

APPENDIX 4 - THE ASSESSMENT PROCESS

1.0 Introduction

1.1 A 'traffic-light' system has been used to appraise different growth scenarios in this report. We have based this on the methodology used in the Building for Life (BfL) document, which is endorsed by central government. The latest version of this document was rewritten in 2012 specifically to take account of the NPPF. It was drawn up by three partners: CABE at the Design Council, Design for Homes, and the Home Builders Federation, with the assistance of Nottingham Trent University. Local communities, local authorities and developers are encouraged to use it to guide discussions about creating good places to live.

1.2 The purpose of the Building for Life document is to help local planning authorities assess the quality of proposed and completed developments; and to provide a point of reference in the preparation of local design policies. The document examines different aspects of development and assigns to each a rating of green, amber or red. It recommends that new developments should aim to secure as many 'greens' as possible; the more 'greens', the better a development will be.

1.3 We have used the same principle to evaluate different growth scenarios for West Horndon. In doing so we have changed the emphasis towards assessing the sustainability of different options. We have aimed to be as objective as such a process can allow.

2.0 The Rating System

2.1 By way of further explanation in deciding whether to assign red, green or amber to different options this Appendix provides more detail of our assessment process. The task has been to rate each scenario objectively in terms of the criteria, whilst also reflecting the requirements of sustainability and the vision and objectives of the NP. An amber light indicates that a particular

aspect of a scenario may be in some way problematic but that solutions or mitigation measures are feasible. A red light indicates that, judged on the criterion in question, the scenario is more seriously flawed. One or more red lights might not necessarily preclude an option from consideration, if appropriate measures could be employed that would enable the red to be converted to an amber or green.

3.0 Sustainability Objectives

3.1 In arriving at either red, green or amber we have assessed the growth scenarios with reference to the three elements of sustainable development as set out in the NPPF. The following provides a detailed explanation as to how we have sought to evaluate the impact of different scenarios.

3.2 Whether a scenario meets the sustainability objectives requires detailed planning considerations. We have referred to these as the “main indicators”, set out in Section 4 below, under the headings of transport, education, Green Belt, health, employment, housing, shopping, residential amenity, flooding, accessible green spaces, ecology, and community. They sit behind and inform the sustainability tests.

3.3 We have outlined below our scoring method, with reference to the three strands of sustainability, economic, environmental, and social. We have shown which indicators are relevant to each test.

ECONOMIC

Thriving economically - access to a range of local job opportunities

3.4 This has been assessed both in respect of the existence of local job opportunities, such as the industrial park, and in respect of the ability of residents to easily access the larger

employment centres such as London, Brentwood, and Basildon. See **Employment** and **Transport** below.

Prosperous - maintain/grow workforce

3.5 This has been assessed with regard to the need for a range of new housing in the local area and the Borough as a whole and the contribution this makes to the economy. See **Housing** and **Transport** below.

ENVIRONMENTAL

Reducing fossil fuel consumption/adapting to climate change

3.6 In this respect we have considered how certain choices could either increase or decrease the dependence on car journeys, for work, school, shopping, or recreation. We have considered the degree to which the railway will be able to play a role in providing a viable transport option for existing and future residents of the village. We have also considered, given the location and scale of growth options, the degree to which potential flooding becomes an issue. See **Transport, Employment, Education, Shopping, Accessible Green Spaces, and Flooding** below.

Protecting environmental assets - landscape/ecology

3.7 This has considered how the local flora and fauna might be disrupted or lost. This has not been confined to the loss of specifically identified areas. It has considered both the nature and scale of loss that would result from different scenarios. See **Green Belt** and **Ecology** below.

Preventing urban sprawl - Green Belt / greenfield

3.8 This has considered the extent to which an option would result in the loss of open Green Belt land and encroachment into on the countryside. See **Green Belt** below.

Protection of residential amenities

3.9 This has considered the current level of heavy traffic through the village, and also how new development might impact on the amenities of existing residents, a large number of whom enjoy easy access to the countryside and open aspect to the rear of their houses. See **Residential Amenity** and **Green Belt** below.

SOCIAL

Provision for education and health care

3.10 Informed judgments have been made here based on the knowledge of existing provision and what additions and improvements would be necessary to deal with different levels of growth. A factor here is that the nearer secondary school, with whatever level of investment, will be in Brentwood. See **Education, Health Care, Transport, and Community** below.

Quality of life - decent and affordable homes available for all

3.11 We have looked at this principally in a local sense. Any development, under the current policy requirements must provide a percentage of affordable units. It is important these are made available to local people. See **Housing** below.

Vibrant centres - reasonable access to services appropriate to that centre

3.12 We have highlighted the fact that services and facilities in the village are limited and dispersed. New housing and investment could provide for improved and centralised provision. See **Shopping, Community, Health, Education, and Transport** below.

Access to a range of recreational and social facilities

3.13 Again if the objectives of the NP are to be met investment is required. This can a balanced judgement, where say the loss of countryside is not welcomed but new development can help fund community buildings and public open space. See **Accessible Green Space** and **Community** below.

Sense of community and belonging

3.14 This has been considered primarily in respect of the value currently placed on West Horndon as a small settlement with a strong sense of community. The realisation of the NP objectives would see this flourish and grow, with local societies and clubs given the facilities they need. The worst case is that an “overgrown” and badly planned village will lose its identity. See **Community, Green Belt, Health Care,** and **Employment** below.

4.0 The Main Indicators

4.1 In arriving at the assessment of different scenarios we have referenced national and County Council guidelines for the provision of infrastructure. For example, in respect of education this is straightforward question of applying recognised formulas in projecting housing numbers to arrive at the required new school places. In some other respects we can only be objective up to a point, say with regard to the need for accessible green space. Where conclusions are more subjective they are based on the result of consultation exercises, and sound local knowledge.

4.2 In looking at transport, education, housing, and shopping, we have had particular regard to the impacts on fossil fuel consumption and climate change.

Transport

4.3 Under the County Council's Guide to Infrastructure Contributions Residential Travel Planning developers are required to supply a Residential Travel Information Pack for each dwelling on all new residential developments. This includes the provision of an information booklet promoting the convenience of bus travel and the benefits of sustainable transport, and containing information about public transport, walking and cycling routes to the Development, car sharing, community transport and taxi services.

4.4 Each development site that proposes 50 dwellings or more, or commercial development that generates equivalent or higher traffic flows, will require a full Transport Assessment (TA) or a Transport Statement (TS). The assessment will identify the impact of the development in order to make the site sustainable in transport terms and therefore acceptable to the Highway Authority. Early discussions with the Highway Authority are recommended to scope the parameters of any TA or TS. The TA or TS will be used to identify mitigation measures associated with the development which the developer will be asked to fund in total or part, depending on the measures identified. Such measures could include additional highway infrastructure, including cycleways and footpaths, network management measures and enhanced public transport provision.

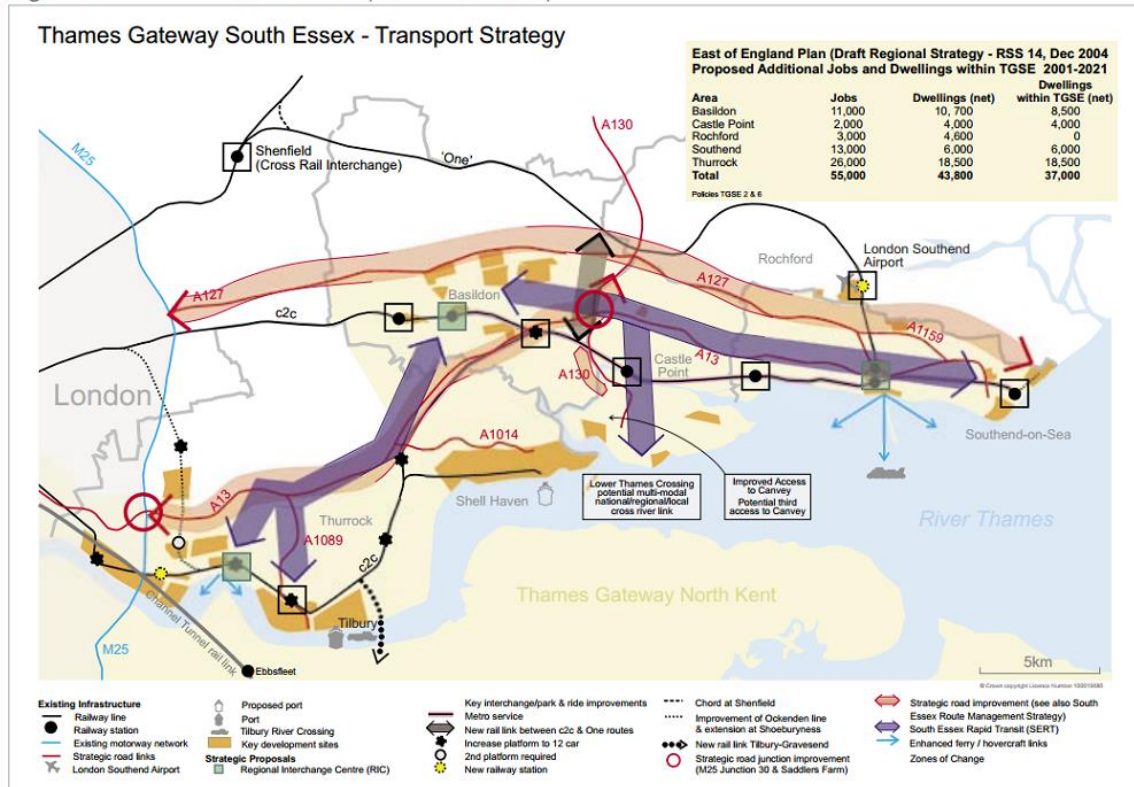
4.5 We have looked at transport in the context of these requirements. First looking at roads and car journeys and then at public transport provision.

Roads and car journeys

4.6 In terms of detailed Highway modelling to determine the exact impact on local road and junctions the Parish obviously has limited resources to employ consultants for this type of work. Such work involves exhaustive surveys of traffic flows and queue lengths at junctions throughout the day and night. Much work has however already been done on a wider level and still has important implications for West Horndon. Our references include the Essex Transport Study, the Thames Gateway South Essex Business Plan for Transport November 2005, and

the A127 Corridor for Growth document (ECC). Although on the fringe of the Thames Gateway area, the future of the A127 is particularly relevant.

Figure 1: TGSE Potential Development Sites Map



Extract from the Transport Strategy

Current Capacity and planned improvements

4.7 The A127 is the main route through the Parish. Transport studies have identified the following:-

“Key strategic routes in TGSE are already exceeding their operational capacity.

The development proposals for TGSE will generate additional traffic that cannot be met by existing systems.

Without a coherent and staged programme of transport investment, the aims of the Sustainable Communities Plan will be jeopardised.

Short, medium and long term programmes that are deliverable and affordable have been developed to address the growth planned for TGSE.”

And that:-

“Traffic forecasts for TGSE indicate that “gridlock” is an inevitable outcome unless appropriate infrastructure is provided. At present the A127 and A13 strategic highway routes are already exceeding their operational capacity, which is in turn having a knock-on effect on the rest of the local road network.”

4.8 It is a fact that The A127 is already at full capacity. It is almost impossible to join it during the peak travel times due to the heavy traffic. The London direction is nearly always at a standstill. The Southend direction is only marginally better. The addition of new housing near the Dunton junction of the A127, for which planning permission has already been obtained, can only worsen the situation.

4.9 The A128 has similar issues. It is a fact that driving to Brentwood and beyond is a stop-start process nearly all the way and trying to turn right from West Horndon to go the other way is often very difficult, due to the volume of traffic. There is no practical way that this road could be widened or supplemented by a new road in either direction.

4.10 The local junctions clearly under stress are as follows:-

Junction of Thorndon Avenue and A127 – the junction is very substandard for an access onto a trunk road for vehicles leaving and entering the A127. This is backed up by accident details.

A128 Halfway House – this junction suffers from a lack of visibility due to slip road alignment which has led to a number of reported collisions. The realignment of both exit slip roads at the roundabout have been reviewed and costed at £360,000. The junction also suffers from subsidence of the slip roads and it should be noted that the above cost does not include

measures to address this. Investigations and in-depth risk assessments to identify stabilising works required for the slipping embankments have been costed at £100,000.

Junction of Station Road and A128 – clearly at full capacity during peak times

4.11 Before considering the additional impact of further development it is clear from the above that the current situation along with the potential impact of agreed housing schemes along the A127 corridor will require massive improvements and investment.

4.12 A development of 400 houses with each house having an average of two cars could add some 800 vehicles to both the local road system and to the A128 and A127.

4.13 The above evidence has been a significant factor in assigning scores to different growth scenarios.

Public Transport

4.14 In looking at the rail service we have made both a qualitative and quantitative assessment of the current situation and likely impact of new development.

4.15 The Borough Council have consistently referred to the rail services as providing a sustainable transport service for West Horndon. This is despite the fact that it does not stop, nor pass through, any other stations in Brentwood Borough. In order to gain rail access to the other Brentwood Borough stations travellers would have to either: travel to Upminster, change to the Greater Anglia line to Romford and change trains again to catch a train towards Brentwood; or, travel to Southend and change train lines to come back towards London.

4.16 West Horndon is on the Fenchurch Street line which, unlike the Liverpool Street line, ends on the periphery of the centre of London with no onward rail links from there and has limited interconnections along the route.

4.17 In terms of capacity the peak trains run once every 20 minutes. National Express run the c2c line and produce an Annual Customer Report. The most recent published in November 2015 announces that improvements have been made to the quality of the service. In particular that all the trains have been refurbished. They acknowledge that too many people making long journeys are standing and too many people making short journeys are crammed in. They state that action will be taken to address these issues. There are plans to make room for 150 extra people on each train.

4.18 There are no plans to increase the frequency of the trains. We also understand that extra coaches cannot be added to the trains as the West Horndon platform cannot accommodate any more than the 12 coaches used at present. The number of trains already on the line during the peak travel times leaves little room for the addition of any extra trains. The London bound trains are very often full when they pull into the station.

4.19 The station car park is full, and during weekdays commuters park wherever they can in the adjacent roads.

4.20 The village is served by two bus routes which both terminate in Brentwood. The limited level of service is shown below.

Area	County	Full Name				
Frequency of services at stop	Location	Number of services using stop	Buses (M-F)	Buses (Sat)	Buses (Sun)	Services County
West Horndon, Clavering Gardens	West Horndon		6	3	0	2 ESSE
West Horndon, Rail Station	West Horndon, Rail Station		11	9	0	3 ESSE
West Horndon, Dunton Hills Farm	West Horndon		11	6	0	3 ESSE

The map below shows transport locations in West Horndon.

On the map below bus stops are shown in red, [National Express](#) stops in Green, [Megabus](#) in Blue and [train](#) stations in Grey.



4.21 In making our assessments, it is clear that if trains and buses are unable to cope with extra capacity, then the number of car journeys will increase. This is significant in assessing fossil fuel consumption and adapting to climate change.

Education

4.22 The County Council has a duty under the Education and Inspections Act 2006 to develop a School Travel Plan with all schools. It also has a statutory duty to promote the use of sustainable methods of transport for all education and training related journeys, from preschool age to post 16 students.

4.23 Where it is not possible to provide additional school places within a reasonable walking distance of the new development or via a safe route, an additional contribution towards school transport will be required. This contribution will be in addition to any pupil places contribution and will usually pertain to the cost of providing the transport for the number of additional pupils for a minimum of five years.

4.24 A formula is used to estimate the number of places in each age group that will be required to serve the development. Different factors are applied to the number of houses, flats and employees to reach a figure for each. In the case of small to medium developments the number of places required is then multiplied by the relevant cost per place. For larger developments the costs of provision, and land requirements, are determined by specially commissioned pre-application studies.

4.25 In addition to school places the Childcare Act 2006 places a range of duties on local authorities regarding the provision of sufficient, sustainable and flexible childcare that is responsive to parents' needs. Local authorities are required to play a lead role in facilitating the childcare market within the broader framework of shaping children's services, in partnership with the private, voluntary and independent sector. Section 6 of the Act defines 'sufficient childcare' as sufficient to meet the requirements of parents in the area who require childcare in

order to enable them to take up, or remain in, work or undertake education or training which could reasonably be expected to assist them to obtain work.

4.26 The requirements for child care and education provision are as follows:-

Age Range	Houses	Flats
Early Years and Childcare	0.09	0.045
Primary School	0.3	0.15
Secondary School	0.2	0.1
Sixth Form	0.04	0.02

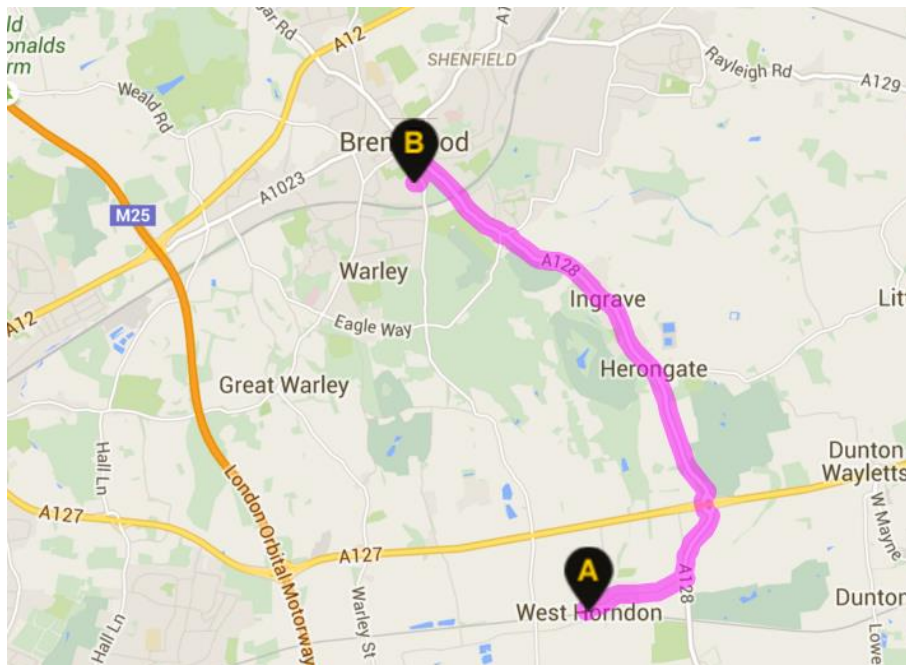
For a development of 400 houses this works out as follows:-

Early years and childcare – 36 spaces

Primary school - 120 spaces

Secondary school – 80 spaces

Sixth form – 16



The journey to Brentwood County High from West Horndon.

4.27 This level of development would therefore require the provision of 120 primary school places and 80 secondary school places. The primary school currently has a total of around 115

pupils, and is understood to be at full capacity. To accommodate housing growth at any level a new or greatly extended school will be required.

4.28 With regard to secondary education the nearest school is Brentwood County High, so another 80 or so pupils will need to make the journey by car or bus.

Green Belt

4.29 The impact of losing Green Belt land is difficult to quantify numerically. In round terms expansive development on the west side of the village would reduce the Green Belt setting of the existing village by some 40%. The success of Green Belt policy has been due to its blanket approach, without attempting grade the quality of the landscape. The value of the Green Belt is in maintaining its openness, protecting the countryside around the village, and thereby enhancing its setting.

4.30 In scoring scenarios that would entail the loss of Green Belt land our assessments have related both to the strong national policy context to protect Green Belt, and the particular role it plays in conserving the character of the village.

Health Care

4.31 In response to the Borough consultation exercises so far a number of West Horndon residents have raised the issue of medical facilities.

4.32 The current doctor's surgery has three doctors serving the village. An expansion of say 400 houses is likely to require at least two more. A reasonable expectation is that a new purpose built health centre would be provided in a central location.

Employment

4.33 The main source of local employment is on the Horndon Industrial estate. Occupiers include Turner Packaging, Graphic International Bridgen Training Services and Label Solutions Ltd. The park is advertised as having “excellent circulation space, and parking provision to suit the requirement of the occupiers”.

4.34 Proposals to redevelop the industrial area have met with mixed feelings. On the one hand it would remove the heavy traffic from the village, but would in the process result in the loss of local employment.

Housing

4.35 Section 2 of the appraisal has described the extent and character of the existing housing in the village. New housing will help to maintain local facilities and amenities, and should provide an opportunity to widen the house types available to local people. There are relatively few smaller or affordable dwellings in the village.

4.36 If fewer new homes are provided then the population is projected to fall. A falling population may start to undermine local service provision and the general vitality and vibrancy of the village.

Shopping

4.37 West Horndon has very few shops. There are three small parades of shops which include two hairdressers, a newsagent, a general store, a fireplace shop, and a café. There are 3 or 4 vacant units. For weekly shopping most residents will travel to Brentwood or Basildon.

4.38 A significant amount of trade for the small convenience shops and the cafe is associated with the Horndon Industrial Park (site 021) in the form of workers from the site and drivers of

vehicles heading to and from the site. The proposal to relocate most of the industrial units from this site could severely impact these shops and lead to one or more of their closures. If new development can support new shops the preference will be for these to be centrally located.

Residential amenity

4.39 A large percentage of the housing in the village has the benefit of backing onto open farmland. It therefore has an open aspect to the rear and is not overlooked.

4.40 Heavy traffic associated with the Industrial Areas currently passes through the village, with the consequent noise and disturbance to residents.

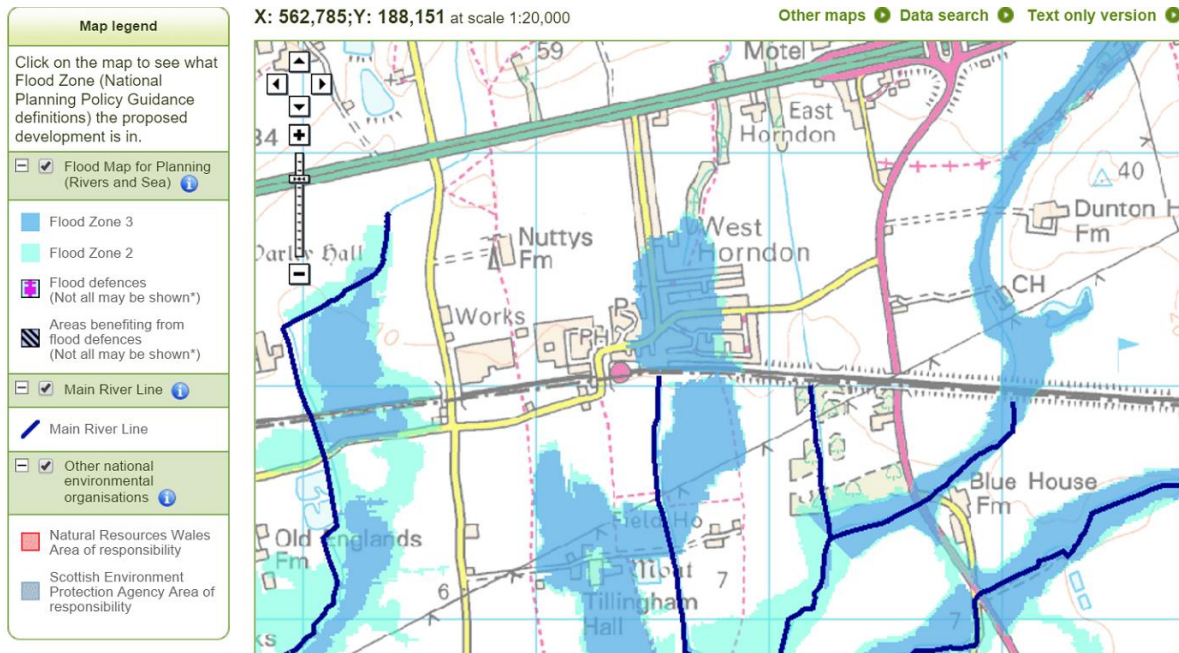
Flooding

4.41 Below is an extract from the Environment Agencies Flood Zone maps. It indicates that large part of the village is within a Flood Zone 2. This shows that it could be flooded from a river by a flood that has a 1 per cent (1 in 100) or greater chance of happening each year

4.42 The village has been flooded several times and the villagers need to be assured that further development would not make this worse. Recorded floods are twice in 1957, then in 1981, and 2012.

4.43 The core village of West Horndon is in a dip. To the north of the village the ground goes upwards, allowing water to naturally flow downhill towards the village from that direction too. The fields between the A127 and the village act as a soakaway for that downhill flow of water and rainwater collected from the A127. The concern is that building on these fields could greatly increase the flood risk by allowing the natural water to flow onwards towards the existing core village. There is no evidence at present that the Borough Council have carried out any assessment of drainage in the area. The impact of development must comply with the

requirements of the Essex County Council's Sustainable Drainage Systems Design Guide.



Extract from Environment Agency Flood Zone Map

Accessible green space

4.44 The Essex County guide to Infrastructure stresses the importance of green infrastructure. In the same way that a transport system is made up of a network of roads, rail and airports, Green Infrastructure has its own components of open spaces, country parks, historic landscapes, nature reserves, rivers, the coast, woodlands, village greens, agricultural land, churchyards, allotments and gardens linked by a network of greenways.

4.45 Green Infrastructure should be provided as an integral part of all new development, alongside other traditional infrastructure, such as utilities and transport networks.

4.46 The village, at the moment has very little accessible green space. It does have West Horndon Park, but it is not extensive or readily accessible to the larger proportion of the village.

Ecology

4.47 There are currently no detailed studies of the countryside surrounding the village. Loss of Green Belt would however involve the loss of countryside and habitats.

Community

4.48 There is no clearly identifiable village centre with the village hall, church, public house, school, shops, and station all being dispersed in different locations.

4.49 As a starting point for any level of new housing the expectation is for a centralised day nursery, community and health care facility is to be delivered to ensure a vibrant community hub from the outset.

SJK Planning

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