 12.8** Beyond access arrangements, the only highways mitigation scheme that would be required is an upgrading of the existing Gresley Way/A602 roundabout.

Highways Funding

- 12.9** All required highways works will be funded by the developer.

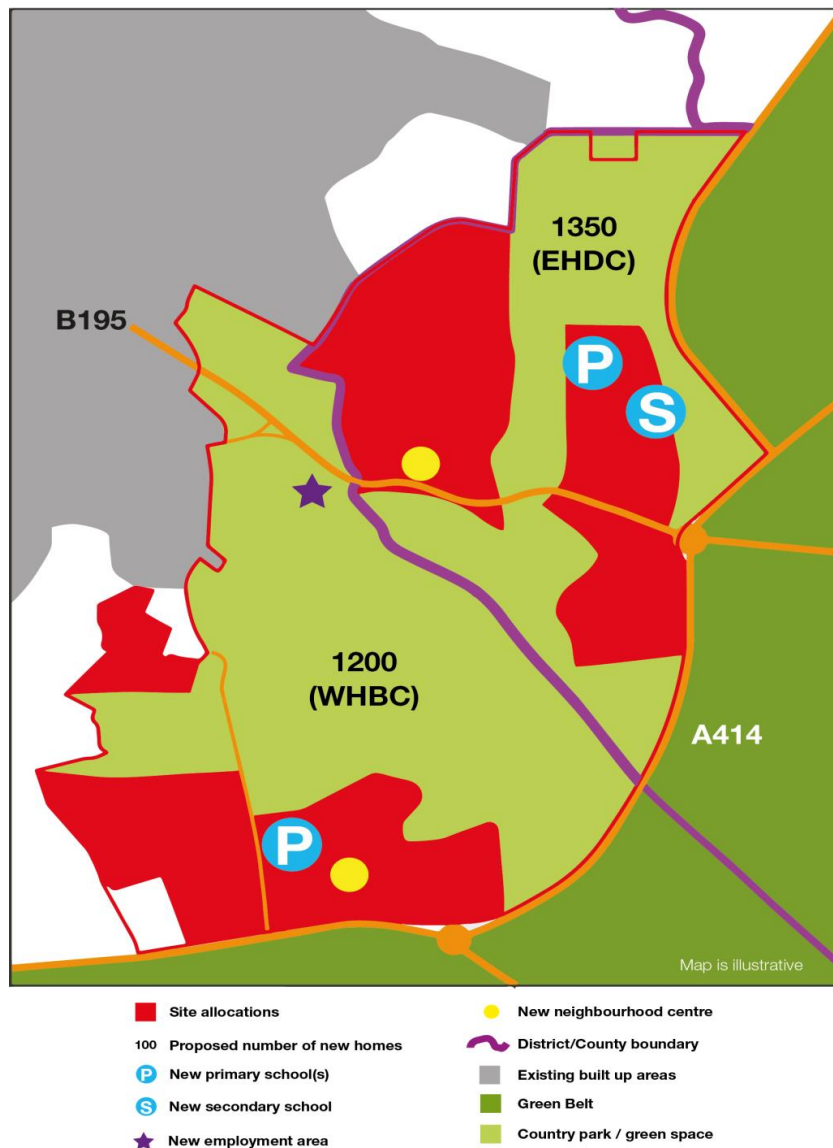
Open Space and Green Infrastructure:

- 12.10** The development will provide an amount of open space that is commensurate to the size of the development. The design and location will be identified through future masterplanning. The District Plan policy requires consideration of the need to provide cemetery space in this location.
-

East of Welwyn Garden City

Introduction:

- 13.1 This development of 2,550 homes is a cross boundary development located both within East Herts and Welwyn Hatfield. The proposals include 1,350 homes in East Herts with the remainder within Welwyn Hatfield. Given the nature of this site, a considerable amount of joint working has taken place between the two Councils in order to plan for infrastructure delivery.



Education Requirements:

- 13.2 There are a number of existing schools in Welwyn Garden City. However the size of the site requires new provision to be made. In order to cater for all educational requirements arising from the site, 5FE of primary provision is required, based on the standard calculation of 1FE per 500 dwellings.
- 13.3 In order to support the development itself, and also wider needs in Welwyn Garden City, a site for a 6FE secondary school is also required.

Education Delivery

- 13.4 At present it is anticipated that the primary provision will be delivered across two sites. A 2FE school with early years provision will be delivered within Welwyn Hatfield, while a school of up to 3FE with early years provision will also be located in East Herts.
- 13.5 The secondary provision will be delivered through a new school of up to 8FE in East Herts.

Education Funding

- 13.6 The need for the two primary schools is directly linked to the scale of proposed development. As such, the developers will deliver and fully fund these schemes.
- 13.7 The secondary school will meet wider needs, beyond those emanating from the development itself. As such the land for the school will be provided, and a significant Section 106 contribution will be made towards the delivery of the school. The remaining funding will be delivered through Section 106 contributions from other development schemes in Welwyn Garden City.
- 13.8 The phasing will be agreed as part of the Section 106 agreement which will form part of a future planning permission.

Transport Infrastructure:

- 13.9 The site is well located in close proximity to the strategic road network, particularly the A414 and A1(M). The B195 is routed through the middle of the development site. The site will form an extension to Welwyn Garden City which has a train station in the town centre.

Highways Infrastructure

- 13.10 While a substantial amount of development is proposed for this location, it is not considered that strategic measures will be required in order to mitigate potential impacts on the highway network in the immediate vicinity of the site. Capacity issues with regards to the A414, particularly as it passes through Hertford, have been identified earlier in this document. However, while this development is located on the A414 corridor, the County Council is satisfied that eastward traffic movements towards Hertford would be limited. This has been evidenced by the developers own transport model which was agreed and signed off by HCC as Highways Authority.
- 13.11 Upgrades to the two existing junctions on the A414 will be required (Birchall Lane and Holwell Lane), and there will also be a need for capacity upgrades to the B195.
- 13.12 Along with other developments in the wider area, development in this location contributes to pressures on the A1(M), in particular Junctions 3 and 4. A need to upgrade these junctions has therefore been identified. The need for these works has been identified within the HCC 2050 Transport Vision.
- 13.13 In addition, to highways measures, provision will be made for new bus services and walking and cycling.

Highways Funding

- 13.14 All of the required on site highways works, including access and the relevant upgrades to the A414 junctions and the B195, will be funded in full by the developers.
- 13.15 Upgrades to Junctions 3 and 4 of the A1(M) are likely to require bids for national funding. In particular the works to the 'Jack Oldings' roundabout at Junction 4 is likely to cost in excess of £250 million.

Open Space and Green Infrastructure:

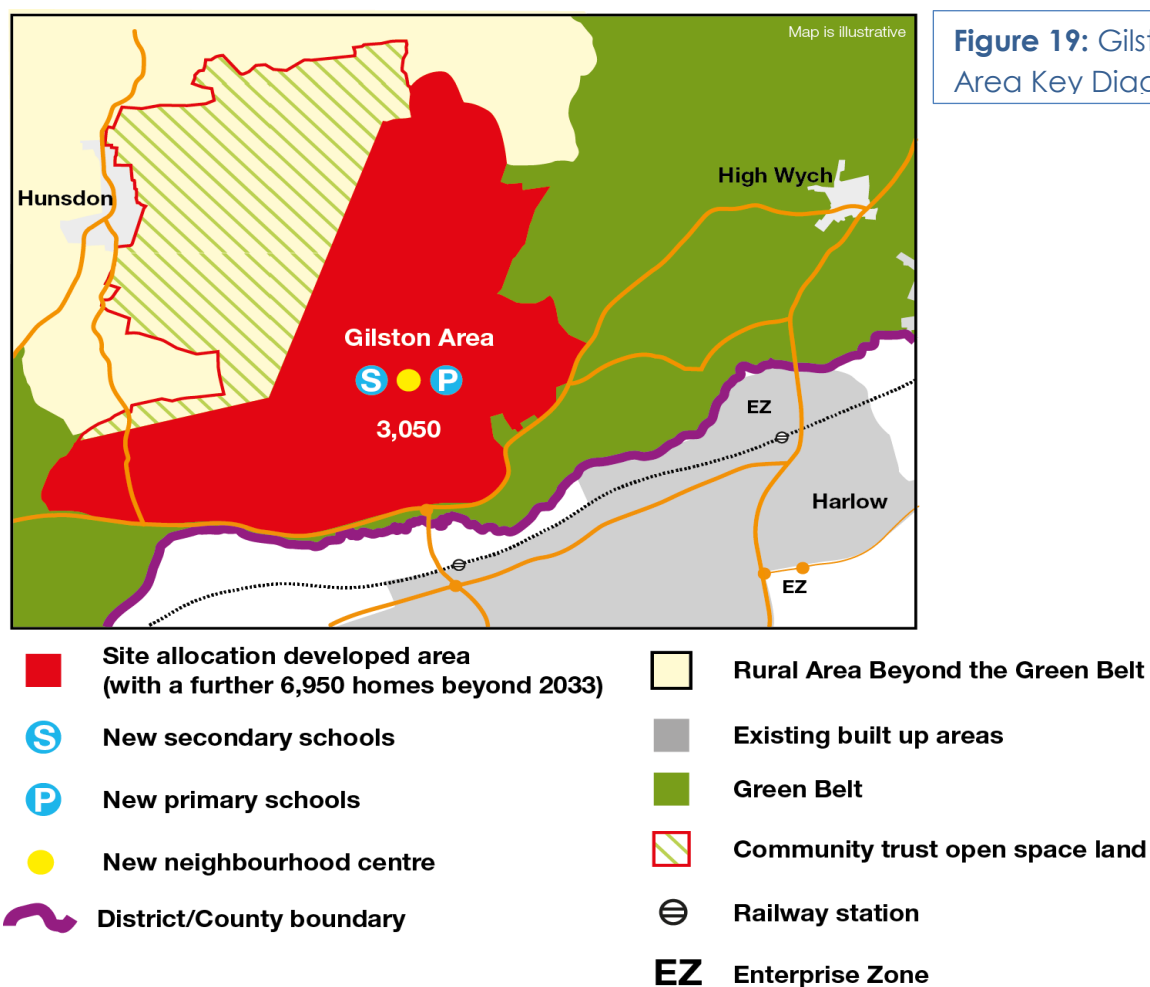
- 13.16 This development provides an opportunity to provide a significant amount of open space. With regards to strategic schemes, a large parkland will be created by utilising the former landfill part of the site within Welwyn Hatfield.
- 13.17 In addition, the development will also benefit from its proximity to Panshanger Park which has recently been made accessible to the public. Upgrading of part of the Cole Green Way will also be delivered as part of this scheme.

- 13.18 The site will also make provision for playing pitches and play spaces as well as community orchards and allotments. The design and location will be identified through future masterplanning.

Gilston Area

Introduction:

- 14.1 The Gilston Area is a proposal for a large development of 10,000 homes, to be delivered in this Plan period and beyond. Building at this scale ensures that a considerable level of new infrastructure can be provided on site, while substantial financial contributions can also be made in relation to strategic off-site infrastructure. Given likely build out rates, it is anticipated that approximately 3,000 homes will be provided by the end of the Plan period in 2033, with the remainder coming forward after that date.
- 14.2 Infrastructure provision in this location needs to be considered in light of the successful Harlow and Gilston Garden Town bid. As part of this ongoing work with our neighbouring authorities, an additional Infrastructure Delivery Plan for the Garden Town area will be prepared.



Education Requirements:

- 14.3 The only existing schools located in close proximity to the proposed development area are either village primary schools or schools located within Harlow. There are capacity concerns with these schools, and as such, the Gilston Area development would need to deliver sufficient education provision, in order to meet all needs arising from the site.
- 14.4 Based on the standard approach of providing 1FE per 500 new dwellings, a scheme of 10,000 homes would require 20 FE of provision for both primary and secondary education. However this development will take place over a significant period of time, and the pupils living in the houses that are occupied first are likely to have finished their education by the time the later phases of development are completed.
- 14.5 A child yield model has therefore been utilised which uses assumptions based on housing type, size and tenure as well as phasing. This model identifies what the peak demand for education provision is likely to be over the lifetime of the development. Based on this approach, the required provision is for 14FE of secondary education and 15FE of primary education. This will need to be kept under review as more detail emerges through the masterplanning process with regards to the assumptions that have informed the model at this stage.

Education Delivery

- 14.6 The Gilston Area development concept is based around the delivery of seven villages. In terms of education, five of these villages will contain primary schools (3FE each), while two secondary schools of 7FE each will be provided in a suitable location. The primary schools will all include provision for early years education. Further work is required in order to identify the phasing of school places alongside the delivery of houses. However, school places will be available at the stage that the first homes are completed. The phasing will be agreed as part of the Section 106 agreement which will form part of a future planning permission.

Education Funding

- 14.7 The cost of this education provision is identified within the table in Appendix H. The developers will fund the delivery of these facilities, and as such there are not considered to be any funding issues.

Transport Infrastructure:

- 14.8 Part of the reason why the Gilston Area is considered to be a sustainable location for growth is its proximity to the strategic road network. In particular, the A414 runs to the

south of the site, while the M11 is located just to the east. The site is also close to Harlow Town train station which has regular services to Cambridge and London Liverpool Street.

Highways Infrastructure

- 14.9 While the site is in proximity to major roads, it is clear that 10,000 homes in this location, in conjunction with other developments in the Harlow area, will have a significant impact on the highway network, including existing routes through Harlow.
- 14.10 The Council has worked closely with Epping Forest and Harlow Councils as well the Essex and Hertfordshire County Councils and Highways England in order to identify the mitigation measures that would be required to deliver approximately 16,000 homes in the wider Harlow area by 2033 (including 3,000 in the Gilston Area). Of primary importance is the delivery of a new Junction 7a on the M11. A planning application for this scheme was submitted by Essex County Council at the end of January and is expected to be decided by the end of June 2017.
- 14.11 The remaining schemes are a package of measures, the timing of which will be considered in light of the identification and phasing of other developments in the Harlow area. The schemes include widening of the existing Stort crossing from the Eastwick roundabout to the Burnt Mill roundabout, provision of a second Stort crossing, and upgrade works to Junctions 7 and 8 of the M11. Works on specific junctions in Harlow itself have also been identified as being necessary.
- 14.12 It is envisaged that the widening of the existing Stort crossing could facilitate the delivery of a sustainable transport corridor which would run from the Gilston Area, through the town centre, to potential new development to the south of Harlow, within Epping Forest District.
- 14.13 In terms of need, the Second crossing would not be required until after the existing crossing had been widened. However, it is an aspiration of the joint working Councils to deliver the two schemes at the same time in order that provision for sustainable transport can be made from the earliest stages of development.
- 14.14 It is likely that further mitigation measures would be required to deliver the full 10,000 homes beyond the Plan period. A VISUM transport model run will be undertaken prior to the District Plan Examination which will assess the impact of this full development on the highway network. HCC is also undertaking similar modelling. The IDP will be updated to take account of these further measures which could include a Harlow Northern Bypass.
- 14.15 At this stage, it is not possible to identify how these mitigation schemes will be phased as this is dependent on the location and timing of other developments

around Harlow. The delivery of these mitigation measures will be dealt with through the Garden Town IDP.

- 14.16 In addition, to highways measures, provision will be made for new bus services and walking and cycling, including improved access to Harlow Town train station.

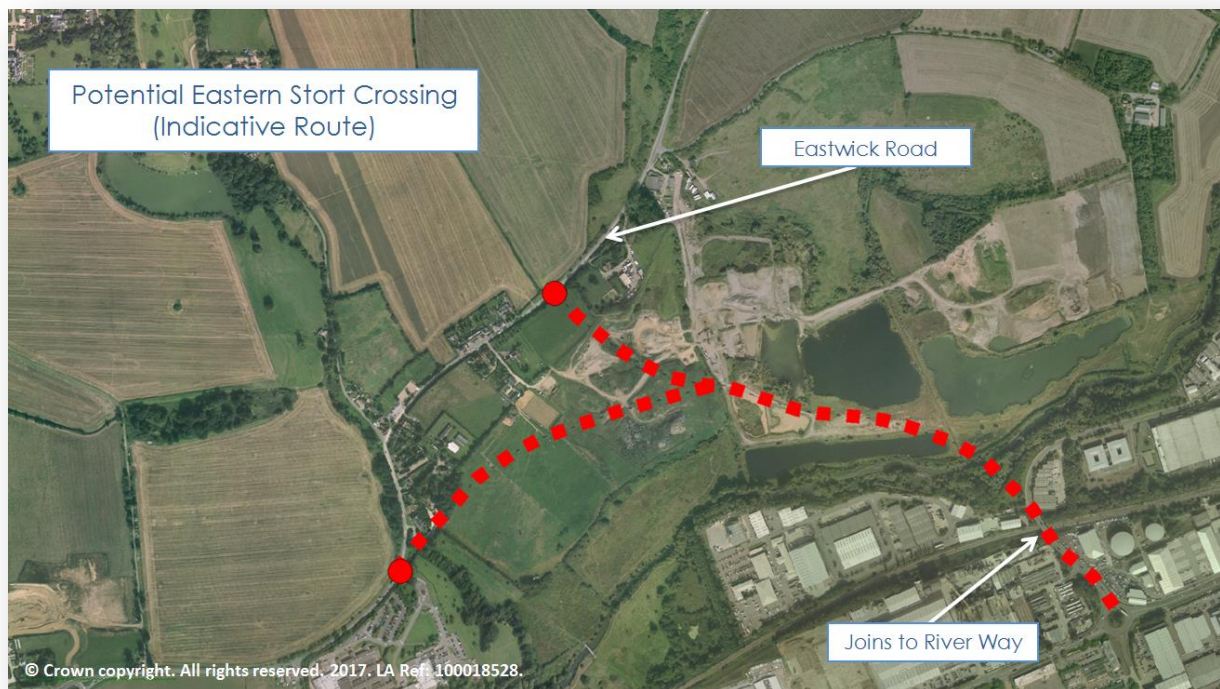


Figure 20

Highways Funding

- 14.17 All of the required on site highways works, including access, will be funded in full by the developers. The strategic mitigation schemes identified above will be delivered through a mixture of Section 106 contributions, of which Gilston would be expected to provide a significant amount being the largest proposed development, and funding from national sources including Road Investment Strategy Funding. The schemes are not all fully funded at present; however the Council will continue to work with our neighbouring authorities, the County Councils and Highways England in order to apply for different funding streams. This is likely to include discussions with the Government as part of the Garden Town proposals.

Open Space and Green Infrastructure:

- 14.18 Given the size of the Gilston Area development, it provides a unique opportunity to deliver a substantial amount of publicly accessible green space. As identified within the District Plan (Policy GA1), the northern portion of the site will be used to provide

new parklands which will include the existing Hunsdon Airfield. Within the area to be developed, there will be numerous green spaces and play areas as well as publicly accessible sports pitches and allotments. The design and location of these facilities will be identified through future masterplanning. There is also potential to improve access to the Stort Valley area, which lies outside of the development site.

- 14.19 One of the principles of development in this location is that the ownership of the parklands, open spaces and other community assets will be transferred to a Community Trust or equivalent which will provide protection in terms of ensuring that further development beyond the 10,000 does not take place. Again, the details of this process will be confirmed at a later stage.
- 14.20 The District Plan policy also requires consideration of the need to provide cemetery space in this location.

Other Infrastructure:

- 14.21 A considerable amount of further infrastructure will be provided on site, directly funded in full by the developers. A list is provided in Appendix H. However, it will include health facilities, community centres, places of worship, libraries, recycling facilities and a police station.

Rural Area

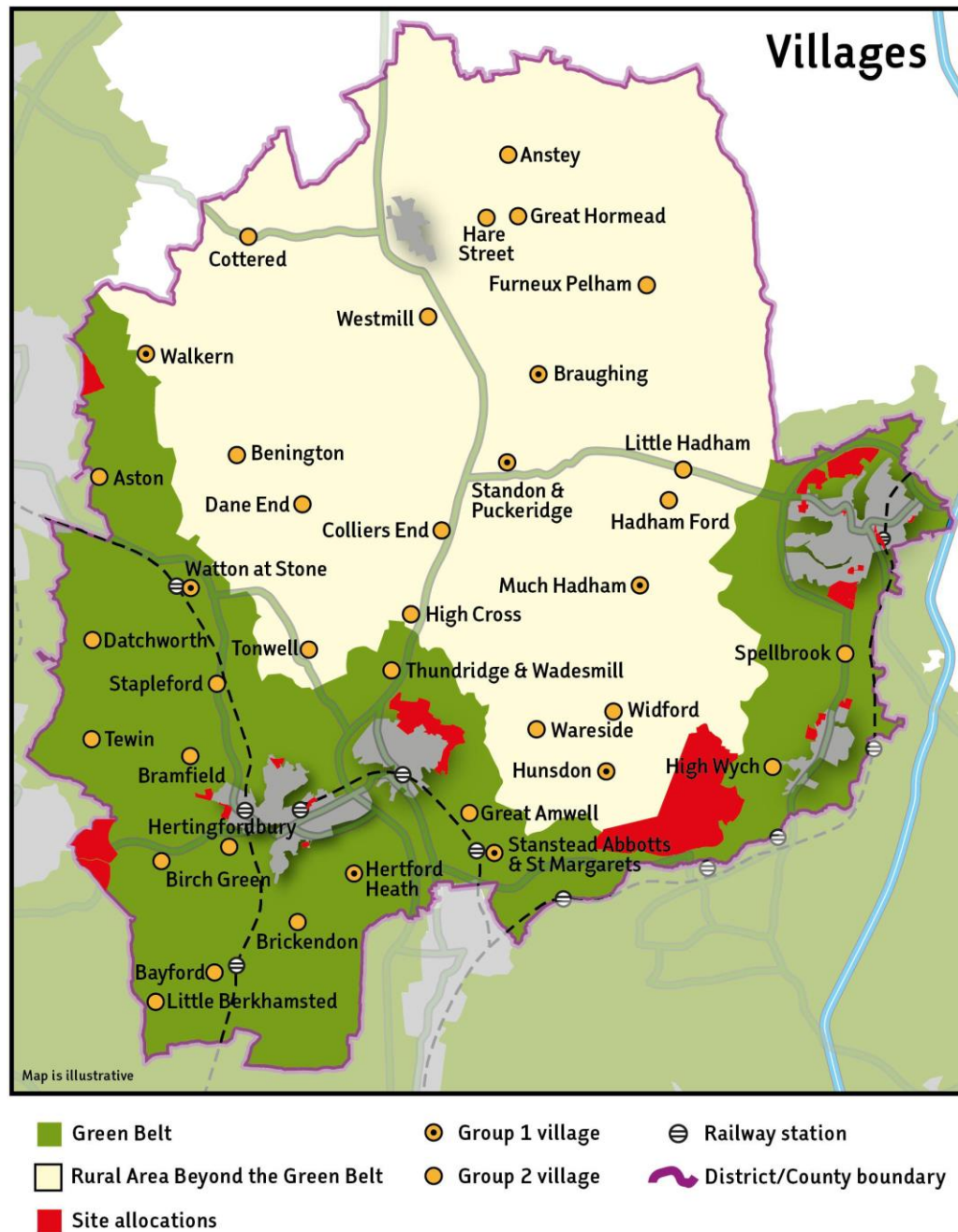


Figure 21: Rural Area Key Diagram

- 15.1 A limited amount of development has been identified for the rural area within the District Plan. A minimum of 500 dwellings will be delivered over the Plan period, largely focused on villages classified as 'Group 1' within the Rural Area Beyond the Green Belt.

- 15.2 Given the limited scale of development proposed for these locations, it not considered necessary to identify specific infrastructure schemes that may be required.
- 15.3 Proposals will be considered on a case by case basis as and when a planning application is submitted. Any development proposal would need to be considered to be acceptable in highways terms. Certain schemes may require highways works in relation to access.
- 15.4 In addition, there are known constraints with regards to school capacity in certain villages and again this issue should be considered by the County Council as part of the planning application process.

Appendices

Appendix A: Bishop's Stortford**Town Wide Infrastructure**

Infrastructure Type	Description	Lead Agencies	Estimated Cost	Phasing	Funding	Notes
Transport	Widening of Station Road Bridge to provide safe access for pedestrians and cyclists	HCC	Unknown	Unknown	Unfunded It is likely that this scheme would be delivered through S106 contributions. However, the funding arrangements have not been confirmed yet.	The emerging Bishop's Stortford Town Centre Planning Framework seeks to address vehicular, pedestrian and cycle movements in the town centre. It is therefore likely that the IDP will need to be updated to reflect the outputs of that study in due course. The study area includes proposed development sites including the Goods Yard, Causeway/Old River Lane and the Mill Site.
Transport	Bus Priority measures along London Road into town centre	HCC	Unknown	Unknown	Unfunded It is likely that this scheme would be delivered through S106 contributions. However, the funding arrangements have not been confirmed yet.	The emerging Bishop's Stortford Town Centre Planning Framework seeks to address vehicular, pedestrian and cycle movements in the town centre. It is therefore likely that the IDP will need to be updated to reflect the outputs of that study in due course. The study area includes proposed development sites including the Goods Yard, Causeway/Old River Lane and the Mill Site.
Community Facilities	Possible expansion of health facilities in accordance with CCG requirements	NHS	N/A	N/A	N/A	Capacity constraints with existing GP surgeries in the town are well known. Haymeads, Parsonage and Bishop's Park surgeries are all 'severely constrained', while South Street and Church Street surgeries have 'limited capacity'. It should be noted that the planning permission for Bishop's Stortford North includes provision of a 3,000 sq m health facility.

BISH4: Reserve Secondary School Site, Hadham Road

Infrastructure Type	Description	Lead Agencies	Estimated Cost	Phasing	Funding	Notes
Transport	Sustainable transport measures that include walking and cycling and enhanced passenger transport services	Developer/HC C	N/A	2017-2022	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	Detailed design issues such as those related to enhancements to walking and cycling and other sustainable transport measures will be considered at the detailed design stage through a site masterplan. However, the need for such measures is a requirement within the District Plan policy.
Green Infrastructure	Green Infrastructure, Play areas and public amenity green space	Developer	N/A	2017-2022	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	Detailed design issues such as those related to green infrastructure and open space will be considered at the detailed design stage through a site masterplan. However, the need for such measures is a requirement within the District Plan policy.
Community Facilities	Retention and enhancement of outdoor playing pitches on the western parcel of the site.	Developer	N/A	2017-2022	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	This is dependent on further discussions with HCC and the way in which they wish to progress the current planning applications.

BISH5: Bishop's Stortford South						
Infrastructure Type	Description	Lead Agencies	Estimated Cost	Phasing	Funding	Notes
Education	2FE primary school with potential to expand to 3FE, including Early Years facilities.	Developer/HC C	£7,500,000	2017-2022	Partially Funded The developer will be required to deliver a significant amount of funding towards provision of the school, commensurate with the size of the development (1.5FE). HCC will consider how the remaining costs should be funded.	
Education	A 6FE secondary school with potential to expand to 8FE.	Developer/HC C	£20,000,000	2017-2022	Partially Funded The developer will be required to deliver a significant amount of funding towards provision of the school, commensurate with the size of the development (1.5FE). HCC will consider how the remaining costs should be funded.	The new school facility in this location may accommodate a re-located Bishop's Stortford High School. If so, the profits made from residential development of the existing High School site may provide the necessary residual funding for this scheme.
Transport	Various access arrangements and local junction upgrades including: priority junctions on Obrey Way, a roundabout on St. James Way, a roundabout at the Whittington Way/Bishop's Avenue junction and improvements to the existing London Road/Whittington Way junction.	HCC	N/A	2017-2022	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	The detailed design for these works will be considered through the masterplanning/planning application stage.
Transport	Sustainable transport measures that include walking and cycling and enhanced passenger transport services	Developer/HC C	N/A	2017-2022	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	Detailed design issues such as those related to enhancements to walking and cycling and other sustainable transport measures will be considered at the detailed design stage through a site masterplan. However, the need for such measures is a requirement within the District Plan policy.
Utilities	Upgrades to local sewerage infrastructure	Thames Water	Unknown	2017-2022	Funded – Subject to Further Work to Identify Costs The funding of upgrades to the sewerage network must be provided by the developer and Thames Water. A drainage strategy is required in order to identify costings. While potential costs are currently unknown, there is not a requirement to find alternative sources of funding.	This item is in response to Thames Water's representations on the Pre-Submission District Plan which identified that a number of proposed allocations may not have sufficient capacity to cater for development, and therefore upgrades could be required. The details of required work will be dealt with through drainage strategies at the planning application stage. It should be noted that Thames Water has a legal obligation to ensure that developments are served by sufficient infrastructure.
Green	Green Infrastructure, Play areas and	Developer	N/A	2017-2022	Funded	Detailed design issues such as those related to

Infrastructure	public amenity green space				These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	green infrastructure and open space will be considered at the detailed design stage through a site masterplan. However, the need for such measures is a requirement within the District Plan policy.
BISH6: Bishop's Stortford High School Site						
Infrastructure Type	Description	Lead Agencies	Estimated Cost	Phasing	Funding	Notes
Education	Expansion of Thorley Hill Primary School by 1FE	HCC	£3,000,000	2017-2022	Unfunded There is not currently any funding arrangements secured for this scheme.	This development is dependent on the re-location of the existing High School to a new site at BISH5: Bishop's Stortford South. If this does occur, the profits made from residential development of the existing High School site may provide the necessary residual funding for this scheme. It should also be noted that HCC is currently consulting on proposals to expand St Joseph's Catholic Primary School by 0.5FE.
Community Facilities	Retention and enhancement of outdoor playing pitches on the western parcel of the site.	Developer	N/A	2017-2022	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	This development is dependent on the re-location of the existing High School to a new site at BISH5: Bishop's Stortford South.
Transport	Sustainable transport measures that include walking and cycling and enhanced passenger transport services	Developer/HC C	N/A	2017-2022	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	Detailed design issues such as those related to enhancements to walking and cycling and other sustainable transport measures will be considered at the detailed design stage through a site masterplan. However, the need for such measures is a requirement within the District Plan policy.
Green Infrastructure	Green Infrastructure, Play areas and public amenity green space	Developer	N/A	2017-2022	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	Detailed design issues such as those related to green infrastructure and open space will be considered at the detailed design stage through a site masterplan. However, the need for such measures is a requirement within the District Plan policy.
BISH7: The Goods Yard						
Infrastructure Type	Description	Lead Agencies	Estimated Cost	Phasing	Funding	Notes
Transport	Passenger Transport Interchange and parking provision at Bishop's Stortford railway station	Developer/Net work Rail	Unknown	2017-2022	Funded These measures would be	A planning application for the Goods Yard has been submitted but hasn't yet been determined by the Council. Consideration of this site forms

					delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	part of the emerging Bishop's Stortford Town Centre Planning Framework.
Transport	Pedestrian and cycle routes from Goods Yard to town centre and station via Anchor Street Leisure Park	Developer/HC C	Unknown	2017-2022	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	
Transport	Enhanced passenger transport services to the town centre and the station including the creation of a sustainable route through the site	Developer/HC C	Unknown	2017-2022	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	
Green Infrastructure	Green Infrastructure, Play areas and public amenity green space	Developer	N/A	2017-2022	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	Detailed design issues such as those related to green infrastructure and open space will be considered at the detailed design stage through a site masterplan. However, the need for such measures is a requirement within the District Plan policy.
BISH8: The Causeway/Old River Lane						
Infrastructure Type	Description	Lead Agencies	Estimated Cost	Phasing	Funding	Notes
						This site is now in Council ownership and consideration is being given to the type of development that should be provided, along with any necessary supporting infrastructure. However, it likely that a mix of uses will be provided including residential, retail and community uses. The IDP can be updated to reflect the outcome of these discussions in due course.
BISH9: East of Manor Links						
Transport	Sustainable transport measures which encourage walking and cycling through the site, including the provision of a new pedestrian crossing point on Dunmow Road	Developer	N/A	2017-2022	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	Detailed design issues such as those related to enhancements to walking and cycling and other sustainable transport measures will be considered at the detailed design stage through a site masterplan. However, the need for such measures is a requirement within the District Plan policy.
Green Infrastructure	Green Infrastructure, Play areas and public amenity green space.	Developer	N/A	2017-2022	Funded	Detailed design issues such as those related to green infrastructure and open space will be

					These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	considered at the detailed design stage through a site masterplan. However, the need for such measures is a requirement within the District Plan policy.
BISH10: The Mill Site						
Transport	New footbridge to facilitate pedestrian access to the town centre over the river Stort	Developer/Canals and Rivers Trust	Unknown	2022-2027	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	The delivery of this site is dependent on the re-location of existing uses. Consideration of this site forms part of the emerging Bishop's Stortford Town Centre Planning Framework.
Transport	Pedestrian and cycle friendly route between the station to the south of the site along Dane Street towards new crossing over Stort	Developer	Unknown	2022-2027	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	Detailed design issues such as those related to enhancements to walking and cycling and other sustainable transport measures will be considered at the detailed design stage through a site masterplan. However, the need for such measures is a requirement within the District Plan policy.
Green Infrastructure	Green Infrastructure, Play areas and public amenity green space.	Developer	N/A	2022-2027	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	Detailed design issues such as those related to green infrastructure and open space will be considered at the detailed design stage through a site masterplan. However, the need for such measures is a requirement within the District Plan policy.

Appendix B: Buntingford						
Town Wide Infrastructure						
Infrastructure Type	Description	Lead Agencies	Estimated Cost	Phasing	Funding	Notes
Education	2FE First School	HCC	£7,500,000	By 2019	Partially Funded HCC considers that sufficient Section 106 contributions have been collected in order to purchase a suitable site. HCC is also considering how the remaining costs could be funded including applying for funding from the Department for Education.	It should be noted that HCC is currently consulting on a proposal to expand Millfield First School by 0.5FE
Education	Expansion of Edwinstree Middle School	HCC	Unknown	2017-2027	Partially Funded Section 106 contributions have been secured towards Middle tier education needs. However, it is not clear at present how the remainder would be funded.	The priority for Buntingford is the delivery of a new First School. Further capacity for Middle and Upper tier education is a longer term requirement.
Education	Expansion of Freman College	HCC	Unknown	2017-2027	Partially Funded Section 106 contributions have been secured towards Upper tier education needs. However, it is not clear at present how the remainder would be funded.	The priority for Buntingford is the delivery of a new First School. Further capacity for Middle and Upper tier education is a longer term requirement. The maximum expansion potential for Freman College is up to 10FE.
Transport	Upgrades to A10/London Road roundabout	HCC	£1,960,000	2017-2022	Funded This scheme has secured funding from the Hertfordshire Local Enterprise Partnership.	
Transport	Dualling of A10 southbound	HCC	Unknown	2022-2033	Unfunded There is not currently any funding arrangements secured for this scheme.	
Community Facilities	Possible expansion of health facilities in accordance with CCG requirements	NHS	N/A	N/A	N/A	

Appendix C: Hertford						
Town Wide Infrastructure						
Infrastructure Type	Description	Lead Agencies	Estimated Cost	Phasing	Funding	Notes
Education	Expansion of Hollybush Primary School by 1FE	HCC	£3,000,000	2017-2022	Partially Funded Development to the west of Hertford, comprising 500 dwellings would result in a requirement to deliver 1FE of additional education. Section 106 contributions from these schemes should provide a significant amount of funding – however this is subject to negotiation at the planning application stage.	
Community Facilities	Possible expansion of health facilities in accordance with CCG requirements	NHS	N/A	N/A	N/A	
Transport	Bus priority measures along A119 and A414	HCC	Unknown	2027 onwards	Unfunded There is not currently any funding arrangements secured for this scheme.	This is a long term aspiration that could only be delivered following the implementation of a strategic highways solution (such as a bypass) in Hertford. Delivery of a bypass would free up capacity on existing routes in the town, potentially allowing the delivery of bus priority measures.
Transport	Access improvements at Hertford North railway station to include a new bus interchange.	Network Rail	Unknown	Unknown	Unfunded There is not currently any funding arrangements secured for this scheme. However, it is likely that Network Rail would deliver this scheme.	
HERT2: Mead Lane Area						
Infrastructure Type	Description	Lead Agencies	Estimated Cost	Phasing	Funding	Notes
Transport	Upgrade existing footways on Mead Lane to 3m pedestrian/cycleway to the south side of Mead Lane in addition to improvements to the towpath and links with the adjoining area and the town centre (in particular addressing links to Hartham Common and Kings Meads)	Developer/HC C	N/A	2022-2027	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	These measures are contained within the adopted Mead Lane Urban Design Framework.
Transport	The widening of Marshgate Drive to allow for improved vehicular and pedestrian access and car parking/car share scheme to be delivered within a Green Streets approach	Developer/HC C	N/A	2022-2027	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	These measures are contained within the adopted Mead Lane Urban Design Framework.
Transport	Hertford East Station access improvements / new station	Network Rail	Unknown	2022-2027	Unfunded	These measures are contained within the adopted Mead Lane Urban Design Framework.

	interchange				There is not currently any funding arrangements secured for this scheme. However, it is likely that Network Rail would deliver this scheme.	
Green Infrastructure	Green Infrastructure, Play areas and public amenity green space.	Developer	N/A	2022-2027	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	Detailed design issues such as those related to green infrastructure and open space will be considered at the detailed design stage through a site masterplan. However, the need for such measures is a requirement within the District Plan policy.
HERT3: West of Hertford (North of Welwyn Road, and West of Thieves Lane)						
Infrastructure Type	Description	Lead Agencies	Estimated Cost	Phasing	Funding	Notes
Transport	Pedestrian/cycle routes between Hertford West site and Perrett Gardens (North of Welwyn Road site only) and new shared footway/cycleway along Welwyn Road	Developer/HC C	N/A	2017-2022	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	Detailed design issues such as those related to enhancements to walking and cycling and other sustainable transport measures will be considered at the detailed design stage through a site masterplan. However, the need for such measures is a requirement within the District Plan policy.
Transport	Enhanced passenger transport services to include new bus stops on B1000 Welwyn Road	HCC	N/A	2017-2022	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	
Green Infrastructure	Green Infrastructure, Play areas and public amenity green space.	Developer	N/A	2017-2022	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	Detailed design issues such as those related to green infrastructure and open space will be considered at the detailed design stage through a site masterplan. However, the need for such measures is a requirement within the District Plan policy.
HERT4: North of Hertford						
Infrastructure Type	Description	Lead Agencies	Estimated Cost	Phasing	Funding	Notes
Utilities	Upgrades to local sewerage infrastructure	Thames Water	Unknown	2017-2022	Funded – Subject to Further Work to Identify Costs The funding of upgrades to the sewerage network must be provided by the developer and Thames Water. A drainage strategy is required in order to identify costings. While potential costs are currently unknown, there is not a requirement to find alternative sources of	This item is in response to Thames Water's representations on the Pre-Submission District Plan which identified that a number of proposed allocations may not have sufficient capacity to cater for development, and therefore upgrades could be required. The details of required work will be dealt with through drainage strategies at the planning application stage. It should be noted that Thames Water has a legal obligation to ensure that developments are served by sufficient infrastructure.

					funding.	
Transport	Old Cross Junction improvements	HCC	Unknown	2017-2022	Funded/ Partially Funded The developer will make a Section 106 contribution towards this scheme. Whether that amount will be sufficient to deliver the improvements is not currently known. If not, then alternative funding sources will need to be explored. However, the junction is constrained by listed buildings, and as such, options for improvements are likely to be limited.	
Green Infrastructure	Green Infrastructure, Play areas and public amenity green space.	Developer	N/A	2017-2022	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	Detailed design issues such as those related to green infrastructure and open space will be considered at the detailed design stage through a site masterplan. However, the need for such measures is a requirement within the District Plan policy.
HERT5: South of Hertford						
Infrastructure Type	Description	Lead Agencies	Estimated Cost	Phasing	Funding	Notes
Transport	Upgrade pedestrian and cycle way along Mangrove Road to Simon Balle School and towards the town centre	Developer/HC C	Unknown	2017-2021	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	Detailed design issues such as those related to enhancements to walking and cycling and other sustainable transport measures will be considered at the detailed design stage through a site masterplan. However, the need for such measures is a requirement within the District Plan policy.
Green Infrastructure	Green Infrastructure, Play areas and public amenity green space.	Developer	N/A	2017-2022	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	Detailed design issues such as those related to green infrastructure and open space will be considered at the detailed design stage through a site masterplan. However, the need for such measures is a requirement within the District Plan policy.

Appendix D: Sawbridgeworth						
Town Wide Infrastructure						
Infrastructure Type	Description	Lead Agencies	Estimated Cost	Phasing	Funding	Notes
Community Facilities	Possible expansion of health facilities in accordance with CCG requirements	NHS	N/A	N/A	N/A	
Education	Expansion of Leventhorpe School by 2FE	Leventhorpe School/HCC	£6,500,000	2017-2022	Partially Funded This scheme is being led by Leventhorpe School which is an Academy. The school is funding part of the work itself; however most of the funding would come from other sources subject to a current bidding process. Subject to the outcome of that process, the scheme is considered to be partially funded but this will be kept under review.	
Education	Expansion of Mandeville Primary School by 1FE	HCC	£3,000,000	2017-2022	Partially Funded Development on three sites in the town, comprising 500 dwellings in total, would result in a requirement to deliver 1FE of additional education. Section 106 contributions from these schemes should provide a significant amount of funding – however this is subject to negotiation at the planning application stage.	
SAWB2: Land North of West Road & SAWB3: Land South of West Road						
Infrastructure Type	Description	Lead Agencies	Estimated Cost	Phasing	Funding	Notes
Utilities	Upgrades to local sewerage infrastructure	Thames Water	Unknown	2017-2022	Funded – Subject to Further Work to Identify Costs The funding of upgrades to the sewerage network must be provided by the developer and Thames Water. A drainage strategy is required in order to identify costings. While potential costs are currently unknown, there is not a requirement to find alternative sources of funding.	This item is in response to Thames Water's representations on the Pre-Submission District Plan which identified that a number of proposed allocations may not have sufficient capacity to cater for development, and therefore upgrades could be required. The details of required work will be dealt with through drainage strategies at the planning application stage. It should be noted that Thames Water has a legal obligation to ensure that developments are served by sufficient infrastructure.
Transport	Footway/cycleway from West Road to Mandeville School and Leventhorpe School (SAWB2 only)	Developer	£30,000	2017-2022	Funded These measures would be delivered by the developer as	Detailed design issues such as those related to enhancements to walking and cycling and other sustainable transport measures will be considered at the detailed design stage through a

					part of the planning permission. As such no additional funding is expected to be required.	site masterplan. However, the need for such measures is a requirement within the District Plan policy.
Transport	Footway enhancements along southern side of West Road (SAWB3 only)	HCC	Unknown	2017-2022	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	Detailed design issues such as those related to enhancements to walking and cycling and other sustainable transport measures will be considered at the detailed design stage through a site masterplan. However, the need for such measures is a requirement within the District Plan policy.
Transport	Signalisation of A1184/West Road/Station Road junction	HCC	£175,000	2017-2022	Funded This scheme will be funded jointly by the two sites.	Site SAWB4 would also be required to provide funding to deliver this scheme if it comes forward for development earlier than 2022-2027 as currently anticipated.
Transport	Signalisation of A1184/High Wych Road junction	HCC	£175,000	2017-2022	Funded This scheme will be funded jointly by the two sites.	Site SAWB4 would also be required to provide funding to deliver this scheme if it comes forward for development earlier than 2022-2027 as currently anticipated.
Green Infrastructure	Green Infrastructure, Play areas and public amenity green space.	Developer	N/A	2017-2022	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	Detailed design issues such as those related to green infrastructure and open space will be considered at the detailed design stage through a site masterplan. However, the need for such measures is a requirement within the District Plan policy.
SAWB4: Land North of Sawbridgeworth						
Infrastructure Type	Description	Lead Agencies	Estimated Cost	Phasing	Funding	Notes
Utilities	Upgrades to local sewerage infrastructure	Thames Water	Unknown	2022-2027	Funded – Subject to Further Work to Identify Costs The funding of upgrades to the sewerage network must be provided by the developer and Thames Water. A drainage strategy is required in order to identify costings. While potential costs are currently unknown, there is not a requirement to find alternative sources of funding.	This item is in response to Thames Water's representations on the Pre-Submission District Plan which identified that a number of proposed allocations may not have sufficient capacity to cater for development, and therefore upgrades could be required. The details of required work will be dealt with through drainage strategies at the planning application stage. It should be noted that Thames Water has a legal obligation to ensure that developments are served by sufficient infrastructure.
Transport	Sustainable transport measures that include walking and cycling and enhanced passenger transport services	Developer/HC C	N/A	2022-2027	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	Detailed design issues such as those related to enhancements to walking and cycling and other sustainable transport measures will be considered at the detailed design stage through a site masterplan. However, the need for such measures is a requirement within the District Plan policy.

Green Infrastructure	Green Infrastructure, Play areas and public amenity green space	Developer	N/A	2022-2027	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	Detailed design issues such as those related to green infrastructure and open space will be considered at the detailed design stage through a site masterplan. However, the need for such measures is a requirement within the District Plan policy.
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Appendix E: Ware						
WARE2: North and East of Ware						
Infrastructure Type	Description	Lead Agencies	Estimated Cost	Phasing	Funding	Notes
Transport	Spine Road (Widbury Hill to A1170/A10)	Developer/HCC	£6,000,000	2022-2027	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	Provision of the Spine Road through the site, connecting to the A10 junction, is essential both in terms of serving the site itself, but also to reduce impact on existing roads.
Transport	Bus Services	HCC	Unknown	2027-2033	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	The cost of extending bus services to serve the site is subject to further discussions with HCC. It is also likely that the services would need to be 'forward funded' by the developer for a period of time until they become self-sufficient in the later development phases.
Transport	Crossing point improvements	Developer/HCC	£30,000	2022-2033	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	
Transport	Rush Green Roundabout Improvements – additional lane on northern slip road approaching roundabout.	HCC	£200,000	2022-2027	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	This scheme will provide some capacity improvements on the roundabout. However, the junction suffers from substantial congestion issues at different time, linked to use of McDonalds and the petrol station. At present, there isn't an identified solution to this wider problem but the Council will continue to work with HCC to consider this issue.
Utilities	New foul sewer	Thames Water	£5,000,000	2022-2037	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	This scheme is essential in order to overcome constraints with the existing sewerage network.
Utilities	Off-site gas upgrades	Utility Company	£450,000 for a 1,000 home scheme £650,000 for a 1,500 home scheme	2022-2027	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	
Utilities	Off-site electricity upgrades	Utility Company	£375,000 for a 1,000 home scheme	2022-2027	Funded These measures would be delivered by the developer as	

			£550,000 for a 1,500 home scheme		part of the planning permission. As such no additional funding is expected to be required.	
Utilities	Off-site water connection upgrades	Utility Company	£150,000 for a 1,000 home scheme £250,000 for a 1,500 home scheme	2022-2027	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	
Education	Primary Education for 2FE school (1,000 homes)with potential to expand to 3FE/expansion of Priors Wood by 1FE (1,500 homes). With Early Years provision.	Developer/HC C	£7,500,000 for 2FE. Further £3,000,000 to deliver additional 1FE	2022 onwards	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	The initial 2FE would be delivered on a new primary school site to serve a development of 1,000 homes. Should the additional 500 homes be delivered then a further 1FE would be required. This could be delivered by expanding the new school by 1FE or by expanding the existing Priors Wood Primary School by 1FE.
Education	Nursery facilities	Developer	£3,000,000	2022 onwards	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	
Education	New 6FE secondary school with potential to expand to 8FE	Developer/HC C	£20,000,000	2017-2022	Partially Funded The developer will be required to deliver a significant amount of funding towards provision of the school, commensurate with the size of the development (2FE for a 1,000 home scheme or 3FE for a 1,500 home scheme). The proposed developments in Hertford will be expected to provide Section 106 contributions towards this scheme. HCC will consider how any remaining costs should be funded.	Delivery of a new secondary school in this location to meet the needs of the wider Hertford and Ware catchment is the preferred solution. It is recognised that this development will come forward later than developments in Hertford. Therefore the most appropriate solution would be to provide this school site ahead of development of the wider site in order to cater for earlier planned development in Hertford. If this school cannot be delivered earlier, then it is likely that HCC would wish to consider the expansion of one or more existing secondary schools in Hertford. This situation will be kept under review.
Community Facilities	Town centre improvements	TBC	£2,500,000	2027-2033	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	The nature of these improvements will be considered through the planning application process.
Community Facilities	GP surgery	NHS	£2,000,000	2022-2027	Funded These measures would be delivered by the developer as part of the planning permission.	The size and design of this facility will need to be agreed with the NHS through the masterplanning process.

					As such no additional funding is expected to be required.	
Community Facilities	Community Centre	Developer	£1,000,000	2022-2033	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	
Community Facilities/Green Infrastructure	Indoor and outdoor sports facilities (which may be shared use) to include, junior football and mini soccer pitches; and all other green space on site including a cemetery if there is a demonstrable need.	Developer/Sport England	£7,500,000 for a 1,000 home scheme £11,250,000 for a 1,500 home scheme	2022-2033	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	
Transport	Shared footway/cycleway between site, High Oak Road area and Wodson Park	Developer/HC C	£325,000	2022-2033	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	Detailed design issues such as those related to enhancements to walking and cycling and other sustainable transport measures will be considered at the detailed design stage through a site masterplan. However, the need for such measures is a requirement within the District Plan policy.

Appendix F: East of Stevenage						
EOS1: East of Stevenage						
Infrastructure Type	Description	Lead Agencies	Estimated Cost	Phasing	Funding	Notes
Transport	3x roundabouts on Gresley Way for site access	Developer/HC C	N/A	2017-2022	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	
Transport	The provision of cycle-ways and footways that provide links into Stevenage including existing cycle networks	Developer/HC C	N/A	2017-2022	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	
Transport	Upgrade to Gresley Way/A602 Junction	HCC	£425,000	2017-2022	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	
Education	Education provision - 2FE Primary School with Early Years provision	Developer/HC C	£7,500,000	2017-2022	Partially Funded The developer will be required to deliver a significant amount of funding towards provision of the school, commensurate with the size of the development (1.2FE based on 600 dwellings). HCC will consider how any remaining costs should be funded.	In addition to primary education, the developer would be expected to make a Section 106 contribution towards secondary education needs, commensurate to the size of the development. The site forms a relatively small proportion of new development in the Stevenage area which cumulatively leads to a need for a new 6-8FE school. HCC's preference is for this to be provided on the northern edge of Stevenage as part of new development in North Herts District. The Council will continue to work with Stevenage, North Herts and HCC on this issue.
Green Infrastructure	Green Infrastructure, Play areas and public amenity green space.	Developer	N/A	2017-2022	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	Detailed design issues such as those related to green infrastructure and open space will be considered at the detailed design stage through a site masterplan. However, the need for such measures is a requirement within the District Plan policy.
Community facilities	GP surgery and provision for pharmacy and dentist.	CCG/NHS Provider	Unknown	2017-2022	Partially Funded It is likely that the developer would fund this scheme in its entirety. However, the size of it is subject to discussions with the NHS and the cost is unknown. It is therefore	

					cautiously identified as partially funded at present.	
Utilities	Upgrades to local sewerage infrastructure	Thames Water	Unknown	2017-2022	Funded – Subject to Further Work to Identify Costs The funding of upgrades to the sewerage network must be provided by the developer and Thames Water. A drainage strategy is required in order to identify costings. While potential costs are currently unknown, there is not a requirement to find alternative sources of funding.	This item is in response to Thames Water’s representations on the Pre-Submission District Plan which identified that a number of proposed allocations may not have sufficient capacity to cater for development, and therefore upgrades could be required. The details of required work will be dealt with through drainage strategies at the planning application stage. It should be noted that Thames Water has a legal obligation to ensure that developments are served by sufficient infrastructure.

Appendix G: East of Welwyn Garden City						
EWEL1: East of Welwyn Garden City						
Infrastructure Type	Description	Lead Agencies	Estimated Cost	Phasing	Funding	Notes
Transport	Alignment of A414/Holwell Lane roundabout	HCC	£140,000	2017-2022	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	
Transport	A414/B195 Birchall Lane/ Cole Green Lane Roundabout improvements	Developer/HC C	£2,300,000	2017-2022	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	
Transport	Roundabouts on Birchall/Cole Green Lane for access	Developer/HC C	£850,000	2017-2022	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	
Transport	Enhanced pedestrian and cycle linkages	Developer	N/A	2017-2022	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	
Utilities	Off-site utilities upgrades	Developer/Service Provider	£4,700,000	2017-2033	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	
Education	Primary School up to 3FE.	Developer/HC C	Up to £11,000,000 for 3FE	2017 - 2022	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	The overall development will comprise 2,550 homes with 1,350 in East Herts and the remaining 1,200 in Welwyn Hatfield. In order to meet the needs of the development as a whole, two primary schools will be delivered, one in each administrative area.
Education	Secondary School up to 8FE.	Developer/HC C	Up to £25,000,000 for 8FE	2017 - 2022	Partially Funded The developer will be required to deliver a significant amount of funding towards provision of the school, commensurate with	This school will meet the needs of the whole site with the potential to meet some of the wider needs in the Welwyn Garden City area.

					the size of the development (approximately 5FE based on 2,550 homes). HCC will consider how any remaining costs should be funded.	
Community facilities	Library facilities	Developer/HCC	£300,000	2022 onwards	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	
Community facilities	GP surgery and provision for pharmacies and dentists.	CCG/NHS/Developer	£3,500,000	2022 onwards	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	
Community facilities	Community Centre	Developer	£450,000	2022 onwards	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	
Green Infrastructure	Green Infrastructure, Play areas and public amenity green space.	Developer	£8,000,000	2017-2022	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	Detailed design issues such as those related to green infrastructure and open space will be considered at the detailed design stage through a site masterplan. However, the need for such measures is a requirement within the District Plan policy. This will include the formal Country Park which will form the centre of the overall development.
Transport	Improvements to National Cycle Network 61 cycle route into Hertford	HCC	Unknown	2022 onwards	Partially Funded The developer will be required to deliver a Section 106 contribution towards the funding of improvements to the Cole Green Way	The scope of these works is yet to be determined.
Utilities	Upgrades to local sewerage infrastructure	Thames Water	Unknown	2022 onwards	Funded – Subject to Further Work to Identify Costs The funding of upgrades to the sewerage network must be provided by the developer and Thames Water. A drainage strategy is required in order to identify costings. While potential costs are currently unknown,	This item is in response to Thames Water's representations on the Pre-Submission District Plan which identified that a number of proposed allocations may not have sufficient capacity to cater for development, and therefore upgrades could be required. The details of required work will be dealt with through drainage strategies at the planning application stage. It should be noted that Thames Water has a legal obligation to ensure that developments are served by sufficient

					there is not a requirement to find alternative sources of funding.	infrastructure.
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Appendix H: Gilston Area (Figures based on the full scheme of 10,000 houses)**GA1: Gilston Area**

Infrastructure Type	Description	Lead Agencies	Estimated Cost	Phasing	Funding	Notes
Transport	Widening of Central crossing over River Stort from Eastwick Roundabout to Burnt Mill Roundabout.	HCC/ECC	£16,000,000	2022-2027	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	<p>The existing crossing will be widened to provide extra capacity in the earlier stages of development. If provided in advance of the Second Crossing, the extra capacity would be for car borne traffic only. Following provision of the Second Crossing, part of the existing crossing could be retro-fitted to facilitate sustainable forms of transport.</p> <p>However, the joint working Councils have an aspiration to deliver the Second Crossing earlier, at the same time as the widened crossing. This would allow provision for sustainable transport on the existing crossing from the earliest stages of development, thus providing a better chance of encouraging residents to use non-car forms of travel.</p> <p>Either way, the sustainable transport element of the existing crossing will form the northern section of the sustainable transport corridor, running from the Gilston Area, through Harlow Town Centre, to potential new development on the southern side of the town within Epping Forest District.</p>
Transport	New Second Stort Crossing to the east of the existing crossing	HCC/ECC	£50,000,000	2027-2033	Funded The provision of this crossing is largely as a result of the Gilston Area development. As such the development would be expected to fund the majority, if not the entirety, of the scheme. Other developments in the Harlow area could be expected to provide contributions to this scheme depending on the timing of their delivery. This issue should be considered as part of the Garden Town bid and the IDP that will be prepared for that area.	An eastern crossing is the preferred option as it would reduce traffic flows on the western section of Edinburgh Way in Harlow. However, if the land required cannot be secured then a second option is to provide a crossing to the west of the existing.
Transport	Hammar skjold/Fifth Avenue/Velizy Avenue 'Longabout'	ECC	£5,000,000	2022 onwards	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	

Transport	Second Avenue/Velizy Avenue 'Throughabout'	ECC	£4,000,000	2022 onwards	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	
Transport	A414 Edinburgh Way/Howard Way improvement scheme	ECC	£5,000,000	2022 onwards	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	
Transport	A414 Edinburgh Way/Retail Park junction improvement	ECC	£2,000,000	2022 onwards	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	
Transport	Amwell Roundabout	HCC	£4,200,000	2022 onwards	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	There is potential to make this junction a 'throughabout' with priority given to traffic using the A414 but this is subject to further transport modelling.
Transport	Access arrangements	Developer/HCC	Unknown	2022 onwards	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	There will be four site accesses for the full 10,000 home development. The main access will be off the existing Eastwick roundabout junction with a second on Eastwick Road to access the eastern part of the development. Two further access on the A414 will be located to the west of the existing Stort Crossing.
Transport	Improved access to Harlow Town Station and Adjoining Areas	ECC/HCC	£2,000,000	2022 onwards	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	
Transport	Pedestrian/Cycle improvements (off site)	HCC/ECC	£1,200,000	2022 onwards	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	Detailed design issues such as those related to enhancements to walking and cycling and other sustainable transport measures will be considered at the detailed design stage through a site masterplan. However, the need for such measures is a requirement within the District Plan policy.
Utilities	Water infrastructure	Thames Water	£17,500,000	2022	Funded These measures would be	Note that this figure includes on-site works in addition to off site.

					delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	
Utilities	Sewerage infrastructure	Thames Water	£17,500,000	2022	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	Note that this figure includes on-site works in addition to off site.
Utilities	Electricity Infrastructure	Utility Provider	£29,000,000	2022 onwards	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	Note that this figure includes on-site works in addition to off site.
Utilities	Gas Infrastructure	Utility Provider	£16,000,000	2022 onwards	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	Note that this figure includes on-site works in addition to off site.
Utilities	Telecommunications Infrastructure	Utility Provider	£7,500,000	2022 onwards	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	Note that this figure includes on-site works in addition to off site.
Green Infrastructure	Green Infrastructure, Country parks, Play areas, public amenity green space and cemetery if there is a demonstrable need.	Developer	£47,000,000	2022 onwards	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	Detailed design issues such as those related to green infrastructure and open space will be considered at the detailed design stage through a site masterplan. However, the need for such measures is a requirement within the District Plan policy. Much of the green space on the site will be transferred to community ownership through establishment of a Community Trust or equivalent mechanism.
Green Infrastructure	Off site infrastructure	Developer	£5,000,000	2022 onwards	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	Much of this funding will help deliver significant enhancements to the Stort Valley corridor which is located outside of the development area.
Education	6x Crèche facilities	Developer/Service Provider	£1,100,000	2022 onwards	Funded	

					These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	
Education	5x 3FE Primary School provision	Developer/HC C	£51,000,000	2022 onwards	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	
Education	14 FE Secondary School provision	Developer/HC C	£50,000,000	2022 onwards	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	This provision is likely to be in the form of two Secondary schools, subject to further discussions with HCC.
Community Facilities	2x Primary Care Health Centres including provision for GP surgeries, pharmacies and dentists.	Developer/NH S	£18,000,000	2022 onwards	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	The nature of these facilities is subject to further advice from the NHS.
Community Facilities	Community Centres	Developer	£4,000,000	2022 onwards	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	
Community Facilities	Libraries	Developer/HC C	£1,000,000	2022 onwards	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	
Community Facilities	Police Station	Developer/Hertfordshire Constabulary	£500,000	2022 onwards	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	
Community Facilities	Places of worship	Developer/Service Provider	£1,500,000	2022 onwards	Funded These measures would be delivered by the developer as part of the planning permission.	

					As such no additional funding is expected to be required.	
Transport	Bus Services	Developer/HC C	£7,000,000	2022-2033	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	
Waste Management	On site and waste/recycling sorting facilities	Developer	£2,500,000	2022 onwards	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	
Community Facilities	Public Art	Developer	£3,000,000	2022-2033	Funded These measures would be delivered by the developer as part of the planning permission. As such no additional funding is expected to be required.	

Appendix I: Strategic Infrastructure						
Infrastructure Type	Description	Lead Agencies	Estimated Cost	Phasing	Funding	Notes
Transport	A602 capacity and traffic flow upgrades	HCC	£19,400,000	Complete by 2019.	Funded Hertfordshire LEP and HCC	Works will be undertaken in the following locations: <ul style="list-style-type: none"> • Hertford Road Junction • A119 roundabout • Ware Road • Sacombe Pound Junction • Stony Hills Junction • Anchor Lane roundabout • Westmill Road • A10 Junction
Transport	A1(M) Junction 4 – ‘Jack Oldings’ roundabout	Highways England/HCC	£250,000,000	Unknown	Unfunded There is currently no funding agreed for this scheme.	The nature of these works is at present unknown. The need for improvements is identified within HCC’s 2050 Transport Vision document.
Transport	M11 Junction 7a including widening of Gilden Way.	Highways England/ECC	£45,000,000	By 2021	Funded Up to £42,000,000 from Road Investment Strategy Funding. The remainder will be forward funded by Essex County Council and then returned to them through Section 106 contributions as development comes forward.	The money from Road Investment Strategy 1 was originally identified for upgrades to Junction 7. However, a new Junction 7a was seen by ECC as a more beneficial priority and so a switch was confirmed in late 2016. ECC is currently investigating the potential to implement interim capacity improvements at Junction 7 which would provide 5 to 10 years of future capacity. Road Investment Strategy 2 or 3 funding could then be used to deliver a more comprehensive scheme later in the Plan period.
Transport	M11 Junction 7	Highways England/ECC	£34,000,000	2022-2033	Unfunded There is currently no funding agreed for this scheme.	ECC has submitted feedback to Highways England’s Route Strategies, which will be the foundation of Highways England’s first ‘Strategic Road Network Initial Report’ to be submitted to Government in 2017 and will inform the need for a strategic intervention at Junction 8 to Road Investment Strategy 2 (RIS2).
Transport	M11 Junction 8 (Interim Option)	Highways England/ECC	£13,000,000	2022-2027	Partially Funded £1,000,000 secured from Greater Cambs/Greater Peterborough LEP. A bid has been made for Road Investment Strategy 2 funding. In addition bids for money from the Highways England Growth and Housing Fund and the Local Growth Fund Round 3 (through the South East LEP) have made it successfully through the first assessment stage.	
Transport	M11 Junction 8 (Full Option)	Highways England/ECC	Unknown	2027 onwards	Unfunded There is currently no funding agreed for this scheme.	
Transport	Little Hadham Bypass	HCC	£30,000,000	By 2019	Funded	

					£27,400,000 has been provided by the Hertfordshire LEP with the remainder largely being provided by the Environment Agency in relation to the flood alleviation scheme.	
Transport	Hertford Strategic Solution	HCC	£155,000,000 - £175,000,00	By 2024	Unfunded There is currently no funding agreed for this scheme.	This is most likely to be in the form of a bypass.
Transport	Further mitigation in Harlow area including a potential Harlow Northern Bypass	ECC	£200,000,000	Post 2033	Unfunded There is currently no funding agreed for this scheme.	The mitigation measures to deliver around 16,000 homes by 2033 in the Harlow area (including 3,000 at Gilston Area) are known. In order to deliver the rest of the Gilston Area development beyond the Plan period, it is likely that further schemes will be needed. This is subject to future transport modelling work by HCC and ECC.
Transport	M25 Junction 25 capacity improvements	Highways England	£23,000,000 - £27,000,000	By 2022/2023	Funded Funding has been secured through the Road Investment Strategy 1 programme.	Two options have been consulted on by Highways England. Both would add extra lanes to the roundabout and the A10 southbound approach would be widened. The more expensive option would also add a dedicated free flow left turn to join the A10 northbound.
Utilities	Rye Meads Sewage Treatment Upgrades	Thames Water	Unknown	2024 onwards	Unfunded The cost of any upgrade works is unknown. However, Thames Water will identify works and costings through its standard future planning procedures.	Rye Meads STW serves a large catchment. Thames Water has recently advised that it has capacity to around 2024, although this is regarded as a worst case scenario.
Health	Relocation of Princess Alexandra Hospital	PAH	Unknown	2025 onwards	Unfunded There is currently no funding agreed for this scheme. The hospital is preparing a Strategic Outline Case in order to seek Government funding.	The existing hospital site is extremely constrained and the preferred approach of the Hospital Trust is to relocate to a new site on the edge of the town. A high level study has identified that land to the north or east of Harlow could be suitable. This issue is being progressed by the joint working local authorities and the hospital through the Co-operation for Sustainable Development Board. There is potential for a new site to deliver a 'health campus' incorporating a range of medical services. Timescales for potential delivery of a relocated facility are relatively significant. At present, a Strategic Outline Case is being prepared by the hospital in order to seek the necessary funding from Government. It is likely that a decision on this would be made in 4 – 6 months' time. This would be followed by an Outline Business Case which could take a further 4 months before a Full Business Case is put to Government. Overall,

						timescales for delivery are likely to by 8 years plus.
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