

Sustainability Appraisal (SA) of the Hollands Farm Development Brief Supplementary Planning Document (SPD)

SA Report

Buckinghamshire Council

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Quality information

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Non-Technical Summary

Introduction

AECOM has been commissioned to undertake an independent Sustainability Appraisal (SA) incorporating Strategic Environmental Assessment (SEA) in support of the emerging Hollands Farm Development Brief, which will become an adopted Supplementary Planning Document (SPD). The requirement for SEA was identified through a Habitats Regulation Assessment Screening Opinion, verified by AECOM.

The SEA Regulations require that a report is published for consultation alongside the draft Development Brief that ‘identifies, describes and evaluates’ the likely significant effects of implementing ‘the plan [*i.e. the SPD*], and reasonable alternatives’. The report must then be taken into account, alongside consultation responses, when finalising the Development Brief.

Structure of the SA Report/ this NTS

The SA Report and this NTS is structured to answer the following three questions:

1. What has plan-making / SA involved up to this point?
 - Including in relation to ‘reasonable alternatives’.
2. What are the SA findings at this stage?
 - *i.e.* in relation to the Draft Development Brief
3. What happens next?
 - What steps will be taken to finalise (and monitor) the Development Brief?

This SA Report¹ is published alongside the draft Hollands Farm Development Brief SPD, and answers each of the three questions in turn, with a ‘part’ of the SA report dedicated to each and a heading in the NTS dedicated to each.

Before answering the first question however, two initial questions are answered in order to further ‘set the scene’ – i) what is the Development Brief trying to achieve?; and ii) what is the scope of the SA?

What is the Development Brief seeking to achieve?

The Wycombe District Local Plan was adopted on 19 August 2019 and it:

- sets out strategic policies;
- allocates new areas for housing growth;
- allocates new areas for employment growth;
- sets out development management policies for housing, economic growth, placemaking, historic conservation, the AONB, flood risk and water quality, the green belt and rural areas, and safeguarded land for essential infrastructure; and
- sits alongside the Delivery and Site Allocations Plan for Town Centre and Managing Development Plan (2013) policies as well as the made Neighbourhood Development Plans

Policy BE2 in the Local Plan allocates land at Hollands Farm in Bourne End and Wooburn for development. The site is located towards the south of Bourne End between Hawks Hill

¹ See **Appendix I** for further explanation of the regulatory basis for answering certain questions within the Environmental Report and a ‘checklist’ explaining more precisely the regulatory basis for presenting certain information.

and Wessex Road. The 23.7-hectare greenfield site has an indicative capacity of 467 homes.

Buckinghamshire Council have decided to develop the Development Brief SPD to provide further detail and guidance on the future development of the Hollands Farm Site in Bourne End, specifically in relation to Policy BE2 of the Wycombe District Local Plan. Following adoption, the SPD will be a material consideration in planning decisions but will not be a part of the Local Plan.

A Development Brief provides a guide for how a site may be developed. It is not a planning application and does not dictate a precise layout; but rather provides a series of principles, adding detail to how the Local Plan site allocation policy should be implemented, and will be used to guide and inform the planning application stage. New policy requirements cannot be introduced within the Development Brief.

The main purpose of the Hollands Farm Development Brief is to:

- set out the vision for and key objectives of the development;
- explain the planning policy context within which the development will be considered;
- identify the key constraints and opportunities affecting the development of the site;
- establish a broad design approach/concept for the site; and
- provide an illustrative framework.

The Development Brief is structured in two parts, with part one providing an analysis of the site and its context, and part two providing a development framework.

What is the scope of the SEA?

The scope of the SA is the identified sustainability topics / issues / objectives that should be a focus of the assessment of the Development Brief and reasonable alternatives. As an initial stage of the SA, the scope was developed and consulted on in early 2020. Full detailed scoping information and scoping consultation responses can be found in **Appendix II** of the main SA Report.

The SA scope is summarised in a list of themes, objectives and questions known as the SA framework. **Table 1** below presents the SA framework as broadly agreed with statutory consultees in 2020. The proposed SA framework for the Development Brief builds upon the framework established through the Local Plan SA, aligning with the broad objectives but providing more site-specific assessment questions.

Table 1: The SA framework

SA theme	SA objective	Assessment questions
Biodiversity	To conserve and enhance biodiversity.	<ul style="list-style-type: none">• Support the status of the internationally, nationally and locally designated sites surrounding the site and consider impact pathways and connections between the development site and designated biodiversity sites?• Consult with Natural England where necessary regarding the impacts of development on Cock Wood SSSI?• Protect and enhance priority habitats and species, including potential endangered species on site, and woodland habitats adjacent to the site?• Achieve a net gain in biodiversity?• Support enhancements to multifunctional green infrastructure networks which include ecological corridors and connections between habitats?

SA theme	SA objective	Assessment questions
		<ul style="list-style-type: none"> Support access to, interpretation and understanding of biodiversity and geodiversity?
Climate change	To reduce contributions to climate change, through (a) sustainable building practices, (b) maximising the potential for renewable energy and energy conservation and (c) promoting sustainable management of waste	<ul style="list-style-type: none"> Promote sustainable development, including sustainable construction and operation of new housing, and sustainable waste management during construction and operation? Promote energy efficiency and renewable energy generation including solar panels, energy efficient buildings and recycled water and materials? Support sustainable building practices through well-connected development that promotes more sustainable modes of transport, including active travel networks?
	To reduce the risk of flooding from all sources and increase the flood resilience of the built and natural environment.	<ul style="list-style-type: none"> Ensure that development effectively manages surface water and groundwater and reduces surface water and groundwater flood risk on site? Avoids locating housing development in the south-west corner of the site within the area designated as Flood Zone 3? Increase the resilience of the built and natural environment to the effects of climate change, including flood resilience measures such as Sustainable Drainage Systems and enhancements to ecological networks, green infrastructure and biological connectivity?
Community wellbeing	To sustain vibrant communities and improve accessibility for everyone to health, education, recreational, cultural and community facilities and services	<ul style="list-style-type: none"> Maintain and/ or improve the provision of community infrastructure, services and facilities? Support accessibility enhancements and opportunities to promote active travel networks within the settlement? Maintain or enhance the quality of life of existing residents? Enhance community access to green infrastructure?
	To maintain and improve the health, well-being and community cohesion of the population and reduce social deprivation	<ul style="list-style-type: none"> Encourage and promote social cohesion and encourage active involvement of local people in community activities? Ensure the current and future health and wellbeing needs of the local population are met? Protect and enhance access to nature via greenspace and footpaths? Promote the use of healthier modes of travel, including active travel networks? Improve access to the countryside for recreational use? Avoiding any negative impacts to the quality and extent of existing recreational assets, such as formal or informal footpaths?
Economy and employment	To promote a strong, balanced and sustainable economy, retaining existing businesses while having a sector focus to develop new business in the area.	<ul style="list-style-type: none"> Support a strong, diverse and resilient economy that provides opportunities for all? Enhance the vitality of the village centre, and employment areas? Improve accessibility to the adjacent employment area, particularly through improved active travel opportunities? Ensure that proposed uses adjacent to the existing employment areas are compatible?
	To raise educational attainment and develop and maintain a skilled	<ul style="list-style-type: none"> Ensure enough capacity at local educational facilities to support housing growth?

SA theme	SA objective	Assessment questions
	workforce to support long-term competitiveness	<ul style="list-style-type: none"> • Supports skills provision that meets District needs for existing and future labour markets?
Historic environment	To conserve and enhance the District's townscapes and historic environment, and, in particular, those areas designated for their heritage importance.	<ul style="list-style-type: none"> • Conserve and enhance the significance of buildings and structures of architectural or historic interest, both designated and non-designated, and their setting? • Conserve and enhance the key characteristics and features of the Hedsor Road and Riversdale Bourne End Conservation Area, and its setting? • Conserve and enhance the setting of the Hedsor House Registered Park and Garden? • Conserve and enhance the special interest, character and appearance of locally important features and their settings? • Support access to, interpretation and understanding of the historic evolution and character of the environment? • Conserve and enhance archaeological remains? • Support the undertaking of archaeological investigations and, where appropriate, recommend mitigation strategies?
Landscape	To conserve and enhance the District's landscape and, in particular, those areas designated for their landscape value.	<ul style="list-style-type: none"> • Conserve and enhance locally important landscape and 'villagescape' features within and surrounding the settlement area? • Support the retention and enhancement of existing landscape features at the Hollands Farm site where possible? • Conserve and enhance local diversity and character, including the character and identity of the settlement area? • Protect locally important viewpoints contributing to the sense of place and visual amenity of the settlement area?
Natural resources	Ensure the efficient and effective use of land, protect soil quality and minimise the loss of high-quality agricultural land.	<ul style="list-style-type: none"> • Maximise design opportunities (in layout and massing) to minimise the loss of high-quality agricultural land? • Reduce/ avoid surface water run-off that may affect soil quality both during construction and operation?
	To maintain and enhance the quality and quantity of the District's water sources, achieve sustainable water resources management and reduce the risk of flooding	<ul style="list-style-type: none"> • Support improvements to water quality? • Protect surface water and groundwater resources from pollution? • Ensure appropriate drainage and mitigation is delivered alongside development? • Minimise water consumption? • Maximise water efficiency and opportunities for water harvesting and/ or water recycling?
Transport and traffic	To deliver transport improvements, improve travel choice and connectivity, reduce the need for travel by car and reduce the negative impact of	<ul style="list-style-type: none"> • Provide a new link road? • Ensure sufficient road capacity to accommodate new development? • Enable sustainable transport infrastructure enhancements? • Facilitate home and remote working? • Improve road safety?

SA theme	SA objective	Assessment questions
	transport on the environment.	<ul style="list-style-type: none"> Reduce the impact on residents from the road network?

Plan-making/ SA up to this point

In line with regulatory requirements, there is a need to explain how work was undertaken to develop and then appraise reasonable alternatives, and how the Council then took into account appraisal findings when finalising the Development Brief.

Part 1 of the SA Report and this section of the NTS presents the information regarding the consideration of reasonable alternatives across a number of 'themes' considered in the development of the SPD. This information is important given regulatory requirements.²

Considering the parameters outlined by Policy BE2 and the scope of the Development Brief, four main 'themes' were identified where alternatives options reasonably exist. However, these themes and options are not considered mutually exclusive, they are elements of an iterative process. The four themes are:

- **Theme 1:** Connectivity and movement – encompassing the need to explore options for the link road, PRow and cycle path connections within the site and wider connections outside of the site;
- **Theme 2:** The location of the new school – encompassing the need to explore options for the delivery of a new 1 form entry primary school;
- **Theme 3:** Open space and boundary treatment – encompassing landscape buffer options and locations for open space, as well as boundary treatment in relation to the Hedsor Road Conservation and Riversdale Area; and
- **Theme 4:** Housing density on site – encompassing a landscape-led approach to development to reduce its impact.

Options were established and assessed under each of themes which are summarised in turn below. Outline reasons from the Council for the progression or rejection of options are then summarised at the end of this section before moving onto the SA findings at this stage.

Theme 1: Connectivity and movement

Policy BE2 outlines a number of requirements including; a new link road (referred to as the principal route in the Development Brief) through the site connecting to the Cores End roundabout and Ferry Lane, a redirected bus service and enhanced provision through the site, enhanced footpath and cycle links to the village centre, and the retention of the north-south connectivity for PRow through the site.

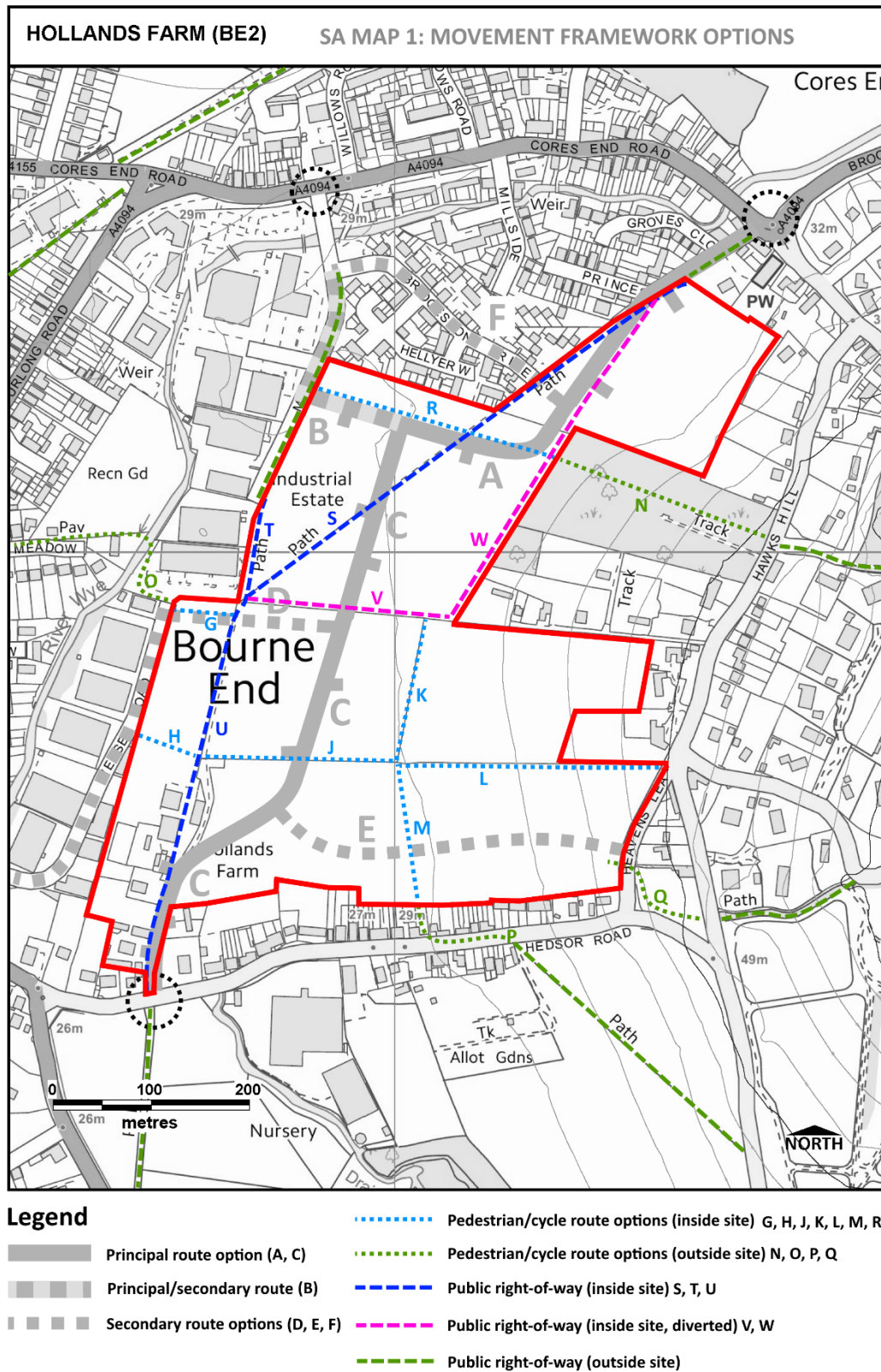
In conceptualising these matters through master-planning a number of inter-related options arise, each of which present reasonable alternative options in themselves. On this basis, the following sub-themes were established:

- **Sub-theme 1a;** principal routes
- **Sub-theme 1b;** secondary routes
- **Sub-theme 1c;** active travel connections within and beyond the site

Each of these sub-themes are explored in turn below and **Figure 1** below identifies the location of each of the routes discussed below.

² There is a requirement for the SEA Report to present an appraisal of 'reasonable alternatives' and 'an outline of the reasons for selecting the alternatives dealt with'.

Figure 1: Options for Theme 1



Sub-theme 1a; principal routes

The directions of Policy BE2 require principal route access connecting to the Cores End roundabout and Ferry Lane, where the diverted bus route should be located. This is provided as Route A (see **Figure 1**) which is intended to connect with Hedsor Road (Route A + Route C). To support this connection, master-planning has identified the potential to form an additional principal route connection at Millboard Road. On this basis, two alternative options are established as follows:

- **Option A:** Route A + Route C (Princes Road to Hedsor Road)
- **Option B:** Route A + Route B + Route C (Princes Road + Millboard Road to Hedsor Road)

These two options were subject to assessment and **Table 2** below presents the summary findings for this assessment. The full detailed assessment is provided in **Appendix II** of the main SA Report.

Table 2: Summary assessment findings for Theme 1 - Sub-theme 1a

SA theme		Option A	Option B
Biodiversity	Likely significant effect?	No	No
	Rank	-	-
Climate change	Likely significant effect?	No	No
	Rank	2	1
Community wellbeing	Likely significant effect?	No	No
	Rank	2	1
Economy and employment	Likely significant effect?	No	No
	Rank	2	1
Historic environment	Likely significant effect?	No	No
	Rank	-	-
Landscape	Likely significant effect?	No	No
	Rank	-	-
Natural resources	Likely significant effect?	No	No
	Rank	1	2
Transport and traffic	Likely significant effect?	No	No
	Rank	2	1

Summary:

In terms of principal route coverage across the site, the options differ through the inclusion of Route B (under Option B) or not (under Option A). Overall, no significant effects are anticipated under either option, but the following differentiations can be made in respect of each route and route option:

- Route A (**Options A and B**); as a consistent consideration across all options (given the policy direction of Local Plan Policy BE2) Route A is noted for likely minor negative effects as a result of disturbance, noise, light and air pollution to species on-site and habitats adjacent to the site.
- Route B (**Option B**); is considered for limited additional impact in relation to most SA themes, including in relation to impacts on the landscape and the historic environment. The route will provide direct principal route access to adjacent employment areas and minor positive effects are anticipated in relation to the SA themes of community wellbeing and economy and employment as a result. The inclusion of this route under Option B

also extends opportunities to address known and future flood risk north of the site in junction remodelling works.

- **Route C (Options A and B)**; this north-south connection through the site is noted for potential minor negative effects in relation to climate change (with areas located within Flood Risk Zone 2 and adjacent to Flood Risk Zone 3), landscape and the historic environment (with direct connections to the Conservation Area). However, the connection is also considered for increasing accessibility across the site which may lead to benefits in relation to the climate change mitigation, community wellbeing and economy and employment SA objectives.

Sub-theme 1b; secondary routes

Secondary routes are intended to connect with the principal routes through the site and master-planning has identified four alternative routes to provide secondary connections as follows:

- **Option C:** Route B (connection to Millboard Road)
- **Option D:** Route D (connection to Wessex Road)
- **Option E:** Route E (connection to Heavens Lea)
- **Option F:** Route F (connection to Bridgestone Drive)

These four options were subject to assessment and **Table 3** below presents the summary findings for this assessment. The full detailed assessment is provided in **Appendix II** of the main SA Report.

Table 3: Summary assessment findings for Theme 1 – Sub-theme 1b

SA theme		Option C	Option D	Option E	Option F
Biodiversity	Likely significant effect?	No	No	No	No
	Rank	2	1	1	2
Climate change	Likely significant effect?	No	No	No	No
	Rank	1	2	2	1
Community wellbeing	Likely significant effect?	No	No	No	No
	Rank	-	-	-	-
Economy and employment	Likely significant effect?	No	No	No	No
	Rank	1	1	2	1
Historic environment	Likely significant effect?	No	No	No	No
	Rank	1	1	2	1
Landscape	Likely significant effect?	No	No	No	No
	Rank	1	1	2	1
Natural resources	Likely significant effect?	No	No	No	No
	Rank	2	2	2	1
Transport and traffic	Likely significant effect?	No	No	No	No
	Rank	-	-	-	-

Summary:

None of the options are considered likely to lead to any significant effects. Options C and F may increase vehicular movement within the vicinity of the woodland habitat off Hawks Hill (adjacent to the site) marginally increasing the potential for minor negative effects associated with disturbance, noise, light and air pollution when compared to the remaining options. Option E may also lead to higher levels of vehicle presence within the vicinity of the historic townscape south of the site and affect levels of tranquillity around lower density housing in the east.

However, all options will enhance accessibility across the site, benefiting future and existing residents. The additional benefit of providing direct secondary route access to the adjacent employment area is recognised under Options C, D, and F, and Option E provides an opportunity to improve safe pedestrian access in the south of the site given roads south of the site are notably constrained by a lack of pavements.

Opportunities are recognised at Options C and F for road improvements to address known issues, which alongside the practical application of sustainable drainage systems can support reduced surface water flood risk in this area. Option F will also support positive effects in relation to land use and soil resources as the option utilises an existing road connection.

Considering the various opportunities outlined above, it is recognised that multiple routes (i.e. progression of more than one option) could maximise benefits in relation to the SA themes of community wellbeing, economy and employment and traffic and transport.

Sub-theme 1c; active travel connections within and beyond the site

Reflecting the policy directions for enhanced active travel links through the site and connecting to the village centre and into the wider countryside, master-planning has identified the following eight potential alternative options for active travel connections within and immediately surrounding the site:

- **Option G:** Combined route H-J-L providing east-west link between Hawks Hill and Wessex Road;
- **Option H:** Combined route P-M-K. Link route P via Garibaldi Pub (community owned) subject to agreement;
- **Option I:** Route G providing link to Wessex Road;
- **Option J:** Route R-N providing east-west link between Harvest Hill/ Hawks Hill PRoW and Millboard Road PRoW via Orchard;
- **Option K:** Route O providing a potential link to nearby recreational ground via industrial estate;
- **Option L:** Route Q providing a potential link between southern end of the site and Hawks Hill/ Harvest Hill PRoW to the east;
- **Option M:** Routes V and W providing a diversion to existing PRoW but retaining north-south link connecting Hedsor Road to Princes Road; and
- **Option N:** Existing PRoW Routes S, T and U retaining north-south link connecting Hedsor Road to Princes Road.

These eight options were subject to assessment and **Table 4** below presents the summary findings for this assessment. The full detailed assessment is provided in **Appendix II** of the main SA Report.

Table 4: Summary assessment findings for Theme 1 – Sub-theme 1c

SA theme		Option G	Option H	Option I	Option J	Option K	Option L	Option M	Option N
Biodiversity	Likely significant effect?	No	No	No	No	No	No	No	No
	Rank	1	1	1	2	1	1	2	1
Climate change	Likely significant effect?	No	No	No	No	No	No	No	No
	Rank	1	1	1	1	1	1	1	2
Community wellbeing	Likely significant effect?	No	No	No	No	No	No	No	No
	Rank	2	1	2	1	2	1	2	2
Economy and employment	Likely significant effect?	No	No	No	No	No	No	No	No
	Rank	1	2	1	2	1	2	2	2
Historic environment	Likely significant effect?	No	No	No	No	No	No	No	No
	Rank	2	1	2	2	2	1	2	2
Landscape	Likely significant effect?	No	No	No	No	No	No	No	No
	Rank	-	-	-	-	-	-	-	-
Natural resources	Likely significant effect?	No	No	No	No	No	No	No	No
	Rank	-	-	-	-	-	-	-	-
Transport and traffic	Likely significant effect?	No	No	No	No	No	No	No	No
	Rank	2	1	2	1	2	1	2	2

Summary:

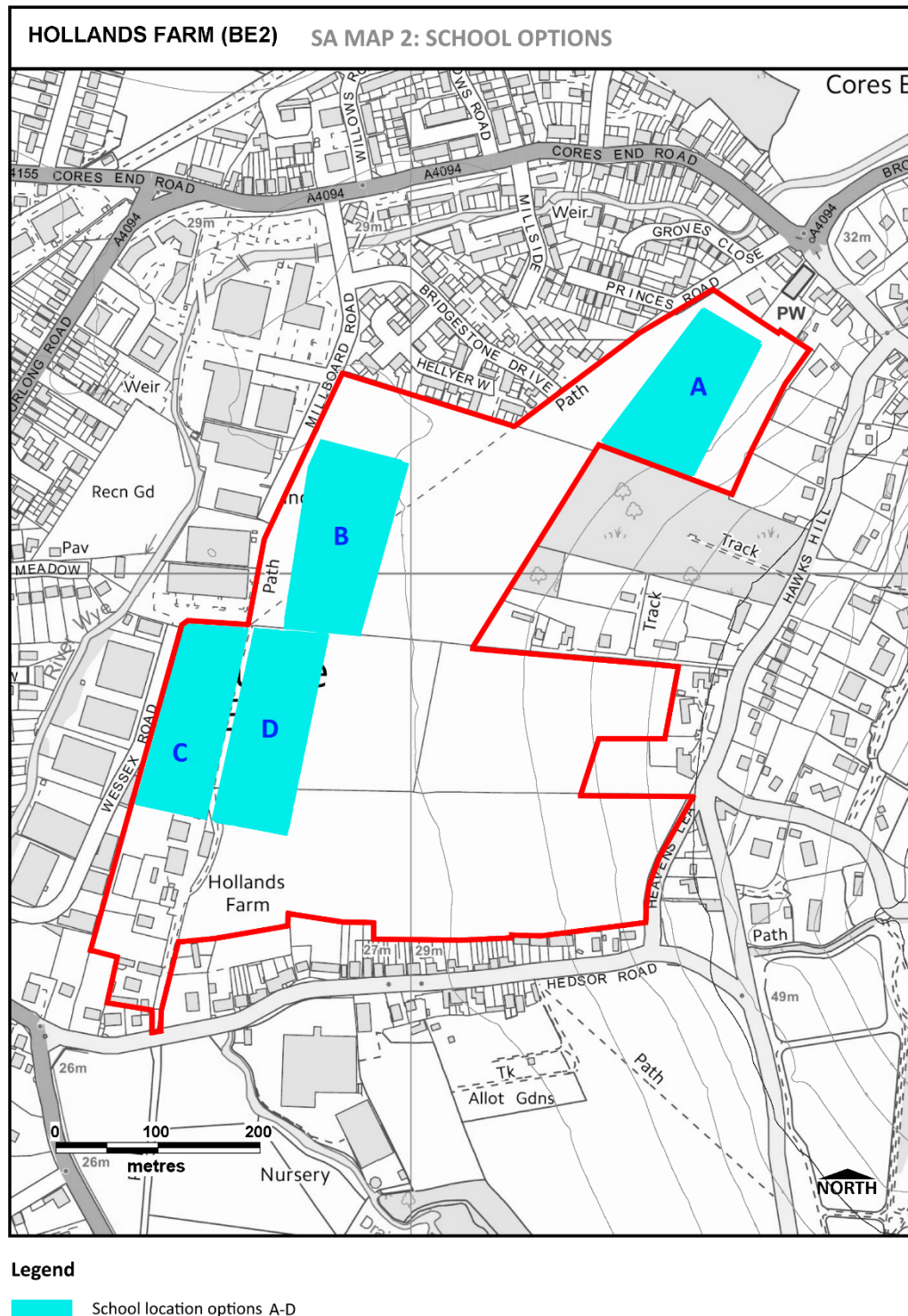
None of the options are considered likely to lead to any significant effects in relation to any of the SA themes. The provision of active travel routes is considered likely to lead to predominantly positive effects. Options H, J and L are considered for their potential to maximise benefits in relation to overall connectivity (by providing wider connections with existing PRoW surrounding the site). Options G, I and K will also deliver direct active travel connections to the employment area positively supporting the economy and employment SA theme. However, it is noted that use of permeable surfaces should be considered to minimise impacts in relation to surface water run-off and water quality. Options J and M are also noted for likely minor negative effects as a result of increased disturbance at the adjacent woodland habitat off Hawks Hill, and it is noted that existing surface water flood risk issues may reduce the potential use of Option N at times.

Theme 2: Locating the new primary school

Recognising the policy requirement to deliver a new school, master-planning work has identified four potential on-site locations for the new primary school. These options are

closely linked to the potential new road layout/ active travel links and seek to minimise landscape impacts whilst remaining compatible with the existing surrounding land uses. The potential locations are identified in **Figure 2**.

Figure 2: Options for the location of the new primary school



It was also deemed appropriate at this stage to explore the potential merits and disadvantages of providing the school off-site. Whilst a precise off-site location is not identified at this stage, the option is included for assessment.

On this basis, five options for the location of the new primary school are established:

- **Option A:** On-site (north off Princes Road)
- **Option B:** On-site (north-west off Millboard Road)
- **Option C:** On-site (west off Wessex Road)
- **Option D:** On-site (inset west)
- **Option E:** Off-site (precise location unknown)

These five options were subject to assessment and **Table 5** below presents the summary findings for this assessment. The full detailed assessment is provided in **Appendix II** of the main SA Report.

Table 5: Summary assessment findings for Theme 2

SA theme		Option A	Option B	Option C	Option D	Option E
Biodiversity	Likely significant effect?	No	No	No	No	No
	Rank	1	2	2	2	3
Climate change	Likely significant effect?	No	No	No	No	No
	Rank	1	2	2	2	3
Community wellbeing	Likely significant effect?	Yes	Yes	Yes	Yes	Yes
	Rank	1	2	2	2	3
Economy and employment	Likely significant effect?	No	No	No	No	No
	Rank	-	-	-	-	-
Historic environment	Likely significant effect?	No	No	No	No	No
	Rank	2	1	1	1	3
Landscape	Likely significant effect?	No	No	No	No	No
	Rank	1	1	1	1	2
Natural resources	Likely significant effect?	No	No	No	No	No
	Rank	-	-	-	-	-
Transport and traffic	Likely significant effect?	No	No	No	No	No
	Rank	1	1	1	1	2

Summary:

All options are considered likely to support existing and new communities with good educational access and lead to significant positive effects for community wellbeing. It is also recognised that all options will also place pressure on the surrounding local roads – particularly during school run hours, and minor negative effects are anticipated in this respect. All on-site options can connect with the existing/ diverted PRow on-site to maximise active travel connections and mitigate negative effects in this respect.

On-site Option A, whilst located in close proximity to Listed Buildings at Kiln Lane and the woodland habitat off Hawks Hill, is considered likely to support the transition between new and existing housing in the north of the site, alongside the landscape buffer, and could provide good access for existing residents north and east of the site. However, given its edge of site location, traffic implications are more likely to extend the site potentially affecting local roads to a greater degree when compared to the remaining on-site options.

On-site Options B-D will avoid sensitive habitats and heritage assets. Whilst the options locate the school close to employment uses, additional open space could reduce/ avoid impacts relating to health and safety and development in this area of the site can provide a transitional area between existing employment uses adjacent to the site and new housing on-site.

As an off-site location is not precisely identified under Option E, the likely effects are difficult to ascertain, and the Option is ranked least favourable on this basis.

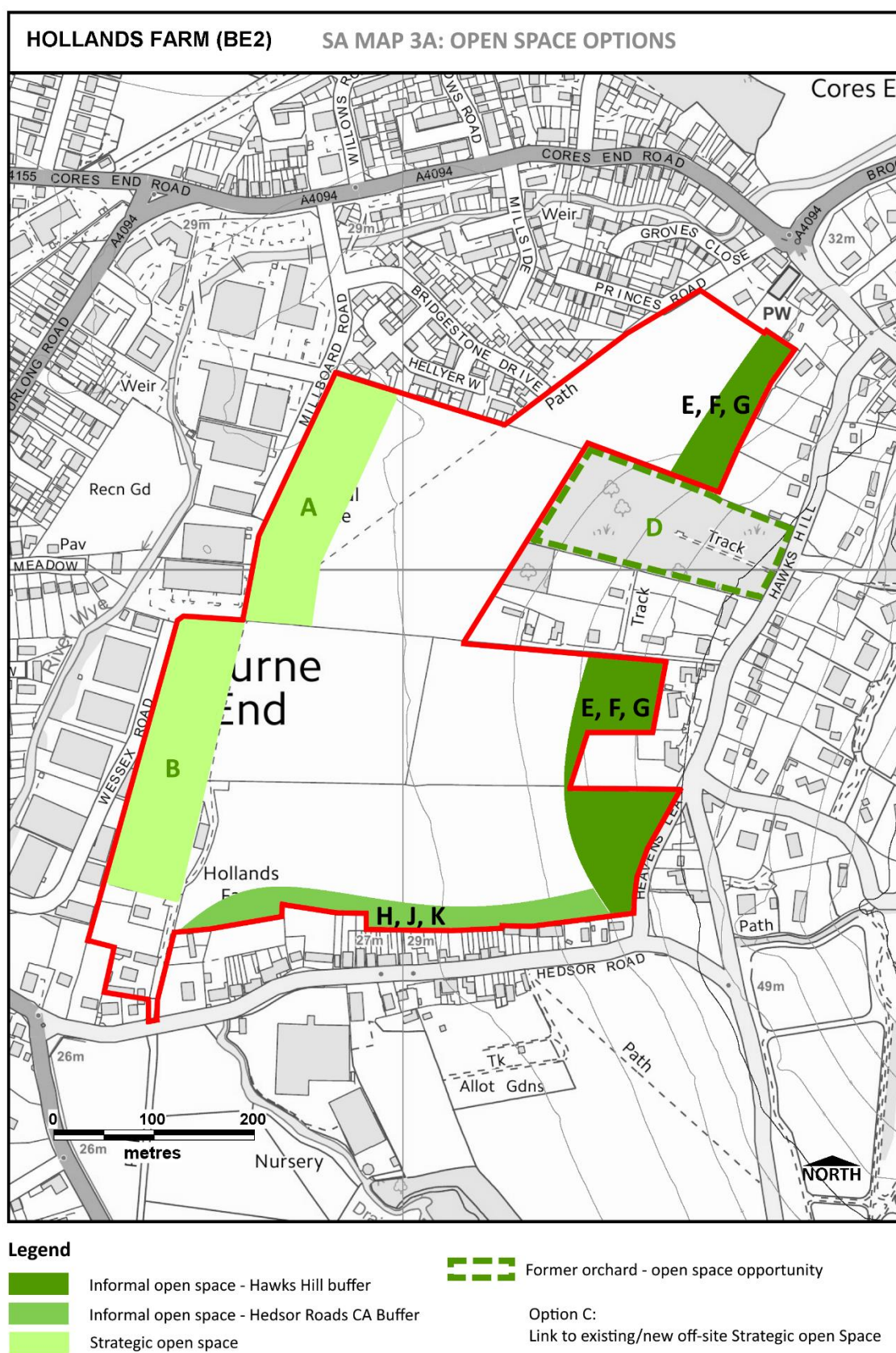
Theme 3: Open space and boundary treatment

In conceptualising open space and boundary treatment through master-planning a number of inter-related options arise, each of which present reasonable alternative options in themselves. On this basis, the following sub-themes were established:

- **Sub-theme 3a** - the location of new strategic open space
- **Sub-theme 3b** - options for the landscape buffer at Hawks Hill/ Harvest Hill (informal open space)
- **Sub-theme 3c** - boundary treatment at Hedsor Road and Riversdale Conservation Area

Each of these sub-themes are explored in turn below, and the location of the options presented under these themes are identified in **Figure 3** below.

Figure 3: Location of options considered under Theme 3



Sub-theme 3a - the location of new strategic open space

Recognising the policy requirement to deliver new open space, master-planning work has identified two potential on-site locations for strategic open space alongside the opportunity to provide public access and biodiversity enhancements to the former orchard at the adjacent deciduous woodland habitat connecting the site with Hawks Hill. These options are considered alongside the potential to deliver open space at an alternative off-site location for which the merits and disadvantages should be explored.

On this basis, four options for the location of new open space are identified:

- **Option A:** On-site (adjacent to Millboard Road)
- **Option B:** On-site (adjacent to Wessex Road)
- **Option C:** Off-site (precise location unknown)
- **Option D:** Off-site (community orchard opportunity at Hawks Hill)

These four options were subject to assessment and **Table 6** below presents the summary findings for this assessment. The full detailed assessment is provided in **Appendix II** of the main SA Report.

Table 6: Summary assessment findings for Theme 3 – Sub-theme 3a

SA theme		Option A	Option B	Option C	Option D
Biodiversity	Likely significant effect?	No	No	No	No
	Rank	1	1	2	3
Climate change	Likely significant effect?	No	No	No	No
	Rank	2	1	3	2
Community wellbeing	Likely significant effect?	No	No	No	No
	Rank	2	1	4	3
Economy and employment	Likely significant effect?	No	No	No	No
	Rank	1	1	2	2
Historic environment	Likely significant effect?	No	No	No	No
	Rank	2	2	3	1
Landscape	Likely significant effect?	No	No	No	No
	Rank	-	-	-	-
Natural resources	Likely significant effect?	No	No	No	No
	Rank	-	-	-	-
Transport and traffic	Likely significant effect?	No	No	No	No
	Rank	1	1	2	1

Summary:

The delivery of new open space under all options is considered likely to support minor long-term positive effects in relation to community wellbeing (for both existing and new communities), biodiversity, climate change, natural resources, landscape and historic environment.

The benefits of locating open space on-site are recognised under Options A and B; namely in providing good accessibility, a buffer between new housing on-site and the adjacent employment area, and under Option B potentially supporting reduced flood risk protecting people and properties on-site.

Sub-theme 3b - options for the landscape buffer at Hawks Hill/ Harvest Hill (informal open space)

Recognising the parameters of Policy BE2 which requires that development maintains a degree of separation with Hawks Hill/ Harvest Hill, a landscape buffer is deemed necessary along the eastern boundary. This is also recognised in the WDLP indicative layout plan.

Master-planning has identified the options of either open space, woodland or a mixture of the two to form the landscape buffer in this area. On this basis, the following options are established:

- **Option E:** Open space
- **Option F:** Woodland
- **Option G:** Mixture of open space and woodland

These three options were subject to assessment and **Table 7** below presents the summary findings for this assessment. The full detailed assessment is provided in **Appendix II** of the main SA Report.

Table 7: Summary assessment findings for Theme 3 – Sub-theme 3b

SA theme		Option E	Option F	Option G
Biodiversity	Likely significant effect?	No	No	No
	Rank	2	2	1
Climate change	Likely significant effect?	No	No	No
	Rank	3	1	2
Community wellbeing	Likely significant effect?	No	No	No
	Rank	-	-	-
Economy and employment	Likely significant effect?	No	No	No
	Rank	-	-	-
Historic environment	Likely significant effect?	No	No	No
	Rank	3	1	2
Landscape	Likely significant effect?	No	No	No
	Rank	1	2	1
Natural resources	Likely significant effect?	No	No	No
	Rank	-	-	-
Transport and traffic	Likely significant effect?	No	No	No
	Rank	-	-	-

Summary:

None of the options are considered likely to lead to any significant effects in relation to any of the SA themes. The provision of the buffer at this location (under all options) is likely to support positive effects by providing additional habitat supporting biodiversity and providing natural drainage. Woodland (under Options F and G) is also noted for the additional benefits of carbon sequestration. The buffer supports the setting of Listed Buildings along Kiln Lane and woodland (under Options F and G) is recognised for additional screening benefits in this respect. However, landscape character evidence suggests that open space and sparse woodland is more in keeping with the overall landscape character of this area. Therefore, evidence suggests Option E followed by Option G would perform marginally better against the SA theme of Landscape than Option F.

Sub-theme 3c - options for boundary treatment at Hedsor Road and Riversdale Conservation Area

In line with Policy BE2, special regard is given to the surrounding historic environment, and of particular concern is the adjacent Hedsor Road and Riversdale Conservation Area in the south of the site. Master-planning has identified three options for boundary treatment in this area and **Figure 4** (overleaf) illustrates these options in greater detail:

- **Option H:** Back-to-back with no buffer
- **Option J:** Back-to-back with a private green buffer between residential gardens
- **Option K:** Green buffer with houses fronting onto public road

These three options were subject to assessment and **Table 8** below presents the summary findings for this assessment. The full detailed assessment is provided in **Appendix II** of the main SA Report.

Table 8: Summary assessment findings for Theme 3 – Sub-theme 3c

SA theme		Option H	Option J	Option K
Biodiversity	Likely significant effect?	No	No	No
	Rank	3	1	2
Climate change	Likely significant effect?	No	No	No
	Rank	2	2	1
Community wellbeing	Likely significant effect?	No	No	No
	Rank	1	1	2
Economy and employment	Likely significant effect?	No	No	No
	Rank	-	-	-
Historic environment	Likely significant effect?	No	No	No
	Rank	3	1	2
Landscape	Likely significant effect?	No	No	No
	Rank	3	1	2
Natural resources	Likely significant effect?	No	No	No
	Rank	2	1	1
Transport and traffic	Likely significant effect?	No	No	No
	Rank	2	2	1

Summary:

None of the options are considered likely to lead to any significant effects. The additional green buffer included within Options J and K is considered likely to support enhanced minor positive effects in relation to biodiversity and the historic environment (through additional screening). This is particularly enhanced under Option J which minimises disturbance to biodiversity (by making the green buffer private) and reduces vehicle presence in the immediate setting of the conservation area (by setting the road further back beyond new housing). However, Option K is considered for its potential to support road development with natural sustainable drainage systems potentially supporting reduced surface water flood risk in this area, and for providing scenic routes to promote active travel.

Figure 4: Options for boundary treatment at Hedsor Road and Riversdale Conservation Area

The location of each of the identified options under Theme 3 are depicted in **Figure 3** above.

Theme 4: Housing density

Whilst the level of growth at the site is set through the WDLP, the density of housing development across the site has potential implications in terms of its landscape and historic environment impact. Following a landscape-led approach (in line with Policy BE2) density options are therefore explored further in recognition of the potential to minimise landscape and historic environment impacts in this respect.

Master-planning has identified three options for housing density as follows:

- **Option 1:** Uniform medium density
- **Option 2:** East-west gradient
- **Option 3:** North-south gradient

These three options are depicted in **Figures 5-7** overleaf and were subject to assessment and **Table 9** below presents the summary findings for this assessment. The full detailed assessment is provided in **Appendix II** of the main SA Report.

Table 9: Summary assessment findings for Theme 4

SA theme		Option 1	Option 2	Option 3
Biodiversity	Likely significant effect?	No	No	No
	Rank	1	1	2
Climate change	Likely significant effect?	No	No	No
	Rank	2	2	1
Community wellbeing	Likely significant effect?	No	No	No
	Rank	1	2	1
Economy and employment	Likely significant effect?	No	No	No
	Rank	-	-	-
Historic environment	Likely significant effect?	No	No	No
	Rank	2	2	1
Landscape	Likely significant effect?	No	No	No
	Rank	2	2	1
Natural resources	Likely significant effect?	No	No	No
	Rank	2	2	1
Transport and traffic	Likely significant effect?	No	No	No
	Rank	-	-	-

Summary:

None of the options are considered likely to lead to any significant effects; however, the assessment identified some differences between them:

- Option 1; uniform densities are largely considered to 'fall in between' Options 2 and 3 in terms of performance. Whilst uniform densities offer potential to integrate housing more consistently in the landscape, it may also miss opportunities for example to reduce impacts in relation to the settlement edge in the south and designated Conservation Area.
- Option 2; by increasing density in the west of the site, this option is noted for potential minor negative effects in relation to community wellbeing (predominantly safety) given its proximity to the adjacent industrial warehousing employment area.

- Option 3; by increasing density in the north of the site this option is considered for potential minor negative effects of greater significance in relation to biodiversity, as a result of increased disturbance, noise, light and air pollution at the adjacent woodland habitat off Hawks Hill. Alternatively by reducing density in the south of the site, enhanced positive effects are anticipated in relation to climate change adaptation (by reducing development in the vicinity of fluvial flood risk zones) and landscape and historic environment (by reducing development in the setting of the designated Conservation Area and area where views are most predominant into the site impacting the settlement edge).

Figure 5: Density Option 1

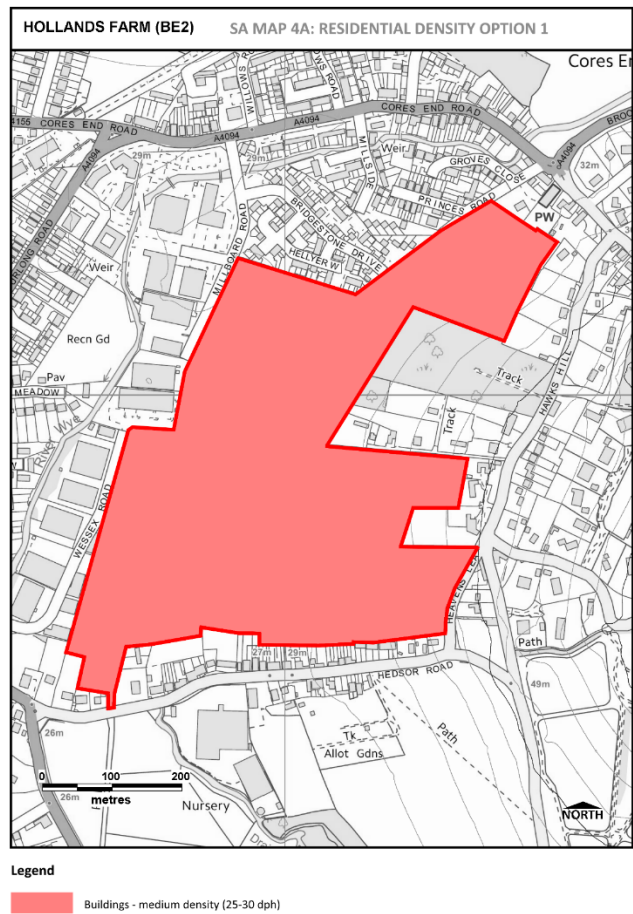


Figure 6: Density Option 2

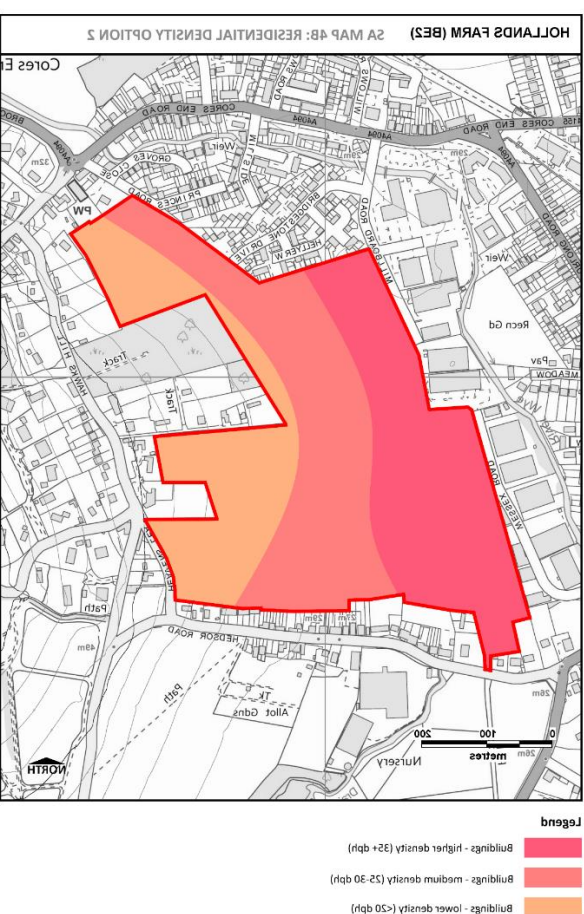
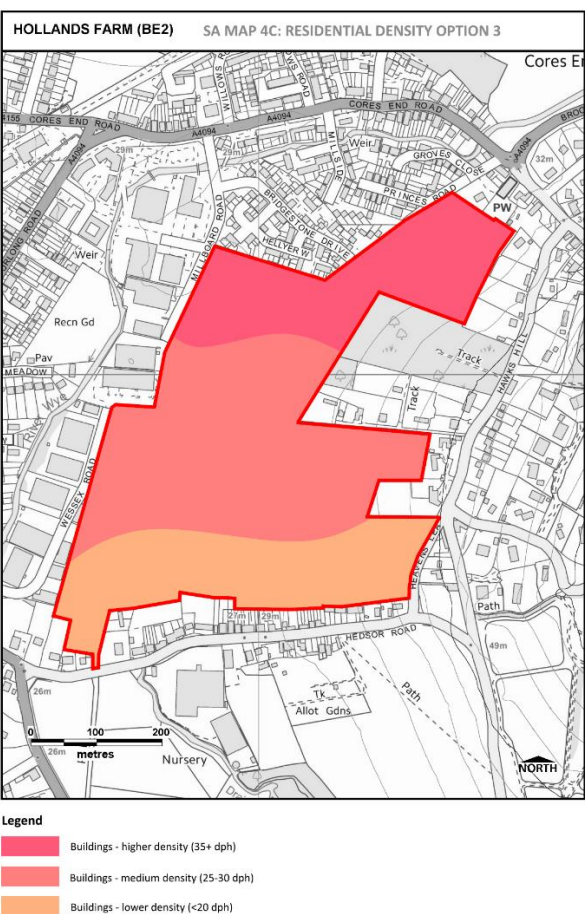


Figure 7: Density Option 3



The preferred approach

Table 10 below sets out the Council's reasons for the selection or rejection of options, in light of the alternatives assessment.

Table 10: Council's reasons for the selection/ rejection of options

Theme/ Option	Reasons for selection/ rejection
Theme 1: Connectivity and movement	
Sub-theme 1a – principal routes	
Option A	Selected - Accords with policy. No deliverability issues. Provides a direct north south link, suitable for a bus route to be diverted.
Option B	Selected – offers greater connectivity from Cores End road. Advantageous if the school is located to the west of the Employment Area, multiple routes for school traffic to enter and leave the site. Millboard Road is subject to deliverability, currently in private ownership. The highway authority would need to adopt it. Final route to be determined at the planning application stage.
Theme 1: Connection and movement	
Sub-theme 1b – secondary routes	
Option C	Selected – Offers connectivity. Advantageous if the school is located to the west of the Employment Area, multiple routes for pedestrians to enter and leave the site. Millboard Road is subject to deliverability, currently in private ownership. Highway authority would need to adopt the road.
Option D	Rejected – Industrial road would be unsuitable to take additional traffic from the development. Also, outside of developer ownership, deliverability issues.
Option E	Rejected – link onto Heavens Lea considered unsafe by the Highway Authority. It is a narrow road with no footpaths with steep hedges either side.
Option F	Potential option – Already footpath connection. Vehicular access would increase connectivity towards the town centre. Would need to ensure the connection does not have an adverse impact on local residents. To be decided at the planning application stage.
Theme 1: Connectivity and movement	
Sub-theme 1c – active travel connections with and beyond the site	
Option G	Selected – provides an E – W linkage through the site internally. Precise location will be subject to block layout which will be determined at the planning application stage.
Option H	Selected – this route provides a wider connection to Hedsor Road and PRow south of the site into the wider countryside. This route requires permission from the Garibaldi pub which the footpath would need to cross, therefore subject to deliverability. The location of M would also help to maintain wider views of the large TPO trees into the site from the south.
Option I	Selected – this route would provide a link to the recreation ground and further beyond to the Bourne End train station. There are deliverability issues, crossing through private land at Wessex Road employment site and also a crossing over the River Rye.
Option J	Selected – this route would provide an eastern link to Hawks hill and the existing PRow going east. The former orchard provides an opportunity to increase biodiversity whilst having community benefits.
Option K	Selected – this route would provide a link to the recreation ground and further beyond to the Bourne End train station. There are deliverability issues, crossing through private land at Wessex Road employment site and also a crossing over the River Rye.
Option L	Rejected – Heavens Lea road is not suitable for pedestrian movement. It is a narrow road with no footpaths and therefore not considered safe by the Highway Authority. The land steeply rises, the change in levels would not be favourable for a footpath in this location.

Theme/ Option	Reasons for selection/ rejection
Option M	Selected – The diversion would allow for more regular block shapes, therefore advantageous for best use of land. It would also build on existing green space/corridors, creating a more pedestrian friendly environment.
Option N	Rejected – existing route would result in triangulation of blocks, resulting in odd block shapes. This would not be the best use of land.

Theme 2: Locating the new primary school

Option A	Selected - No options have been discounted at this stage. Option A would be the least favourable. A 1.1ha site for the school would leave an oddly shaped parcel of remaining land, it would also be located close to existing residential development and likely to increase congestion on Cores End Road/ roundabout.
Option B	Selected - No options have been discounted at this stage. Option B is the preferred option, benefiting from two northern access points, Princes Road and Millboard Road. It would also act as a buffer to the Millboard Road employment area. Centrally located it would be in walking distance to all of the site and existing residential areas towards the town centre. This is also the flattest part of the site.
Option C	Selected - No options have been discounted at this stage. Option C – less connected to the rest of the site but is located on flat ground and would act as a buffer to the Wessex Road industrial site.
Option D	Selected - No options have been discounted at this stage. Option D – Also relatively flat area of land. Not as connected as options A and B being located in the southern part of the site.
Option E	Rejected - No options have been discounted at this stage. Option E – Rejected. Currently there is no known option for expanding an existing school nearby, therefore not deliverable.

Theme 3: Open space and boundary treatment

Sub-theme 3a – the location of new strategic open space

Option A	Selected - Option A and B both supported for strategic open space. Preferred option will be dependent on the location of the primary school.
Option B	Selected - Option A and B both supported for strategic open space. Preferred option will be dependent on the location of the primary school.
Option C	Rejected - Option C rejected as no known deliverable location nearby to expand or locate new sports pitches.
Option D	Selected - Option D supported. Helps to fulfil the policy objective of providing community access and ongoing management to the former orchard.

Theme 3: Open space and boundary treatment

Sub-theme 3b – the landscape buffer at Hawks Hill/ Harvest Hill (informal open space)

Option E	Selected - Option E and F rejected as a mixture of open space and woodland is preferred, responding to the different boundary types. Tree belts creates more of a visual separation, whereas open space could have a dual use providing informal open space for local resident's recreational areas.
Option F	Selected - Option E and F rejected as a mixture of open space and woodland is preferred, responding to the different boundary types. Tree belts creates more of a visual separation, whereas open space could have a dual use providing informal open space for local resident's recreational areas.
Option G	Option G is supported as a mixture of trees and open space will be appropriate dependent on the precise location along the buffer. A woodland is preferred adjacent to Heavens Leas as this will create a greater sense of separation to Heavens Lea, which is a policy objective.

Theme 3: Open space and boundary treatment

Theme/ Option	Reasons for selection/ rejection
Sub-theme 3c – boundary treatment at Hedsor Road and Riversdale Conservation Area	
Option H	Option H – rejected. This would have an adverse impact on the Hedsor and Riversdale Conservation Area. It would result in no separation between those buildings in the conservation area and the new development.
Option J	Option J – preferred. This would create a tree belt to the rear of the conservation area, separating it from the development. Being within residential gardens would prevent ongoing management issues. All trees would be TPO'd to ensure perpetuity.
Option K	Option K – rejected. It is not considered good to design to have public areas fronting onto the rear of private residential properties. The green buffer would also require long term management and could attract anti-social behaviour.
Theme 4: Housing density	
Option 1	No options have been discounted. This would be the least favourable as changing densities help create different character areas, responding to the surrounding environment.
Option 2	No options have been discounted. Preferred option, as this responds to the existing surrounding densities, with larger plots located to the west of the site.
Option 3	No options have been discounted. The northern end of the site is adjacent to the highest density development, which is reflected in this option.

SA findings at this stage

Part 2 of the SA Report presents an assessment of the draft Hollands Farm Development Brief SPD as a whole and the summary findings of this appraisal are provided below.

It is important to reiterate at this stage that the Development Brief cannot set new policy provisions for development at the Hollands Farm site and whilst the Development Brief is a site-specific document, this assessment remains strategic in nature to meet the requirements of the SEA Regulations.³

Summary findings

Table 11 below draws together the overall conclusions for each SA theme. Overall, as the draft Development Brief does not introduce new growth or new policy, no significant negative effects are anticipated as a result of its adoption and implementation. On the contrary, the Development Brief is considered likely to support the both the minimisation of likely negative effects arising and maximise the potential delivery of positive effects as a result of its detailed contextual overview and development principles which seek to address known development constraints and maximise potential opportunities.

The draft Development Brief guides a landscape-led approach to high-quality, climate-resilient design and development, focuses biodiversity net gain opportunities, requires the necessary supporting infrastructure for population growth, and minimises development impacts on sensitive heritage settings. The measures are likely to lead to significant positive effects in relation to community wellbeing.

Two recommendations are made within the assessment as follows:

- To better secure positive effects in relation to archaeology, it is recommended that the observed need for trial trenching prior to development is further established as a development principle to ensure this is carried through to development proposals.

³ Environmental Assessment of Plans and Programmes Regulations 2004 (the SEA Regulations)

- It is considered that opportunities to identify the links between on-site mitigation measures/ efficiency initiatives and wider Council aims in relation to climate change mitigation and climate resilience are missed in 'part one' of the draft Brief (the contextual analysis). It is recommended that additional context is provided to better secure the responsive on-site measures required.

Table 11: Summary findings for the appraisal of the draft Development Brief

SA theme	Conclusions
Biodiversity	Overall, the site is not considered particularly sensitive in biodiversity terms. The detailed and extensive development principles provided in relation to biodiversity are considered likely to support overall net gain and biodiversity enhancements on site, and opportunities are recognised to link enhancements on-site with the wider Biodiversity Opportunity Area targets. As a result, minor long-term positive effects are anticipated.
Climate change	Overall, the detailed guidance to address known flood risk constraints on-site, alongside detailed design and general principles which support climate change mitigation, minor long-term positive effects are anticipated.
Community wellbeing	Overall, the draft Brief outlines the measures necessary to avoid negative effects in relation to community health and wellbeing and facilitates high-quality development and new provisions which are required to support the growing population in this area. As a result, significant long-term positive effects are anticipated in relation to community wellbeing.
Economy and employment	Overall, improved educational access in the east of the settlement as a result of development (and new job opportunities here), alongside the general principle to promote improved connectivity within and surrounding the site is considered likely to lead to indirect minor long-term positive effects for the local economy and employment accessibility.
Historic environment	Overall, the detailed contextual information and development principles seek to ensure that development duly considers the significance of heritage assets surrounding the site and their settings; supporting reduced potential for, and significance of, negative effects arising. Despite this, the addition of just under 500 homes in this location is considered likely to result in residual minor long-term negative effects on the setting of designated heritage assets. To better secure mitigation in relation to archaeology, it is recommended that the observed need for trial trenching prior to development is further established as a development principle to ensure this is carried through to development proposals.
Landscape	Overall, the detailed contextual information providing insight into the character and formation of the landscape and built environment surrounding the site, alongside the detailed development principles guiding a landscape-led approach to design and development is considered likely to ensure that development responds sensitively to both its immediate and wider character area and setting. In this respect, the Brief minimises the impact of the development in landscape terms. Despite this, the addition of just under 500 homes in a previously undeveloped area is still considered likely to lead to residual minor long-term negative effects .
Natural resources	Overall, minor long-term negative effects in relation to soil resources are considered an unavoidable consequence of development at this site. However, the proposed green infrastructure improvements which includes support for improved water quality along the river corridor is considered likely to support long-term positive effects .
Transport and traffic	Overall, the prioritisation of sustainable forms of transport, supported by an efficient road network layout and road junction improvements are considered likely to deliver the necessary mitigation to avoid negative effects arising as a result of development at the site. However, the addition of 500 homes in this area is still considered likely to affect local roads to some degree and minor long-term negative effects are anticipated in this respect.

Next steps

A local liaison group of community representatives have reviewed the draft SA prior to public consultation of the SA, no changes were suggested. Following consultation on the draft Development Brief and accompanying SA Report, Buckinghamshire Council will finalise the Development Brief, taking into account consultation responses and assessment findings, and produce a Consultation Statement. The SA Report will also be updated during this period to consider and reflect feedback and respond to any Development Brief amendments.

The finalised Development Brief, SA Report and Consultation Statement will be made available for representations prior to the adoption of the SPD. It is Buckinghamshire Council's aim to adopt a finalised Development Brief SPD in autumn 2020.

Monitoring

At the current time, there is a need only to present 'measures envisaged concerning monitoring'. The SEA Regulations expect monitoring and mitigation to be linked, and that the focus should be on any significant negative effects identified through the assessment. Where possible existing arrangements for monitoring should be used to avoid duplication of effort.

Based on the findings of the SA, which predicted no significant negative effects; no specific monitoring measures have been proposed at this stage. It is anticipated that monitoring of general sustainability indicators will be undertaken by Buckinghamshire Council as part of the process of preparing its Annual Monitoring Report (AMR).

Further consideration will be given to monitoring in due course once the responses to the draft Development Brief and accompanying SA Report have been received. If necessary, the SA Adoption Statement will set out monitoring measures against SA objectives, including responsibilities.

1. Introduction

Background

- 1.1 AECOM has been commissioned to undertake an independent Sustainability Appraisal (SA) incorporating Strategic Environmental Assessment (SEA) in support of the emerging Hollands Farm Development Brief, which will become an adopted Supplementary Planning Document (SPD). The requirement for SEA was identified through a Habitats Regulation Assessment Screening Opinion, verified by AECOM.
- 1.2 The purpose of the development brief is to provide further detail and guidance on the future sustainable development of the Hollands Farm site in Bourne End - specifically in relation to Policy BE2 (Hollands Farm) of the adopted Wycombe District Local Plan (WDLP) (August 2019). Following adoption, the SPD will be a material consideration in planning decisions but will not be a part of the WDLP.

SA explained

- 1.3 SA is a mechanism for considering and communicating the impacts of an emerging plan, and potential alternatives in terms of key sustainability issues. The aim of SA is to inform and influence the plan-making process with a view to avoiding and mitigating negative impacts and maximising the positives.
- 1.4 SA is undertaken to address the procedures prescribed by the Environmental Assessment of Plans and Programmes Regulations 2004 (the SEA Regulations). It also widens the scope of the assessment from focussing on environmental issues to further consider social and economic issues. SA (incorporating SEA) is a legal requirement for Local Plans; however, an SPD is not a Local Plan and SA is not therefore legally required.
- 1.5 The Council concluded following the HRA screening that the SPD requires an Appropriate Assessment, to assess the effects of the proposals and measures contained within the SPD that relate to the development of Hollands Farm. This includes the proposed mitigation of effects on Burnham Beeches Special Area of Conservation (SAC). Given the need for Appropriate Assessment the Council also concluded that SEA should be carried out in line with Regulation 5 (3) of the SEA Regulations. However, the Council does not consider that the SPD is likely to have significant effects on the environment that have not already been the subject of assessment through the SA of the Wycombe District Local Plan. While there is no requirement for a Sustainability Appraisal to be carried out, the Council considers that it would be appropriate in this case in order to demonstrate clear links with the SA process carried out for the adopted Local Plan. An SA (incorporating the requirements of SEA) is therefore being carried out for the SPD.
- 1.6 The SEA Regulations require that a report is published for consultation alongside the draft Development Brief that 'identifies, describes and evaluates' the likely significant effects of implementing 'the plan [*i.e. the SPD*], and reasonable alternatives'. The report must then be taken into account, alongside consultation responses, when finalising the Development Brief.
- 1.7 The 'likely significant effects on the environment', are those defined in Annex I of the SEA Directive as 'including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors'. Reasonable alternatives need to take into consideration the objectives for the Development Brief and its geographic scope.

- 1.8 More specifically, the SA Report must answer the following three questions:
4. What has plan-making / SA involved up to this point?
 - Including in relation to 'reasonable alternatives'.
 5. What are the SA findings at this stage?
 - i.e. in relation to the Draft Development Brief
 6. What happens next?
 - What steps will be taken to finalise (and monitor) the Development Brief?

This SA Report

- 1.9 This SA Report⁴ is published alongside the draft Hollands Farm Development Brief SPD, and answers each of the three questions (outlined in paragraph 1.8 above) in turn, with a 'part' of the report dedicated to each.
- 1.10 Before answering the first question however, two initial questions are answered in order to further 'set the scene' – i) what is the Development Brief trying to achieve?; and ii) what is the scope of the SA?

⁴ See **Appendix I** for further explanation of the regulatory basis for answering certain questions within the Environmental Report and a 'checklist' explaining more precisely the regulatory basis for presenting certain information.

2. What is the Development Brief seeking to achieve?

2.1 This chapter seeks to explain the context to the preparation of the Development Brief and identify its vision and objectives.

The Wycombe District Local Plan

2.2 The Wycombe District Local Plan was adopted on 19 August 2019 and it:

- sets out strategic policies;
- allocates new areas for housing growth;
- allocates new areas for employment growth;
- sets out development management policies for housing, economic growth, placemaking, historic conservation, the AONB, flood risk and water quality, the green belt and rural areas, and safeguarded land for essential infrastructure; and
- sits alongside the Delivery and Site Allocations Plan for Town Centre and Managing Development Plan (2013) policies as well as the made Neighbourhood Development Plans

2.3 Policy BE2 in the Local Plan is presented in **Table 2.1** below and allocates land at Hollands Farm in Bourne End and Wooburn for development. The site is located towards the south of Bourne End between Hawks Hill and Wessex Road. The 23.7-hectare greenfield site is depicted in **Figure 2.1** (at the end of this chapter) and has an indicative capacity of 467 homes. The illustrative layout for the site is depicted in **Figure 2.2** (also at the end of this chapter).

Table 2.1: Policy BE2 in the adopted Wycombe District Local Plan

POLICY BE2 – HOLLANDS FARM , BOURNE END AND WOOBURN

The site as shown on the Policies Map is allocated for residential-led mixed use.

Development of the site is required to :

1. Placemaking

- a) Adopt a landscape-led positive approach to design and layout to limit its impact on the landscape;
- b) Have special regard to the conservation of nearby Heritage Assets and their settings, including the Hedsor Road and Riversdale Conservation Area;
- c) Maintain a sense of separation between Harvest Hill and the new development site;
- d) Ensure satisfactory relationship to the industrial buildings at Millboard Road Employment Area on the western boundary.

2. Transport

- a) Provide a link road through the site linking to the Cores End Road roundabout and Ferry Lane;
- b) Provide a redirected bus service and enhanced provision through the site;
- c) Provide contributions to off-site highway improvements as required by the Highway Authority;
- d) Provide and enhance footpath and cycle links to the village centre.

3. Green Infrastructure/ Environment

- a) Provide on-site high quality open space;
- b) Provide S106 contributions to mitigate recreational impacts at Burnham Beeches SAC;
- c) Maintain north south connectivity for Public Rights of Way through the site;
- d) Protect and enhance the biodiversity and green infrastructure value of the former orchard in accordance with Policy DM34, providing public access and ongoing management as part of the overall development. Buildings within this area will not be acceptable;
- e) Avoid areas of fluvial flood risk where possible;
- f) Provide appropriate SuDS across the site.

4. Other

- a) Provision of a 1 form entry primary school.

The Hollands Farm Development Brief SPD

- 2.4 Buckinghamshire Council have decided to develop the Development Brief SPD to provide further detail and guidance on the future development of the Hollands Farm

Site in Bourne End, specifically in relation to Policy BE2 of the Wycombe District Local Plan. Following adoption, the SPD will be a material consideration in planning decisions but will not be a part of the WDLP.

Purpose of the Development Brief

- 2.5 A Development Brief provides a guide for how a site may be developed. It does not dictate a precise layout but rather provide a series of principles, adding detail to how the Local Plan site allocation policy should be implemented.
- 2.6 Development Briefs are not intended to be planning application documents; their purpose is to provide the vision, development principles and a broad framework that will guide and inform the planning application stage. New policy requirements cannot be introduced within the Development Brief.
- 2.7 The main purpose of the Hollands Farm Development Brief is to:
- set out the vision for and key objectives of the development;
 - explain the planning policy context within which the development will be considered;
 - identify the key constraints and opportunities affecting the development of the site;
 - establish a broad design approach/concept for the site; and
 - provide an illustrative framework.
- 2.8 The Development Brief is structured in two parts, with part one providing an analysis of the site and its context, and part two providing a development framework.

3. What is the scope of the SA?

Introduction

- 3.1 The aim here is to introduce the reader to the scope of the SA, i.e. the sustainability topics / issues / objectives that should be a focus of the assessment of the Development Brief and reasonable alternatives. Further information is presented in **Appendix II**.

Consultation

- 3.2 The SEA Regulations require that “*when deciding on the scope and level of detail of the information that must be included in the report, the responsible authority shall consult the consultation bodies*”. In England, the consultation bodies are the Environment Agency, Historic England and Natural England.⁵ As such, these authorities were consulted in early 2020. Scoping responses are detailed in **Appendix II**, the responses resulted in minor updates to the baseline and context review but did not result in any changes to the proposed SA framework.

The SA framework

- 3.3 The SA scope is summarised in a list of themes, objectives and questions known as the SA framework. **Table 3.1** presents the SA framework as broadly agreed with statutory consultees in 2020. The proposed SA framework for the Development Brief builds upon the framework established through the Local Plan SA, aligning with the broad objectives but providing more site-specific assessment questions.

Table 3.1: The SA framework

SA theme	SA objective	Assessment questions
Biodiversity	To conserve and enhance biodiversity.	<ul style="list-style-type: none">• Support the status of the internationally, nationally and locally designated sites surrounding the site and consider impact pathways and connections between the development site and designated biodiversity sites?• Consult with Natural England where necessary regarding the impacts of development on Cock Wood SSSI?• Protect and enhance priority habitats and species, including potential endangered species on site, and woodland habitats adjacent to the site?• Achieve a net gain in biodiversity?• Support enhancements to multifunctional green infrastructure networks which include ecological corridors and connections between habitats?• Support access to, interpretation and understanding of biodiversity and geodiversity?
Climate change	To reduce contributions to climate change, through (a) sustainable building practices, (b) maximising the potential for renewable energy and energy conservation and (c)	<ul style="list-style-type: none">• Promote sustainable development, including sustainable construction and operation of new housing, and sustainable waste management during construction and operation?• Promote energy efficiency and renewable energy generation including solar panels, energy efficient buildings and recycled water and materials?

⁵ These consultation bodies were selected “*by reason of their specific environmental responsibilities, [they] are likely to be concerned by the environmental effects of implementing plans and programmes*” (SEA Directive, Article 6(3)).

SA theme	SA objective	Assessment questions
	promoting sustainable management of waste	<ul style="list-style-type: none"> Support sustainable building practices through well-connected development that promotes more sustainable modes of transport, including active travel networks?
	To reduce the risk of flooding from all sources and increase the flood resilience of the built and natural environment.	<ul style="list-style-type: none"> Ensure that development effectively manages surface water and groundwater and reduces surface water and groundwater flood risk on site? Avoids locating housing development in the south-west corner of the site within the area designated as Flood Zone 3? Increase the resilience of the built and natural environment to the effects of climate change, including flood resilience measures such as Sustainable Drainage Systems and enhancements to ecological networks, green infrastructure and biological connectivity?
Community wellbeing	To sustain vibrant communities and improve accessibility for everyone to health, education, recreational, cultural and community facilities and services	<ul style="list-style-type: none"> Maintain and/ or improve the provision of community infrastructure, services and facilities? Support accessibility enhancements and opportunities to promote active travel networks within the settlement? Maintain or enhance the quality of life of existing residents? Enhance community access to green infrastructure?
	To maintain and improve the health, well-being and community cohesion of the population and reduce social deprivation	<ul style="list-style-type: none"> Encourage and promote social cohesion and encourage active involvement of local people in community activities? Ensure the current and future health and wellbeing needs of the local population are met? Protect and enhance access to nature via greenspace and footpaths? Promote the use of healthier modes of travel, including active travel networks? Improve access to the countryside for recreational use? Avoiding any negative impacts to the quality and extent of existing recreational assets, such as formal or informal footpaths?
Economy and employment	To promote a strong, balanced and sustainable economy, retaining existing businesses while having a sector focus to develop new business in the area.	<ul style="list-style-type: none"> Support a strong, diverse and resilient economy that provides opportunities for all? Enhance the vitality of the village centre, and employment areas? Improve accessibility to the adjacent employment area, particularly through improved active travel opportunities? Ensure that proposed uses adjacent to the existing employment areas are compatible?
	To raise educational attainment and develop and maintain a skilled workforce to support long-term competitiveness	<ul style="list-style-type: none"> Ensure enough capacity at local educational facilities to support housing growth? Supports skills provision that meets District needs for existing and future labour markets?
Historic environment	To conserve and enhance the District's townscapes and historic environment, and, in particular, those areas designated for	<ul style="list-style-type: none"> Conserve and enhance the significance of buildings and structures of architectural or historic interest, both designated and non-designated, and their setting? Conserve and enhance the key characteristics and features of the Hedsor Road and Riversdale Bourne End Conservation Area, and its setting?

SA theme	SA objective	Assessment questions
	their heritage importance.	<ul style="list-style-type: none"> • Conserve and enhance the setting of the Hedsor House Registered Park and Garden? • Conserve and enhance the special interest, character and appearance of locally important features and their settings? • Support access to, interpretation and understanding of the historic evolution and character of the environment? • Conserve and enhance archaeological remains? • Support the undertaking of archaeological investigations and, where appropriate, recommend mitigation strategies?
Landscape	To conserve and enhance the District's landscape and, in particular, those areas designated for their landscape value.	<ul style="list-style-type: none"> • Conserve and enhance locally important landscape and 'villagescape' features within and surrounding the settlement area? • Support the retention and enhancement of existing landscape features at the Hollands Farm site where possible? • Conserve and enhance local diversity and character, including the character and identity of the settlement area? • Protect locally important viewpoints contributing to the sense of place and visual amenity of the settlement area?
Natural resources	Ensure the efficient and effective use of land, protect soil quality and minimise the loss of high-quality agricultural land.	<ul style="list-style-type: none"> • Maximise design opportunities (in layout and massing) to minimise the loss of high-quality agricultural land? • Reduce/ avoid surface water run-off that may affect soil quality both during construction and operation?
	To maintain and enhance the quality and quantity of the District's water sources, achieve sustainable water resources management and reduce the risk of flooding	<ul style="list-style-type: none"> • Support improvements to water quality? • Protect surface water and groundwater resources from pollution? • Ensure appropriate drainage and mitigation is delivered alongside development? • Minimise water consumption? • Maximise water efficiency and opportunities for water harvesting and/ or water recycling?
Transport and traffic	To deliver transport improvements, improve travel choice and connectivity, reduce the need for travel by car and reduce the negative impact of transport on the environment.	<ul style="list-style-type: none"> • Provide a new link road? • Ensure sufficient road capacity to accommodate new development? • Enable sustainable transport infrastructure enhancements? • Facilitate home and remote working? • Improve road safety? • Reduce the impact on residents from the road network?

Part 1: What has plan-making/ SA involved up to this point?

4. Introduction (to Part 1)

- 4.1 In line with regulatory requirements, there is a need to explain how work was undertaken to develop and then appraise reasonable alternatives, and how the Council then took into account appraisal findings when finalising the Development Brief.
- 4.2 This part of the report presents the information regarding the consideration of reasonable alternatives across a number of 'themes' considered in the development of the SPD. This information is important given regulatory requirements.⁶
- 4.3 The SEA Regulations⁷ are not prescriptive as to what constitutes a reasonable alternative, stating only that the Environmental Report should present an appraisal of the "*plan and reasonable alternatives taking into account the objectives and geographical scope of the plan*".
- 4.4 In accordance with the SEA Regulations the Environmental Report must include:
- An outline of the reasons for selecting the alternatives dealt with; and
 - The likely significant effects on the environment associated with alternatives/ an outline of the reasons for selecting the preferred approach in light of the alternatives appraised.

Structure of this part of the report

- 4.5 This part of the report is structured as follows:
- **Chapter 5** – explains the process of establishing reasonable alternatives
 - **Chapter 6** – presents the outcomes of assessing reasonable alternatives
 - **Chapter 7** – explains reasons for establishing the preferred option, in light of the assessment.

⁶ There is a requirement for the SEA Report to present an appraisal of 'reasonable alternatives' and 'an outline of the reasons for selecting the alternatives dealt with'.

⁷ Environmental Assessment of Plans and Programmes Regulations 2004

5. Establishing the reasonable alternatives

Introduction

- 5.1 As previously identified, the Development Brief is a site-specific document, supporting Policy BE2 of the WDLP with further detail and guidance on the future development of the Hollands Farm site in Bourne End. As an SPD, the Development Brief will not form part of the WDLP but will become a material consideration when considering a planning application for the site. As the SPD does not form part of the WDLP it is important to note that it cannot introduce any new planning policies and it should not add unnecessary financial burdens to development.
- 5.2 On this basis, the alternatives are focused on the options emerging within the scope of the development brief, for example; the location of the required new primary school. As a starting point therefore, it is appropriate to identify the parameters set by Policy BE2.

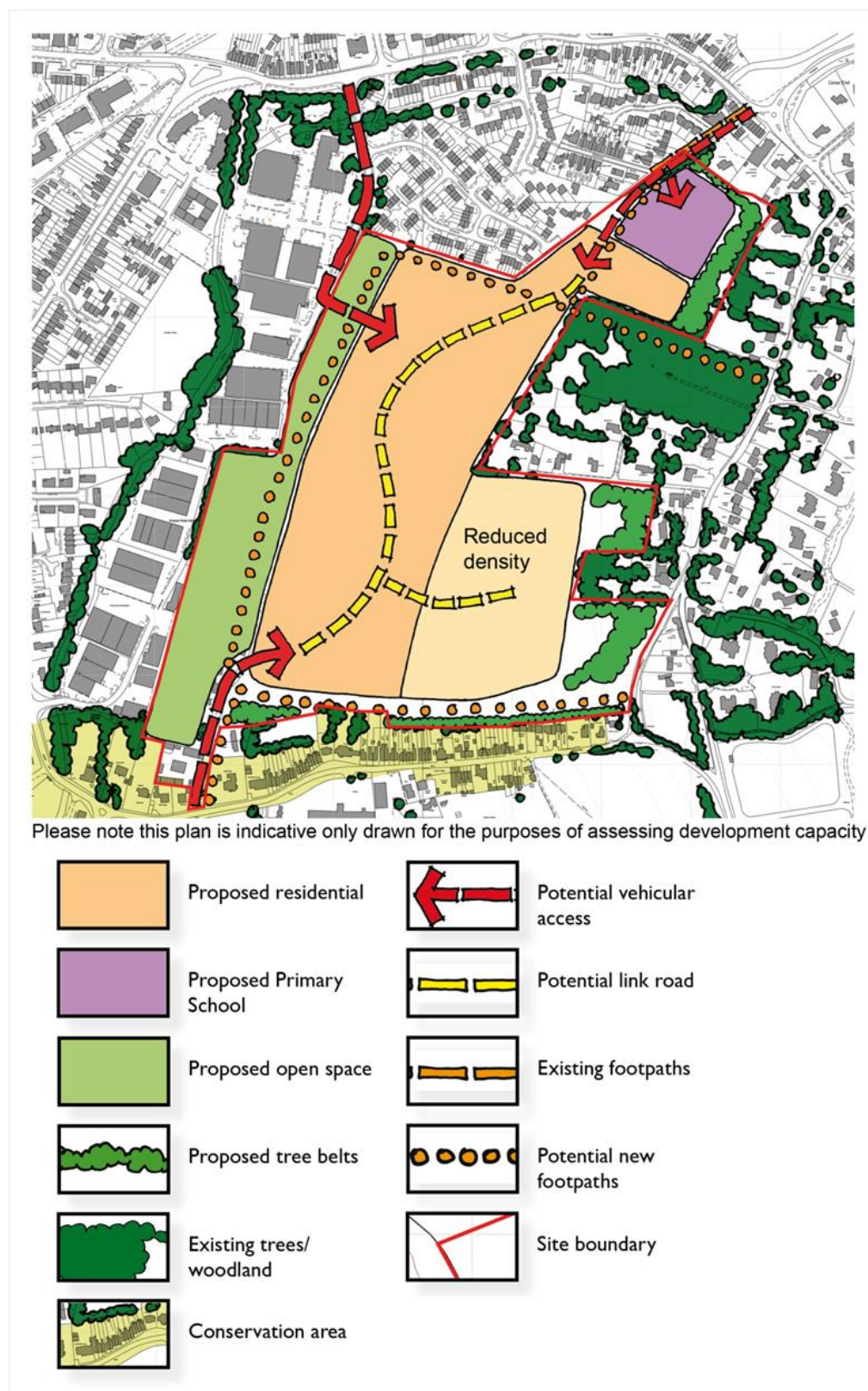
Local Plan policy context

- 5.3 The following points summarise the key contextual issues arising for the Development Brief from the strategic parameters of WDLP Policy BE2 (Hollands Farm, Bourne End and Wooburn):
- The policy requires a landscape-led approach to design and layout, limiting the impact of development on the landscape.
 - There is a need to pay special regard to the surrounding historic environment, including the Hedsor Road and Riversdale Conservation Area.
 - There is a need to maintain a sense of separation between Harvest Hill and the new development site.
 - Appropriate uses will need to be considered where the site joins the industrial buildings at Millboard Road Employment Area in the west.
 - The north-south connectivity for Public Rights of Way (PRoW) through the site must be maintained.
 - The biodiversity and green infrastructure value of the former orchard in the east of the site must be protected and development should be avoided in this part of the site.
 - Development will need to avoid areas of fluvial flood risk where possible.
 - There is a policy requirement to deliver as part of development; a 1 form entry primary school, a link road through the site connecting to the Cores End roundabout and Ferry Lane, a redirected bus service and enhanced provision through the site, enhanced footpath and cycle links to the village centre, on-site high-quality open space and sustainable drainage systems.
 - There is also a policy requirement for development to contribute to; off-site highways improvements as required by the Highway Authority, and mitigation measures associated with minimising recreational impacts at Burnham Beeches Special Area of Conservation (SAC).
- 5.4 It is also worth noting here that a separate Habitats Regulations Assessment (HRA) is being carried out alongside the SA for the Development Brief which will inform

decision-making around the required mitigation at European designated biodiversity sites.

- 5.5 Policy BE2 further provides an indicative layout for the development of the Hollands Farm site (see **Figure 5.1** below) though it is noted that this is indicative only for the purposes of assessing capacity. The Development Brief seeks to investigate the layout options in greater detail.

Figure 5.1: WDLP indicative layout plan for Hollands Farm, Bourne End and Wooburn



Establishing alternative options

5.6 Considering the parameters outlined by Policy BE2 and the scope of the Development Brief, four main 'themes' were identified where alternatives options reasonably exist. However, these options are not considered mutually exclusive, they are elements of an iterative process. These four themes are:

- **Theme 1:** Connectivity and movement – encompassing the need to explore options for the link road, PRow and cycle path connections within the site and wider connections outside of the site;
- **Theme 2:** The location of the new school – encompassing the need to explore options for the delivery of a new 1 form entry primary school;
- **Theme 3:** Open space and boundary treatment – encompassing landscape buffer options and locations for open space, as well as boundary treatment in relation to the Hedsor Road Conservation and Riversdale Area; and
- **Theme 4:** Housing density on site – encompassing a landscape-led approach to development to reduce its impact.

5.7 Each of these 'themes' are considered in turn below.

Theme 1: Connectivity and movement

5.8 Policy BE2 outlines a number of requirements including; a new link road (referred to as the principal route in the Development Brief) through the site connecting to the Cores End roundabout and Ferry Lane, a redirected bus service and enhanced provision through the site, enhanced footpath and cycle links to the village centre, and the retention of the north-south connectivity for PRow through the site.

5.9 In conceptualising these matters through master-planning a number of inter-related options arise, each of which present reasonable alternative options in themselves. On this basis, the following sub-themes were established:

- **Sub-theme 1a;** principal routes
- **Sub-theme 1b;** secondary routes
- **Sub-theme 1c;** active travel connections within and beyond the site

5.10 Each of these sub-themes are explored in turn below.

Sub-theme 1a; principal routes

5.11 The directions of Policy BE2 require principal route access connecting to the Cores End roundabout and Ferry Lane, where the diverted bus route should be located. This is provided as Route A (see **Figure 5.2**) which is intended to connect with Hedsor Road (Route A + Route C). To support this connection, master-planning has identified the potential to form an additional principal route connection at Millboard Road. On this basis, two alternative options are established as follows:

- **Option A:** Route A + Route C (Princes Road to Hedsor Road)
- **Option B:** Route A + Route B + Route C (Princes Road + Millboard Road to Hedsor Road)

Sub-theme 1b; secondary routes

5.12 Secondary routes are intended to connect with the principal routes through the site and master-planning has identified four alternative routes to provide secondary connections as follows:

- **Option C:** Route B (connection to Millboard Road)

- **Option D:** Route D (connection to Wessex Road)
- **Option E:** Route E (connection to Heavens Lea)
- **Option F:** Route F (connection to Bridgestone Drive)

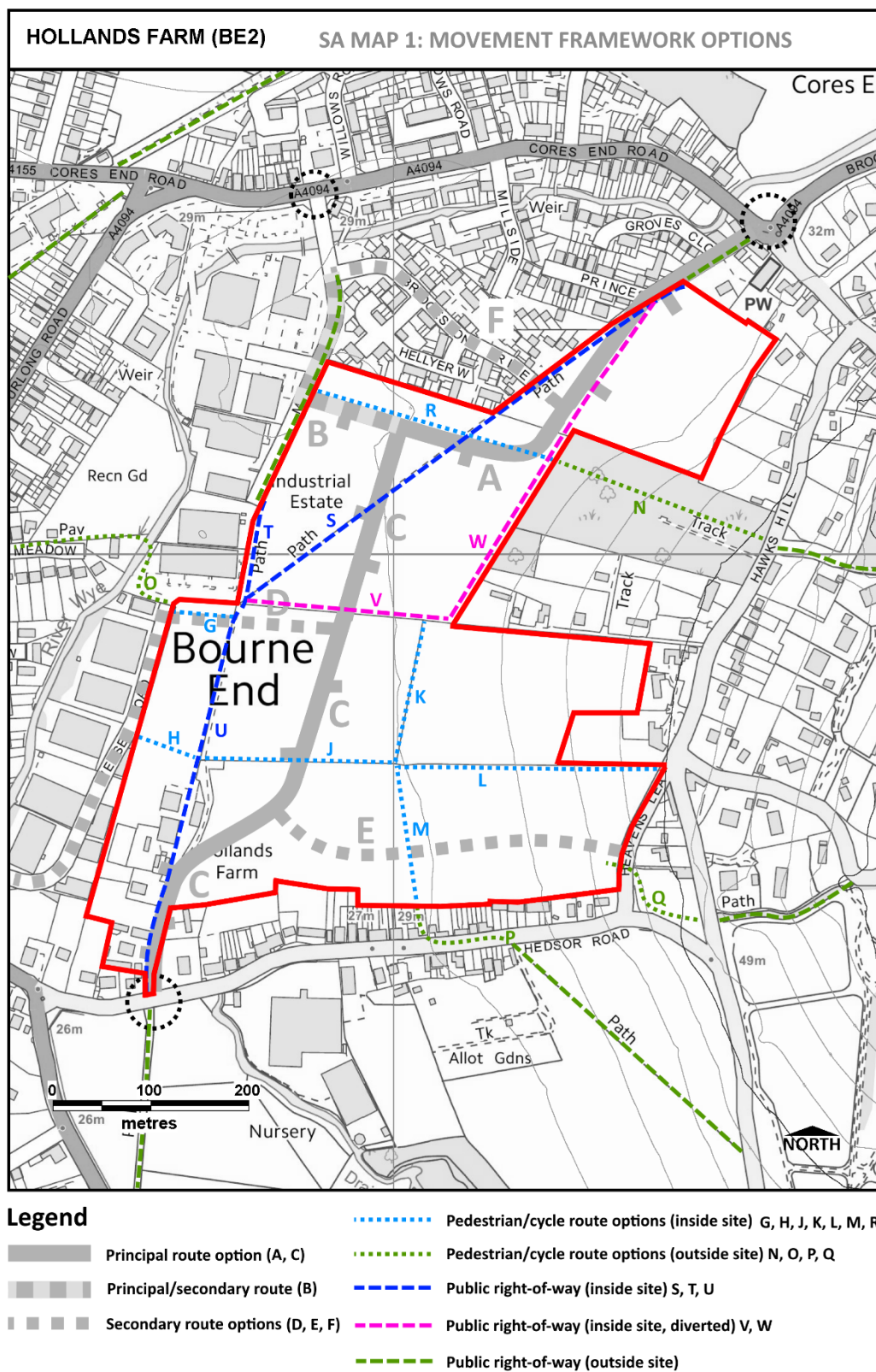
Sub-theme 1c; active travel connections within and beyond the site

5.13 Reflecting the policy directions for enhanced active travel links through the site and connecting to the village centre and into the wider countryside, master-planning has identified the following eight potential alternative options for active travel connections within and immediately surrounding the site:

- **Option G:** Combined route H-J-L providing east-west link between Hawks Hill and Wessex Road;
- **Option H:** Combined route P-M-K. Link route P via Garibaldi Pub (community owned) subject to agreement;
- **Option I:** Route G providing link to Wessex Road;
- **Option J:** Route R-N providing east-west link between Harvest Hill/ Hawks Hill PRow and Millboard Road PRow via Orchard;
- **Option K:** Route O providing a potential link to nearby recreational ground via industrial estate;
- **Option L:** Route Q providing a potential link between southern end of the site and Hawks Hill/ Harvest Hill PRow to the east;
- **Option M:** Routes V and W providing a diversion to existing PRow but retaining north-south link connecting Hedsor Road to Princes Road; and
- **Option N:** Existing PRow Routes S, T and U retaining north-south link connecting Hedsor Road to Princes Road.

5.14 The location of each of the identified options under Theme 1 are depicted in **Figure 5.2** overleaf.

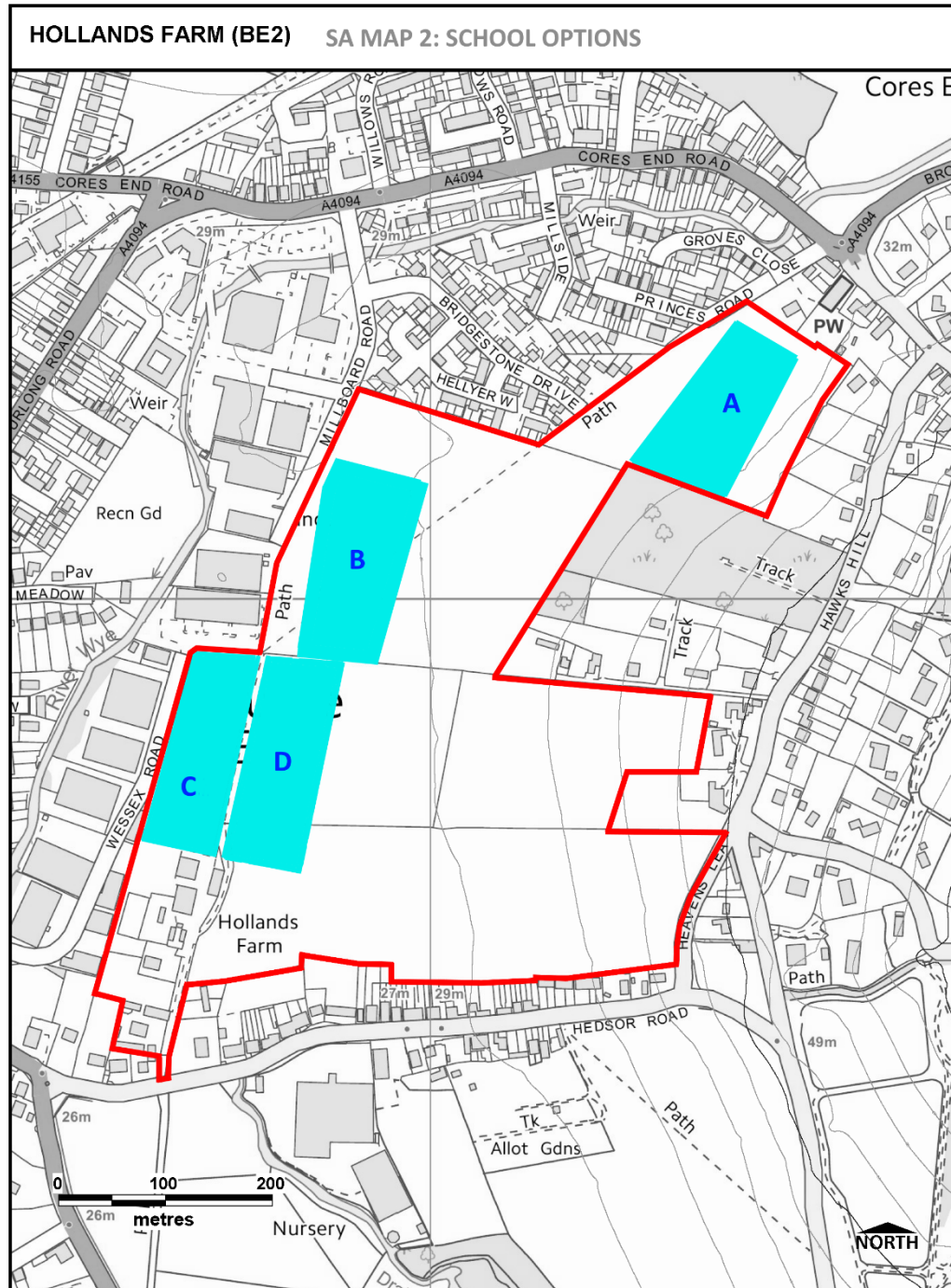
Figure 5.2: Options for Theme 1



Theme 2: Locating the new primary school

5.15 Recognising the policy requirement to deliver a new school, master-planning work has identified four potential on-site locations for the new primary school. These options are closely linked to the potential new road layout/ active travel links and seek to minimise landscape impacts whilst remaining compatible with the existing surrounding land uses. The potential locations are identified in **Figure 5.3**.

Figure 5.3: Options for the location of the new primary school



Legend

School location options A-D

5.16 It was also deemed appropriate at this stage to explore the potential merits and disadvantages of providing the school off-site. Whilst a precise off-site location is not identified at this stage, the option is included for assessment.

5.17 On this basis, five options for the location of the new primary school are established:

- **Option A:** On-site (north off Princes Road)
- **Option B:** On-site (north-west off Millboard Road)
- **Option C:** On-site (west off Wessex Road)
- **Option D:** On-site (inset west)
- **Option E:** Off-site (precise location unknown)

Theme 3: Open space and boundary treatment

5.18 In conceptualising open space and boundary treatment through master-planning a number of inter-related options arise, each of which present reasonable alternative options in themselves. On this basis, the following sub-themes were established:

- **Sub-theme 3a** - the location of new strategic open space
- **Sub-theme 3b** - options for the landscape buffer at Hawks Hill/ Harvest Hill (informal open space)
- **Sub-theme 3c** - boundary treatment at Hedsor Road and Riversdale Conservation Area

5.19 Each of these sub-themes are explored in turn below.

Sub-theme 3a - the location of new strategic open space

5.20 Recognising the policy requirement to deliver new open space, master-planning work has identified two potential on-site locations for strategic open space alongside the opportunity to provide public access and biodiversity enhancements to the former orchard at the adjacent deciduous woodland habitat connecting the site with Hawks Hill. These options are considered alongside the potential to deliver open space at an alternative off-site location for which the merits and disadvantages should be explored.

5.21 On this basis, four options for the location of new open space are identified:

- **Option A:** On-site (adjacent to Millboard Road)
- **Option B:** On-site (adjacent to Wessex Road)
- **Option C:** Off-site (precise location unknown)
- **Option D:** Off-site (community orchard opportunity at Hawks Hill)

Sub-theme 3b - options for the landscape buffer at Hawks Hill/ Harvest Hill (informal open space)

5.22 Recognising the parameters of Policy BE2 which requires that development maintains a degree of separation with Hawks Hill/ Harvest Hill, a landscape buffer is deemed necessary along the eastern boundary. This is also recognised in the WDLP indicative layout plan.

5.23 Master-planning has identified the options of either open space, woodland or a mixture of the two to form the landscape buffer in this area. On this basis, the following options are established:

- **Option E:** Open space
- **Option F:** Woodland

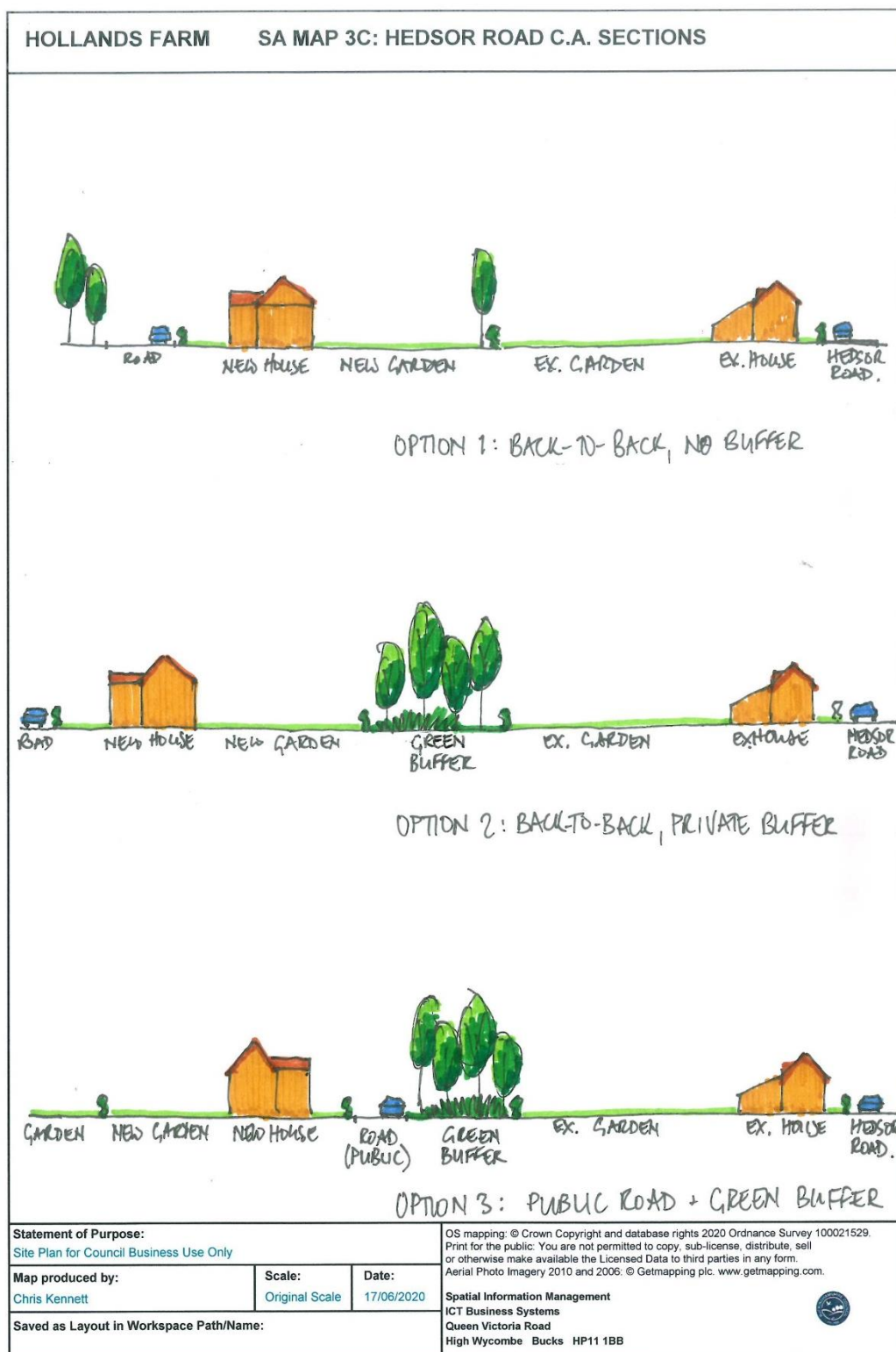
- **Option G:** Mixture of open space and woodland

Sub-theme 3c - options for boundary treatment at Hedsor Road and Riversdale Conservation Area

5.24 In line with Policy BE2, special regard is given to the surrounding historic environment, and of particular concern is the adjacent Hedsor Road and Riversdale Conservation Area in the south of the site. Master-planning has identified three options for boundary treatment in this area and **Figure 5.4** illustrates these options in greater detail:

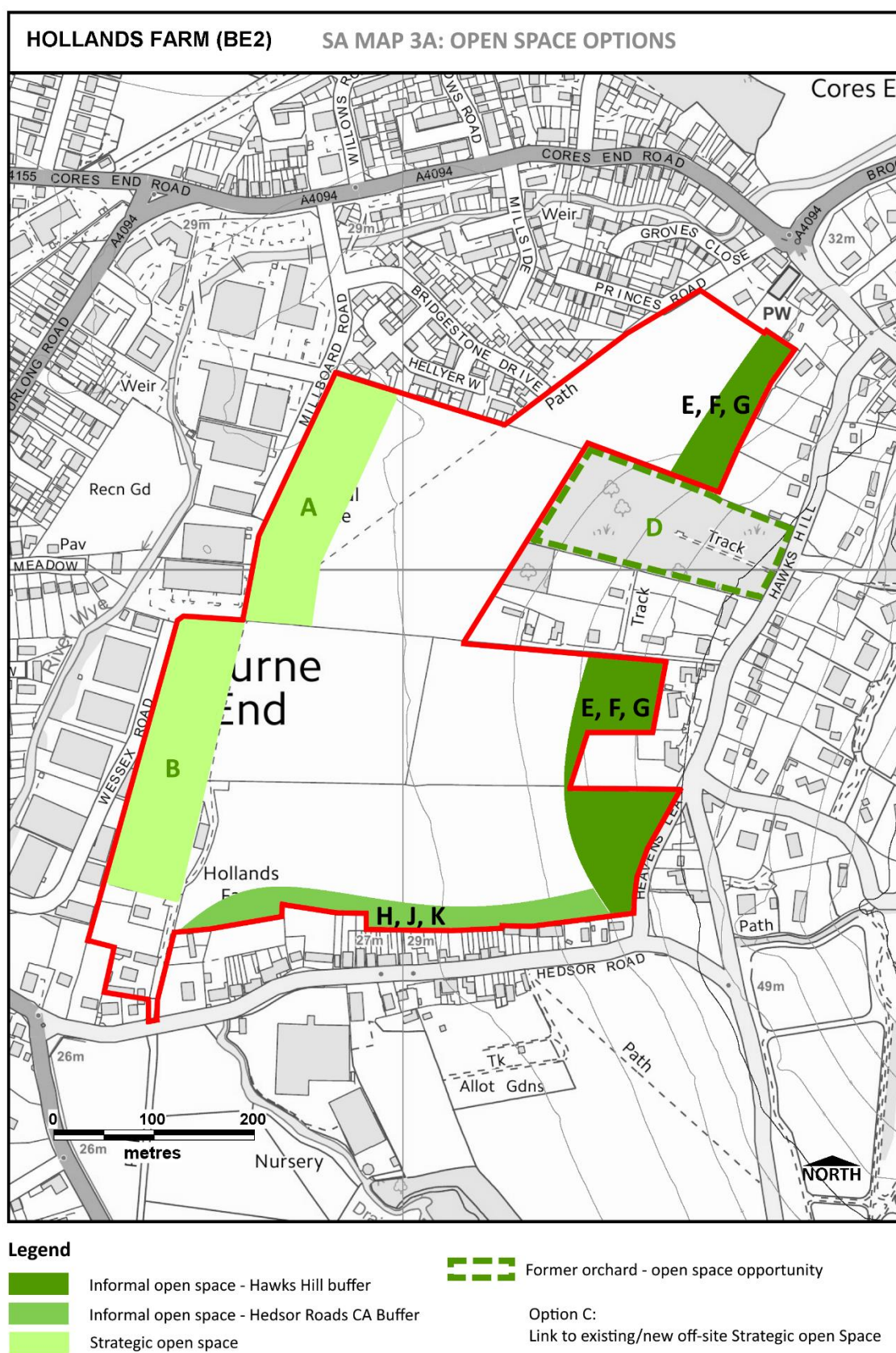
- **Option H:** Back-to-back with no buffer
- **Option J:** Back-to-back with a private green buffer between residential gardens
- **Option K:** Green buffer with houses fronting onto public road

Figure 5.4: Options for boundary treatment at Hedsor Road and Riversdale Conservation Area



5.25 The location of each of the identified options under Theme 3 are depicted in **Figure 5.5** overleaf.

Figure 5.5: Location of options considered under Theme 3



Theme 4: Housing density

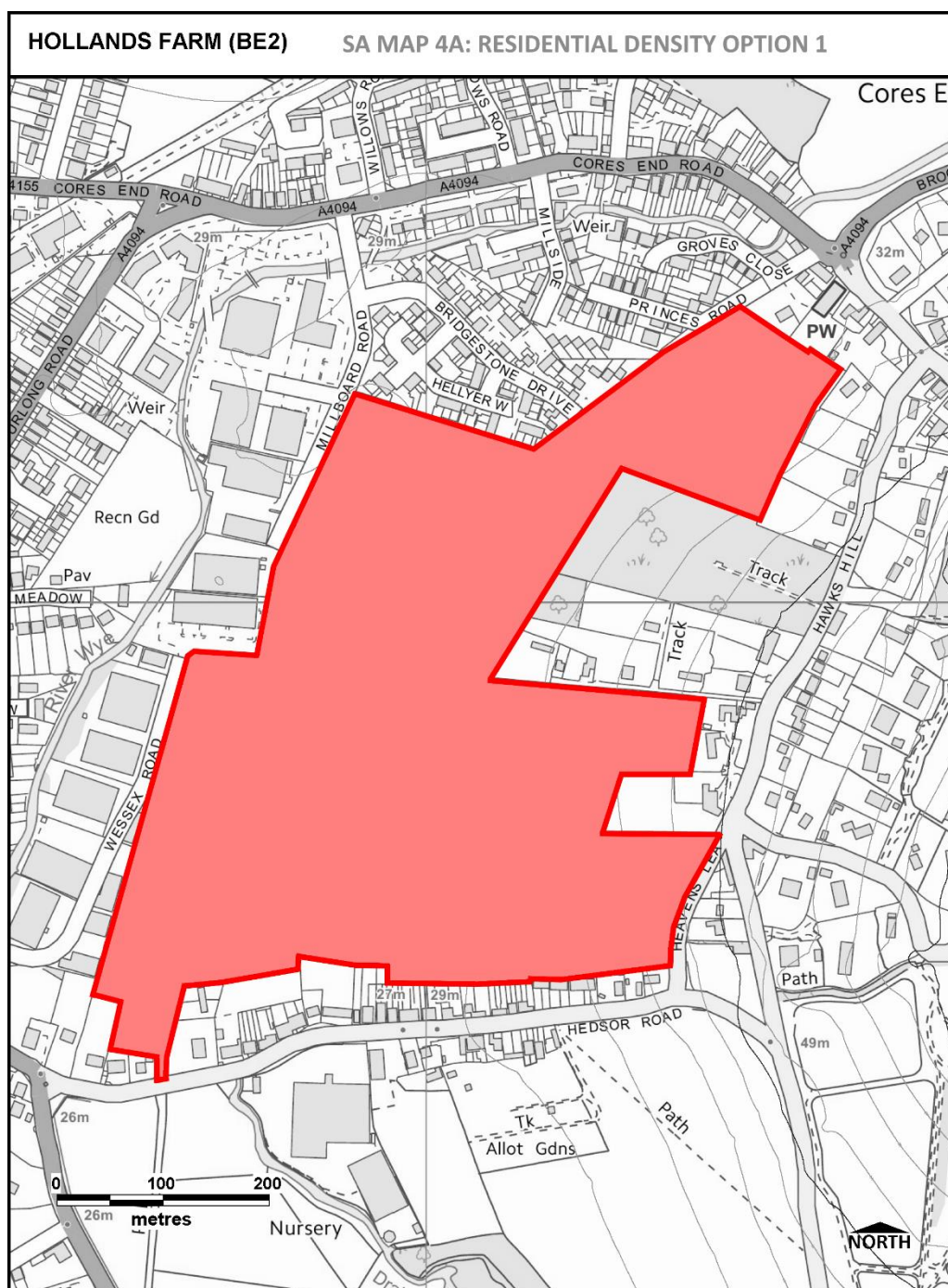
5.26 Whilst the level of growth at the site is set through the WDLP, the density of housing development across the site has potential implications in terms of its landscape and historic environment impact. Following a landscape-led approach (in line with Policy BE2) density options are therefore explored further in recognition of the potential to minimise landscape and historic environment impacts in this respect.

5.27 Master-planning has identified three options for housing density as follows:

- **Option 1:** Uniform medium density
- **Option 2:** East-west gradient
- **Option 3:** North-south gradient

5.28 These options are depicted in **Figures 5.6 - 5.8**.

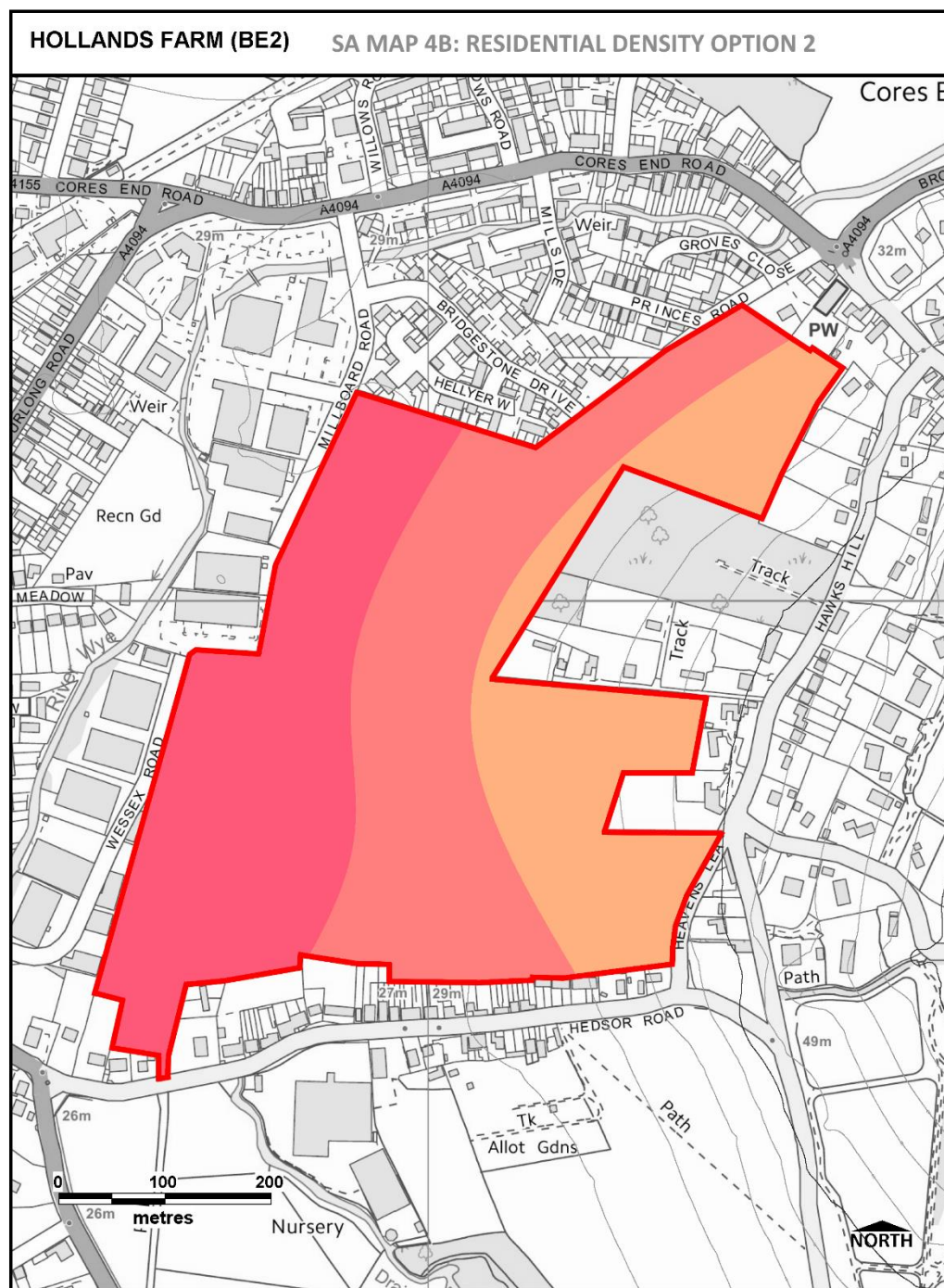
Figure 5.6: Theme 4 Option 1



Legend

Buildings - medium density (25-30 dph)

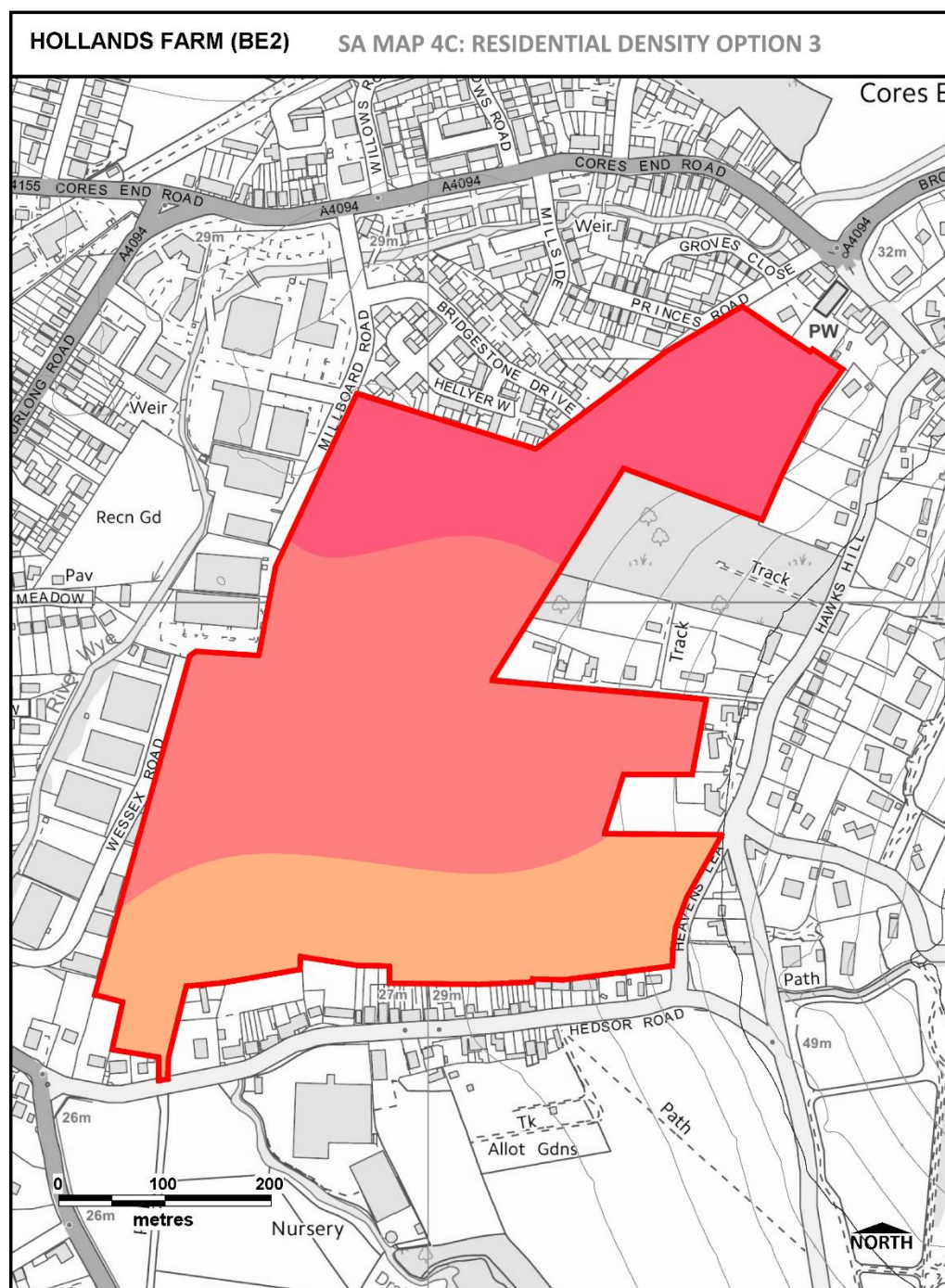
Figure 5.7: Theme 4 Option 2



Legend

- Buildings - higher density (35+ dph)
- Buildings - medium density (25-30 dph)
- Buildings - lower density (<20 dph)

Figure 5.8: Theme 4 Option 3



Legend

- Buildings - higher density (35+ dph)
- Buildings - medium density (25-30 dph)
- Buildings - lower density (<20 dph)

6. SA of reasonable alternatives

- 6.1 As identified above, four sets of options are established under the themes of; connectivity and movement, the location of the new primary school, open space and boundary treatment, and housing density. The options identified under each theme were subject to a comparative assessment against the SA framework.
- 6.2 It is important to reiterate that each set of options relate to themes that are considered as part of an iterative process, all following a landscape-led approach. Summary findings for alternatives under each set of options are presented in this chapter, and the full detailed assessment of these options is presented in **Appendix III**.

Methodology

- 6.3 For each of the options, the assessment examines likely **significant** effects on the baseline, drawing on the sustainability objectives identified through scoping (see **Table 3.1**) as a methodological framework. Green is used to indicate significant positive effects, whilst red is used to indicate significant negative effects.
- 6.4 Every effort is made to predict effects accurately; however, where there is a need to rely on assumptions in order to reach a conclusion on a 'significant effect' this is made explicit in the appraisal text (see **Appendix III** for detailed appraisal text).
- 6.5 Where it is not possible to predict likely significant effects based on reasonable assumptions, efforts are made to comment on the relative merits of the alternatives in more general terms and to indicate **a rank of preference**. This is helpful, as it enables a distinction to be made between the options even where it is not possible to distinguish between them in terms of 'significant effects'. Numbers are used to highlight the option or options that are preferred from an SA perspective with 1 performing the best.
- 6.6 Considering the above, it is important to refer to **Appendix III** for the full detailed assessment and narrative supporting the conclusions provided within this chapter.
- 6.7 Finally, it is important to note that effects are predicted taking into account the criteria presented within Regulations.⁸ So, for example, account is taken of the duration, frequency and reversibility of effects.

Theme 1: Connectivity and movement

- 6.8 Alternative options under this theme are established relating to three sub-themes:
- **Sub-theme 1a**; principal routes
 - **Sub-theme 1b**; secondary routes
 - **Sub-theme 1c**; active travel connections within and beyond the site
- 6.9 Each sub-theme is considered in turn below.

⁸ Schedule 1 of the Environmental Assessment of Plans and Programmes Regulations 2004.

Sub-theme 1a – principal routes

6.10 The two alternative options identified for the location of principal routes are:

- **Option A:** Route A + Route C (Princes Road to Hedsor Road)
- **Option B:** Route A + Route B + Route C (Princes Road + Millboard Road to Hedsor Road)

6.11 The summary findings of for the assessment of these options is provided in **Table 6.1** below.

Table 6.1: Summary assessment findings for Theme 1 - Sub-theme 1a

SA theme		Option A	Option B
Biodiversity	Likely significant effect?	No	No
	Rank	-	-
Climate change	Likely significant effect?	No	No
	Rank	2	1
Community wellbeing	Likely significant effect?	No	No
	Rank	2	1
Economy and employment	Likely significant effect?	No	No
	Rank	2	1
Historic environment	Likely significant effect?	No	No
	Rank	-	-
Landscape	Likely significant effect?	No	No
	Rank	-	-
Natural resources	Likely significant effect?	No	No
	Rank	1	2
Transport and traffic	Likely significant effect?	No	No
	Rank	2	1

Summary:

In terms of principal route coverage across the site, the options differ through the inclusion of Route B (under Option B) or not (under Option A). Overall, no significant effects are anticipated under either option, but the following differentiations can be made in respect of each route and route option:

- Route A (**Options A and B**); as a consistent consideration across all options (given the policy direction of Local Plan Policy BE2) Route A is noted for likely minor negative effects as a result of disturbance, noise, light and air pollution to species on-site and habitats adjacent to the site.
- Route B (**Option B**); is considered for limited additional impact in relation to most SA themes, including in relation to impacts on the landscape and the historic environment. The route will provide direct principal route access to adjacent employment areas and minor positive effects are anticipated in relation to the SA themes of community wellbeing and economy and employment as a result. The inclusion of this route under Option B also extends opportunities to address known and future flood risk north of the site in junction remodelling works.
- Route C (**Options A and B**); this north-south connection through the site is noted for potential minor negative effects in relation to climate change (with areas located within Flood Risk Zone 2 and adjacent to Flood Risk Zone 3), landscape and the historic environment (with direct connections to the Conservation Area). However, the connection is also considered for increasing accessibility across the site which may lead to benefits in relation to the climate change mitigation, community wellbeing and economy and employment SA objectives.

Sub-theme 1b – secondary routes

6.12 The four alternative options identified for the location of secondary routes are:

- **Option C:** Route B (connection to Millboard Road)
- **Option D:** Route D (connection to Wessex Road)
- **Option E:** Route E (connection to Heavens Lea)
- **Option F:** Route F (connection to Bridgestone Drive)

6.13 The summary findings for the assessment of these options is provided in **Table 6.2** below.

Table 6.2: Summary assessment findings for Theme 1 – Sub-theme 1b

SA theme		Option C	Option D	Option E	Option F
Biodiversity	Likely significant effect?	No	No	No	No
	Rank	2	1	1	2
Climate change	Likely significant effect?	No	No	No	No
	Rank	1	2	2	1
Community wellbeing	Likely significant effect?	No	No	No	No
	Rank	-	-	-	-
Economy and employment	Likely significant effect?	No	No	No	No
	Rank	1	1	2	1
Historic environment	Likely significant effect?	No	No	No	No
	Rank	1	1	2	1
Landscape	Likely significant effect?	No	No	No	No
	Rank	1	1	2	1
Natural resources	Likely significant effect?	No	No	No	No
	Rank	2	2	2	1
Transport and traffic	Likely significant effect?	No	No	No	No
	Rank	-	-	-	-

Summary:

None of the options are considered likely to lead to any significant effects. Options C and F may increase vehicular movement within the vicinity of the woodland habitat off Hawks Hill (adjacent to the site) marginally increasing the potential for minor negative effects associated with disturbance, noise, light and air pollution when compared to the remaining options. Option E may also lead to higher levels of vehicle presence within the vicinity of the historic townscape south of the site and affect levels of tranquillity around lower density housing in the east.

However, all options will enhance accessibility across the site, benefiting future and existing residents. The additional benefit of providing direct secondary route access to the adjacent employment area is recognised under Options C, D, and F, and Option E provides an opportunity to improve safe pedestrian access in the south of the site given roads south of the site are notably constrained by a lack of pavements.

SA theme	Option C	Option D	Option E	Option F
<p>Opportunities are recognised at Options C and F for road improvements to address known issues, which alongside the practical application of sustainable drainage systems can support reduced surface water flood risk in this area. Option F will also support positive effects in relation to land use and soil resources as the option utilises an existing road connection.</p> <p>Considering the various opportunities outlined above, it is recognised that multiple routes (i.e. progression of more than one option) could maximise benefits in relation to the SA themes of community wellbeing, economy and employment and traffic and transport.</p>				

Sub-theme 1c – active travel connections within and beyond the site

6.14 The eight alternative options identified for the location of active travel connections are:

- **Option G:** Combined route H-J-L providing east-west link between Hawks Hill and Wessex Road;
- **Option H:** Combined route P-M-K. Link route P via Garibaldi Pub (community owned) subject to agreement;
- **Option I:** Route G providing link to Wessex Road;
- **Option J:** Route R-N providing east-west link between Harvest Hill/ Hawks Hill PRoW and Millboard Road PRoW via Orchard;
- **Option K:** Route O providing a potential link to nearby recreational ground via industrial estate;
- **Option L:** Route Q providing a potential link between southern end of the site and Hawks Hill/ Harvest Hill PRoW to the east;
- **Option M:** Routes V and W providing a diversion to existing PRoW but retaining north-south link connecting Hedsor Road to Princes Road; and
- **Option N:** Existing PRoW Routes S, T and U retaining north-south link connecting Hedsor Road to Princes Road.

6.15 The summary findings for the assessment of these options is provided in **Table 6.3** below.

Table 6.3: Summary assessment findings for Theme 1 – Sub-theme 1c

SA theme		Option G	Option H	Option I	Option J	Option K	Option L	Option M	Option N
Biodiversity	Likely significant effect?	No	No	No	No	No	No	No	No
	Rank	1	1	1	2	1	1	2	1
Climate change	Likely significant effect?	No	No	No	No	No	No	No	No
	Rank	1	1	1	1	1	1	1	2
Community wellbeing	Likely significant effect?	No	No	No	No	No	No	No	No
	Rank	2	1	2	1	2	1	2	2
Economy and employment	Likely significant effect?	No	No	No	No	No	No	No	No
	Rank	1	2	1	2	1	2	2	2
Historic environment	Likely significant effect?	No	No	No	No	No	No	No	No
	Rank	2	1	2	2	2	1	2	2
Landscape	Likely significant effect?	No	No	No	No	No	No	No	No
	Rank	-	-	-	-	-	-	-	-
Natural resources	Likely significant effect?	No	No	No	No	No	No	No	No
	Rank	-	-	-	-	-	-	-	-
Transport and traffic	Likely significant effect?	No	No	No	No	No	No	No	No
	Rank	2	1	2	1	2	1	2	2

Summary:

None of the options are considered likely to lead to any significant effects in relation to any of the SA themes. The provision of active travel routes is considered likely to lead to predominantly positive effects. Options H, J and L are considered for their potential to maximise benefits in relation to overall connectivity (by providing wider connections with existing PRoW surrounding the site). Options G, I and K will also deliver direct active travel connections to the employment area positively supporting the economy and employment SA theme. However, it is noted that use of permeable surfaces should be considered to minimise impacts in relation to surface water run-off and water quality. Options J and M are also noted for likely minor negative effects as a result of increased disturbance at the adjacent woodland habitat off Hawks Hill, and it is noted that existing surface water flood risk issues may reduce the potential use of Option N at times.

Theme 2: Locating the new primary school

6.16 The five alternative options identified for the location of the new primary school are:

- **Option A:** On-site (north off Princes Road)
- **Option B:** On-site (north-west off Millboard Road)
- **Option C:** On-site (west off Wessex Road)
- **Option D:** On-site (inset west)
- **Option E:** Off-site (precise location unknown)

6.17 The summary findings for the assessment of these options is provided in **Table 6.4** below.

Table 6.4: Summary assessment findings for Theme 2

SA theme		Option A	Option B	Option C	Option D	Option E
Biodiversity	Likely significant effect?	No	No	No	No	No
	Rank	1	2	2	2	3
Climate change	Likely significant effect?	No	No	No	No	No
	Rank	1	2	2	2	3
Community wellbeing	Likely significant effect?	Yes	Yes	Yes	Yes	Yes
	Rank	1	2	2	2	3
Economy and employment	Likely significant effect?	No	No	No	No	No
	Rank	-	-	-	-	-
Historic environment	Likely significant effect?	No	No	No	No	No
	Rank	2	1	1	1	3
Landscape	Likely significant effect?	No	No	No	No	No
	Rank	1	1	1	1	2
Natural resources	Likely significant effect?	No	No	No	No	No
	Rank	-	-	-	-	-
Transport and traffic	Likely significant effect?	No	No	No	No	No
	Rank	1	1	1	1	2

Summary:

All options are considered likely to support existing and new communities with good educational access and lead to significant positive effects for community wellbeing. It is also recognised that all options will also place pressure on the surrounding local roads – particularly during school run hours, and minor negative effects are anticipated in this respect. All on-site options can connect with the existing/ diverted PRow on-site to maximise active travel connections and mitigate negative effects in this respect.

On-site Option A, whilst located in close proximity to Listed Buildings at Kiln Lane and the woodland habitat off Hawks Hill, is considered likely to support the transition between new and existing housing in the north of the site, alongside the landscape buffer, and could provide good access for existing residents north and east of the site. However, given its edge of site location, traffic implications are more likely to extend the site potentially affecting local roads to a greater degree when compared to the remaining on-site options.

On-site Options B-D will avoid sensitive habitats and heritage assets. Whilst the options locate the school close to employment uses, additional open space could reduce/ avoid impacts relating to health and safety and development in this area of the site can provide a transitional area between existing employment uses adjacent to the site and new housing on-site.

As an off-site location is not precisely identified under Option E, the likely effects are difficult to ascertain, and the Option is ranked least favourable on this basis.

Theme 3: Open space and boundary treatment

6.18 Alternative options under this theme are established relating to three sub-themes:

- **Sub-theme 3a** - the location of new strategic open space
- **Sub-theme 3b** - options for the landscape buffer at Hawks Hill/ Harvest Hill (informal open space)
- **Sub-theme 3c** - boundary treatment at Hedsor Road and Riversdale Conservation Area

6.19 Each sub-theme is considered in turn below.

Sub-theme 3a - the location of new strategic open space

6.20 The four alternative options identified for the location of new open space provisions are:

- **Option A:** On-site (adjacent to Millboard Road)
- **Option B:** On-site (adjacent to Wessex Road)
- **Option C:** Off-site (precise location unknown)
- **Option D:** Off-site (community orchard opportunity at Hawks Hill)

6.21 The summary findings for the assessment of these options is provided in **Table 6.5** below.

Table 6.5: Summary assessment findings for Theme 3 – Sub-theme 3a

SA theme		Option A	Option B	Option C	Option D
Biodiversity	Likely significant effect?	No	No	No	No
	Rank	1	1	2	3
Climate change	Likely significant effect?	No	No	No	No
	Rank	2	1	3	2
Community wellbeing	Likely significant effect?	No	No	No	No
	Rank	2	1	4	3
Economy and employment	Likely significant effect?	No	No	No	No
	Rank	1	1	2	2
Historic environment	Likely significant effect?	No	No	No	No
	Rank	2	2	3	1
Landscape	Likely significant effect?	No	No	No	No
	Rank	-	-	-	-
Natural resources	Likely significant effect?	No	No	No	No
	Rank	-	-	-	-
Transport and traffic	Likely significant effect?	No	No	No	No
	Rank	1	1	2	1

Summary:

The delivery of new open space under all options is considered likely to support minor long-term positive effects in relation to community wellbeing (for both existing and new communities), biodiversity, climate change, natural resources, landscape and historic environment.

SA theme	Option A	Option B	Option C	Option D
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The benefits of locating open space on-site are recognised under Options A and B; namely in providing good accessibility, a buffer between new housing on-site and the adjacent employment area, and under Option B potentially supporting reduced flood risk protecting people and properties on-site.

Sub-theme 3b - the landscape buffer at Hawks Hill/ Harvest Hill (informal open space)

6.22 The three alternative options identified for the landscape buffer at Hawks Hill/ Harvest Hill are:

- **Option E:** Open space
- **Option F:** Woodland
- **Option G:** Mixture of open space and woodland

6.23 The summary findings for the assessment of these options is provided in **Table 6.6** below.

Table 6.6: Summary assessment findings for Theme 3 – Sub-theme 3b

SA theme		Option E	Option F	Option G
Biodiversity	Likely significant effect?	No	No	No
	Rank	2	2	1
Climate change	Likely significant effect?	No	No	No
	Rank	3	1	2
Community wellbeing	Likely significant effect?	No	No	No
	Rank	-	-	-
Economy and employment	Likely significant effect?	No	No	No
	Rank	-	-	-
Historic environment	Likely significant effect?	No	No	No
	Rank	3	1	2
Landscape	Likely significant effect?	No	No	No
	Rank	1	2	1
Natural resources	Likely significant effect?	No	No	No
	Rank	-	-	-
Transport and traffic	Likely significant effect?	No	No	No
	Rank	-	-	-

Summary:

None of the options are considered likely to lead to any significant effects in relation to any of the SA themes. The provision of the buffer at this location (under all options) is likely to support positive effects by providing additional habitat supporting biodiversity and providing natural drainage. Woodland (under Options F and G) is also noted for the additional benefits of carbon sequestration. The buffer supports the setting of Listed Buildings along Kiln Lane and woodland (under Options F and G) is recognised for additional screening benefits in this respect. However, landscape character evidence suggests that open space and sparse woodland is more in keeping with the overall landscape character of this area. Therefore, evidence suggests Option E followed by Option G would perform marginally better against the SA theme of Landscape than Option F.

Sub-theme 3c - boundary treatment at Hedsor Road and Riversdale Conservation Area

6.24 The three alternative options identified for boundary treatment at Hedsor Road and Riversdale Conservation Area are:

- **Option H:** Back-to-back with no buffer
- **Option J:** Back-to-back with a private green buffer between residential gardens
- **Option K:** Green buffer with houses fronting onto public road

6.25 The summary findings for the assessment of these options is provided in **Table 6.7** below.

Table 6.7: Summary assessment findings for Theme 3 – Sub-theme 3c

SA theme		Option H	Option J	Option K
Biodiversity	Likely significant effect?	No	No	No
	Rank	3	1	2
Climate change	Likely significant effect?	No	No	No
	Rank	2	2	1
Community wellbeing	Likely significant effect?	No	No	No
	Rank	1	1	2
Economy and employment	Likely significant effect?	No	No	No
	Rank	-	-	-
Historic environment	Likely significant effect?	No	No	No
	Rank	3	1	2
Landscape	Likely significant effect?	No	No	No
	Rank	3	1	2
Natural resources	Likely significant effect?	No	No	No
	Rank	2	1	1
Transport and traffic	Likely significant effect?	No	No	No
	Rank	2	2	1

Summary:

None of the options are considered likely to lead to any significant effects. The additional green buffer included within Options J and K is considered likely to support enhanced minor positive effects in relation to biodiversity and the historic environment (through additional screening). This is particularly enhanced under Option J which minimises disturbance to biodiversity (by making the green buffer private) and reduces vehicle presence in the immediate setting of the conservation area (by setting the road further back beyond new housing). However, Option K is considered for its potential to support road development with natural sustainable drainage systems potentially supporting reduced surface water flood risk in this area, and for providing scenic routes to promote active travel.

Theme 4: Housing density

6.26 The three alternative options identified for housing density are:

- **Option 1:** Uniform medium density
- **Option 2:** East-west gradient
- **Option 3:** North-south gradient

6.27 The summary findings for the assessment of these options is provided in **Table 6.8**.

Table 6.8: Summary assessment findings for Theme 4

SA theme		Option 1	Option 2	Option 3
Biodiversity	Likely significant effect?	No	No	No
	Rank	1	1	2
Climate change	Likely significant effect?	No	No	No
	Rank	2	2	1
Community wellbeing	Likely significant effect?	No	No	No
	Rank	1	2	1
Economy and employment	Likely significant effect?	No	No	No
	Rank	-	-	-
Historic environment	Likely significant effect?	No	No	No
	Rank	2	2	1
Landscape	Likely significant effect?	No	No	No
	Rank	2	2	1
Natural resources	Likely significant effect?	No	No	No
	Rank	2	2	1
Transport and traffic	Likely significant effect?	No	No	No
	Rank	-	-	-

Summary:

None of the options are considered likely to lead to any significant effects; however, the assessment identified some differences between them:

- Option 1; uniform densities are largely considered to 'fall in between' Options 2 and 3 in terms of performance. Whilst uniform densities offer potential to integrate housing more consistently in the landscape, it may also miss opportunities for example to reduce impacts in relation to the settlement edge in the south and designated Conservation Area.
- Option 2; by increasing density in the west of the site, this option is noted for potential minor negative effects in relation to community wellbeing (predominantly safety) given its proximity to the adjacent industrial warehousing employment area.
- Option 3; by increasing density in the north of the site this option is considered for potential minor negative effects of greater significance in relation to biodiversity, as a result of increased disturbance, noise, light and air pollution at the adjacent woodland habitat off Hawks Hill. Alternatively by reducing density in the south of the site, enhanced positive effects are anticipated in relation to climate change adaptation (by reducing development in the vicinity of fluvial flood risk zones) and landscape and historic environment (by reducing development in the setting of the designated Conservation Area and area where views are most predominant into the site impacting the settlement edge).

7. Developing the preferred approach

7.1 The Council have provided the following table setting out the reasons for the selection or rejection of options, in light of the alternatives assessment.

Table 7.1: Council's reasons for the selection/ rejection of options

Theme/ Option	Reasons for selection/ rejection
Theme 1: Connectivity and movement	
Sub-theme 1a – principal routes	
Option A	Selected - Accords with policy. No deliverability issues. Provides a direct north south link, suitable for a bus route to be diverted.
Option B	Selected – offers greater connectivity from Cores End road. Advantageous if the school is located to the west of the Employment Area, multiple routes for school traffic to enter and leave the site. Millboard Road is subject to deliverability, currently in private ownership. The highway authority would need to adopt it. Final route to be determined at the planning application stage.
Theme 1: Connection and movement	
Sub-theme 1b – secondary routes	
Option C	Selected – Offers connectivity. Advantageous if the school is located to the west of the Employment Area, multiple routes for pedestrians to enter and leave the site. Millboard Road is subject to deliverability, currently in private ownership. Highway authority would need to adopt the road.
Option D	Rejected – Industrial road would be unsuitable to take additional traffic from the development. Also, outside of developer ownership, deliverability issues.
Option E	Rejected – link onto Heavens Lea considered unsafe by the Highway Authority. It is a narrow road with no footpaths with steep hedges either side.
Option F	Potential option – Already footpath connection. Vehicular access would increase connectivity towards the town centre. Would need to ensure the connection does not have an adverse impact on local residents. To be decided at the planning application stage.
Theme 1: Connectivity and movement	
Sub-theme 1c – active travel connections with and beyond the site	
Option G	Selected – provides an E – W linkage through the site internally. Precise location will be subject to block layout which will be determined at the planning application stage.
Option H	Selected – this route provides a wider connection to Hedsor Road and PRoW south of the site into the wider countryside. This route requires permission from the Garibaldi pub which the footpath would need to cross, therefore subject to deliverability. The location of M would also help to maintain wider views of the large TPO trees into the site from the south.
Option I	Selected – this route would provide a link to the recreation ground and further beyond to the Bourne End train station. There are deliverability issues, crossing through private land at Wessex Road employment site and also a crossing over the River Rye.
Option J	Selected – this route would provide an eastern link to Hawks hill and the existing PRoW going east. The former orchard provides an opportunity to increase biodiversity whilst having community benefits.
Option K	Selected – this route would provide a link to the recreation ground and further beyond to the Bourne End train station. There are deliverability issues, crossing through private land at Wessex Road employment site and also a crossing over the River Rye.
Option L	Rejected – Heavens Lea road is not suitable for pedestrian movement. It is a narrow road with no footpaths and therefore not considered safe by the

Theme/ Option	Reasons for selection/ rejection
	Highway Authority. The land steeply rises, the change in levels would not be favourable for a footpath in this location.
Option M	Selected – The diversion would allow for more regular block shapes, therefore advantageous for best use of land. It would also build on existing green space/corridors, creating a more pedestrian friendly environment.
Option N	Rejected – existing route would result in triangulation of blocks, resulting in odd block shapes. This would not be the best use of land.

Theme 2: Locating the new primary school

Option A	No options have been discounted at this stage. Option A would be the least favourable. A 1.1ha site for the school would leave an oddly shaped parcel of remaining land, it would also be located close to existing residential development and likely to increase congestion on Cores End Road/ roundabout.
Option B	No options have been discounted at this stage. Option B is the preferred option, benefiting from two northern access points, Princes Road and Millboard Road. It would also act as a buffer to the Millboard Road employment area. Centrally located it would be in walking distance to all of the site and existing residential areas towards the town centre. This is also the flattest part of the site.
Option C	No options have been discounted at this stage. Option C – less connected to the rest of the site but is located on flat ground and would act as a buffer to the Wessex Road industrial site.
Option D	No options have been discounted at this stage. Option D – Also relatively flat area of land. Not as connected as options A and B being located in the southern part of the site.
Option E	No options have been discounted at this stage. Option E – Rejected. Currently there is no known option for expanding an existing school nearby, therefore not deliverable.

Theme 3: Open space and boundary treatment

Sub-theme 3a – the location of new strategic open space

Option A	Selected - Option A and B both supported for strategic open space. Preferred option will be dependent on the location of the primary school.
Option B	Selected - Option A and B both supported for strategic open space. Preferred option will be dependent on the location of the primary school.
Option C	Rejected - Option C rejected as no known deliverable location nearby to expand or locate new sports pitches.
Option D	Selected - Option D supported. Helps to fulfil the policy objective of providing community access and ongoing management to the former orchard.

Theme 3: Open space and boundary treatment

Sub-theme 3b – the landscape buffer at Hawks Hill/ Harvest Hill (informal open space)

Option E	Rejected - Option E and F rejected as a mixture of open space and woodland is preferred, responding to the different boundary types. Tree belts creates more of a visual separation, whereas open space could have a dual use providing informal open space for local resident's recreational areas.
Option F	Rejected - Option E and F rejected as a mixture of open space and woodland is preferred, responding to the different boundary types. Tree belts creates more of a visual separation, whereas open space could have a dual use providing informal open space for local resident's recreational areas.
Option G	Selected - Option G is supported as a mixture of trees and open space will be appropriate dependent on the precise location along the buffer. A

Theme/ Option	Reasons for selection/ rejection
	woodland is preferred adjacent to Heavens Leas as this will create a greater sense of separation to Heavens Lea, which is a policy objective.
Theme 3: Open space and boundary treatment	
Sub-theme 3c – boundary treatment at Hedsor Road and Riversdale Conservation Area	
Option H	Rejected - Option H – rejected. This would have an adverse impact on the Hedsor and Riversdale Conservation Area. It would result in no separation between those buildings in the conservation area and the new development.
Option J	Selected - Option J – preferred. This would create a tree belt to the rear of the conservation area, separating it from the development. Being within residential gardens would prevent ongoing management issues. All trees would be TPO'd to ensure perpetuity.
Option K	Rejected - Option K – rejected. It is not considered good to design to have public areas fronting onto the rear of private residential properties. The green buffer would also require long term management and could attract anti-social behaviour.
Theme 4: Housing density	
Option 1	Selected - No options have been discounted. This would be the least favourable as changing densities help create different character areas, responding to the surrounding environment.
Option 2	Selected - No options have been discounted. Preferred option, as this responds to the existing surrounding densities, with larger plots located to the west of the site.
Option 3	Selected - No options have been discounted. The northern end of the site is adjacent to the highest density development, which is reflected in this option.

Part 2: What are the SA findings at this stage?

8. Introduction (to Part 2)

- 8.1 This part of the report presents an assessment of the draft Hollands Farm Development Brief SPD as a whole.
- 8.2 It is important to reiterate at this stage that the Development Brief cannot set new policy provisions for development at the Hollands Farm site.
- 8.3 Whilst the Development Brief is a site-specific document, this assessment remains strategic in nature to meet the requirements of the SEA Regulations.⁹

Methodology

- 8.4 The assessment identifies and evaluates 'likely significant effects' on the baseline, drawing on the sustainability objectives identified through scoping (see **Table 3.1**) as a methodological framework.
- 8.5 Every effort is made to predict effects accurately; however, this is inherently challenging given the nature of the document under consideration and understanding of the baseline (now and in the future under a 'no SPD' scenario) that is inevitably limited. Given uncertainties there may be a need to make assumptions, e.g. in relation to plan implementation and aspects of the baseline that might be impacted. Assumptions are made cautiously and explained within the text (with the aim of striking a balance between comprehensiveness and conciseness). In many instances, given reasonable assumptions, it is not possible to predict 'significant effects', but it is possible to comment on merits (or otherwise) of the draft Brief in more general terms.
- 8.6 Finally, it is important to note that effects are predicted taking account of the criteria presented within Schedule 1 of the SEA Regulations. So, for example, account is taken of the probability, duration, frequency and reversibility of effects as far as possible. Cumulative effects are also considered, i.e. the potential for the SPD to impact an aspect of the baseline when implemented alongside other plans, programmes and projects. These effect 'characteristics' are described within the assessment as appropriate.

⁹ Environmental Assessment of Plans and Programmes Regulations 2004 (the SEA Regulations)

9. SA of the Draft Development Brief

- 9.1 The assessment is presented below under eight topic headings, reflecting the established assessment framework (see Section 3). A final section then presents overall conclusions.

Biodiversity

- 9.2 In relation to biodiversity, the draft Brief clearly sets out the constraints and opportunities in relation to both green and blue infrastructure as well as ecology providing detailed information to inform subsequent planning applications and supporting long-term positive effects in this respect.
- 9.3 The site is recognised to be of limited biodiversity value with few green infrastructure assets on site, and no designated ecological sites within or adjoining the site. Despite this, mature trees and historic and priority habitats exist on-site (in the form of hedgerows) and adjoin the site in the east (Orchard off Hawks Hill) which contribute to wider ecological connectivity. Trees and hedgerows on-site are recognised for their potential to support species such as bats and badgers, and it is considered likely that wildlife crosses the site to gain access to the river. Mature gardens surrounding the site are also considered likely to support ecological connectivity, particularly east of the site. The draft Brief recognises the potential to avoid losses of contributing features in development and avoid long-term negative effects in this respect; however, minor long-term negative effects are still anticipated as a result of increased severance, disturbance, noise, light and air pollution.
- 9.4 The draft Brief emphasises that whilst the site has limited constraints, it sits within a wider more sensitive river corridor area which is also recognised as a Biodiversity Opportunity Area (BOA) and Green Corridor Opportunity Area (Opportunity Area 11).
- 9.5 Associated BOA targets considered achievable in development on-site are identified as the creation, management and restoration of hedgerows and lowland meadows, and the management and restoration of chalk rivers (The River Wye). Where appropriate, development could also contribute to the management and restoration of traditional orchards, eutrophic standing water, woodland, and wood pasture and parkland habitats. Such detail is considered likely to focus biodiversity net gain opportunities in development to areas that maximise benefits in terms of its wider ecological connectivity.
- 9.6 The draft Brief further recognises the potential for development on site to expand green infrastructure networks and enhance links to the surrounding area and green infrastructure assets. As a result, minor long-term positive effects can be anticipated if development proposals recognise the opportunities *“to enrich biodiversity by providing new habitats, strengthening ecological corridors and linking to the wider GI network.”*
- 9.7 In the wider context, the HRA concludes that provided a suitable package of enhancements is delivered at Little Marlow Lakes Country Park, in consultation with Natural England, there will be no adverse effects of the Hollands Farm SPD on the site integrity of the Burnham Beeches Special Area of Conservation (SAC). The draft Brief identifies the potential to relieve the pressure of visitors to Burnham Beeches Special Area of Conservation (SAC) by providing new recreational open space and robust green infrastructure networks.
- 9.8 Drawing on this context the draft Brief outlines the vision, objectives and principles for development in relation to green and blue infrastructure and ecology. This includes the objective to *“adopt a landscape-led approach to site layout and green infrastructure which responds sensitively to the surrounding environment”* and actions to:

- facilitate future long-term public access and biodiversity enhancement to the adjacent orchard at Hawks Hill;
- integrate trees, green infrastructure and open space;
- create the framework for a development that delivers a biodiversity net gain and enhances green infrastructure; and
- contribute to specific improvements at Little Marlow Lakes Country Park that will mitigate recreational impacts at Burnham Beeches SAC.

9.9 The following principles are established for development which directly relate to the biodiversity SA theme:

- Retain and protect existing mature trees and hedgerows within the site and at/adjoining the site perimeter, incorporating these into public open spaces and green corridors;
- Use new tree planting to protect/reinforce the setting of nearby heritage assets, where appropriate;
- Design, integrate and link public open spaces and green corridors as part of wider networks of open space, green infrastructure and biodiversity;
- Minimising severance and disturbance of hedgerow connections and maintaining generous undeveloped buffers (e.g. 10m to either side);
- Providing new/alternative green corridors and wildlife crossings/tunnels;
- Minimising lighting and hard surfacing along hedgerows, in green spaces and other areas of ecological sensitivity;
- Incorporating native tree/shrub species, native wildflower mixes and sympathetic SuDS features within green corridors;
- Using plant species and features throughout that provide food, water and shelter for wildlife;
- Providing structural features throughout the site for nesting, roosting and hibernation, and to aid movement at ground level between plots/gardens; and
- New biodiversity gain is required and should be demonstrated through biodiversity accounting.

9.10 Overall, the site is not considered particularly sensitive in biodiversity terms. The detailed and extensive development principles provided in relation to biodiversity are considered likely to support overall net gain and biodiversity enhancements on site, and opportunities are recognised to link enhancements on-site with the wider Biodiversity Opportunity Area targets. As a result, **minor long-term positive effects** are anticipated.

Climate change

9.11 In relation to climate change adaptation, the draft Brief clearly sets out the constraints and opportunities in relation to flood risk and air quality providing information to inform subsequent planning applications and supporting the minimisation of negative effects and maximisation of positive effects in this respect.

9.12 The draft Brief identifies that the site lies predominantly in Flood Zone 1 (lowest risk); however, fluvial Flood Zones 2 and 3 border the site in the south, extending slightly into the south west corner of the site, and affect the road access points in both the north and south of the site. The draft Brief recognises the opportunity for development *“to address local issues with fluvial flooding as part of new road junction designs.”*

- 9.13 Alongside this, low levels of groundwater flooding occur along the site's western margin and groundwater levels are generally high in central and western parts of the site. This is a notable constraint which is recognised to restrict the scope for sustainable drainage system solutions.
- 9.14 Drawing on this context the draft Brief outlines the vision, objectives and principles for development in relation to flood risk and sustainable drainage systems. This includes the objective to *"ensure development does not increase fluvial or surface water flood risk"* with actions to *"ensure residential development avoids areas of fluvial Flood Zone 2"* and *"incorporate sustainable drainage throughout the site"* whilst ensuring that *"flood risk is not worsened either on- or off-site"*.
- 9.15 Principles for sustainable drainage systems are established, and the draft Brief identifies that *"Source control SuDS should be prioritised, as this will assist with incorporating SuDS into the landscape across the site to mimic natural drainage processes and create blue-green corridors. The surface water drainage scheme should seek to meet all four pillars of sustainable drainage (water quantity, quality, biodiversity and amenity) and 'End of pipe' solutions are not desirable. The preference is for above ground SuDS which provide multifunctional benefits, such as tree pits, bioretention areas and swales. A detailed SuDS strategy will need to form part of a future planning application."*
- 9.16 Despite little contextual information in relation to climate change mitigation, the draft Brief draws together climate change and sustainability measures which are likely to support climate change mitigation. This includes principles relating to accessibility and prioritising more sustainable forms of travel, particularly wider active travel connections, as well as energy efficiency measures and renewable energy opportunities. Detailed design principles supporting climate change mitigation include:
- Active/ passive design in buildings and landscaping to aid heating/ cooling and microclimate;
 - Use of BRE Green Guide construction materials;
 - Minimising construction waste and maximising re-use/ recycling;
 - Incorporate high standards of energy efficiency;
 - Capture renewable energy sources through solar thermal/ voltaic panels and ground/ air source heat pumps;
 - Consider modular on-site CHP and/ or connection to a wider district heating system;
 - Incorporate high standards of water efficiency and provide for grey water recycling;
 - Provide suitable infrastructure for electric vehicle charging;
 - Incorporate green roofs to suitable buildings, such as the school, to enhance biodiversity and increase building insulation; and
 - Incorporate detailed provision for biodiversity/ wildlife such as bird/ bat boxes and wildlife gates/ corridors.
- 9.17 It is considered that opportunities to identify the links between such on-site initiatives and wider Council aims in relation to climate change mitigation and climate resilience are missed in 'part one' of the draft Brief (the contextual analysis). It is recommended that additional context is provided to better secure the responsive on-site measures required.

- 9.18 Overall, the detailed guidance to address known flood risk constraints on-site, alongside detailed design and general principles which support climate change mitigation, **minor long-term positive effects** are anticipated.

Community wellbeing

- 9.19 The Development Brief clearly sets out the constraints and opportunities in relation to services and amenities and noise and vibration providing information to inform subsequent planning applications and support the minimisation of negative effects and maximisation of potential positive effects.
- 9.20 The site is relatively well located in terms of accessibility, with existing provisions in the south along Hedsor Road, and to the northwest heading to the centre of Bourne End. Employment opportunities also lie adjacent at Millboard Road and Wessex Road. Additional provisions in development (such as the new school) are likely to support improved accessibility in the east of the settlement and result in positive long-term effects for both existing and new residents in this respect.
- 9.21 However, concerns exist in relation to the adjacent employment uses to the site, where the variety of businesses have scope for noise, dust, vibration and air pollution emissions which may negatively affect new communities. It is also recognised that development may elevate noise and air pollution along the A4094 and A4155 at peak traffic times potentially affecting resident health and wellbeing. The draft Brief recognises the opportunity in development to use open space as a buffer and reduce negative effects in this respect.
- 9.22 Drawing on this context the Development Brief outlines the vision, objectives and principles for development in relation to services and amenities. This includes the objective to “*provide necessary community facilities to support the site*” and actions to provide a 1FE primary school, 2 junior sports pitches, a Multi-Use Games Area (MUGA) and a Teen Recreation Facility, as well as public open space.
- 9.23 A detailed design principle is established for development to combat site-specific concerns in relation to health and wellbeing which ensures “*The proposed development will take account of existing and new sources of noise, vibration and air pollution and take steps to minimise their effects upon existing and new residents*”.
- 9.24 Alongside the above, wider principles which seek to; deliver high-quality, climate-resilient new housing and infrastructure, improve sustainable transport access, active travel opportunities and green infrastructure networks, and integrate development to create cohesive new communities, are considered likely to indirectly support community health and wellbeing. Long-term minor positive effects are anticipated in this respect.
- 9.25 Overall, the draft Brief outlines the measures necessary to avoid negative effects in relation to community health and wellbeing and facilitates high-quality development and new provisions which are required to support the growing population in this area. As a result, **significant long-term positive effects** are anticipated in relation to community wellbeing.

Economy and employment

- 9.26 Whilst not directly addressing the opportunities and constraints in relation to economy and employment, the draft Brief clearly sets out the historic evolution of the employment areas within Bourne End, and provides a detailed overview of the character of the existing employment areas adjacent to the site. The detail is likely to inform subsequent planning applications, particularly in design and layout, and support positive effects in this respect.

- 9.27 The draft Brief identifies existing pedestrian access to the adjacent employment areas, and the support provided for the retention and enhancement of this route is likely to support improved accessibility and long-term minor positive effects. Further to this, the draft Brief recognises the potential to increase connectivity in development with new western road access points and connections through the site, and long-term minor positive effects are anticipated in this respect.
- 9.28 Drawing on this context, the draft Brief includes actions to *“mitigate visual and other impacts arising from the industrial buildings along Millboard Road and Wessex Road”, “identify how the existing Public Right of Way routes through the site would benefit from being diverted, to better serve the development and the wider area”, and “identify to what extent Millboard Road and Princes Road provide vehicular/ pedestrian/ cycle access”*.
- 9.29 The principle to *“Use development and/or landscaping to increase screening of the adjacent industrial estates and business parks to the west”* is also likely to support an improved public realm and inward investment to a minor degree.
- 9.30 The delivery of the new school on-site will also increase educational access within the eastern part of the settlement and provide new jobs, delivering minor long-term positive effects in relation to the SA objectives for the economy and employment theme.
- 9.31 Overall, improved educational access in the east of the settlement as a result of development (and new job opportunities here), alongside the general principle to promote improved connectivity within and surrounding the site is considered likely to lead to **indirect minor long-term positive effects** for the local economy and employment accessibility.

Historic environment

- 9.32 The draft Brief clearly sets out the constraints and opportunities in relation to the historic context providing detailed information to inform subsequent planning applications and supporting long-term positive effects in this respect. The draft Brief provides a detailed overview of the designated and non-designated assets surrounding the site, the significance of which will need consideration in development proposals for the site. The Brief identifies that effects are likely to predominantly relate to the settings of these assets which vary in the different historic character areas north, east and south of the site.
- 9.33 The Hedsor Road and Riversdale Conservation Area will ultimately be a key consideration for development proposals. Whilst a diverse mix of building styles and quality surround the site, it is recognised that there is a consistent and distinctive form and architectural character of the Conservation Area and listed buildings and development at the southern extent of the site will directly affect the setting of the designated area – particularly affecting identified views but also through new road access and the potential loss of open space adjoining it.
- 9.34 The draft Brief draws on archaeological evidence existing within and surrounding the site (limited to scattered finds with no pattern of deposits), identifying that whilst a recent geophysical survey did not identify any anomalies of archaeological potential, trial trenching is still recommended prior to any development taking place.
- 9.35 In terms of settlement character, the draft Brief provides an overview of the historic evolution of the settlement, particularly the development surrounding the site. This includes the adjacent employment development built in the 1970’s replacing former mills along the River Wye. The River Wye plays an important role in the historic

context of the settlement, industry was located here with water used for energy and as a raw material.

- 9.36 Drawing on this context the draft Brief outlines the vision, objectives and principles for development in relation to conservation and heritage. This includes the objective to *“have special regard to the conservation of nearby heritage assets and their settings”* and actions for *“careful design of highways networks”* and establishing *“opportunities for new development to enhance or better reveal”* the significance of assets.
- 9.37 Principles are established for development which directly relate to the historic environment SA theme, these include specific principles in relation to Cores End roundabout, the relationship between the development and existing properties at Hedsor Road and the Hedsor Road route junction.
- 9.38 Overall, the detailed contextual information and development principles seek to ensure that development duly considers the significance of heritage assets surrounding the site and their settings; supporting reduced potential for, and significance of, negative effects arising. Despite this, the addition of just under 500 homes in this location is considered likely to result in residual **minor long-term negative effects** on the setting of designated heritage assets.
- 9.39 To better secure mitigation in relation to archaeology, it is recommended that the observed need for trial trenching prior to development is further established as a development principle to ensure this is carried through to development proposals.

Landscape

- 9.40 The draft Brief clearly sets out the constraints and opportunities in relation to landscape, place-making and settlement character providing detailed information to inform subsequent planning applications and supporting long-term positive effects in this respect.
- 9.41 The context provides a site-specific overview of the character of the river corridor setting as part of the wider ‘Thames Valley’ Landscape Character Type, whilst identifying that the site sits immediately within the built environment which is of varying character. There are limited sensitive landscape features on-site (trees and hedgerow) but varying influences surround the site which need to be considered in development. This includes an industrial presence in the west, the influence of the historic townscape setting in the south, low-density rural housing in the east and denser village development in the north. It is recognised that development will ultimately merge these varying character areas.
- 9.42 Detailed information is provided in relation to views; whilst there are limited immediate views within and surrounding the site, longer distance views from public footpaths are identified. In particular, a long-ranging view from the northern footpath WOO/20/4 is likely to be affected by development on-site and the Draft Brief recognises the opportunity to use such views to guide the distribution of development and open space.
- 9.43 In terms of settlement character, the draft Brief provides an overview of the historic evolution of the settlement, particularly the development surrounding the site. This includes the adjacent employment development built in the 1970’s replacing former mills along the River Wye.
- 9.44 The River Wye plays an important role in the historic context of the settlement, industry was located here with water used for energy and as a raw material. Alongside the development of the former railway, this influenced the siting of the significant employment development between which remains today, despite the closure of the railway and removal of commercial uses at the river. Development needs to consider

the transition between this area and housing as the site in its current form provides a landscape buffer between the uses. The draft Brief recognises the opportunity to reduce the visual impact of the industrial estate/ business park with additional landscaping and/ or built development.

- 9.45 More recent residential expansion has begun closing the gap between Cores End and Wooburn north of the site, and the draft Brief provides a detailed overview of the character of the housing in this area. This contrasts with the built environment south of the site where Hedsor Road originated as a core of houses around the Garibaldi pub historically surrounded by orchards (including historically on-site). This area remains sensitive to development as a designated Conservation Area. Rural housing west of the site at Hawks Hill and Harvest Hill were largely developed during the 1960's and 70's and is typically of lower density than the rest of the housing surrounding the site.
- 9.46 Drawing on this context the draft Brief outlines the vision, objectives and principles for development in relation to landscape character and place making. This includes *"adopting a landscape-led approach to site layout and green infrastructure"*, providing *"a physical and/ or visual separation between Hawks Hill, Hedsor Road and the new development"*. Actions include establishing *"different residential character areas within the development"* ensuring *"new development makes a positive contribution to local character and distinctiveness"* alongside the objective to *"to sensitively integrate with the existing residential areas to form a cohesive area through a range of design principles"*.
- 9.47 Many principles are established for development which seek to respond to the landscape and varying character areas identified, this includes (but is not limited to):
- Responding appropriately to the character areas immediately adjoining the site;
 - Using development and/ or landscaping to increase screening of the adjacent industrial estates and business parks to the west;
 - Responding to views across the site from public rights of way and roads where these occur at a distance from the north and in closer proximity from the east and south;
 - Working with existing site topography to avoid and minimise changes of level;
 - Using a substantial landscape buffer of trees and open space on higher ground to provide physical and visual separation between Hawks Hill/ Harvest Hill/ Hedsor Road conservation area and development within the site;
 - Retaining and protecting existing mature trees and hedgerows within the site and at/ adjoining the site perimeter, incorporating these into public open spaces and green corridors;
 - Using new tree planting to protect/ reinforce the setting of nearby heritage assets, where appropriate;
 - Using public open spaces as a landscape setting for areas of built development and principal roads;
 - Designing, integrating and linking public open spaces and green corridors as part of wider networks of open space, green infrastructure and biodiversity;
 - Using generous green corridors as the basis for a footpath/ cycle network throughout the site and to link together areas of public open space;
 - Maintaining a high standard of landscape amenity where sustainable drainage systems are incorporated into public open spaces and green corridors;
 - In meeting the policy requirement for canopy cover across the site, prioritise delivery with tree planting on public streets and open spaces/ green buffers;

- ‘Completing’ perimeter blocks for the existing residential area at the site’s northern boundary (rear of Hellyer Way and cul-de-sac end of Bridgestone Drive). These areas largely back onto the site with a somewhat ‘unfinished’ edge. Site development has an opportunity to improve the security and amenity of these edges;
 - Locating higher-density development away from the more sensitive edges (including Heavens Lea and Hawks Hill), towards the centre and west of the site; and
 - Ensuring landscape infrastructure will primarily be informal or naturalistic, including the buffers to the east and south and a series of much smaller incidental open spaces distributed throughout the site.
- 9.48 Overall, the detailed contextual information providing insight into the character and formation of the landscape and built environment surrounding the site, alongside the detailed development principles guiding a landscape-led approach to design and development is considered likely to ensure that development responds sensitively to both its immediate and wider character area and setting. In this respect, the Brief minimises the impact of the development in landscape terms. Despite this, the addition of just under 500 homes in a previously undeveloped area is still considered likely to lead to **residual minor long-term negative effects**.

Natural resources

- 9.49 The development of the site will ultimately result in unavoidable losses of high-quality agricultural land resources and long-term minor negative effects are anticipated in this respect. Despite this, the asserted landscape-led approach in the draft Brief, alongside high-quality targeted green infrastructure improvements and open space provisions are likely to support the retention and enhancement of soil resources in areas.
- 9.50 The draft Brief clearly sets out the constraints and opportunities in relation to flood risk and ground conditions which are explored above under the climate change topic heading.
- 9.51 In relation to water quality, the draft Brief emphasises that the site sits within a wider sensitive river corridor area which is also recognised as a Biodiversity Opportunity Area (BOA) and Green Corridor Opportunity Area (Opportunity Area 11). Associated BOA targets considered achievable in development on-site includes the management and restoration of chalk rivers (The River Wye). The draft Brief further recognises the potential for development on site to expand green infrastructure networks and enhance links to the surrounding area and green infrastructure assets. As such minor long-term positive effects can be anticipated if development proposals recognise the opportunities to support improved ecological quality in the surrounding waterbodies.
- 9.52 Overall, **minor long-term negative effects** in relation to soil resources are considered an unavoidable consequence of development at this site. However, the proposed green infrastructure improvements which includes support for improved water quality along the river corridor is considered likely to support **long-term positive effects**.

Transport and traffic

- 9.53 The draft Brief clearly sets out the constraints and opportunities in relation to access, transport and movement providing detailed information to inform subsequent planning applications and supporting long-term positive effects in this respect.
- 9.54 The contextual issues associated with traffic and transport include access to the site, and movement through and surrounding the site. Current road access points exist in

the north and south of the site; however, both are constrained by adjacent properties, highlighting the issues to be addressed in development proposals when seeking to accommodate principal and secondary road connections. The draft Brief recognises the potential to increase connectivity in development with new western road access points and connections through the site.

- 9.55 In terms of sustainable transport access, the railway station in Bourne End provides hourly services to Maidenhead as well as wider connections (including London), and two bus routes serve the settlement. Both routes stop within 800m of the site, providing good access in this respect. The draft Brief recognises the potential to re-route existing bus services through the site, which is likely to benefit new communities with enhanced access, although it is recognised that this could also reduce access for existing residents in some area.
- 9.56 Whilst no specific cycle provisions exist in the settlement, the draft Brief recognises the long-term planning aspirations to upgrade the PRow along the former railway line to a surfaced footpath and cycle way supporting connections between Bourne End and High Wycombe. In this respect, the draft Brief seeks an appropriate financial contribution from development towards such improvements, which are likely to support long-term positive effects in relation to traffic and transport SA objectives.
- 9.57 Additional pedestrian access is provided to the site off Millboard Road to the west, and two PRows traverse the site providing connections between Hedsor Road, Princes Road and Millboard Road. The draft Brief demonstrates that pedestrian movement is constrained to the east and south of the site where there are generally no roadside pavements. Issues with pedestrian safety will thus need consideration in development proposals. The draft Brief also recognises opportunities to improve east-west pedestrian movement through the site and provide better connections to the existing PRow surrounding the site.
- 9.58 Drawing on this context the draft Brief outlines the vision, objectives and principles for development in relation to access and movement. This includes the objective to *“identify the design and layout requirements for a comprehensive movement network”* and actions to *“coordinate the movement network with a landscape-led approach to site layout”*, *“facilitate the bus route through the site”* and *“facilitate enhanced footpath and cycle links”*.
- 9.59 Principles are established for development which directly relate to the traffic and transport SA theme, these include specific principles in relation to; principal routes, walking routes, cycling routes, public transport, servicing and private transport routes, parking, off-site junction improvements, off-site contributions, and travel plans.
- 9.60 Overall, the prioritisation of sustainable forms of transport, supported by an efficient road network layout and road junction improvements are considered likely to deliver the necessary mitigation to avoid significant negative effects arising as a result of development at the site. However, the addition of 500 homes in this area is still considered likely to affect local roads to some degree and **minor long-term negative effects** are anticipated in this respect.

10. Conclusions

- 10.1 **Table 10.1** below draws together the overall conclusions for each SA theme. Overall, as the draft Development Brief does not introduce new growth or new policy, no significant negative effects are anticipated as a result of its adoption and implementation. On the contrary, the Development Brief is considered likely to support the both the minimisation of likely negative effects arising and maximise the potential delivery of positive effects as a result of its detailed contextual overview and development principles which seek to address known development constraints and maximise potential opportunities.
- 10.2 The draft Development Brief guides a landscape-led approach to high-quality, climate-resilient design and development, focuses biodiversity net gain opportunities, requires the necessary supporting infrastructure for population growth, and minimises development impacts on sensitive heritage settings. The measures are likely to lead to significant positive effects in relation to community wellbeing.
- 10.3 Two recommendations are made within the assessment as follows:
- To better secure positive effects in relation to archaeology, it is recommended that the observed need for trial trenching prior to development is further established as a development principle to ensure this is carried through to development proposals.
 - It is considered that opportunities to identify the links between on-site mitigation measures/ efficiency initiatives and wider Council aims in relation to climate change mitigation and climate resilience are missed in 'part one' of the draft Brief (the contextual analysis). It is recommended that additional context is provided to better secure the responsive on-site measures required.

Table 10.1: Summary findings for the appraisal of the draft Development Brief

SA theme	Conclusions
Biodiversity	Overall, the site is not considered particularly sensitive in biodiversity terms. The detailed and extensive development principles provided in relation to biodiversity are considered likely to support overall net gain and biodiversity enhancements on site, and opportunities are recognised to link enhancements on-site with the wider Biodiversity Opportunity Area targets. As a result, minor long-term positive effects are anticipated.
Climate change	Overall, the detailed guidance to address known flood risk constraints on-site, alongside detailed design and general principles which support climate change mitigation, minor long-term positive effects are anticipated.
Community wellbeing	Overall, the draft Brief outlines the measures necessary to avoid negative effects in relation to community health and wellbeing and facilitates high-quality development and new provisions which are required to the support the growing population in this area. As a result, significant long-term positive effects are anticipated in relation to community wellbeing.
Economy and employment	Overall, improved educational access in the east of the settlement as a result of development (and new job opportunities here), alongside the general principle to promote improved connectivity within and surrounding the site is considered likely to lead to indirect minor long-term positive effects for the local economy and employment accessibility.
Historic environment	Overall, the detailed contextual information and development principles seek to ensure that development duly considers the significance of heritage assets surrounding the site and their settings; supporting reduced potential for, and significance of, negative effects arising. Despite this, the addition of just under 500 homes in this location is considered likely to result in residual minor long-term negative effects on the setting of designated heritage assets.

SA theme	Conclusions
	To better secure mitigation in relation to archaeology, it is recommended that the observed need for trial trenching prior to development is further established as a development principle to ensure this is carried through to development proposals.
Landscape	Overall, the detailed contextual information providing insight into the character and formation of the landscape and built environment surrounding the site, alongside the detailed development principles guiding a landscape-led approach to design and development is considered likely to ensure that development responds sensitively to both its immediate and wider character area and setting. In this respect, the Brief minimises the impact of the development in landscape terms. Despite this, the addition of just under 500 homes in a previously undeveloped area is still considered likely to lead to residual minor long-term negative effects .
Natural resources	Overall, minor long-term negative effects in relation to soil resources are considered an unavoidable consequence of development at this site. However, the proposed green infrastructure improvements which includes support for improved water quality along the river corridor is considered likely to support long-term positive effects .
Transport and traffic	Overall, the prioritisation of sustainable forms of transport, supported by an efficient road network layout and road junction improvements are considered likely to deliver the necessary mitigation to avoid negative effects arising as a result of development at the site. However, the addition of 500 homes in this area is still considered likely to affect local roads to some degree and minor long-term negative effects are anticipated in this respect.

Part 3: What happens next?

11. Next steps (Part 3)

- 11.1 This part of the report explains the next steps that will be taken as part of plan-making and SA.

Finalisation of the Development Brief

- 11.2 Following consultation on the draft Development Brief and accompanying SA Report, Buckinghamshire Council will finalise the Development Brief, taking into account consultation responses and assessment findings, and produce a Consultation Statement. The SA Report will also be updated during this period to consider and reflect feedback and respond to any Development Brief amendments.
- 11.3 The finalised Development Brief, SA Report and Consultation Statement will be made available for representations prior to the adoption of the SPD. It is Buckinghamshire Council's aim to adopt a finalised Development Brief SPD in autumn 2020.

Monitoring

- 11.4 At the current time, there is a need only to present 'measures envisaged concerning monitoring'. The SEA Regulations expect monitoring and mitigation to be linked, and that the focus should be on any significant negative effects identified through the assessment. Where possible existing arrangements for monitoring should be used to avoid duplication of effort.
- 11.5 Based on the findings of the SA, which predicted no significant negative effects; no specific monitoring measures have been proposed at this stage. It is anticipated that monitoring of general sustainability indicators will be undertaken by Buckinghamshire Council as part of the process of preparing its Annual Monitoring Report (AMR).
- 11.6 Further consideration will be given to monitoring in due course once the responses to the draft Development Brief and accompanying SA Report have been received. If necessary, the SA Adoption Statement will set out monitoring measures against SA objectives, including responsibilities.

Appendices

Appendix I: Regulatory requirements

As discussed in Chapter 1, Schedule 2 of the Environmental Assessment of Plans Regulations 2004 explains the information that must be contained in the SA Report; however, interpretation of Schedule 2 is not straightforward. **Table A** links the structure of this report to an interpretation of Schedule 2 requirements, whilst **Table B** explains this interpretation. **Table C** identifies how and where within the Environmental Report the regulatory requirements have/ will be met.

Table A: Questions answered by this SA Report, in-line with an interpretation of regulatory requirements

	QUESTIONS ANSWERED		AS PER REGULATIONS... THE SA REPORT MUST INCLUDE...
Introduction	What's the plan seeking to achieve?		<ul style="list-style-type: none"> An outline of the contents, main objectives of the plan and relationship with other relevant plans and programmes
	What's the IIA scope?	What's the sustainability 'context'?	<ul style="list-style-type: none"> Relevant environmental protection objectives, established at international or national level Any existing environmental problems which are relevant to the plan including those relating to any areas of a particular environmental importance
		What's the sustainability 'baseline'?	<ul style="list-style-type: none"> Relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan The environmental characteristics of areas likely to be significantly affected Any existing environmental problems which are relevant to the plan including those relating to any areas of a particular environmental importance
		What are the key issues and objectives that should be a focus?	<ul style="list-style-type: none"> Key environmental problems / issues and objectives that should be a focus of (i.e. provide a 'framework' for) assessment
Part 1	What has plan-making / IIA involved up to this point?		<ul style="list-style-type: none"> Outline reasons for selecting the alternatives dealt with (and thus an explanation of the 'reasonableness' of the approach) The likely significant effects associated with alternatives Outline reasons for selecting the preferred approach in-light of alternatives assessment / a description of how environmental objectives and considerations are reflected in the draft plan
Part 2	What are the IIA findings at this current stage?		<ul style="list-style-type: none"> The likely significant effects associated with the draft plan The measures envisaged to prevent, reduce and offset any significant adverse effects of implementing the draft plan
Part 3	What happens next?		<ul style="list-style-type: none"> A description of the monitoring measures envisaged

Table B: Questions answered by this SA Report, in-line with regulatory requirements

<u>Schedule 2</u>	<u>Interpretation of Schedule 2</u>		
<i>The report must include...</i>	<i>The report must include...</i>		
(a) an outline of the contents, main objectives of the plan and relationship with other relevant plans and programmes;	An outline of the contents, main objectives of the plan and relationship with other relevant plans and programmes	i.e. answer - <i>What's the plan seeking to achieve?</i>	
(b) the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan	Any existing environmental problems which are relevant to the plan including, in particular, those relating to any areas of a particular environmental importance	i.e. answer - <i>What's the 'context'?</i>	i.e. answer – <i>What's the scope of the SA?</i>
(c) the environmental characteristics of areas likely to be significantly affected;	The relevant environmental protection objectives, established at international or national level		
(d) any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Directives 79/409/EEC and 92/43/EEC;	The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan	i.e. answer - <i>What's the 'baseline'?</i>	
(e) the environmental protection objectives, established at international, Community or Member State level, which are relevant to the plan and the way those objectives and any environmental considerations have been taken into account during its preparation;	The environmental characteristics of areas likely to be significantly affected		
(f) the likely significant effects on the environment including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors;	Any existing environmental problems which are relevant to the plan including, in particular, those relating to any areas of a particular environmental importance	i.e. answer - <i>What are the key issues & objectives?</i>	
(g) the measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan;	Key environmental problems / issues and objectives that should be a focus of appraisal		
(h) an outline of the reasons for selecting the alternatives dealt with and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information	An outline of the reasons for selecting the alternatives dealt with (i.e. an explanation of the 'reasonableness of the approach')	i.e. answer - <i>What has Plan-making / SA involved up to this point?</i> [Part 1 of the Report]	
(i) a description of the measures envisaged concerning monitoring.	The likely significant effects associated with alternatives, including on issues such as... ... and an outline of the reasons for selecting the preferred approach in light of the alternatives considered / a description of how environmental objectives and considerations are reflected in the draft plan.		
	The likely significant effects associated with the draft plan	i.e. answer - <i>What are the assessment findings at this current stage?</i> [Part 2 of the Report]	
	The measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects of implementing the draft plan		
	A description of the measures envisaged concerning monitoring	i.e. answer - <i>What happens next?</i> [Part 3 of the Report]	

Table C: 'Checklist' of how and where (within the report) regulatory requirements are reflected**Regulatory requirement****Information presented in this report**

Schedule 2 of the regulations lists the information to be provided within the SA Report

Regulatory requirement**Information presented in this report**

a) An outline of the contents, main objectives of the plan or programme, and relationship with other relevant plans and programmes;	Section 2 ('What's the Development Brief seeking to achieve') presents this information.
b) The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme;	These matters were considered in detail at the scoping stage, which included consultation on a Scoping Report.
c) The environmental characteristics of areas likely to be significantly affected;	The outcome of scoping was an 'SA framework', and this is presented within Section 3 ('What's the scope of the SA').
d) Any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance...;	Messages highlighted through context and baseline review are also presented within Appendix II.
e) The environmental protection, objectives, established at international, Community or national level, which are relevant to the plan or programme and the way those objectives and any environmental, considerations have been taken into account during its preparation;	<p>The Scoping Report presents a detailed context review and explains how key messages from the context review (and baseline review) were then refined in order to establish an 'SA framework'.</p> <p>The SA framework is presented within Section 3. Also, messages from context review are presented within Appendix II.</p> <p>With regards to explaining "<i>how... considerations have been taken into account</i>", Chapter 7 explains the Council's 'reasons for supporting the preferred approach', i.e. explains how/ why the preferred approach is justified in light of alternatives appraisal.</p>
f) The likely significant effects on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors.	<p>Section 6 presents alternatives appraisal findings in respect of a range of reasonable alternatives identifies under four different themes.</p> <p>Chapters 9 presents an appraisal of the draft plan.</p> <p>With regards to assessment methodology, Chapter 8 explains the role of the SA framework/scope, and the need to consider the potential for various effect characteristics/ dimensions, e.g. timescale.</p>
g) The measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan or programme;	Specific recommendations are made in Chapter 10.
h) An outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information;	<p>Chapters 4 and 5 deal with 'Reasons for selecting the alternatives dealt with', in that there is an explanation of the reasons for focusing on particular issues and options.</p> <p>Also, Chapter 7 explains the Council's 'reasons for selecting the preferred option' (in-light of alternatives assessment).</p>
i) description of measures envisaged concerning monitoring in accordance with Art. 10;	Section 11 discusses measures envisaged concerning monitoring.
j) a non-technical summary of the information provided under the above headings	The NTS is provided at the beginning of this SA Report.

Regulatory requirement

Information presented in this report

The IIA Report must be published alongside the draft plan, in-line with the following regulations

authorities with environmental responsibility and the public, shall be given an early and effective opportunity within appropriate time frames to express their opinion on the draft plan or programme and the accompanying environmental report before the adoption of the plan or programme (Art. 6.1, 6.2)

This SA Report is published alongside the Draft Hollands Farm Development Brief SPD consultation document, in order to inform the consultation and subsequent work to finalise the Brief and SA Report.

The IIA Report must be taken into account, alongside consultation responses, when finalising the plan.

The environmental report prepared pursuant to Article 5, the opinions expressed pursuant to Article 6 and the results of any transboundary consultations entered into pursuant to Article 7 shall be taken into account during the preparation of the plan or programme and before its adoption or submission to the legislative procedure.

This SA Report will be taken into account when finalising the Development Brief, alongside consultation responses received on the draft Brief and accompanying SA Report.

Appendix II: Scoping information

This appendix presents the outcomes of scoping consultation and provides an updated summary of the baseline and context review.

A Scoping Report (May 2020) was shared with the Environment Agency, Historic England and Natural England for formal consultation over the period 26th May to 30th June 2020. The responses received are presented in **Table All.1** below.

Table All.1: SA scoping consultation responses

Scoping response	How the response was considered in the SA Report
Natural England	
Ellen Satchwell, Sustainable Development Lead Advisor, Thames Solent Team	
Thank you for your consultation on the above dated 26 May 2020 which was received by Natural England on the same day. Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.	With thanks.
Plans related to the natural environment Natural England has not reviewed the plans listed. However, we advise that the following types of plans relating to the natural environment should be considered where applicable;	Many thanks, the suggested plans have been included within the scope where appropriate and available.
<ul style="list-style-type: none"> • Green infrastructure strategies • Natural Environment Partnership Green Infrastructure Opportunities Mapping • Biodiversity plans • Rights of Way Improvement Plans • River basin management plans • Chilterns AONB Management Plan 2019-2024. • Relevant landscape plans and strategies. 	
Burnham Beeches Special Area of Conservation (SAC) Natural England welcome the inclusion of Policy BE2 which states that S106 contributions will be made to mitigate adverse impacts on the qualifying features of Burnham Beeches SAC. Due to new evidence on the impacts of recreational and urban growth at Burnham Beeches SAC carried out by Footprint Ecology in 2019, Natural England recognises that new housing within 5.6km of the internationally designated Burnham Beeches Special Area of Conservation (SAC) can be expected to result in an increase in recreation pressure. The 5.6km zone proposed within Policy DM NP3 of the emerging Chiltern and South Bucks Local Plan represents the core area around the SAC where increases in the number of residential properties will require Habitats Regulations Assessment. Mitigation measures will be necessary to rule out adverse effects on the integrity of the SAC from the cumulative impacts of development.	Noted, with thanks.
Biodiversity Net Gain Development at Hollands Farm should protect and enhance the nature conservation or geological interest of nationally important wildlife sites. There is a likelihood that mandatory net gain may come forward soon. Biodiversity net gain is strongly supported by the National Planning Policy Framework (NPPF) and features prominently in the government's 25 Year Environment Plan. Natural England has recently released the Defra Biodiversity Metric 2.0. The new metric is accompanied with detailed guidance and a tool to apply the metric. Natural England encourages the incorporation of the 10 best practice principles developed by CIRIA/CIEEM/IEMA for those delivering biodiversity net gain.	Noted, with thanks. The SA framework includes an assessment question as follows; will the option/ proposal achieve a net gain in biodiversity?

Scoping response

How the response was considered in the SA Report

The development should set out a strategic approach, planning positively for the creation, protection, enhancement and management of networks of biodiversity. There should be consideration of geodiversity conservation in terms of any geological sites and features in the wider environment. A strategic approach for networks of biodiversity should support a similar approach for green infrastructure. Planning policies and decisions should contribute and enhance the natural and local environment, as outlined in para 170 of the NPPF. Plans should set out the approach to delivering net gains for biodiversity.

Noted, with thanks. The proposed SA framework is considered to support these objectives.

Green Infrastructure (GI)

We welcome the inclusion of Green Infrastructure within Policy BE2. GI refers to the living network of green spaces, water and other environmental features in both urban and rural areas. It is often used in an urban context to provide multiple benefits including space for recreation, access to nature, flood storage and urban cooling to support climate change mitigation, food production, wildlife habitats and health & well-being improvements provided by trees, rights of way, parks, gardens, road verges, allotments, cemeteries, woodlands, rivers and wetlands. A strategic approach for green infrastructure is required to ensure its protection and enhancement, as outlined in para 171 of the NPPF. Evidence of a strategic approach can be underpinned by Green Infrastructure Strategy.

Noted, with thanks. The SA framework seeks to assess the issues and opportunities associated with green infrastructure in relation to both biodiversity and community wellbeing.

Climate change adaptation

We welcome consideration of Climate Change. In considering climate change adaption, also recognise the role of the natural environment to deliver measures to reduce the effects of climate change, for example tree planting to moderate heat island effects. In addition factors which may lead to exacerbate climate change (through more greenhouse gases) should be avoided (e.g. pollution, habitat fragmentation, loss of biodiversity) and the natural environment's resilience to change should be protected. Green Infrastructure and resilient ecological networks play an important role in aiding climate change adaptation.

Noted, with thanks. The SA framework includes objectives relating to both climate change adaptation and mitigation.

Priority habitats, ecological networks and priority and/or legally protected species populations

Priority habitats and species are those listed under Section 41 of the Natural Environment and Rural Communities Act, 2006 and UK Biodiversity Action Plan (UK BAP). Further information is available here: Habitats and species of principal importance in England. Local Biodiversity Action Plans (LBAPs) identify the local action needed to deliver UK targets for habitats and species. They also identify targets for other habitats and species of local importance and can provide a useful blueprint for biodiversity enhancement in any particular area.

Noted, with thanks. BAP habitats have been explored in the scope of the SA.

Protected species are those species protected under domestic or European law. Further information can be found here Standing advice for protected species. Sites containing watercourses, old buildings, significant hedgerows and substantial trees are possible habitats for protected species.

Noted, with thanks. Priority and protected species have been explored in the scope of the SA.

Ecological networks are coherent systems of natural habitats organised across whole landscapes so as to maintain ecological functions. A key principle is to maintain connectivity - to enable free movement and dispersal of wildlife e.g. badger routes, river corridors for the migration of fish and staging posts for migratory birds. Local ecological networks will form a key part of the wider Nature Recovery Network proposed in the 25 Year Environment Plan. Where development is proposed, opportunities should be explored to contribute to the enhancement of ecological networks. Planning positively for ecological networks will also contribute towards a strategic approach for the creation, protection, enhancement and management of green infrastructure, as identified in paragraph 171 of the NPPF.

Noted, with thanks. The SA framework seeks to assess the effects of options/ proposals in relation to ecological networks.

Should the proposal change, please consult us again.

Noted, any significant changes will be further consulted upon.

Scoping response

How the response was considered in the SA Report

Historic England

Edward Winter, Historic Environment Planning Adviser

Thank you for inviting Historic England to comment on the above document. In terms of the historic environment, we consider that the Report has identified most of the plans and programmes which are of relevance to the development of the Hollands Farm (Bourne End) Development Brief SPD (although please see the table below for specific comments), that it has established an appropriate Baseline against which to assess the Plan's proposals (although please see the table below for specific comments) and that it has put forward a suitable set of Objectives and Indicators. Overall, therefore, we believe that it provides an appropriate framework for assessing any significant effects which this plan might have upon the historic environment. Please also see our comments regarding key issues, which we consider warrant some expansion on those issues already identified.

Noted, with thanks. Specific comments are responded to in turn below.

Historic England strongly advises that the conservation and archaeological advisers to Buckinghamshire Council are closely involved throughout the preparation of the SA/SEA of this Plan. They are best placed to advise on; local historic environment issues and priorities, including access to data held in the HER (formerly SMR); how the policy or proposal can be tailored to minimise potential adverse impacts on the historic environment; the nature and design of any required mitigation measures; and opportunities for securing wider benefits for the future conservation and management of heritage assets. Historic England has produced guidance for all involved in undertaking SEA/SA exercises which gives advice on issues relating to the historic environment.

Noted, with thanks. Options and the SA Report have been developed in collaboration with the Council.

This opinion is based on the information provided by you in the document dated May 2020 and, for the avoidance of doubt, does not affect our obligation to advise you on, and potentially object to any specific development proposal which may subsequently arise from this or later versions of the plan which is the subject to consultation, and which may, despite the SA/SEA, have adverse effects on the environment

Noted, with thanks.

If you have any queries about any of the matters raised above or would like to discuss anything further, please do not hesitate to contact me.

Noted, with thanks.

Specific comments

With thanks, this has been removed.

Section 6.3:

Query if the 2010 Government statement on the historic environment still relevant.

Section 6.6/ 6.7:

With thanks, this has been added.

The National Design Guide is of particular reference to new developments of the scale being considered here, and it contains important guidance on the historic environment.

Section 6.12:

With thanks, this has been added.

Suggest including BE2 here

Section 6.15:

With thanks, the relevant figure has been updated.

Suggest the area of archaeological interest rereferred to is added to the key in Figure 6.1.

Section 6.17:

With thanks, historic environment key issues have been updated accordingly.

Key issues: In addition to the key issues already identified, Historic England considers that, based on the illustrative layout (Figure 38 of the local plan), a particularly key issue will be how the 'potential vehicular access' at the southwest of the site is designed, (it is assumed that no significant junction modifications will be required for the potential access to the north-east, as this lists outside the site boundary). The south-western access is located within the conservation area and due regard will need to be given to the special character of the conservation area and its setting, with reference to the conservation area appraisal. The

Scoping response

How the response was considered in the SA Report

access will need to be designed to preserve the rural character of the area.

Map 2 of the conservation area appraisal identifies 'significant buildings' (in addition to the listed building) in the area immediately adjacent to the new access road.

'Broader views' and 'significant views' are also identified in Map 2 of the appraisal. Some of the broad views overlook parts of the development site and numerous significant views are identified, including looking across land to the south from the site, to the site from the south and along Hedsor Road. These should be taken into account and responded to appropriately in the SPD.

With thanks, historic environment key issues have been updated accordingly and identified views have been considered in the assessment.

Section 6.18:

Recommend amending the second assessment question to:

- Conserve and enhance the key characteristics and features of the Hedsor Road and Riversdale Bourne End Conservation Area, and its setting?

With thanks, the second assessment question has been amended in line with the suggested rewording.

Updated baseline and context review

Biodiversity

Context review

Key messages from the National Planning Policy Framework¹⁰ (NPPF) include:

- One of the three overarching objectives of the NPPF to 'contribute to protecting and enhancing our natural, built and historic environment' including by 'helping to improve biodiversity'.
- Plans should: distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value [...], take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries.
- Planning policies and decisions should contribute to and enhance the natural and local environment by: protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with the statutory status or identified quality in the development plan); and minimising impacts on and providing net gains for biodiversity, including establishing coherent ecological networks that are more resilient to current and future pressures.
- To protect and enhance biodiversity and geodiversity, plans should:
 - Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and
 - Promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.

¹⁰ MHCLG (2019) National Planning Policy Framework [online] available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/779764/NPPF_Feb_2019_web.pdf

- Take a proactive approach to mitigating and adapting to climate change, considering the long-term implications for biodiversity.
- The presumption in favour of sustainable development does not apply where development requiring appropriate assessment because of its potential impact on a habitats site is being planned or determined.

The Government's 25 Year Environment Plan¹¹ (2018) sets out a strategy for managing and enhancing the natural environment, embedding 'net gain' principles as key to environmental considerations. These aims are supported by a range of policies which are focused on six key areas. In this context, Goal 3 'Thriving plants and wildlife' and the policies contained within Chapter 2 'Recovering nature and enhancing the beauty of landscapes' and Chapter 5 'Securing clean, productive and biologically diverse seas and oceans' directly relate to biodiversity and geodiversity.

The Biodiversity 2020 Strategy¹² (2011) presents a strategy for England's wildlife and ecosystem services which builds on the Natural Environment White Paper¹³ and sets out the "strategic direction for biodiversity for the next decade". The strategy aims to halt biodiversity loss and improve ecological networks and ecosystems for all people.

The UK Biodiversity Action Plan¹⁴ (BAP) identifies priority species and habitats requiring conservation action. Although the UK BAP has been superseded, BAP priority species and habitats have been used to draw up statutory lists of priority species and habitats in England.

The Wycombe District Local Plan and Delivery and Site Allocations Development Plan contains the following policies which are relevant to the biodiversity SA theme:

- CP10: Green Infrastructure and the Natural Environment
- CP12: Climate Change
- DM11: Green Networks and Infrastructure
- DM13: Conservation and Enhancement of Sites, Habitats and Species of Biodiversity and Geodiversity Importance
- DM15: Protection and Enhancement of River and Stream Corridors
- DM34: Delivering Green Infrastructure and Biodiversity in Development

Baseline review – current baseline

The Hollands Farm site is not located within or adjacent to any internationally designated sites, and the potential effects of development on European designated biodiversity sites was investigated in the Habitat Regulations Assessment¹⁵ (HRA) that accompanied the Wycombe District Local Plan.

Chilterns Beechwoods Special Area of Conservation (SAC) comprises over 1,200ha and is underpinned by nine Sites of Special Scientific Interest (SSSIs) including Bisham Woods which lies just east of Bourne End at Bisham. The area is considered one of the best areas of beech forest in the UK and contains a significant presence of semi-natural dry grasslands and scrubland facies, as well as Stag beetle species. Threats to the site include; forest and

¹¹ HM Government (2018) A Green Future: Our 25 Year Plan to Improve the Environment [online] available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/673203/25-year-environment-plan.pdf

¹² Defra (2011) Biodiversity 2020: A strategy for England's wildlife and ecosystem services [online] available at: <https://www.gov.uk/government/publications/biodiversity-2020-a-strategy-for-england-s-wildlife-and-ecosystem-services>

¹³ Defra (2012) The Natural Choice: securing the value of nature (Natural Environment White Paper) [online] available at: <http://www.official-documents.gov.uk/document/cm80/8082/8082.pdf>

¹⁴ JNCC (2007) UK BAP priority species [online] <http://archive.jncc.gov.uk/page-5717>

¹⁵ Wycombe District Council (2019) Wycombe District Local Plan Revised Habitats Regulations Assessment Report – including Appropriate Assessment [online] available at: <https://www.wycombe.gov.uk/uploads/public/documents/Planning/New-local-plan/Local-plan-examination-2018/WDLP3B-Revised-Habitats-Regulations-Assessment-January-2019.pdf>

plantation management and use; problematic native species; invasive non-native species; and interspecific floral relations.¹⁶

Burnham Beeches SAC also lies east of the Hollands Farm site with local roads providing connections to this site. It is an extensive area of former beech wood-pasture with many old pollards and associated beech and oak. It is also one of the richest sites for saproxylic invertebrates in the UK, including 14 Red Data Book¹⁷ species. Threats to the site include; problematic native species, other ecosystem modifications, changes in biotic conditions, outdoor sports and leisure activities, recreational activities, air pollution and air-borne pollutants.¹⁸

In relation to European designated biodiversity sites, the potential for likely significant effects on European sites from the Hollands Farm development has already been established in the Local Plan HRA. The SPD does not change the policy proposals in the Local Plan but provides greater detail as to how those policy proposals should be delivered and implemented.

The Local Plan, and its accompanying Appropriate Assessment, identified the necessary mitigation to avoid adverse effects on integrity that is via contributions to be made towards improving accessibility to the country park for recreational users. However, the Local Plan did not set out the detailed nature and implementation of potential improvement schemes at Little Marlow Lakes Country Park susceptible to be funded by the required S106 contribution. This will be covered in the draft Development Brief. The Council takes the view that an Appropriate Assessment is necessary to assess whether all of the proposals and measures proposed within the Development Brief to implement the Local Plan policy will be effective in protecting the integrity of European sites.¹⁹ On this basis, further investigation undertaken through an Appropriate Assessment for the SPD and will inform the SEA.

With regards to nationally designated biodiversity, the site lies within 1km of Cock Marsh SSSI and falls within its associated SSSI Impact Risk Zone (IRZ) where part of the site is identified for a requirement to consult further with Natural England for the development of over 50 homes outside of the main settlement area. Cock Marsh SSSI comprises around 18.5ha of grassland, all of which is in a 'favourable' condition and supportive of many flora species. The site transitions from wet alluvial grassland, through calcareous grassland on a steep north-facing slope to more acidic grassland on clay at the top of the slope.²⁰

Endangered invertebrate species have been identified on site (freshwater White-clawed Crayfish) and the site lies adjacent to deciduous woodland Priority Habitats along the north-eastern boundary at Hawks Hill.

The notable biodiversity features are all depicted in **Figure AII.1** overleaf.

¹⁶ Natural England – Designated Sites View [online] available at: <https://designatedsites.naturalengland.org.uk/>

¹⁷ The Red List of Threatened Species, founded in 1964, is the world's most comprehensive inventory of the global conservation status of biological species. It uses a set of criteria to evaluate the extinction risk of thousands of species and subspecies.

¹⁸ Natural England – Designated Sites View [online] available at: <https://designatedsites.naturalengland.org.uk/>

¹⁹ Buckinghamshire Council (2020) Draft Screening Statement for the Hollands Farm Development Brief SPD – attached as **Appendix II**.

²⁰ Ibid.



Baseline review – future baseline

As the site is allocated through the adopted Local Plan, it is likely to be bought forward for housing development in the period up to 2033. The Development Brief provides an opportunity to deliver further guidance to the Council's preferred approach of achieving the policy objectives for the site and better secure ecological improvements; including biodiversity net gain.

Key issues

The following key issues emerge from the context and baseline review:

- Potential environmental pathways connecting the development site with European designated biodiversity sites were investigated through the Habitats Regulation Assessment (HRA) accompanying the Local Plan. An Appropriate Assessment will also be undertaken alongside the development of the SPD which should inform the SEA.
- There is an identified need to consult further with Natural England regarding the potential effects of development for Cock Marsh SSSI, and any relevant mitigation considerations.
- Habitats on site potentially support endangered invertebrate species, these should be retained and enhanced and development at the site will need to minimise impacts on the adjacent deciduous woodland Priority Habitats, as well as any existing ecological corridors across the site that support overall ecological connectivity.

Climate change

Context review

Key messages from the National Planning Policy Framework²¹ (NPPF) include:

- Plans should take a proactive approach to mitigating and adapting to climate change, taking into account the long-term implications for flood risk, coastal change, water supply, biodiversity and landscapes, and the risk of overheating from rising temperatures. Policies should support appropriate measures to ensure the future resilience of communities and infrastructure to climate change impacts, such as providing space for physical protection measures, or making provision for the possible future relocation of vulnerable development and infrastructure.
- Inappropriate development in areas at high risk of flooding should be avoided by directing development away from areas of highest risk (whether existing or future).
- Strategic policies should be informed by a strategic flood risk assessment and should manage flood risk from all sources.
- Plans should take account of the effects of climate change in the long term, taking into account a range of factors including flooding. Adopt proactive strategies to adaptation and manage risks through adaptation measures including well planned green infrastructure.
- Plans should reduce risk from coastal change by avoiding inappropriate development in vulnerable areas and not exacerbate the impacts of physical changes to the coast.

One of the three overarching objectives of the NPPF is an environmental objective to 'contribute to protecting and enhancing our natural, built and historic environment' including

²¹ MHCLG (2019) National Planning Policy Framework [online] available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/779764/NPPF_Feb_2019_web.pdf

by 'mitigating and adapting to climate change' and 'moving to a low carbon economy.' 'The planning system should support the transition to a low carbon future in a changing climate, taking full account of flood risk and coastal change. It should help to: shape places in ways that contribute to radical reductions in greenhouse gas emissions, minimise vulnerability and improve resilience; encourage the reuse of existing resources, including the conversion of existing buildings; and support renewable and low carbon energy and associated infrastructure.

The Flood and Water Management Act (2010)²² sets out measures to ensure that risk from all sources of flooding, not just rivers and seas, are managed more effectively. This includes: incorporating greater resilience measures into the design of new buildings; utilising the environment in order to reduce flooding; identifying areas suitable for inundation and water storage to reduce the risk of flooding elsewhere; roll back development in coastal areas to avoid damage from flooding or coastal erosion; and creating sustainable drainage systems (SuDS).

The UK Climate Change Act²³ was passed in 2008 and established a framework to develop an economically credible emissions reduction path. It also highlighted the role it would take in contributing to collective action to tackle climate change under the Kyoto Protocol, and more recently as part of the UN-led Paris Agreement. The Climate Change Act 2008 (2050 Target Amendment) Order 2019 means that there is now in place a legally binding target of net zero by 2050.

The Committee of Climate Change published a 2012 report entitled 'How Local Authorities Can Reduce Emissions and Manage Climate Change Risk'²⁴ which emphasises the crucial role councils have in helping the UK meet its carbon targets and preparing for the impacts of climate change. It outlines specific opportunities for reducing emissions and highlights good practice examples from local authorities.

The UK Climate Change Risk Assessment is published on a 5-yearly cycle in accordance with the requirements of the Climate Change Act 2008. It required the Government to compile an assessment of the risks for the UK arising from climate change, and then to develop an adaptation programme to address those risks and deliver resilience to climate change on the ground. For both the 2012 and the 2017 UK Climate Change Risk Assessment, the Adaptation Sub-Committee commissioned an evidence report²⁵ containing six priority risk areas requiring additional action in the next five years:

- Flooding and coastal change risks to communities, businesses and infrastructure;
- Risks to health, well-being and productivity from high temperatures;
- Risk of shortages in the public water supply, and for agriculture, energy generation and industry;
- Risks to natural capital, including terrestrial, coastal, marine and freshwater ecosystems, soils and biodiversity;
- Risks to domestic and international food production and trade; and
- New and emerging pests and diseases, and invasive non-native species, affecting people, plants and animals

²² Flood and Water Management Act (2010) [online] available at: <http://www.legislation.gov.uk/ukpga/2010/29/contents>

²³ HM Government (2008): 'Climate Change Act 2008' [online] available at: <http://www.legislation.gov.uk/ukpga/2008/27/contents>

²⁴ CCC (2012) 'How local authorities can reduce emissions and manage climate risks' [online] available at: <https://www.theccc.org.uk/publication/how-local-authorities-can-reduce-emissions-and-manage-climate-risks/>

²⁵ DEFRA (2017) 'UK Climate Change Risk Assessment Report January 2017' [online] available at: <https://www.gov.uk/government/publications/uk-climate-change-risk-assessment-2017>

The Clean Air Strategy²⁶ released in 2019 sets out the Government plans for dealing with all sources of air pollution. The strategy sets out proposals in detail and indicates how devolved administrations intend to make their share of emissions reductions, and complements the Industrial Strategy, Clean Growth Strategy and 25 Year Environment Plan.

Planning Practice Guidance²⁷ advises how to identify suitable mitigation and adaptation measures in the planning process to address the impacts of climate change. The guidance includes advice on how adaptation and mitigation approaches can be integrated, and on how to deal with the uncertainty of climate risks when promoting adaptation in particular developments.

The National Design Guide²⁸ published in 2019 further illustrates how well-designed places that are beautiful, enduring and successful can be achieved in practice.

The Wycombe District Local Plan and Delivery and Site Allocations Development Plan contain the following policies which are relevant to the climate change SA theme:

- CP1: Sustainable Development
- CP7: Delivering the Infrastructure to Support Growth
- CP10: Green Infrastructure and the Natural Environment
- CP12: Climate Change
- DM2 Transport Requirements of development sites
- DM11 Green Networks and Infrastructure
- DM12 Green Spaces
- DM13 Conservation and Enhancement of Sites, Habitats and Species of Biodiversity and Geodiversity Importance
- DM14: Biodiversity in Development
- DM15 Protection and Enhancement of River and Stream Corridor
- DM33: Managing Carbon Emissions: Transport and Energy Generation
- DM34: Delivering Green Infrastructure and Biodiversity in Development
- DM35: Placemaking and Design Quality
- DM38 Water Quality and Supply
- DM39: Managing Flood Risk and Sustainable Drainage Systems
- DM41: Optional Technical Standards for Building Regulation Approval

Baseline review – current baseline

In relation to greenhouse gas emissions, source data from the Department of Energy and Climate Change²⁹ suggests that Wycombe District has had consistently lower per capita emissions than Buckinghamshire and England since 2005. However, the rate of decrease is lower than that identified for both Buckinghamshire and England (see **Figure AII.2**).

²⁶ HM Gov (2019) Clean Air Strategy 2019 [online] available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/770715/clean-air-strategy-2019.pdf

²⁷ MHCLG (2019) Climate change guidance [online] available at: <https://www.gov.uk/guidance/climate-change>

²⁸ MHCLG (2019) National Design Guide [online] available at: <https://www.gov.uk/government/publications/national-design-guide>

²⁹ Department of Energy and Climate Change (2019) '2005 to 2017 UK local and regional CO2 emissions – data tables' [online] available at: <https://www.gov.uk/government/statistics/uk-local-authority-and-regional-carbon-dioxide-emissions-national-statistics-2005-to-2017>

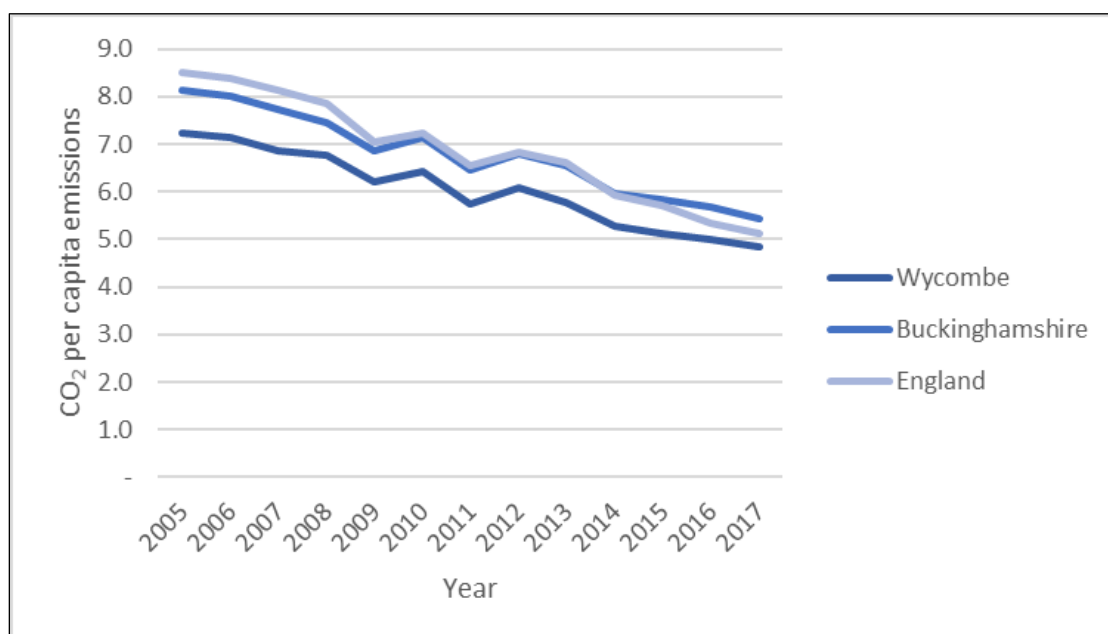


Figure All.2: Per capita emissions 2005 – 2017

The data identifies that the transport sector is the biggest contributor to emissions in the District, followed by the domestic and industry and commercial sectors. Whilst motorways and A-roads are the main sources of emissions, minor roads are also recognised as a significant contributor. In the Domestic sector, gas consumption is the main source of emissions, followed by electricity consumption. This trend is reversed in the Industry and Commercial sector, with electricity identified as the main source of emissions.

Research on the probable effects of climate change in the UK was released in 2018 by the UK Climate Projections (UKCP18) team³⁰. UKCP18 gives climate information for the UK up to the end of this century and projections of future changes to the climate are provided, based on simulations from climate models. Projections are broken down to a regional level across the UK and are shown in probabilistic form, which illustrate the potential range of changes and the level of confidence in each prediction.

As highlighted by the research, the effects of climate change (under medium emissions scenarios 50th percentile) for the South East of England during the period 2040-2059 compared to the period 1981-2000 are likely to be as follows³¹:

- The central estimate of increase in annual mean temperatures of between 1°C and 2°C; and
- The central estimate of change in annual mean precipitation of 0 to +20% in winter and -10% to -30% in summer.

With regards to climate change adaptation, the Environment Agency flood maps identify the southern extent of the site lies partially within Flood Risk Zone 2 and adjacent to Flood Risk Zone 3. The flood risk surrounding the site on the western side is associated with the River Wye and the River Thames, as depicted in **Figure All.3** below.

³⁰ The data was released on 26th November 2018: Available from: <http://ukclimateprojections.metoffice.gov.uk/>

³¹ Met Office (2018): 'Land Projection Maps: Probabilistic Projections', [online map] available at: <https://www.metoffice.gov.uk/research/collaboration/ukcp/land-projection-maps>

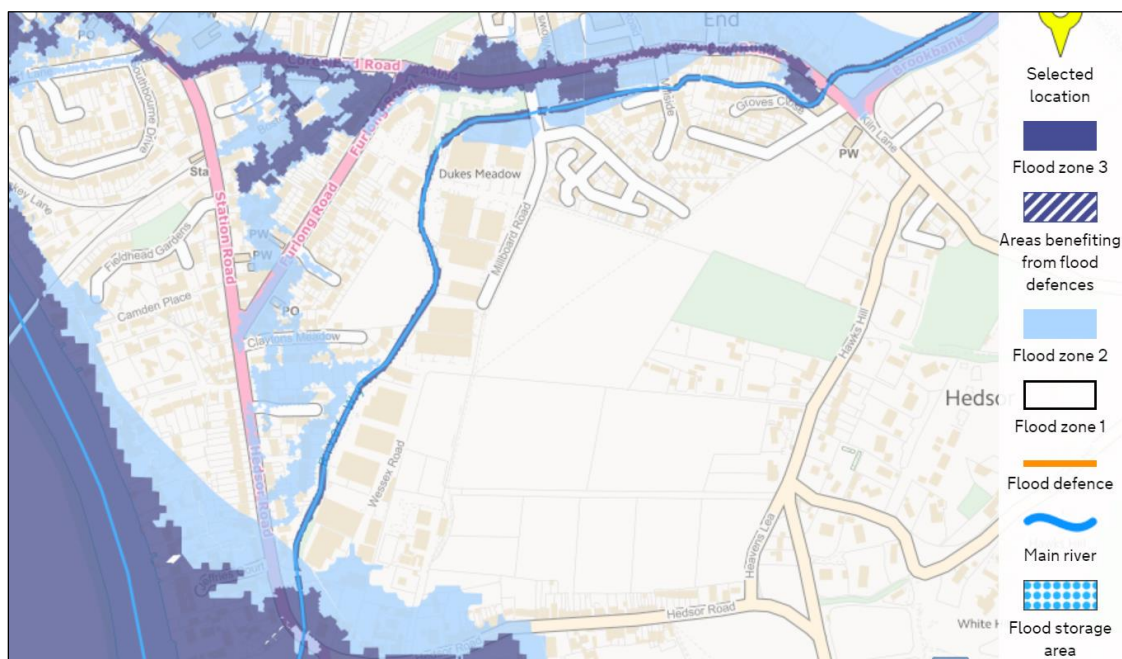


Figure All.3: Fluvial flood risk surrounding Hollands Farm³²

Surface water flood risk is more prevalent across the site, particularly within the northern extent, as depicted in **Figure All.4** below.

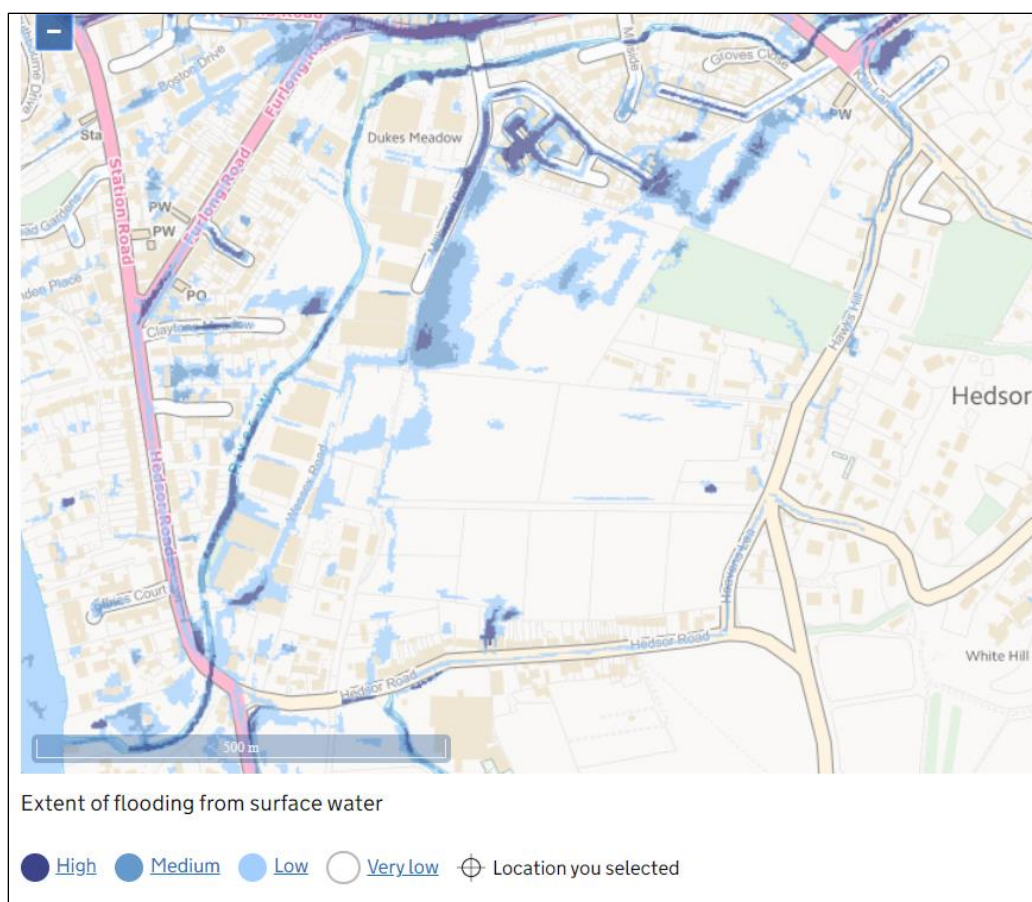


Figure All.4: Surface water flood risk at Hollands Farm³³

³² Environment Agency (2020) Flood Map for Planning [online] available at: <https://flood-map-for-planning.service.gov.uk/>

³³ Environment Agency (2020) Flood Map for Planning [online] available at: <https://flood-map-for-planning.service.gov.uk/>

The (Level 2) Strategic Flood Risk Assessment³⁴ (SFRA) undertaken for the Local Plan has investigated flood risk at the site. The examination of fluvial flood risk identifies the area within the south-western corner of the site is designated as Flood Zone 3 and any development application should *“seek to not develop this area as sufficient space is available elsewhere within the boundary for the proposed residential development.”* The potential for road access in this area is further examined however, and it is recognised that to meet the requirements of the Exception Test access should not change existing ground levels and the development should include facilities to close this access route during a flood event.

With regards to surface water flood risk, the SFRA recognises that climate change has the potential to increase the risk of surface water flooding to the site and *“Such a risk would need to be quantified by the applicant in order to demonstrate that the site could be developed safely for future users, taking into account the planning implications of such a result.”*

Alongside the identified fluvial and surface water flood risk the assessment examines groundwater flood risk at the site. The SFRA identifies that the eastern part of the site is at low risk of flooding, whilst the western side of the site is at high risk of flooding. However, the SFRA also identifies that *“further modelling places the eastern half of the site in a zone of elevated risk of groundwater emergency which would need to be considered in the site-specific FRA”*. Central sections of the site show a high risk of groundwater flooding and that the groundwater levels are either at or very near to (within 0.025m) the ground surface. The eastern side of the site is shown to have groundwater depths between 0.025-5m beneath ground level; the western is shown to have groundwater depths of greater than 5m.

The SFRA further recognises that infiltration should be the first method considered for drainage of the site. However, site-specific FRA is required to demonstrate the feasibility of infiltration measures as the proximity of the watercourse may result in locally high groundwater levels; potentially reducing the feasibility of such measures.

With regards to the risk of flooding from sewers, the SFRA identifies that within the post code area of SL8 between one and five properties have been reported to flood internally and between 16 and 20 instances of external flooding have been reported in the 20 years preceding 2014.

Alongside the identified risks, the SFRA further identifies that there *“is significant opportunity for a development at this site to reduce flood risk; consequently, a future applicant should liaise with the EA to discuss opportunities for betterment.”*

The site is also located within a Zone II (Outer Protection Zone) Source Protection Zone³⁵ (SPZ). The purpose of SPZs is to provide additional protection to safeguard drinking water quality through constraining the proximity of an activity that may impact upon a drinking water abstraction. This is part of an initial screening process in assessing impacts to groundwater resources.

Baseline review – future baseline

As the site is allocated through the adopted Local Plan, it is likely to be bought forward for housing development in the period up to 2033. The Development Brief can address how areas of groundwater, surface water and fluvial flooding, should be dealt with, and identify measures to improve resilience. The Development Brief also offers the potential to explore renewable energy generation and energy efficiency schemes appropriate to development at the site.

³⁴ Jacobs (2017) Level 2 Strategic Flood Risk Assessment [online] available at: <https://www.wycombe.gov.uk/uploads/public/documents/Planning/New-local-plan/Local-plan-publication-version/WDC-level-2-strategic-flood-risk-assessment-report-SFRA.pdf>

³⁵ DEFRA (2020) Magic Map Application [online] available at: <https://magic.defra.gov.uk/MagicMap.aspx>

Key issues

The following key issues emerge from the context and baseline review:

- Development will need to consider energy efficiency and opportunities for renewable energy generation to support the wider goals in relation to carbon neutrality and climate change mitigation. Wider measures such as opportunities to improve active travel networks (see policy DM2) should also be considered to complement the range of potential resilience measures.
- The site is surrounded by areas of fluvial flood risk and contains areas of surface water and groundwater flood risk. Development should consider flood risk constraints from an early stage of design, including future flood risk considering climate change. Development should ensure suitable mitigation is provided in design and layout to provide flood resilience now and into the future.

Community and wellbeing

Context review

Key messages from the National Planning Policy Framework³⁶ (NPPF) include that planning policies should:

- Provide the social, recreational and cultural facilities and services the community needs, such as local shops, meeting places, sports venues, open space, cultural buildings, public houses and places of worship, whilst guarding against the unnecessary loss of community facilities and services.
- Retain and develop accessible local services and community facilities in rural areas.
- Ensure that developments create safe and accessible environments where crime and disorder, and the fear of crime, do not undermine quality of life or community cohesion. Places should contain clear and legible pedestrian routes, and high-quality public spaces, which encourage the active and continual use of public areas.
- Enable and support health lifestyles through provision of green infrastructure, sports facilities, local shops, access to healthier food, allotments and layouts that encourage walking and cycling.
- Take into account and support the delivery of local strategies to improve health, social and cultural well-being for all sections of the community.
- Help deliver access to high quality open spaces and opportunities for sport and physical activity to contribute to the health and well-being of communities.
- Ensure that there is a 'sufficient choice of school places' and taking a 'proactive, positive and collaborative approach' to bringing forward 'development that will widen choice in education'.

National Planning Practice Guidance (NPPG)³⁷ identifies that:

- Local Planning Authorities should assess their development needs working with the other local authorities in the relevant housing market area or functional economic market area in line with the duty to cooperate. This is because such needs are rarely constrained precisely by local authority administrative boundaries.

³⁶ MHCLG (2019) National Planning Policy Framework [online]
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/779764/NPPF_Feb_2019_web.pdf

³⁷ Department for Communities and Local Government (2012) National Planning Practice Guidance [online]
<http://planningguidance.communities.gov.uk/>

- Local planning authorities should secure design quality through the policies adopted in their local plans. Good design is indivisible from good planning and should be at the heart of the plan making process.
- A healthy community is a good place to grow up and grow old in. It is one which supports healthy behaviours and supports reductions in health inequalities. It should enhance the physical and mental health of the community.
- Green infrastructure is a network of multifunctional green space, urban and rural, which is capable of delivering a wide range of environmental and quality of life benefits for local communities. Local Plans should identify the strategic location of existing and proposed green infrastructure networks. Where appropriate, supplementary planning documents can set out how the planning, design and management components of the green infrastructure strategy for the area will be delivered.

The Select Committee on Public Service and Demographic Change report *Ready for Ageing?* (2013)³⁸ warns that society is underprepared for the ageing population. The report says that *'longer lives can be a great benefit, but there has been a collective failure to address the implications and without urgent action this great boon could turn into a series of miserable crises'*. The report says that the housing market is delivering much less specialist housing for older people than is needed. Central and local government, housing associations and house builders need urgently to plan how to ensure that the housing needs of the older population are better addressed and to give as much priority to promoting an adequate market and social housing for older people as is given to housing for younger people.

The increasing role that local level authorities are expected to play in providing health outcomes is demonstrated by recent government legislation. The Health and Social Care Act 2012 transferred responsibility for public health from the NHS to local government, giving local authorities a duty to improve the health of the people who live in their areas. This will require a more holistic approach to health across all local government functions.

The Fair Society, Healthy Lives ('The Marmot Review')³⁹ investigated health inequalities in England and the actions needed in order to tackle them. Subsequently, a supplementary report was prepared providing additional evidence relating to spatial planning and health on the basis that there is: *"overwhelming evidence that health and environmental inequalities are inexorably linked and that poor environments contribute significantly to poor health and health inequalities"*.

The Wycombe Community Safety Partnership Plan⁴⁰ outlines the Community Safety Partnership's priorities, which are determined by the Community Safety Strategic Assessment.

The Wycombe District Sports Facilities Strategy⁴¹ provides an audit, gap analysis and recommendations relating to outdoor and indoor sports facilities. This enables the Council to have a clear plan for developing sports facilities in the future, as a method for prioritising projects have also been developed.

The Wycombe District Local Plan and Delivery and Site Allocations Plan contain the following policies which are relevant to the community and wellbeing SA theme:

³⁸ Select Committee on Public Service and Demographic Change (2013) *Ready for Ageing?* [online] <http://www.parliament.uk/business/committees/committees-a-z/lords-select/public-services-committee/report-ready-for-ageing/>

³⁹ The Marmot Review (2011) *The Marmot Review: Implications for Spatial Planning* [online] <http://www.nice.org.uk/nicemedia/live/12111/53895/53895.pdf>

⁴⁰ Wycombe Community Safety Partnership (2018) *Wycombe Community Safety Partnership Plan 2017-2020* [online] available at: <https://www.wycombe.gov.uk/uploads/public/documents/Community/Public-safety/WCSP-Plan-2018-19-v2.pdf>

⁴¹ Wycombe District Council (2015) *Wycombe District Sports Facility Strategy 2015-2020* [online] available at: <https://www.wycombe.gov.uk/uploads/public/documents/Leisure-and-culture/Sports/Wycombe-district-sports-facilities-strategy.pdf>

- CP2: Overall Spatial Strategy
- CP3: Settlement Strategy
- CP4: Delivering Homes
- CP6: Securing Vibrant and High Quality Town Centres
- CP7: Delivering the Infrastructure to Support Growth
- BE3: Health Facilities in Bourne End and Wooburn
- DM11 Green Networks and Infrastructure
- DM12 Green Spaces
- DM13 Conservation and Enhancement of Sites, Habitats and Species of Biodiversity and Geodiversity Importance
- DM16 Open Space in New Development
- DM29: Community Facilities
- DM35: Placemaking and Design Quality

Baseline review – current baseline

Bourne End is recognised in the Local Plan as “*a bustling village centre with good local amenities*”.

The Hollands Farm site contains Public Rights of Way (PRoWs) that provide access to Wooburn Green and Woolman’s Wood and contribute to the recreational network and lies less than 150m from the Village Green at Slate Meadow, providing good access to open space. Whilst Slate Meadow is identified as a housing growth site within the Local Plan, Policy BE1 identifies that development will be required to retain the village green. The Local Plan (Policy BE2) further seeks to bring the adjacent woodland east of the Hollands Farm site back into public use; which could support future residents at the site. The site is also well connected to Bourne End Recreational Ground, Bourne End Junior Sports Club, and St Mark’s Church and Hall.

The site is located in an area with good access to many of the existing community services and facilities, including the Orchard GP surgery on Station Road, and a post office and day nursery on Furlong Road. A range of shops and facilities are located within relatively good walking distance of the site⁴² along The Parade, including convenience stores, a garage, coffee shops, a pub, Bourne End Library and Bourne End Community Centre. However, despite good access, it is noted in the Infrastructure Delivery Plan⁴³ that there is a need for more healthcare facility (GP) capacity, which is currently supported through Local Plan Policy BE3.

St Pauls C of E Combined School and the Bourne End Academy, as well as Westfield School all lie within 800m from the site at their nearest points and provide good educational access for development at the site.

The Local Plan Principles for Bourne End and Wooburn include in the facilitation of local infrastructure; the provision of additional school places and other community facilities, including improved and expanded healthcare facilities.

The Hollands Farm site lies within the Bourne End-cum-Hedsor Ward⁴⁴ which had a recorded population of 5,531 residents in 2011 across 509.79ha equating to a density of

⁴² Estimated around 950m/ 12 minutes walking distance using Google Maps; access is measured from the north western extent of the site at Millboard Road.

⁴³ Wycombe District Council (2017) Local Plan Publication Version Infrastructure Delivery Plan [online] available at: <https://www.wycombe.gov.uk/uploads/public/documents/Planning/New-local-plan/Local-plan-publication-version/Local-plan-infrastructure-delivery-plan.pdf>

⁴⁴ ONS (2011) Table KS101EW: Usual resident population/ 2011 wards/ E05002677: Bourne End-cum-Hedsor

around 10.8 people per hectare. The age structure of residents is identified in **Table All.2** below and compared to the structures for both Wycombe and England. The table identifies that there are a significantly higher proportion of people aged 60 and over residing in the ward area, and a slightly higher proportion of residents aged between 45 and 59 when compared to the averages for both Wycombe and England. Conversely, there are significantly less younger people forming the resident population, particularly concerning the age band 25 – 44 years, when compared to Wycombe and England.

Table All.2: Age structure (2011)

Age group	Bourne End-Cum-Hedsor	Wycombe	England
0-15	16.2%	20.3%	18.9%
16-24	8%	11.1%	11.9%
25-44	23%	27.4%	27.5%
45-59	22.2%	19.6%	19.4%
60-84	27.1%	19.6%	20.1%
85+	3.5%	2%	2.3%
Total population	5,531	171,644	53,012,456

Source: ONS, 2011 (Table KS102EW)

Census statistics measure deprivation across four 'dimensions' of deprivation, summarised below:

- **Employment:** Any person in the household (not a full-time student) that is either unemployed or long-term sick.
- **Education:** No person in the household has at least a level 2 qualification and no person aged 16-18 is a full-time student.
- **Health and Disability:** Any person in the household that has generally 'bad' or 'very bad' health or has a long-term health problem.
- **Housing:** The household accommodation is either overcrowded (with an occupancy rating of -1 or less), in a shared dwelling or has no central heating.

Based on the information presented in **Table All.3**, there are significantly more households in the ward area that are not deprived in any dimension when compared to both Wycombe and England. The table shows that there are less households deprived in 1, 2, 3 or 4 dimensions overall, and whilst broadly in line with the findings for Wycombe, the ward area performs marginally better in terms of low deprivation.

Out of the 45.98% of households which are deprived in the ward area, the majority are deprived in either one or two dimensions, like the regional and national trends.

Table All.3: Relative household deprivation dimensions

Relative deprivation	Bourne End-Cum-Hedsor	Wycombe	England
Classified households	2,460 (100%)	67,861 (100%)	22,063,368 (100%)
Household not deprived in any dimension	1,329 (54.02%)	35,109 (51.74%)	9,385,648 (42.54%)
Household deprived in 1 dimension	738 (30%)	21,166 (31.19%)	7,204,181 (32.65%)
Household deprived in 2 dimensions	331 (13.46%)	9,527 (14.04%)	4,223,982 (19.14%)
Household deprived in 3 dimensions	58 (2.36%)	1,856 (2.74%)	1,133,622 (5.14%)
Household deprived in 4 dimensions	4 (0.16%)	203 (0.3%)	115,935 (0.53%)

Source: ONS, 2011 (Table QS119EW), AECOM calculations (rounded)

The site falls across two identified Lower Super Output Areas (LSOAs)⁴⁵; Wycombe 021B & Wycombe 021D, both of which fall among the 10% least deprived neighbourhoods in the country.⁴⁶ However, in contrast LSOA Wycombe 021A which forms the northern extent of Bourne End (west and north of Furlong Road and The Parade) falls within the 40% least deprived bracket, performing significantly worse than the remaining areas of Bourne End in relation to deprivation.

Baseline review – future baseline

As the site is allocated through the adopted Local Plan, it is likely to be bought forward for housing development in the period up to 2033. This is likely to support community housing needs and the Development Brief can help to better secure additional community benefits, such as contributions to additional accessible open space, and increased educational and health facility capacities.

Key issues

The following key issues emerge from the context and baseline review:

- New development will be in an area of low deprivation and is likely to be supported by good access to community services and facilities, including open space, given the extent of existing provisions.
- Further development in Bourne End which delivers additional community benefits, such as new open space provisions, or additional capacity at health and educational facilities can lend support to improving deprivation in other areas of Bourne End.

Economy and employment

Context review

Key messages from the NPPF⁴⁷ include:

- Planning policies should help build a strong, responsive and competitive economy by ensuring that sufficient land of the right types is available in the right places and at the right time to support growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure.
- Local Plans should:
 - Encourage sustainable economic growth within their clear economic vision and strategy.
 - Set criteria and identify sites for local investment to match the community needs.
 - Address investment barriers such as inadequate infrastructure, services/housing or poor environment.
 - Incorporate flexibility to account for unanticipated circumstances, allow new working practices and enable rapid responses to economic changes.

The Local Growth White Paper (2010)⁴⁸ notes that government interventions should support investment that will have a long-term impact on growth, working with markets rather than seeking to create artificial and unsustainable growth. The White Paper identifies that economic policy should be judged on the degree to which it delivers strong, sustainable and

⁴⁵ LSOAs are a geographic hierarchy designed to improve the reporting of small area statistics in England and Wales. They are standardized geographies designed to be as consistent in population as possible, with each LSOA containing approximately 1,000 to 1,500 people.

⁴⁶ Indices of Deprivation (2019) [online] available at: http://dclgapps.communities.gov.uk/imd/iod_index.html

⁴⁷ MHCLG (2019) National Planning Policy Framework [online] available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/779764/NPPF_Feb_2019_web.pdf

⁴⁸ Department for Business, Innovation and Skills (2010) Local Growth: Realising Every Place's Potential [online] available at: <https://www.gov.uk/government/publications/local-growth-realising-every-places-potential-hc-7961> 7

balanced growth of income and employment over the long-term. More specifically, growth should be: broad-based industrially and geographically, ensuring everyone has access to the opportunities that growth brings (including future generations), whilst also focused on businesses that compete with the best internationally.

National Planning Practice Guidance (PPG)⁴⁹ identifies that a positive vision or strategy for town centres, articulated through the Local Plan, is key to ensuring successful town centres which enable sustainable economic growth and provide a wide range of social and environmental benefits.

The Wycombe District Local Plan and Delivery and Site Allocations Development Plan contains the following policies which are relevant to the economy and employment SA theme:

- CP2: Overall Spatial Strategy
- CP5: Delivering Land for Business
- CP6: Securing Vibrant and High Quality Town Centres
- HWTC4: Economy
- DM5: Scattered Business Sites
- DM28: Employment Areas
- DM35: Placemaking and Design Quality
- DM37: Small Scale Non-Residential Development

Baseline review – current baseline

Bourne End is recognised in the Local Plan as “*a bustling village centre with good local amenities*” as well as “*significant areas for local businesses making it an important local centre for jobs.*” The Local Plan Principles for Bourne End and Wooburn include the fostering of economic growth by safeguarding business areas and the site lies adjacent to the existing Millboard Road employment area; a significant stretch of warehousing and economic bases along Millboard Road and Wessex Road. Bourne End Garden Centre is also a prominent business area along Hedsor Road; south of the site.

The 2011 Ward Profile⁵⁰ identifies 18.4% of the Bourne End-Cum-Hedsor population aged between 16 and 64 were economically inactive at the time. This includes 5.8% of these people being retired, and 4.1% studying as students. 4.8% of these people identified as looking after the home or family and a further 1.9% identified as long-term sick or disabled.

However, with 81.6% of this age group economically active, Bourne End-Cum-Hedsor performs well in comparison with the percentages for Wycombe (80.5%) and England and Wales (76.8%). Of the population aged 16 and over and in employment, 74.2% were in full-time employment, again performing statistically better than the figures for both Wycombe (72%) and England and Wales (70.7%).

‘Professional’, followed closely by both ‘Associate Professional & Technical’, and ‘Manager and Senior Officials’ were the most prevalent occupations of residents aged 16 and over in the ward. 42% of residents aged between 16 and 64 also held Level 4 qualifications and above, whilst 8.3% had no qualifications in 2011. 1.1% of these residents were also claiming benefits at that time.

⁴⁹ Department for Communities and Local Government (2012) National Planning Practice Guidance [online] available at: <http://planningguidance.communities.gov.uk/>

⁵⁰ Nomis (2011) 2011 Ward Labour Market Profile E36001717: Bourne End-Cum-Hedsor [online] available at: <https://www.nomisweb.co.uk/reports/lmp/ward2011/1140852405/report.aspx?town=bourne%20end>

Baseline review – future baseline

As the site is allocated through the adopted Local Plan, it is likely to be bought forward for housing development in the period up to 2033 in an area with established employment areas. The increase in residents can support local economies and further inward investment, and the Development Brief can lend support in achieving these positive outcomes through high-quality design requirements and increased accessibility between Hawks Hill and Millboard Road/ Wessex Road.

Key issues

The following key issues emerge from the context and baseline review:

- Housing development is likely to be supported by good access to existing employment areas, and high-quality design alongside access improvements can support further inward investment.
- Housing development will need to consider the compatibility of some of the adjacent employment uses, and mitigation may be required in this respect.

Historic environment

Context review

The Planning (Listed Buildings & Conservation Areas) Act 1990 is a UK Act of Parliament that changed laws relating to the granting of planning permission for building works, with a particular focus on listed buildings and conservation areas.⁵¹ It created special controls for the demolition, alteration or extension of buildings, objects or structures of particular architectural or historic interest, as well as conservation areas.

The Ancient Monuments & Archaeological Areas Act 1979 is an Act to consolidate and amend the law relating to ancient monuments; to make provision for the investigation, preservation and recording of matters of archaeological or historical interest and (in connection therewith) for the regulation of operations or activities affecting such matters; to provide for the recovery of grants under section 10 of the Town and Country Planning (Amendment) Act 1972 or under section 4 of the Historic Buildings and Ancient Monuments Act 1953 in certain circumstances; and to provide for grants by the Secretary of State to the Architectural Heritage Fund.⁵²

Key messages from the National Planning Policy Framework⁵³ (NPPF) include:

- Strategic policies should set out an overall strategy making provision for ‘conservation and enhancement of the natural, built and historic environment, including landscapes and green infrastructure.
- Planning policies and decisions should ensure that developments ‘are sympathetic to local character and history, including the surrounding built environment and landscape setting, while not preventing or discouraging appropriate innovation of change (such as increased densities).
- Heritage assets should be recognised as an ‘irreplaceable resource’ that should be conserved in a ‘manner appropriate to their significance’, taking account of ‘the wider social, cultural, economic and environmental benefits’ of conservation, whilst also recognising the positive contribution new development can make to local character and distinctiveness.

⁵¹ UK Public General Acts (1990) Planning (Listed Buildings and Conservation Areas) Act 1990 [online] available at: <https://www.legislation.gov.uk/ukpga/1990/9/contents> last accessed [28/08/19]

⁵² UK Public General Acts (1990) The Ancient Monuments & Archaeological Acts 1979 [online] available at: <https://www.legislation.gov.uk/ukpga/1979/46> last accessed [28/08/19]

⁵³ MHCLG (2019) National Planning Policy Framework [online] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/779764/NPPF_Feb_2019_web.pdf

- Plans should set out a 'positive strategy' for the 'conservation and enjoyment of the historic environment', including those heritage assets that are most at risk.
- When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation (and the more important the asset, the greater the weight should be). This is irrespective of whether any potential harm amounts to substantial harm, total loss or less than substantial harm to its significance.

These messages are supported by the national Planning Practice Guidance (PPG)⁵⁴ which itself includes the key message that local authorities should set out in their Local Plans a positive strategy for the conservation and enjoyment of the historic environment which recognises that conservation is not a passive exercise and that identifies specific opportunities for the conservation and enhancement of heritage assets.

Along with the policies contained within Chapter 2 'Recovering nature and enhancing the beauty of landscapes', Goal 6 'Enhanced beauty, heritage and engagement with the natural environment' of the Government's 'A Green Future: Our 25 Year Plan to Improve the Environment'⁵⁵ directly relates to the Historic Environment.

Historic England is the statutory body that helps people care for, enjoy and celebrate England's spectacular historic environment. Guidance and advice notes provide essential information for local planning authorities, neighbourhood groups, developers, consultants, landowners and other interested parties on historic environment considerations, and are regularly reviewed and updated in light of legislative changes. The following guidance and advice notes are particularly relevant and should be read in conjunction with the others.

Conservation Area Designation, Appraisal and Management: Historic England Advice Note 1 (February 2016)⁵⁶ outlines ways to manage change that conserves and enhances historic areas in order to positively contribute to sustainable development. Principally, the advice note emphasises the importance of:

- Understanding the different types of special architectural and historic interest which underpin the designations; and
- Recognising the value of implementing controls through the appraisal and/or management plan which positively contribute to the significance and value of Conservation Areas.

Sustainability Appraisal (SA) and Strategic Environment Assessment (SEA): Historic England Advice Note 8 (December 2016)⁵⁷ provides support to all stakeholders involved in assessing the effects of certain plans and programmes on the historic environment. It offers advice on heritage considerations during each stage of the SA/SEA process and helps to establish the basis for robust and comprehensive assessments.

Historic Environment Good Practice Advice in Planning Note 3: The Setting of Heritage Assets (2nd Edition) (December 2017)⁵⁸ provides general advice on understanding setting, and how it may contribute to the significance of heritage assets and allow that significance to be appreciated, as well as advice on how views can contribute to setting. Specifically, Part 2

⁵⁴ Department for Communities and Local Government (2012) National Planning Practice Guidance [online] <http://planningguidance.communities.gov.uk/>

⁵⁵ HM GOV (2018) A Green Future: Our 25 Year Plan to Improve the Environment [online] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/693158/25-year-environment-plan.pdf

⁵⁶ Historic England (2016): 'Conservation Area Designation, Appraisal and Management: Advice Note 1' [online] available from: <https://historicengland.org.uk/images-books/publications/conservation-area-designation-appraisal-management-advice-note-1/>

⁵⁷ Historic England (2016): 'SA and SEA: Advice Note 8' [online] available at: <https://historicengland.org.uk/images-books/publications/sustainability-appraisal-and-strategic-environmental-assessment-advice-note-8/>

⁵⁸ Historic England (2017): 'Setting of Heritage Assets: 2nd Edition' [online] available at: <https://historicengland.org.uk/images-books/publications/gpa3-setting-of-heritage-assets/>

of the advice note outlines a five stepped approach to conducting a broad assessment of setting:

- Step 1: Identify which heritage assets and their settings are affected;
- Step 2: Assess the degree to which these settings contribute to the significance of the heritage asset(s) or allow significance to be appreciated;
- Step 3: Assess the effects of the proposed development, whether beneficial or harmful, on that significance or on the ability to appreciate it;
- Step 4: Explore ways to maximise enhancement and avoid or minimise harm; and
- Step 5: Make and document the decision and monitor outcomes.

Neighbourhood Planning and the Historic Environment: Historic England Advice Note 11 (October 2018)⁵⁹ outlines the importance of considering the historic environment whilst preparing the plan (section 1), which culminates in a checklist of relevant issues to consider, followed by an overview of what this means in terms of evidence gathering (section 2). Sections 3 to 5 of the advice note focus on how to translate evidence into policy, understand the SEA process and Historic England's role in neighbourhood planning.

The National Design Guide⁶⁰ published in 2019 further illustrates how well-designed places that are beautiful, enduring and successful can be achieved in practice.

The Wycombe District Local Plan contains the following policies which are relevant to the historic environment SA theme:

- CP9: Sense of Place
- CP11: Historic Environment
- DM31: Development Affecting the Historic Environment
- BE2: Hollands Farm Bourne End and Wooburn.

Baseline review – current baseline

Although the Hollands Farm site is not known to contain any designated heritage assets, Listed Buildings line Kiln Lane, Hawks Hill and Hedsor Road largely surrounding the site. Hedsor Road forming the southern border of the site also lies within the Hedsor Road and Riversdale Bourne End Conservation Area which was designated in 1986 and extended in 1991.

The Conservation Area Appraisal⁶¹ identifies that the designation comprises “*a large area along the east bank of the River Thames between Bourne End Railway Bridge and Cookham Road Bridge. It contains three distinct historic areas of mainly 19th and early 20th century character, interspersed with a few earlier buildings from the 17th and 18th centuries.*” The three areas are defined as:

- Area A: Upper Bourne End – comprises a ribbon of development along part of (Upper) Hedsor Road characterised by late 19th century small-scale artisan and farm-worker housing and encompassing the Grade II Hollands Farmhouse. It is this area that lies adjacent to the Hollands Farm site.
- Area B: Abney – development north of the River Wye expanding around the railway station, particularly within the former grounds to Abney House (a

⁵⁹ Historic England (2018): 'Neighbourhood Planning and the Historic Environment' [online] available at: <https://historicengland.org.uk/images-books/publications/neighbourhood-planning-and-the-historic-environment/>

⁶⁰ MHCLG (2019) National Design Guide [online] available at: <https://www.gov.uk/government/publications/national-design-guide>

⁶¹ Wycombe District Council (2018) Riversdale & Hedsor Road Conservation Area Appraisal [online] available at: <https://www.wycombe.gov.uk/uploads/public/documents/Planning/Conservation-areas-and-listed-buildings/Hedsor-Road-and-Riversdale-Conservation-Area-Appraisal.pdf>

riverside villa partly dating from about 1801) and encompassing a historic mill site.

- Area C: Riversdale – the riverbank south of the River Wye comprising late 19th and early 20th century residential development in large plots that face onto the curve of the River Thames as far south as Cookham Bridge and encompassing two fields.

11.7 Hedsor House Registered Park and Garden extends across much of the landscape south east of the site off Harvest Hill/ Hedsor Hill. This area is also recognised as an Archaeological Site. The designated heritage assets are depicted in **Figure All.5** overleaf.

LEGEND

- Hollands Farm Site Boundary
- Conservation Area
- Hedser House Registered Park and Garden/ Area of Archaeological Interest
- Listed Building
 - Grade I
 - Grade II*
 - Grade II

DESIGNATED HISTORIC ASSETS

Drawn	Checked	Approved	Date
60627436	60627436	60627436	1:17 500

FIGURE A11.5

Baseline review – future baseline

As the site is allocated through the adopted Local Plan, it is likely to be bought forward for housing development in the period up to 2033. The Development Brief can provide additional policy provisions which seek to minimise the impact of development on the historic environment, including through the delivery of high-quality design and effective layout and massing on site.

Key issues

The following key issues emerge from the context and baseline review:

- The Hollands Farm site is surrounded by sensitive heritage settings, including the Hedsor Road and Riversdale Bourne End Conservation Area adjacent to the site in the south and many Listed Buildings. Hedsor House Registered Park and Garden also extends across much of the landscape south east of the site. Development has the potential to affect these heritage settings both positively and negatively. It will be important to ensure that the design and layout of development supports responsive and high-quality design that complements the historic context. This will be a particular consideration for access/ egress and junction remodelling in the south of the site.

Housing

Context review

Key messages from the NPPF⁶² include:

- Support for strong, vibrant and healthy communities, by ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations; and by fostering a well-designed and safe built environment, with accessible services and open spaces that reflect current and future needs and support communities' health, social and cultural wellbeing.
- To support the Government's objective of significantly boosting the supply of housing, strategic policies 'should be informed by a local housing need assessment, conducted using the standard method in national planning guidance. In addition to the local housing need figure, any needs that cannot be met within neighbouring areas should also be taken into account in establishing the amount of housing to be planned for.'
- The size, type and tenure of housing needed for different groups in the community should be assessed and reflected in planning policies. Where a need for affordable housing is identified, planning policies should specify the type of affordable housing required and expect it to be met on-site where possible.
- Recognise the important contribution of small and medium sized development sites in meeting housing needs. Local Plans should identify land to accommodate at least 10% of their housing requirement on sites no larger than one hectare, and neighbourhood planning groups should also consider the opportunities for allocating small and medium-sized sites.
- In rural areas, planning policies and decisions should be responsive to local circumstances and plan housing development to reflect local needs, particularly for affordable housing, including through rural exception sites where appropriate. Authorities should consider whether allowing some market housing would facilitate the provision of affordable housing to meet local needs.

⁶² MHCLG (2019) National Planning Policy Framework [online] available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/779764/NPPF_Feb_2019_web.pdf

In February 2017 the government published the Housing White Paper entitled 'Fixing our broken housing market'.⁶³ Key points in relation to housing delivery include the proposed new standardised methodology for calculating housing need and a drive to increase densities in the most sustainable locations, particularly near transport hubs such as train stations.

National Planning Practice Guidance (PPG)⁶⁴ identifies that:

- Local Planning Authorities should follow the standard method for assessing local housing need and strategic policies should identify a 5-year housing land supply from the intended date of adoption of the plan. Local authorities should also identify a supply of specific, developable sites or broad locations for growth for years 6-10 and, where possible, for years 11-15.
- Local Planning Authorities should secure design quality through the policies adopted in their local plans. Good design is indivisible from good planning and should be at the heart of the plan making process.
- A healthy community is a good place to grow up and grow old in. It is one which supports healthy behaviours and supports reductions in health inequalities. It should enhance the physical and mental health of the community.
- Green infrastructure is a network of multifunctional green space, urban and rural, which is capable of delivering a wide range of environmental and quality of life benefits for local communities. Local Plans should identify the strategic location of existing and proposed green infrastructure networks. Where appropriate, supplementary planning documents can set out how the planning, design and management components of the green infrastructure strategy for the area will be delivered.

The Select Committee on Public Service and Demographic Change report Ready for Ageing (2013)⁶⁵ warns that society is underprepared for the ageing population. The report says that *'longer lives can be a great benefit, but there has been a collective failure to address the implications and without urgent action this great boon could turn into a series of miserable crises'*. The report says that the housing market is delivering much less specialist housing for older people than is needed. Central and local government, housing associations and house builders need urgently to plan how to ensure that the housing needs of the older population are better addressed and to give as much priority to promoting an adequate market and social housing for older people as is given to housing for younger people.

The National Design Guide⁶⁶ published in 2019 further illustrates how well-designed places that are beautiful, enduring and successful can be achieved in practice.

The Wycombe District Local Plan contains the following policies which are relevant to the housing SA theme:

- CP2: Overall Spatial Strategy
- CP3: Settlement Strategy
- CP4: Delivering Homes
- DM21: The Location of New Housing
- DM22: Housing Mix

⁶³ MHCLG (2017) Housing White Paper [online] available at: <https://www.gov.uk/government/collections/housing-white-paper>

⁶⁴ Department for Communities and Local Government (2012) National Planning Practice Guidance [online] available at: <http://planningguidance.communities.gov.uk/>

⁶⁵ Select Committee on Public Service and Demographic Change (2013) Ready for Ageing? [online] available at: <http://www.parliament.uk/business/committees/committees-a-z/lords-select/public-services-committee/report-ready-for-ageing/>

⁶⁶ MHCLG (2019) National Design Guide [online] available at: <https://www.gov.uk/government/publications/national-design-guide>

- DM23: Other Residential Uses
- DM24: Affordable Housing
- DM25: Rural Exceptions Affordable Housing
- DM26: Criteria for Traveller Sites
- DM27: Housing for Rural Workers
- DM35: Placemaking and Design Quality
- DM36: Extensions and Alterations to Existing Dwellings
- DM43: The Replacement or Extension of Dwellings in the Green Belt (including outbuildings)
- DM45: Conversion of Existing Buildings in the Green Belt and other Rural Areas

These are also considered alongside site specific housing allocations and site policies for mixed use development in town centres.

Baseline review – current baseline

As shown in **Figure All.6**, within the Bourne End-Cum-Hedsor ward area, 74.5% of residents either own their home outright or with a mortgage, higher than all other comparators. The proportion of residents living in privately rented accommodation (13.9%), social rented accommodation (9.7%), or in shared ownership (0.2%) in the ward is lower than the regional and national totals. Comparatively, the total percentage of residents living rent free within the ward (1.8%) is slightly higher than the total for Wycombe (1.4%), and England (1.3%).

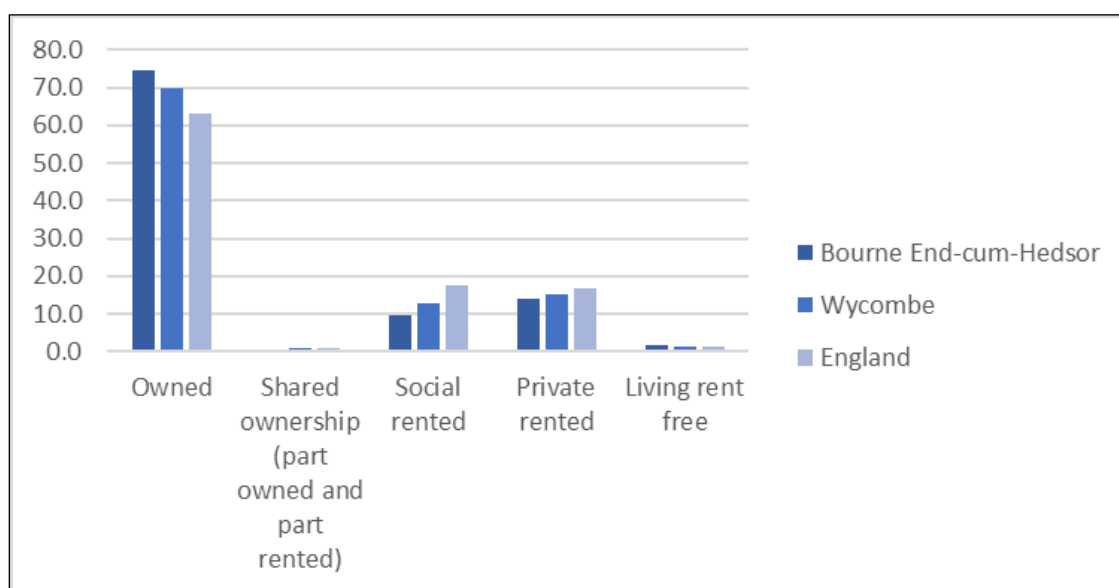


Figure All.6: Tenure by household⁶⁷

To meet identified housing needs the District Local Plan Principles for Bourne End and Wooburn, alongside Policies BE1 and BE2, identify the provision of new housing including affordable housing at both the Hollands Farm strategic Green Belt release site and the former Reserve Site at Slate Meadow. An additional small-scale development site is also identified at Windrush House. In combination, the Local Plan allocations are anticipated to deliver around 625 new dwellings in Bourne End and Wooburn. Adopted Local Plan policies will also shape the mix of dwelling sizes, types and tenures in housing development, as guided by Policy DM22 (Housing Mix) and Policy DM24 (Affordable Housing). In line with Policy DM24, development at the Hollands Farm site will be expected to provide 48% of the total number of units for affordable housing tenures.

⁶⁷ ONS (2011) Tenure by household (Table KS402EW)

Baseline review – future baseline

As the site is allocated through the adopted Local Plan, it is likely to be bought forward for housing development in the period up to 2033. However, the Development Brief can further support the delivery of the right mix of housing on site, and the necessary supporting infrastructure to accommodate housing growth.

Key issues

The following key issues emerge from the context and baseline review:

- Development at the Hollands Farm site is likely to support residents by meeting local housing needs, including affordable housing needs.

As the site will inherently deliver housing development with or without the SPD and Local Plan policy already guides an appropriate mix of housing types, sizes and tenures; no significant changes to the future baseline are anticipated through the delivery of the SPD and it is proposed that this objective is **scoped out** of the SA.

Landscape

Context review

Key messages from the National Planning Policy Framework⁶⁸ (NPPF) include:

- Great weight should be given to conserving and enhancing landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural Beauty [...]. The conservation and enhancement of wildlife and cultural heritage are also important considerations in these areas, and should be given great weight in National Parks and the Broads. The scale and extent of development within these designated areas should be limited.
- Strategic policies should set out an overall strategy making provision for 'conservation and enhancement of the natural, built and historic environment, including landscapes and green infrastructure.
- Planning policies and decisions should ensure that developments 'are sympathetic to local character and history, including the surrounding built environment and landscape setting, while not preventing or discouraging appropriate innovation of change (such as increased densities).
- Planning policies and decisions should contribute to and enhance the natural and local environment by:
 - a. protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils;
 - b. recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland; and
 - c. remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.
- The government attaches great importance to Green Belts, whose fundamental aim is to prevent urban sprawl by keeping land permanently open. The general extent of Green Belts is established and can only be altered in exceptional circumstances through preparation or review of a Local Plan.

⁶⁸ MHCLG (2019) National Planning Policy Framework [online]
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/779764/NPPF_Feb_2019_web.pdf

National Character Area (NCA) Profiles are published by Natural England and divide England in 159 distinct natural areas based on their landscape, biodiversity, geodiversity, historic, cultural and economic characteristics.⁶⁹ NCAs follow natural features in the landscape and are not aligned with administrative boundaries. NCA profiles describe the features which shape each of these landscapes, providing a broad context to its character.

The Government's 25 Year Environment Plan⁷⁰ states the intention to work with relevant authorities to deliver environmental enhancements within all 159 NCAs across England. Along with the policies contained within Chapter 2 'Recovering nature and enhancing the beauty of landscapes', Goal 6 'Enhanced beauty, heritage and engagement with the natural environment' of the Government's "A Green Future: Our 25 Year Plan to Improve the Environment" directly relates to the Landscape.

The Chilterns Area of Outstanding Natural Beauty (AONB) Management Plan⁷¹ 2019-2024 sets out a Vision for the Chilterns AONB. The Plan contains a comprehensive summary of the key issues facing the AONB and the management policies and actions needed to conserve this special place.

The National Design Guide⁷² published in 2019 further illustrates how well-designed places that are beautiful, enduring and successful can be achieved in practice.

The Wycombe District Local Plan contains the following policies which are relevant to the landscape SA theme:

- CP2: Overall Spatial Strategy
- CP3: Settlement Strategy
- CP6: Securing Vibrant and High Quality Town Centres
- CP9: Sense of Place
- CP10: Green Infrastructure and the Natural Environment
- DM30: The Chilterns Area of Outstanding Natural Beauty
- DM32: Landscape Character and Settlement Patterns
- DM35: Placemaking and Design Quality
- DM42: Managing Development in the Green Belt
- DM44: Development in the Countryside Outside of the Green Belt

Baseline review – current baseline

The Hollands Farm site is not located within the Chilterns Area of Outstanding Natural Beauty (AONB) however, the Local Plan identifies that the surrounding landscape *"is also important, particularly the hillsides overlooking the valley that provide an important setting to the villages."*

Bourne End falls within the Chilterns National Character Area (NCA). The NCA profile for Chilterns⁷³ lists several key characteristics, including:

⁶⁹ Natural England (2012) 'National Character Area profiles' [online] <https://www.gov.uk/government/publications/national-character-area-profiles-data-for-local-decision-making>

⁷⁰ HM GOV (2018) A Green Future: Our 25 Year Plan to Improve the Environment [online] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/693158/25-year-environment-plan.pdf

⁷¹ Chilterns Conservation Board (2019) Chilterns AONB Management Plan [online] available at: <https://www.chilternsaonb.org/conservation-board/management-plan.html>

⁷² MHCLG (2019) National Design Guide [online] available at: <https://www.gov.uk/government/publications/national-design-guide>

⁷³ Natural England (2013) NE406: NCA Profile 110: Chilterns [online] available at: <http://publications.naturalengland.org.uk/publication/4977697?category=587130>

- Elevation in the NCA ranges from 18 m on the River Thames flood plain to a maximum of 267 m near Wendover on the chalk ridge. Mean elevation is 126 m.
- Landform is dictated by chalk strata which have been tilted upward to create a north-east to south-west escarpment. The scarp faces north-west across low-lying vales. The dip slope descends into the London Basin and appears as a plateau behind the crest of the scarp. Numerous valleys incise the dip slope creating a ridge and valley topography. The landform is generally rounded and rolling.
- The Thames flows from the clay vales to the north and cuts through the chalk ridge at Goring in the south.
- Woodland is widespread, being found on the plateau and as 'hanger' woods in the valleys and on scarp slopes. Woodland blocks are scattered densely across the NCA as a mosaic with other semi-natural habitats and farmed land, except in the northern third where woodlands are present as smaller, more isolated fragments. In the AONB, cover is highest in the south-west – in Oxfordshire – at 30 per cent.

The Chilterns NCA states its aim to *“Enhance local distinctiveness and create or enhance green infrastructure within existing settlements and through new development, particularly in relation to the urban fringe and growth areas such as Luton. Ensure that communities can enjoy good access to the countryside.”*

Four Statements of Environmental Opportunity (SEOs) have been identified for the Chilterns NCA as follows:

- SEO1: Manage the wooded landscape, the woodlands (including internationally important Chilterns beechwoods), hedgerows, commons and parklands with the aims of conserving and enhancing biodiversity and the historic landscape and its significant features; maximising the potential for recreation; and securing sustainable production of biomass and timber.
- SEO2: In pockets of historic land use where natural and cultural heritage are both particularly rich, aim to restore and strengthen the historic landscape, ecological resilience and heterogeneity, and to conserve soils. Ensure that species-rich habitats are conserved and extended, including internationally important species-rich Chiltern downland. Secure environmentally and economically sustainable management to ensure conservation in the long term.
- SEO3: Conserve the Chilterns' groundwater resource, River Thames and chalk streams by working in partnership to tackle inter-related issues at a catchment scale and also across the water supply network area. Seek to secure, now and in the future, sustainable water use and thriving flood plain landscapes that are valued by the public.
- SEO4: Enhance local distinctiveness and create or enhance green infrastructure within existing settlements and through new development, particularly in relation to the urban fringe and growth areas such as Luton. Ensure that communities can enjoy good access to the countryside.

The Wycombe District Landscape Character Assessment⁷⁴ classifies Bourne End within the 'Thames Floodplain' which is characterised as:

“A distinctive low lying, flat floodplain landform, with an open character. Fields of arable farmland and rough grazing are divided by hedgerows and wooden post and rail fencing. The River Thames runs along the southern boundary of the area and there are a number of water bodies including lakes and ponds associated with former gravel workings (Spade Oak/Little Marlow) and historic designed landscapes. Woodland is sparse, and trees typically occur along hedgerows and associated with water courses

⁷⁴ Land Use Consultants (2011) Wycombe District Landscape Character Assessment [online] available at: <https://www.buckscc.gov.uk/services/environment/landscape/landscape-character-assessments/wycombe-district/>

(including willow pollards along the River Thames). A number of important ecological habitats are designated SSSIs including wet woodland and wet meadows. The area has been worked for minerals, is cut by the busy A4155 and A404 and the suburban edges of Marlow and Bourne End are abrupt in places. However, pockets of tranquillity are associated with areas of water and a historic, rural character is retained in small villages (e.g. Little Marlow and Medmenham) and parkland (Harleyford Manor and Fawley Court). The landscape provides a number of recreational opportunities including the Thames Path, watersports and bird watching. Views are afforded up to the lower chalk dipslope valley sides, across and along the Thames.”

Potential landscape and visual sensitivities for this area are identified as:

- River courses, ponds and lakes, and the associated habitat and wildlife value.
- The range of habitats associated with the geology and riverside location including SSSI wet woodland, gravel pits, and wet meadows.
- Pollard willows along the River Thames which are a historic landscape feature.
- Views across open expanses of water, along and across the River Thames and up the valley sides and to higher ground.
- Open, undeveloped meadow and farmland areas alongside the River Thames which offer tranquillity and calm.
- Hedgerow field boundaries and hedgerow trees which provide ecological connectivity and structure.
- The flat landscape and limited woodland accentuate the visual sensitivity of the landscape.
- The historic character of small villages on rural roads leading down to the Thames.
- Archaeological sites and monuments including a Roman Villa, Neolithic and Bronze Age sites at Low Grounds.
- Historic water meadows, pre 18th century irregular, regular and co-axial field enclosures which are reminder of the historic use of land.
- Historic parkland located at Harleyford Manor and Fawley Court with views to the River Thames.

Overall, the strength of character and intactness of the Thames Floodplain is considered ‘moderate’.

Baseline review – future baseline

As the site is allocated through the adopted Local Plan, it is likely to be bought forward for housing development in the period up to 2033. Development could potentially negatively affect the landscape setting through the loss of landscape features, visual impact on existing features, and loss of tranquillity. New development also has the potential to support landscape character through high-quality design which complements urban settings, delivering green infrastructure improvements and new recreational opportunities and enhanced framing of key views. The Development Brief provides the opportunity to better secure positive outcomes through enhanced policy provisions.

Key issues

The following key issues emerge from the context and baseline review:

- The surrounding landscape setting is valued and a core part of the historical context of the area. Development will need to deliver high-quality design, new green infrastructure and retain and frame any key views to minimise its impact on the landscape.

- Existing landscape features on site that contribute to the landscape setting, such as trees and hedgerows, should be retained in development where possible.

Natural resources

Context review

Key messages from the National Planning Policy Framework⁷⁵ (NPPF) include planning policies and decisions should contribute to and enhance the natural and local environment by:

- Protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils.
- Recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland.
- Prevent new or existing development from being ‘adversely affected’ by the presence of ‘unacceptable levels’ of soil pollution or land instability and be willing to remediate and mitigate ‘despoiled, degraded, derelict, contaminated and unstable land, where appropriate’.
- Planning policies and decisions should promote an effective use of land in meeting the need for homes and other uses, while safeguarding and improving the environment and ensuring safe and healthy living conditions. Strategic policies should set out a clear strategy for accommodating objectively assessed needs, in a way that makes as much use as possible of previously-developed or ‘brownfield’ land.
- Encourage multiple benefits from both urban and rural land, including through mixed use schemes and taking opportunities to achieve net environmental gains.
- Planning policies and decisions should ‘give substantial weight to the value of using suitable brownfield land within settlements for homes and other identified needs’, and ‘promote and support the development of under-utilised land and buildings.’
- Taking a proactive approach to mitigating and adapting to climate change, taking into account the long-term implications for water supply.
- Prevent new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by unacceptable levels of water pollution.
- Ensure that, wherever possible, development helps to improve local environmental conditions including water quality, taking into account relevant information such as river basin management plans.

Since July 2017 the Government’s Planning Practice Guidance (PPG) requires Local Planning Authorities to publish a Brownfield Land Register, and review it at least once a year, in order to identify all previously developed sites with potential for delivering new development. This is to help achieve maximum planning value and efficiency from available land, whilst avoiding unnecessary land take at greenfield sites.⁷⁶ Where significant

⁷⁵ MHCLG (2019) National Planning Policy Framework [online] available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/779764/NPPF_Feb_2019_web.pdf

⁷⁶ MHCLG (2017) Guidance: Brownfield Land Registers [online] available at: <https://www.gov.uk/guidance/brownfield-land-registers>

development of agricultural land is demonstrated to be necessary, local planning authorities should seek to use areas of poorer quality land in preference to that of a higher quality.⁷⁷

The Government's 25 Year Environment Plan was published in 2018 and presents the 'goals for improving the environment within a generation and leaving it in a better state than we found it'.⁷⁸ The implementation of this plan aims to achieve clean air, clean and plentiful water, reduced risk from environmental hazards, and managed exposure to chemicals. Specific policies and actions relating to environmental quality include:

- Improving soil health and restoring and protecting our peatlands;
- Respecting nature in how we use water;
- Reducing pollution; and
- Maximising resource efficiency and minimising environmental impacts at end of life.

Safeguarding our Soils: A strategy for England⁷⁹ sets out a vision for soil use in England which includes better protection for agricultural soils, protecting stores of soil carbon, improving the resilience of soils to climate change and preventing soil pollution. The essential message in relation to development is that pressure on soils is likely to increase in line with development pressure and the planning system should seek to mitigate this.

The Water Framework Directive⁸⁰ (2000) requires a management plan to be prepared for water catchment areas to inform planning and help meet objectives and obligations in areas such as water efficiency and sustainable drainage.

The Water White Paper 2011⁸¹ sets out the Government's vision for a more resilient water sector. It states the measures that will be taken to tackle issues such as poorly performing ecosystems, and the combined impacts of climate change and population growth on stressed water resources.

The Government's Water Strategy for England⁸² (2008) provides strategy for the water sector up until 2030, which aims to sustainably deliver secure water supplies and an improved and protected water environment. It sets out actions within the following areas:

- Water demand;
- Water supply;
- Water quality;
- Surface water drainage;
- River and coastal flooding;
- Greenhouse gas emissions;
- Charging for water; and
- Regulatory framework, competition and innovation.

⁷⁷ Department for Communities and Local Government (2012) National Planning Practice Guidance [online] available at: <http://planningguidance.communities.gov.uk/>

⁷⁸ DEFRA (2018) 25 Year Environment Plan [online] available at: <https://www.gov.uk/government/publications/25-year-environment-plan>

⁷⁹ DEFRA (2009) Safeguarding our Soils: A strategy for England [online] available at: <https://www.gov.uk/government/publications/safeguarding-our-soils-a-strategy-for-england>

⁸⁰ Directive 2000/60/EC of the European Parliament and of the Council establishing a framework for the Community action in the field of water policy.

⁸¹ Defra (2011) Water for life (The Water White Paper) [online] available at: <http://www.official-documents.gov.uk/document/cm82/8230/8230.pdf>

⁸² Defra (2011) Future Water: the Government's Water Strategy for England [online] available at: <https://www.gov.uk/government/publications/future-water-the-government-s-water-strategy-for-england>

Water for life⁸³ (2011) sets out the Government's vision for a more resilient water sector. It states the measures that will be taken to tackle issues such as poorly performing ecosystems, and the combined impacts of climate change and population growth on stressed water resources.

The Thames Water Draft Water Resources Management Plan⁸⁴ sets out how Thames Water plan to provide a secure and sustainable supply of water for customers in the period up to 2100.

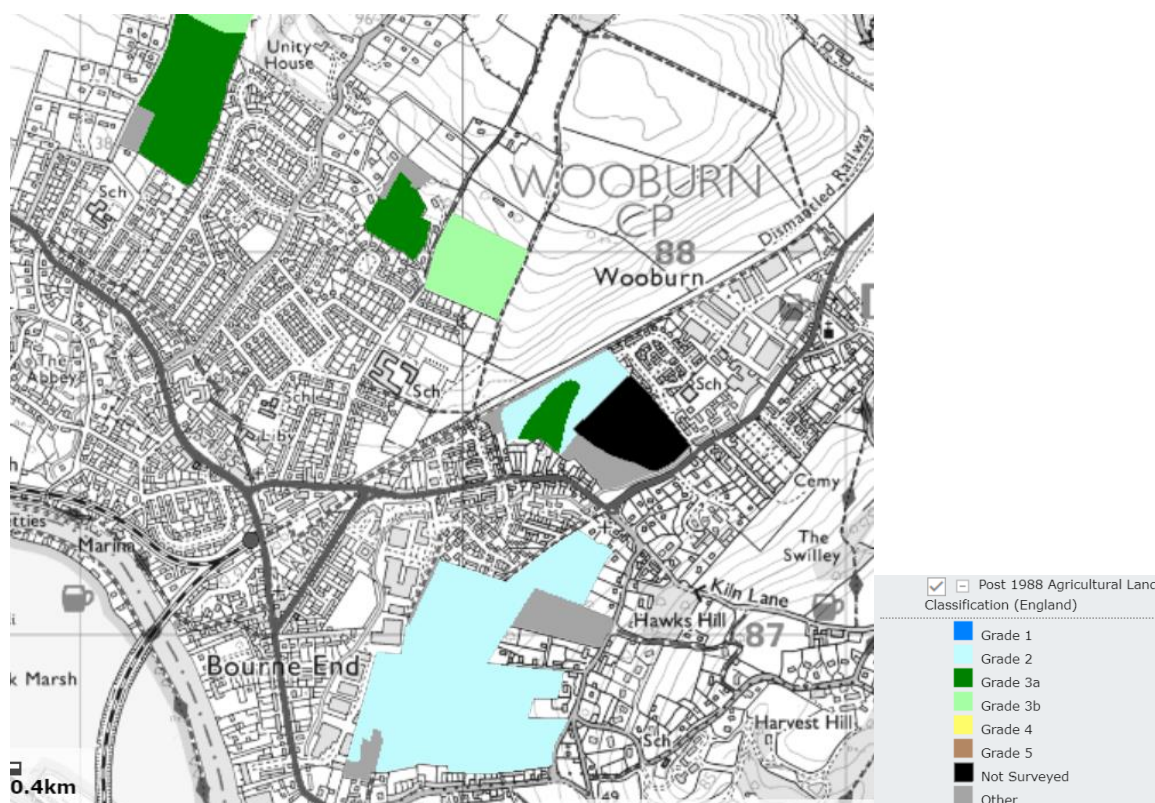
The Wycombe District Local Plan and Delivery and Site Allocations for Town Centres and Managing Development Plan contains the following policies which are relevant to the natural resources SA theme:

- CP10: Green Infrastructure and the Natural Environment
- DM15 Protection and Enhancement of River and Stream Corridors
- DM38: Water Quality and Supply
- DM39: Managing Flood Risk and Sustainable Drainage Systems
- DM41: Optional Technical Standards for Building Regulation Approval

Baseline review – current baseline

The Agricultural Land Classification (ALC) classifies land into six grades (plus 'non-agricultural' and 'urban'), where Grades 1 to 3a are recognised as being the 'best and most versatile' (BMV) land. **Figure All.7** depicts how most of the Hollands Farm site is identified as Grade 2 'best and most versatile' agricultural land, which forms the largest extent of high-quality agricultural land identified within/ surrounding Bourne End.

Figure All.7: Agricultural Land Classification (ALC) in Bourne End⁸⁵



⁸³ Defra (2011) Water for life [online] available at: <http://www.official-documents.gov.uk/document/cm82/8230/8230.pdf>

⁸⁴ Thames Water (2018) Consultation Draft WRMP 2019 [online] available at: <https://corporate.thameswater.co.uk/about-us/our-strategies-and-plans/water-resources>

⁸⁵ DEFRA (2020) Magic Map application [online] available at: <https://magic.defra.gov.uk/MagicMap.aspx>

The high-level review of the British Geological Survey (BGS) maps show the bedrock geology is the White Chalk subgroup⁸⁶, described as: “Chalk with flints. With discrete marl seams, nodular chalk, sponge-rich and flint seams throughout. Typology of flints and incidence of marl seams is important for correlation”.

Adopted in September 2016, the Buckinghamshire Minerals and Waste Local Plan⁸⁷ covers the period to 2036 and provides the planning strategies and policies for the development that will be needed for the supply of minerals and management of waste in Buckinghamshire. In this respect there are no active minerals sites or safeguarded areas affecting the Hollands Farm site.

The main watercourses flowing through Bourne end are the River Thames and the River Wye. The Hollands Farm site is located within the Thames River Basin District and the and the ‘Thames and Chilterns South’ Management Catchments/ ‘Chilterns South’ Operational Catchment. Bourne End is covered by the Thames Catchment Flood Management Plan⁸⁸ which aims to promote more sustainable approaches to managing flood risk.

Based on the most recently completed water quality assessments undertaken in 2016, the Environment Agency’s Catchment Data Explorer⁸⁹ classifies the 13 water bodies in the Chilterns South catchment as ranging from ‘Bad’ to ‘Good’ ecological status (with seven of the 13 water bodies classes as ‘Moderate’) and a ‘Good’ chemical status. The ‘reasons for not achieving good status’ (RNAGs) are primarily attributed to the following activities; water industry, agriculture and rural land management, and urban and transport factors.

The site also lies partially within a Surface Water Drinking Water Safeguard Zone⁹⁰; as a catchment area which influences water quality and is at risk of failing the drinking water protection objectives. As part of a joint initiative between the Environment Agency and water companies, action to address water contamination is targeted at Safeguard Zones so that extra treatment by water companies can be avoided. Safeguard Zones are identified as one of the main tools for delivering the drinking water protection objectives of the WFD. Several pesticides, nitrate and turbidity are identified as the main causes of the catchment being ‘at risk’.

With regards to wastewater, the Princes Risborough and Little Marlow Wastewater Treatment Works (WwTW) Assessment⁹¹ supporting the Local Plan identifies that the Little Marlow WwTW should be able to accommodate the predicted housing growth within the current permit limited and prevent deterioration in the River Thames.

Baseline review – future baseline

As the site is allocated through the adopted Local Plan, it is likely to be bought forward for housing development in the period up to 2033 and lead to losses of high-quality agricultural land resources.

Future development has the potential to affect water quality through increased consumption, diffuse pollution, wastewater discharges, water run-off, and modification. Water companies are likely to maintain adequate water supply and wastewater management over the plan period, and the requirements of the Water Framework Directive are likely to lead to continued improvements to water quality within Bourne End and the wider area. However, it will be important for new development to avoid impacts on water quality and support the

⁸⁶ British Geological Society (2019) Geology of Britain Viewer [online] available at: <http://mapapps.bgs.ac.uk/geologyofbritain/home.html>

⁸⁷ Buckinghamshire County Council (2016): ‘Buckinghamshire Minerals and Waste Local Plan 2016-2036’ [online] available at: <https://www.buckscc.gov.uk/media/4514370/buckinghamshire-minerals-and-waste-local-plan-2016-2036.pdf>

⁸⁸ Environment Agency (2009) Policy paper: Thames: Catchment flood management plan [online] available at: <https://www.gov.uk/government/publications/thames-catchment-flood-management-plan>

⁸⁹ Environment Agency (2019): ‘Blackwater (Combined Essex) Overview, Catchment Data Explorer’ [online] available at: <https://environment.data.gov.uk/catchment-planning/WaterBody/GB105037041160>

⁹⁰ DEFRA (2020) Magic Map Application [online] available at: <https://magic.defra.gov.uk/MagicMap.aspx>

⁹¹ Amec Foster Wheeler Environment & Infrastructure UK Ltd (2017) Princes Risborough and Little Marlow Wastewater Treatment Work Assessments [online] available at: <https://www.wycombe.gov.uk/uploads/public/documents/Planning/New-local-plan/Local-plan-publication-version/Princes-Risborough-and-Little-Marlow-wastewater-treatment-work-assessments.pdf>

objectives of the Water Resource Management Plan in reducing consumption and improving efficiency. The Development Brief can lend support in achieving these positive outcomes through enhanced policy protections.

Key issues

The following key issues emerge from the context and baseline review:

- Development of the Hollands Farm site will result in losses of high-quality agricultural land. Effective layout and massing on site can minimise these losses.
- Local Plan Policy DM41 requires all new dwellings to achieve the higher water efficiency standard in the appendix to Building Regulations Approved Document Part G. Measures should be considered early in design phases to maximise the potential for resilient and efficient development that is supportive of water supply aims in the wider catchment area.

Transport and traffic

Context review

Key messages from the National Planning Policy Framework⁹² (NPPF) include:

- Transport issues should be considered from the earliest stages of plan-making and development proposals, so that:
 - a. The potential impacts of development on transport networks can be addressed;
 - b. Opportunities from existing or proposed transport infrastructure, and changing transport technology and usage, are realised;
 - c. Opportunities to promote walking, cycling and public transport use are identified and pursued;
 - d. The environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account; and
 - e. Patterns of movement, streets, parking and other transport considerations are integral to the design of schemes and contribute to making high quality places.
- Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This can help to reduce congestion and emissions and improve air quality and public health. However, opportunities to maximise sustainable transport solutions will vary between urban and rural areas, and this should be taken into account in both plan-making and decision-making.

National Planning Practice Guidance (NPPG)⁹³ identifies that it is important for local planning authorities to undertake an assessment of the transport implications in developing or reviewing their Local Plan so that a robust transport evidence base may be developed to support the preparation and/or review of that Plan.

The Transport Investment Strategy - Moving Britain Ahead (2017)⁹⁴ sets out the Department for Transport's approach for future investment decisions and priorities. At the local level, the strategy relies on devolved decision-making where local communities have the power and

⁹² MHCLG (2019) National Planning Policy Framework [online] available at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/779764/NPPF_Feb_2019_web.pdf

⁹³ Department for Communities and Local Government (2012) National Planning Practice Guidance [online] available at: <http://planningguidance.communities.gov.uk/>

⁹⁴ Department for Transport (2017) Transport Investment Strategy - Moving Britain Ahead [online] available at: <https://www.gov.uk/government/publications/transport-investment-strategy>

will be backed by funding. Investment aims to achieve a transport network that is reliable, well-managed, safe, and works for everyone. The transport system should also provide smooth, fast and comfortable journeys, and have the right connections in the right places.

The Wycombe District Local Plan and Site Allocations Development Plan contain the following policies which are relevant to the transport and traffic SA theme:

- BE2: Hollands Farm
- CP7: Delivering the Infrastructure to Support Growth
- DM2: Transport Requirements of development sites
- DM3: Transport Improvement Lines
- DM33: Managing Carbon Emissions: Transport and Energy Generation
- DM46: HS2 Safeguarded Land
- DM47: Princes Risborough to Aylesbury (PRA) Safeguarded Land

Baseline review – current baseline

Bourne End railway station serves the settlement and is located within good walking distance⁹⁵ of the Hollands Farm site. Existing bus services run along the A4094, Station Road and Furlong Road, within good walking distance of the site and providing connections to High Wycombe and Maidenhead.

The main road connections through the settlement include the A4094 and A4155. The A4094 provides direct access to the M40 north of the settlement area. No National Cycle Routes currently connect the site, with the closest located in the north of Maidenhead connecting with Cookham Rise

A Public Right of Way (PRoW) runs along the western border of the site along Millboard Road and cuts through the northern extent of the site to join the rear of the existing development along Princes Road.

Based on the 2011 census data, **Figure All.8** depicts how 88.3% of households in the Bourne End-cum-Hedsor ward area have access to at least one car or van, which is higher than the totals for Wycombe (86.3%) and England (74.2%).

⁹⁵ Around 800m/ 10-minute walking distance estimated using Google Maps starting out at the north east corner of the site at Millboard Road.

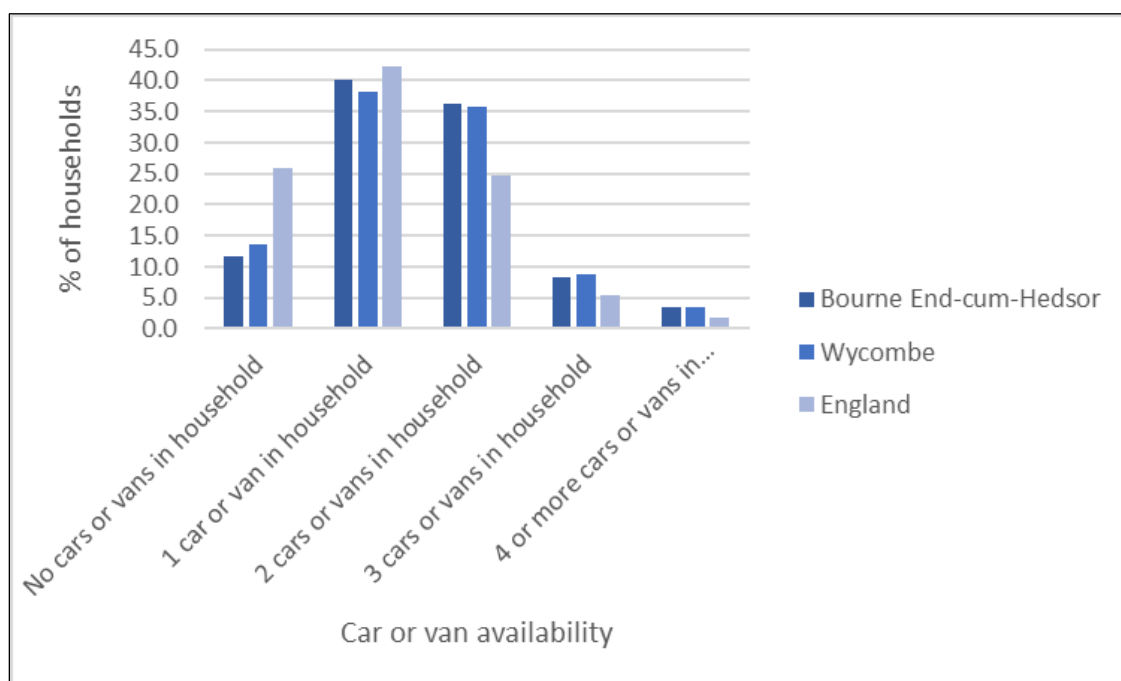


Figure All.8: Car or van availability⁹⁶

As shown in **Figure All.9**, the most popular mode of transport to work in the ward area is driving via a car or van (47.23%). This is higher than the totals for Wycombe (45.93%) and England (36.90%). Comparatively, a higher percentage of economically active residents in the ward area choose to work from home (7.09%) in comparison to the District (5.29%) and national (3.47%) trends.

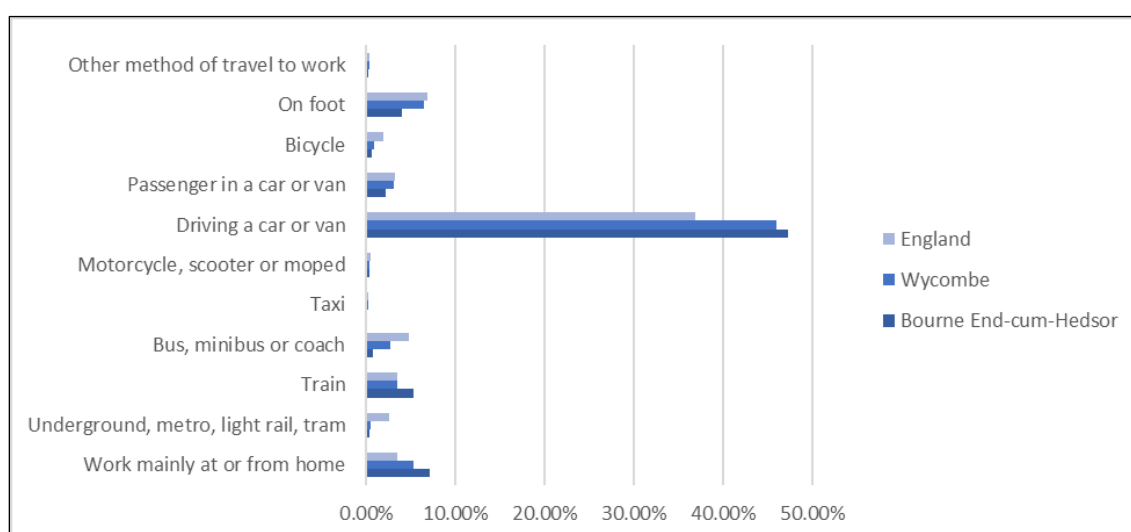


Figure All.9: Method of travel to work⁹⁷

The total percentage of the working population in the ward area that travel to work on foot (4.06%) is lower than the totals for Wycombe (6.45%) and the whole of England (6.95%). The percentage of the working population in the ward area that travel to work by train (5.36%) is higher than the District (3.49%) and national averages (3.46%).

Baseline review – future baseline

As the site is allocated through the adopted Local Plan, it is likely to be bought forward for housing development in the period up to 2033. Development would be supported by relatively good accessibility to sustainable transport modes, as well as a vibrant village

⁹⁶ ONS (2011) Car or Van Availability (Table KS404EW)

⁹⁷ ONS (2011) Method of travel to work (Table QS701EW)

centre that supports a reduced need to travel. However, development has the potential to increase traffic on local and minor roads, as well as the A4094/ A4155 and negatively impact upon congestion and journey/ travel times. The Local Plan (Policy BE2) further requires the delivery of a new link road in the development of Hollands Farm to mitigate the impact of development on the local road network at this location. The Development Brief can therefore ensure through additional guidance and measures that road capacity is fully considered and any necessary infrastructure upgrades are undertaken to accommodate the development, and that development fully mitigates the impacts on increased vehicle movements in this area. The Development Brief can also support the delivery of additional benefits in development such as improved active travel opportunities.

Key issues

The following key issues emerge from the context and baseline review:

- The location is supported by good rail and bus access to support the use of more sustainable transport modes in new development.
- Despite good public transport access, the private vehicle remains the dominant mode of choice in the ward area, and it will be important for development to encourage residents away from continuing this trend.

Appendix III: Assessment of reasonable alternatives

This appendix provides the detailed assessment of alternative options as established through Chapter 5 of the main report. The detailed tables are also summarised in Chapter 6 of the main report.

Methodology

For each of the options, the assessment examines likely significant effects on the baseline, drawing on the sustainability objectives identified through scoping (see **Table 3.1**) as a methodological framework. **Green** is used to indicate significant positive effects, whilst **red** is used to indicate significant negative effects.

Every effort is made to predict effects accurately; however, where there is a need to rely on assumptions in order to reach a conclusion on a 'significant effect' this is made explicit in the appraisal text.

Where it is not possible to predict likely significant effects based on reasonable assumptions, efforts are made to comment on the relative merits of the alternatives in more general terms and to indicate **a rank of preference**. This is helpful, as it enables a distinction to be made between the alternatives even where it is not possible to distinguish between them in terms of 'significant effects'. Numbers are used to highlight the option or options that are preferred from an SA perspective with 1 performing the best.

Finally, it is important to note that effects are predicted taking into account the criteria presented within Regulations.⁹⁸ So, for example, account is taken of the duration, frequency and reversibility of effects.

Theme 1: Connectivity and movement

Alternative options for this theme are established under three sub-themes:

- **Sub-theme 1a**; principal routes
- **Sub-theme 1b**; secondary routes
- **Sub-theme 1c**; active travel connections within and beyond the site

Each sub-theme is considered in turn below.

Sub-theme 1a - principal route options

The two alternative options identified for the location of principal routes are:

- **Option A**: Route A + Route C (Princes Road to Hedsor Road)
- **Option B**: Route A + Route B + Route C (Princes Road + Millboard Road to Hedsor Road)

The summary findings for the assessment of these options is provided in **Table AIII.1** below.

⁹⁸ Schedule 1 of the Environmental Assessment of Plans and Programmes Regulations 2004.

Table AIII.1: Assessment of principal route options

SA theme		Option A	Option B
Biodiversity	Likely significant effect?	No	No
	Rank	-	-

Commentary:

Both options are unlikely to lead to significant effects in relation to biodiversity; however, Route A (under both options) runs adjacent to the woodland habitat off Hawks Hill (adjacent to the site) and lies within the area of the site where notable species have been recorded. As this route is included under both options, both options are considered to have the potential for minor long-term negative effects as a result of increased disturbance, noise, light and air pollution. The difference between the options relates to the inclusion or not of Route B as an additional principal route connection, and this is considered unlikely to further affect the significance of the predicted effects. As such, the options cannot be meaningfully differentiated.

SA theme		Option A	Option B
Climate change	Likely significant effect?	No	No
	Rank	2	1

Commentary:

Both options will support vehicle movements through the site and whilst this supports private vehicle access, it will also provide bus route connections through the site benefitting new residents with good access to more sustainable transport solutions.

Whilst no significant effects are anticipated in relation to climate change adaptation, Route C lies within Flood Zone 2 in the south of the site (adjacent to Flood Zone 3) and fluvial flood risk affects the access points both north and south of the site – and these constraints are applicable to both options. Junction remodelling in new development has the potential to address known issues and support reduced flood risk in this respect. As Option B could extend potential works to along Millboard Road potentially supporting measures to manage existing and future flood risk in this area, Option B is marginally preferred.

SA theme		Option A	Option B
Community wellbeing	Likely significant effect?	No	No
	Rank	2	1

Commentary:

Both options are considered likely to positively support residents with ease of access to principal routes and bus services. The additional principal route connection with Millboard Road can improve access to the adjacent employment area providing additional benefits for residents in this respect. On this basis, Option B (through its inclusion of Route B) is considered to perform marginally better when compared to Option A. No significant effects are anticipated under either of the options.

SA theme		Option A	Option B
Economy and employment	Likely significant effect?	No	No
	Rank	2	1

Commentary:

Whilst no significant effects are anticipated, both options are likely to positively support enhanced access within and surrounding the employment area to the west of the site. As Option B will provide a direct principal route connection with the adjacent employment area, this option is considered to perform marginally better than Option A in relation to this SA theme.

SA theme		Option A	Option B
Historic environment	Likely significant effect?	No	No
	Rank	-	-

Commentary:

In terms of the historic environment, access to and egress from the site in both the north and south is likely to affect the setting of designated heritage assets, predominantly in the short-term during construction phases, but also potentially in the long-term as a result of increased traffic. This is a notable constraint in the south of the site where connections are made directly with the designated Conservation Area. These constraints are associated with both options, as both options include Routes A and C. The difference between the options relates to the inclusion or not of Route B as a principal connection, and this is unlikely to affect the significance of the predicted effects. As such, the options cannot be meaningfully differentiated. Overall effects will ultimately be dependent upon the design and layout of junction improvements, but at this stage, no significant effects are considered likely.

SA theme		Option A	Option B
Landscape	Likely significant effect?	No	No
	Rank	-	-

Commentary:

Effects in relation to landscape are considered likely to predominantly relate to the historic townscape south of the site, and loss of tranquillity in the area. As a result of necessary junction improvements (apparent in both options) both options are considered likely to affect the historic townscape and tranquillity, predominantly in the short-term during construction phases, but also potentially in the long-term as a result of increased traffic. Minor negative effects are anticipated in this respect. The difference between the options relates to the inclusion or not of Route B as a principal connection, and this is unlikely to affect the significance of the predicted effects. As such, the options cannot be meaningfully differentiated.

SA theme		Option A	Option B
Natural resources	Likely significant effect?	No	No
	Rank	1	2

Commentary:

Both options will result in the loss of some greenfield and high-quality (best and most versatile) agricultural land and therefore minor long-term negative effects are anticipated in this respect. Both options will introduce impermeable surfaces where it will be necessary to manage polluted water run-off to avoid the potential negative effects arising in respect of water quality. Option B would result in a greater area of road development and therefore impermeable surfaces overall, and as such is not considered to perform as well with regards to this SA theme as Option A – though this difference is considered minimal.

SA theme		Option A	Option B
Transport and traffic	Likely significant effect?	No	No
	Rank	2	1

Commentary:

Both options will support new residents with principal road access (which will include access to diverted bus services) and minor long-term positive effects are anticipated in this respect. By providing an additional direct connection with the adjacent employment area, Option B (through its inclusion of Route B) can improve access to this area from the east to some degree and support enhanced minor positive effects in this respect. As a result, Option B is considered to perform marginally better than Option A overall.

Primary route options assessment summary:

In terms of principal route coverage across the site, the options differ through the inclusion of Route B (under Option B) or not (under Option A). Overall, no significant effects are anticipated under either option, but the following differentiations can be made in respect of each route and route option:

- Route A (**Options A and B**); as a consistent consideration across all options (given the policy direction of Local Plan Policy BE2) Route A is noted for likely minor negative effects as a result of disturbance, noise, light and air pollution to species on-site and habitats adjacent to the site.
 - Route B (**Option B**); is considered for limited additional impact in relation to most SA themes, including in relation to impacts on the landscape and the historic environment. The route will provide direct principal route access to adjacent employment areas and minor positive effects are anticipated in relation to the SA themes of community wellbeing and economy and employment as a result. The inclusion of this route under Option B also extends opportunities to address known and future flood risk north of the site in junction remodelling works.
 - Route C (**Options A and B**); this north-south connection through the site is noted for potential minor negative effects in relation to climate change (with areas located within Flood Risk Zone 2 and adjacent to Flood Risk Zone 3), landscape and the historic environment (with direct connections to the Conservation Area). However, the connection is also considered for increasing accessibility across the site which may lead to benefits in relation to the climate change mitigation, community wellbeing and economy and employment SA objectives.
-

Sub-theme 1b - secondary route options

The four alternative options identified for the location of secondary routes are:

- **Option C:** Route B (connection to Millboard Road)
- **Option D:** Route D (connection to Wessex Road)
- **Option E:** Route E (connection to Heavens Lea)
- **Option F:** Route F (connection to Bridgestone Drive)

The summary findings for the assessment of these options is provided in **Table AIII.2** below.

Table AIII.2: Assessment of secondary route options

SA theme		Option C	Option D	Option E	Option F
Biodiversity	Likely significant effect?	No	No	No	No
	Rank	2	1	1	2

Commentary:

None of the options fall in areas that are considered to be sensitive in relation to biodiversity, and the options cannot be easily differentiated in this respect. No significant effects are anticipated under any option, though it is recognised that improved road access in the north of the site (Options C and F) may increase vehicular movement within the vicinity of the woodland habitat off Hawks Hill (adjacent to the site) marginally increasing the potential for minor negative effects associated with disturbance, noise, light and air pollution. As a result, these options are not ranked as highly as Options D and E.

SA theme		Option C	Option D	Option E	Option F
Climate change	Likely significant effect?	No	No	No	No
	Rank	1	2	2	1

Commentary:

None of the options are located within an area of fluvial flood risk; however, Options C and F are both constrained by high surface water flood risk. Road improvements in this area have the potential to address known issues, which alongside the practical application of sustainable drainage systems provide enhanced opportunities to reduce surface water flood risk in this area. The presence of such opportunities provides the potential for Options C and F to perform marginally better than Options D and E (which largely avoid surface water flood risk areas and any likely effects in this respect).

All options will support enhanced accessibility through the site, particularly in supporting improved east-west connections through the site and to the adjacent employment area and minor long-term positive effects are anticipated in this respect (in relation to climate change mitigation).

SA theme		Option C	Option D	Option E	Option F
Community wellbeing	Likely significant effect?	No	No	No	No
	Rank	-	-	-	-

Commentary:

Secondary route access under all options is likely to positively support residents with increased accessibility and the additional benefit of providing direct secondary route access to the adjacent employment area is recognised under Options C, D, and F.

Roads south of the site are notably constrained in relation to pedestrian movement (with a lack of pavements), as such Route E (under Option E) provides the opportunity to improve safe pedestrian movement in this area to the benefit of both existing and new residents.

Considering the above, the options cannot be easily differentiated or fairly ranked, but it is recognised that multiple routes (i.e. progression of more than one option) could maximise benefits for communities and community wellbeing.

SA theme		Option C	Option D	Option E	Option F
Economy and employment	Likely significant effect?	No	No	No	No
	Rank	1	1	2	1

Commentary:

None of the options are likely to result in significant effects in relation to this SA theme. However, Routes C, D and F provide direct secondary route access to the employment area in the west of the site, and minor positive effects are anticipated in this respect. As a result, these options are considered to perform better in respect of this SA theme than Option E.

SA theme		Option C	Option D	Option E	Option F
Historic environment	Likely significant effect?	No	No	No	No
	Rank	1	1	2	1

Commentary:

Whilst no significant effects are anticipated under any of the options, greater secondary route coverage in the south of the site under Option E is likely to lead to higher levels of vehicle presence within the vicinity of the Conservation Area in the south of the site. This may lead to minor long-term negative effects when compared to Options C, D and F which are considered unlikely to affect this SA theme, making Option E slightly less preferable overall when compared to the alternative options.

SA theme		Option C	Option D	Option E	Option F
Landscape	Likely significant effect?	No	No	No	No
	Rank	1	1	2	1

Commentary:

Whilst no significant effects are anticipated under any of the options, greater secondary route coverage in the south of the site under Option E is likely to lead to higher levels of vehicle presence within the vicinity of the historic townscape south of the site and affect levels of tranquillity around lower density housing in the east. This may lead to minor long-term negative effects when compared to Options C, D and F which are considered less likely to affect this SA theme, making Option E slightly less preferable overall when compared to the alternative options.

SA theme		Option C	Option D	Option E	Option F
Natural resources	Likely significant effect?	No	No	No	No
	Rank	2	2	2	1

Commentary:

Whilst no significant effects are anticipated; Options C, D and E will result in the loss of some greenfield and high-quality (best and most versatile) agricultural land and minor long-term negative effects are anticipated in this respect. Option F will improve existing road connections and performs marginally better in terms of land-take in this respect, and this is reflected in the ranking of the options.

Where options are likely to introduce impermeable surfaces; it will be necessary to manage polluted water run-off to avoid the potential negative effects arising in respect of water quality.

SA theme		Option C	Option D	Option E	Option F
Transport and traffic	Likely significant effect?	No	No	No	No
	Rank	-	-	-	-

Commentary:

All options will support new residents with secondary road access and minor long-term positive effects are anticipated in this respect. The additional benefit of providing direct secondary route access to the adjacent employment area is recognised under Options C, D, and F.

Roads south of the site are notably constrained in relation to pedestrian movement (with a lack of pavements), as such Route E (under Option E) provides the opportunity to improve safe pedestrian movement in this area to the benefit of both existing and new residents.

Considering the above, there are no significant differences between the options, but it is recognised that multiple routes (i.e. progression of more than one option) could maximise benefits for traffic and transport.

Secondary route options assessment summary:

None of the options are considered likely to lead to any significant effects. Options C and F may increase vehicular movement within the vicinity of the woodland habitat off Hawks Hill (adjacent to the site) marginally increasing the potential for minor negative effects associated with disturbance, noise, light and air pollution when compared to the remaining options. Option E may also lead to higher levels of vehicle presence within the vicinity of the historic townscape south of the site and affect levels of tranquillity around lower density housing in the east.

However, all options will enhance accessibility across the site, benefiting future and existing residents. The additional benefit of providing direct secondary route access to the adjacent employment area is recognised under Options C, D, and F, and Option E provides an opportunity to improve safe pedestrian access in the south of the site given roads south of the site are notably constrained by a lack of pavements.

Opportunities are recognised at Options C and F for road improvements to address known issues, which alongside the practical application of sustainable drainage systems can support reduced surface water flood risk in this area. Option F will also support positive effects in relation to land use and soil resources as the option utilises an existing road connection.

Considering the various opportunities outlined above, it is recognised that multiple routes (i.e. progression of more than one option) could maximise benefits in relation to the SA themes of community wellbeing, economy and employment and traffic and transport.

Sub-theme 3c - active travel connection options within and beyond the site

The eight alternative options identified for the location of footpaths are:

- **Option G:** Combined route H-J-L providing east-west link between Hawks Hill and Wessex Road;
- **Option H:** Combined route P-M-K. Link route P via Garibaldi Pub (community owned) subject to agreement;
- **Option I:** Route G providing link to Wessex Road;
- **Option J:** Route R-N providing east-west link between Harvest Hill/ Hawks Hill PRow and Millboard Road PRow via Orchard;
- **Option K:** Route O providing a potential link to nearby recreational ground via industrial estate;
- **Option L:** Route Q providing a potential link between southern end of the site and Hawks Hill/ Harvest Hill PRow to the east;
- **Option M:** Routes V and W providing a diversion to existing PRow but retaining north-south link connecting Hedsor Road to Princes Road; and
- **Option N:** Existing PRow Routes S, T and U retaining north-south link connecting Hedsor Road to Princes Road.

The summary findings for the assessment of these options is provided in **Table AIII.3** below.

Table AIII.3: Assessment of options for active travel connections

SA theme		Option G	Option H	Option I	Option J	Option K	Option L	Option M	Option N
Biodiversity	Likely significant effect?	No	No	No	No	No	No	No	No
	Rank	1	1	1	2	1	1	2	1

Commentary:

None of the options are considered likely to significantly affect biodiversity. By promoting active travel as an alternative to the private vehicle all options are likely to positively support good air quality with indirect positive effects for biodiversity. However, increased disturbance is considered likely at surrounding habitats under Options J and M; which are, as a result, considered to perform less well in respect of this SA theme than the remaining options.

SA theme		Option G	Option H	Option I	Option J	Option K	Option L	Option M	Option N
Climate change	Likely significant effect?	No	No	No	No	No	No	No	No
	Rank	1	1	1	1	1	1	1	2

Commentary:

All options support active travel connections within and surrounding the site which can support long-term climate change mitigation objectives and positive effects in this respect. None of the options are located within an area of fluvial flood risk, and permeable surfaces should be considered in development where appropriate to support natural drainage across the site. The existing PRow under Option N traverses an area of high surface water flood risk and as such its use may be restricted at times, making a diverted route preferable overall. No significant effects are considered likely.

SA theme		Option G	Option H	Option I	Option J	Option K	Option L	Option M	Option N
Community wellbeing	Likely significant effect?	No	No	No	No	No	No	No	No
	Rank	2	1	2	1	2	1	2	2

Commentary:

All options support active travel connections within and surrounding the site which can support health and wellbeing objectives. Minor positive effects are anticipated in this respect.

Option J would also provide improved access to the adjacent former orchard for recreational purposes; which enhances the potential for positive effects in relation to community health and wellbeing.

Options H, J and L seek to deliver connections through the site with existing PRow off-site which can maximise positive effects by providing wider connectivity benefits to both existing and new communities. As a result, these options are considered likely to lead to minor positive effects of slightly increased significance when compared to the remaining options. However, overall no significant effects are anticipated.

SA theme		Option G	Option H	Option I	Option J	Option K	Option L	Option M	Option N
Economy and employment	Likely significant effect?	No	No	No	No	No	No	No	No
	Rank	1	2	1	2	1	2	2	2

Commentary:

None of the options are considered likely to significantly affect this SA theme; however, the benefits of improving active travel connections surrounding the existing employment area at Millboard Road and Wessex Road are recognised for both future communities and existing communities in the east of the site. Options G, I and K will deliver additional direct active travel connections to the employment area and are considered likely to lead to minor positive effects of increased significance in relation to this SA theme when compared to the remaining options.

SA theme		Option G	Option H	Option I	Option J	Option K	Option L	Option M	Option N
Historic environment	Likely significant effect?	No	No	No	No	No	No	No	No
	Rank	2	1	2	2	2	1	2	2

Commentary:

Active travel connections are not considered likely to significantly affect designated or non-designated heritage assets or their settings. Options H and L will deliver additional active travel routes in the south of the site and can promote increased access and appreciation of the Hedsor Road and Riversdale Conservation Area. On this basis, Options H and L are considered to perform marginally better in relation to this SA theme than the remaining options.

SA theme		Option G	Option H	Option I	Option J	Option K	Option L	Option M	Option N
Landscape	Likely significant effect?	No	No	No	No	No	No	No	No
	Rank	-	-	-	-	-	-	-	-

Commentary:

Active travel connections are not considered likely to significantly affect the landscape, and the options cannot be meaningfully differentiated with regards to this SA theme.

SA theme		Option G	Option H	Option I	Option J	Option K	Option L	Option M	Option N
Natural resources	Likely significant effect?	No	No	No	No	No	No	No	No
	Rank	-	-	-	-	-	-	-	-

Commentary:

None of the options are considered likely to significantly affect this SA theme. However, permeable surfaces should be considered in development where appropriate to support natural drainage and maintain or improve water quality. The options cannot be meaningfully differentiated with regards to this SA theme.

SA theme		Option G	Option H	Option I	Option J	Option K	Option L	Option M	Option N
Transport and traffic	Likely significant effect?	No	No	No	No	No	No	No	No
	Rank	2	1	2	1	2	1	2	2

Commentary:

All options will deliver active travel connections within and surrounding the site, promoting more sustainable transport connections and increased east-west connectivity. All options are therefore considered likely to lead to long-term minor positive effects with regards to this SA theme.

Options H, J and L seek to deliver connections through the site with existing PRoW off-site which can maximise positive effects by providing wider connectivity benefits to both existing and new communities. As a result, these options are considered likely to lead to minor positive effects of slightly increased significance when compared to the remaining options.

It is also recognised that multiple routes (i.e. progression of more than one option) could maximise benefits for transport and traffic. In this respect, Options G, I and K create a direct walkable link to the train station and is also more direct than Millboard Road to the town centre.

Active travel connections options summary:

None of the options are considered likely to lead to any significant effects in relation to any of the SA themes. The provision of active travel routes is considered likely to lead to predominantly positive effects. Options H, J and L are considered for their potential to maximise benefits in relation to overall connectivity (by providing wider connections with existing PRoW surrounding the site). Options G, I and K will also deliver direct active travel connections to the employment area and train station/ town centre positively supporting the economy and employment and transportation SA themes.

However, it is noted that use of permeable surfaces should be considered to minimise impacts in relation to surface water run-off and water quality. Options J and M are also noted for likely minor negative effects as a result of increased disturbance at the adjacent woodland habitat off Hawks Hill, and it is noted that existing surface water flood risk issues may reduce the potential use of Option N at times.

Theme 2: Location of the new primary school

The five alternative options identified for the location of the new primary school are:

- **Option A:** On-site (north off Princes Road)
- **Option B:** On-site (north-west off Millboard Road)
- **Option C:** On-site (west off Wessex Road)
- **Option D:** On-site (inset west)
- **Option E:** Off-site (precise location unknown)

The summary findings for the assessment of these options is provided in **Table AIII.4** below.

Table AIII.4: Options for the location of the new primary school

SA theme		Option A	Option B	Option C	Option D	Option E
Biodiversity	Likely significant effect?	No	No	No	No	No
	Rank	1	2	2	2	3

Commentary:

Options A-D avoid locating the school in the most sensitive area on-site where notable species have been recorded. Despite this, these options will locate development within the vicinity of the woodland habitat (and its associated species) off Hawks Hill and minor long-term negative effects are anticipated as a result of increased disturbance, noise, light and air pollution, the closest option being Option A.

The policy requirement (under the NPPF and WDLP) for biodiversity net gain seeking positive enhancements which support habitats and species is likely to lead to residual long-term minor positive effects overall for all options.

Considering the location of the landscape buffer along the eastern border of the site, Option A would locate the school adjacent to the existing woodland off Hawks Hill – as opposed to housing. This is considered for its potential to support habitats with reduced disturbance in the evenings and educational activities that increase knowledge in respect of biodiversity and support children in protecting and enhancing biodiversity values. Multiple benefits can thus be achieved in relation to biodiversity, climate change and community wellbeing, ranking this option slightly higher when compared to Options B, C and D.

Given that no precise off-site location is identified under Option E it is difficult to ascertain the likely effects and uncertainty is noted at this stage. However, it is assumed that locating the school off-site will increase the level of housing development on-site, which may slightly increase the potential effects of disturbance, noise, light and air pollution to some degree, particularly within the immediate vicinity of the woodland habitat off Hawks Hill and notable species recorded on site. Whilst this is considered likely to be a negligible difference, Option E is ranked least favourable on this basis.

SA theme		Option A	Option B	Option C	Option D	Option E
Climate change	Likely significant effect?	No	No	No	No	No
	Rank	1	2	2	2	3

Commentary:

It is assumed that all options present equal opportunity to employ sustainable construction methods and building practices, supporting sustainable waste management and energy efficiency in development. Therefore, the options are not differentiated in this respect.

Principal Route A is set by Local Plan policy directions (and thus included under each option for primary routes) which will run directly adjacent to Option A, as well as the existing PRoW on-site, supporting good connectivity at this location. The remaining on-site options (Options B-D) will also be well connected to a principal route if route C is progressed as a preferred option and connect to the PRoW. As route A is confirmed Option A is considered to perform marginally better at this stage. As a precise off-site location is unknown under Option E it is difficult to predict likely connectivity and uncertainty is noted at this stage.

None of the on-site Options A-D are located within areas of fluvial flood risk; however, these options each contain areas at risk of surface water flooding and sustainable drainage systems will be required at any of these locations. High risk areas lie adjacent to both Option A and Option B; however, appropriate mitigation at the

SA theme	Option A	Option B	Option C	Option D	Option E
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school site is likely to mitigate any negative effects arising, and the additional provisions for a landscape buffer adjacent to Option A can support these mitigation measures in this location on-site.

As no precise off-site location is identified under Option E uncertainty is noted at this stage in relation to flood risk, making this option less preferable when compared to Options A-D.

SA theme	Option A	Option B	Option C	Option D	Option E
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Community wellbeing	Likely significant effect?	Yes	Yes	Yes	Yes	Yes
	Rank	1	2	2	2	3

Commentary:

All options (both on-site and off-site) will deliver a new school supporting existing and future residents with improved educational access and providing opportunities to improve deprivation (albeit deprivation is low in the settlement anyway). A new school on-site will increase educational access for residents in the south and east given that existing schools are predominantly located further west in the settlement or north in Wooburn Town. As a result, all options are considered likely to lead to long-term significant positive effects in relation to community wellbeing, with on-site options potentially benefitting residents to a greater extent by improving educational access in the east and south of the settlement.

Of the identified on-site locations; Options B, C and D will place the school in closer proximity to the industrial buildings west of the site and as less compatible land uses with regards to safety these options are not considered to perform as well as Option A which locates the school in the north of the site and adjacent to existing housing. However, it is recognised that an open space buffer located between the school and employment area could reduce/ avoid potential negative effects arising.

All on-site options could connect with the existing PRoW running through the site supporting active travel and minor long-term positive effects in this respect. However, given the industrial presence in the west of the site, Option A is also considered for its potential to better connect with the existing PRoW access east of the site (potentially in-combination with additional active travel connections (Route N) through the adjacent woodland habitat off Hawks Hill) and the existing residential areas here. On this basis, Option A is considered for marginally better connections (in terms of increasing accessibility for existing residents) and performs marginally better in this respect.

As a precise off-site location is unknown under Option E it is difficult to predict the likely effects in relation to accessibility and uncertainty is noted at this stage – making it the least preferable option overall. Despite this, it is assumed that any alternative off-site location would be within the confines of the settlement and accessible in this respect and be able to serve the new community at this site. As such, significant positive effects are still anticipated overall under Option E.

SA theme	Option A	Option B	Option C	Option D	Option E
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Economy and employment	Likely significant effect?	No	No	No	No	No
	Rank	-	-	-	-	-

Commentary:

All options (both on-site and off-site) will deliver a new school supporting existing and future residents with improved educational and employment access and providing opportunities to improve deprivation in this respect and contribute to skills provision in the District. As a result, all options are considered likely to lead to long-term minor positive effects and it is difficult to meaningfully differentiate between the options in relation to this SA theme.

SA theme		Option A	Option B	Option C	Option D	Option E
Historic environment	Likely significant effect?	No	No	No	No	No
	Rank	2	1	1	1	3

Commentary:

Options B, C and D are considered unlikely to affect the historic environment as they lie adjacent to industrial area along the western boundary.

Option A will locate the school in proximity of Listed Buildings along Kiln Lane; however, it is supported by a landscape buffer located immediately opposite the heritage assets which is likely to provide a degree of protection for the setting of these assets and screening can reduce the significance of any potential negative effects. Despite this, given the proximity to designated assets this option is considered less preferable when compared to Options B, C and D.

Given that no precise off-site location is identified under Option E, the likely effects in relation to the historic environment cannot be determined at this stage, and uncertainty is noted. As a result, this option is ranked least preferable when compared to the remaining options.

SA theme		Option A	Option B	Option C	Option D	Option E
Landscape	Likely significant effect?	No	No	No	No	No
	Rank	1	1	1	1	2

Commentary:

All options are considered to have equal potential to affect the landscape, and it is noted that the provision of a new school is set by Local Plan policy. The overall effects in terms of landscape impact are ultimately dependent upon the design and layout, including elevation.

In terms of topography, the site slightly inclines to the east, and development is screened from the east to a large degree by existing hedgerow and tree coverage. Views into the site are predominantly from the south, and as such are more likely to be affected by new homes rather than the development of the school.

Despite this, locating the school in the north of the site (supported by the Hawks Hill landscape buffer) may provide a softer approach to new development and opportunities to better integrate new housing with the existing housing in the north of the site. Similarly, locating the school in the west of the site under Options B, C and D can provide a transitional area between existing employment uses and new housing on site, particularly if supported with additional open space. It is also anticipated that any existing trees bordering the on-site options could be readily retained. Assuming that development delivers high-quality design which successfully integrates with the existing urban form, minor long-term positive effects are anticipated overall for all on-site options.

Given that no precise off-site location is identified at this stage, it is different to ascertain the likely effects under Option E in relation to landscape impacts. However, it is assumed that any off-site location would be within the settlement confines and minimise landscape impacts in this respect. Given the uncertainty that is noted at this stage, this option is not considered to perform as well as the remaining on-site options.

SA theme		Option A	Option B	Option C	Option D	Option E
Natural resources	Likely significant effect?	No	No	No	No	No
	Rank	-	-	-	-	-

Commentary:

Greenfield and high-quality (best and most versatile) agricultural land loss is inevitable under all of the on-site options (Options A-D) and minor negative effects are anticipated in this respect. No brownfield off-site alternative locations have been identified at this stage so it is considered likely that greenfield loss (and minor negative effects) will also occur under Option E.

All options will increase impermeable surfaces, though no significant effects in relation to water quality are anticipated at this stage. Considering the above, no meaningful differentiation between the options can be made at this stage.

SA theme		Option A	Option B	Option C	Option D	Option E
Transport and traffic	Likely significant effect?	No	No	No	No	No
	Rank	1	1	1	1	2

Commentary:

Under all options it is likely that additional pressure will be placed on adjacent local roads (particularly during school run times) and minor negative effects are anticipated in this respect. It is recognised that this may be a key issue for Option A given its edge of site location, where traffic is likely to extend the site and impact on congestion surrounding the site, particularly at Cores End Road. The connectivity of the school with active travel routes will be a key aspect in mitigating such effects. In this respect all on-site options would connect with the existing PRow running through the site. However, given the industrial presence in the west of the site, Option A is considered for its potential to better connect with the existing PRow access east of the site (potentially in-combination with additional active travel connections (Route N) through the adjacent woodland habitat off Hawks Hill) and the existing residential areas here.

Principal route A is a confirmed route (and included under each option for primary routes) which will run directly adjacent to Option A, supporting good road connectivity at this location. The remaining on-site options (Options B-D) will also be well connected to a principal route if route C is progressed as a preferred option.

As a precise off-site location is unknown under Option E it is difficult to predict likely connectivity and uncertainty is noted at this stage; and the option is least favoured in this respect.

All options are considered likely to avoid significant negative effects arising, however greater uncertainty is noted under Option E. It is considered likely that the promoted active travel connections can support a reduced vehicle presence to minimise negative effects arising.

Summary of assessment of options for school location:

All options are considered likely to support existing and new communities with good educational access and lead to significant positive effects for community wellbeing. It is also recognised that all options will also place pressure on the surrounding local roads – particularly during school run hours, and minor negative effects are anticipated in this respect. All on-site options can connect with the existing/ diverted PRow on-site to maximise active travel connections and mitigate negative effects in this respect.

On-site Option A, whilst located in close proximity to Listed Buildings at Kiln Lane and the woodland habitat off Hawks Hill, is considered likely to support the transition between new and existing housing in the north of the site, alongside the landscape buffer, and could provide good access for existing residents north and east of the site. However, given its edge of site location, traffic implications are more likely to extend the site potentially affecting local roads to a greater degree when compared to the remaining on-site options.

On-site Options B-D will avoid sensitive habitats and heritage assets. Whilst the options locate the school close to employment uses, additional open space could reduce/ avoid impacts relating to health and safety and development in this area of the site can provide a transitional area between existing employment uses adjacent to the site and new housing on-site.

As an off-site location is not precisely identified under Option E, the likely effects are difficult to ascertain, and the Option is ranked least favourable on this basis.

Theme 3: Open space and boundary treatment

Alternative options under this theme are established relating to three sub-themes:

- **Sub-theme 3a** - the location of new strategic open space
- **Sub-theme 3b** - options for the landscape buffer at Hawks Hill/ Harvest Hill (informal open space)
- **Sub-theme 3c** - boundary treatment at Hedsor Road and Riversdale Conservation Area

Each sub-theme is considered in turn below.

Sub-theme 3a - alternative options for the location of strategic open space provisions

The four alternative options identified for the location of new open space provisions are:

- **Option A:** On-site (adjacent to Millboard Road)
- **Option B:** On-site (adjacent to Wessex Road)
- **Option C:** Off-site (precise location unknown)
- **Option D:** Off-site (community orchard opportunity at Hawks Hill)

The summary findings for the assessment of these options is provided in **Table AIII.5** below.

Table AIII.5: Options for strategic open space

SA theme		Option A	Option B	Option C	Option D
Biodiversity	Likely significant effect?	No	No	No	No
	Rank	1	1	2	3

Commentary:

All options have the potential to deliver benefits for biodiversity with new open space and planting. The additional benefit of existing habitat enhancement is realised under Option D; however, this is also recognised for its potential to increase recreational disturbance which may lead to minor negative effects. On this basis, Option D is not considered to perform as well as Options A, B or C.

As no precise location is identified under Option C the likely effects in relation to biodiversity remain uncertain; however, the delivery of new open space is considered likely to support positive effects. However, as uncertainty is noted, this Option is not considered to perform as well as Options A and B at this stage.

On-site options (particularly when combined) provide opportunities to deliver habitat connectivity along the western boundary of the site and may benefit species movement in this respect.

SA theme		Option A	Option B	Option C	Option D
Climate change	Likely significant effect?	No	No	No	No
	Rank	2	1	3	2

Commentary:

New open space provisions under all options are considered for positive effects in relation to land use impact, biodiversity and ecosystem services, supporting climate change mitigation through natural drainage and carbon sequestration.

The additional benefits of locating open space within and adjacent to the area of fluvial flood risk on site are realised under Option B, alongside planting, this is likely to support improved natural drainage that may reduce risk to people and properties, with the potential for enhanced long-term positive effects. On this basis, Option B is considered the preferable on-site location.

SA theme	Option A	Option B	Option C	Option D
As a precise off-site location is not identified under Option C, the potential to maximise additional benefits from open space and green infrastructure may be less well coordinated, as such, this option is ranked least favourable overall.				

SA theme	Option A	Option B	Option C	Option D
Community wellbeing	Likely significant effect?	No	No	No
	Rank	2	1	4
			3	

Commentary:

The provision of new open space under all options is considered for its positive effects in relation to community health and wellbeing by providing increased access to natural recreational areas.

The on-site options (Options A and B) provide opportunities to better integrate housing development on-site with the adjacent employment uses and minimise negative effects in relation to community health and wellbeing. On this basis, these options are noted for potential additional positive effects in relation to this SA theme.

The additional benefits of locating open space within and adjacent to the area of fluvial flood risk on site are realised under Option B, alongside planting, this could support improved natural drainage and may reduce flood risk to people and properties, supporting long-term community health and wellbeing. On this basis, Option B is considered the preferable on-site location.

Habitat and access enhancement at the adjacent woodland area under Option D may also bring additional leisure and recreational benefits for community wellbeing with improved access to high-quality natural spaces assuming ownership issues are overcome.

SA theme	Option A	Option B	Option C	Option D
Economy and employment	Likely significant effect?	No	No	No
	Rank	1	1	2
			2	2

Commentary:

The provision of open space on-site (under Option A and B) or adjacent (Option D) is considered unlikely to significantly affect this SA theme. Options A and B are noted for the delivery of open space adjacent to existing industrial uses off Millboard Road and Wessex Road which may complement the landscape setting and support inward investment in this respect; however, these effects are likely to be minor. Neutral effects are anticipated under Option D.

Whilst a precise potential off-site location is not identified under Option C and uncertainty is noted, it is considered unlikely that any such provisions would result in any loss of existing employment land and negative effects are considered unlikely.

SA theme	Option A	Option B	Option C	Option D
Historic environment	Likely significant effect?	No	No	No
	Rank	2	2	3
			1	

Commentary:

The on-site locations for the provision of open space under Options A and B are considered unlikely to affect this SA theme, given their proximity from designated assets, and the likelihood that housing development will occur in between. Therefore, neutral effects are anticipated overall for these options.

As a precise off-site location is not identified under Option C, the potential effects in relation to the historic environment are uncertain and the options is ranked least favourable; however, the nature of development (of open space) is considered unlikely to lead to any significant effects.

Option D would enhance the habitat off Hawks Hill, which may in turn positively support improvements to the setting of designated assets (Listed Buildings) along Hawks Hill. As such, the potential for minor positive effects is identified for this option, and it is considered to perform better when compared to the other options.

SA theme		Option A	Option B	Option C	Option D
Landscape	Likely significant effect?	No	No	No	No
	Rank	-	-	-	-

Commentary:

On-site options A and B would provide a landscape buffer between industrial buildings west of the site and the new housing development on site, softening this transition and supporting minor long-term positive effects in this respect. Habitat enhancement adjacent to the site under Option D is likely to positively affect landscape, particularly in terms of the historic townscape setting along Hawks Hill. As such, minor long-term positive effects are also anticipated under this option.

Whilst a precise off-site location is not identified under Option C, it is considered likely (given the nature of the development of open space) that this option too will support landscape features and character with the potential for minor positive effects. It is therefore difficult to meaningfully differentiate between the options in relation to this SA theme.

SA theme		Option A	Option B	Option C	Option D
Natural resources	Likely significant effect?	No	No	No	No
	Rank	-	-	-	-

Commentary:

The retention of greenfield land as open space under all options is considered likely to support long-term positive effects in relation to efficient land use and natural resources. No significant effects are anticipated in relation to water resources or water quality, and the options cannot be meaningfully differentiated with regards to this SA theme.

SA theme		Option A	Option B	Option C	Option D
Transport and traffic	Likely significant effect?	No	No	No	No
	Rank	1	1	2	1

Commentary:

The location of open space is considered unlikely to significantly affect this SA theme; however, the benefits of locating development within or adjacent to the site under Options A, B and D include high levels of accessibility which could support a reduced need to travel to access open space and minor long-term positive effects in this respect. As such these options are preferred to Option C where the precise location of the new open space is unknown and uncertain effects are noted.

Summary of assessment of options for open space:

The delivery of new open space under all options is considered likely to support minor long-term positive effects in relation to community wellbeing (for both existing and new communities), biodiversity, climate change, natural resources, landscape and historic environment.

The benefits of locating open space on-site are recognised under Options A and B; namely in providing good accessibility, a buffer between new housing on-site and the adjacent employment area, and under Option B potentially supporting reduced flood risk protecting people and properties on-site.

Sub-theme 3b - alternative options for the landscape buffer at Hawks Hill/ Harvest Hill

The three alternative options identified for the landscape buffer at Hawks Hill/ Harvest Hill are:

- **Option E:** Open space
- **Option F:** Woodland
- **Option G:** Mixture of open space and woodland

The summary findings for the assessment of these options is provided in **Table AIII.6** below.

Table AIII.6: Assessment of options for the landscape buffer at Hawks Hill/ Harvest Hill

SA theme		Option E	Option F	Option G
Biodiversity	Likely significant effect?	No	No	No
	Rank	2	2	1

Commentary:

All options for the type of landscape buffer are considered to support long-term benefits for biodiversity through additional planting, whilst it may be arguable that a mixture of both open space and woodland under Option G could promote greater habitat diversity, the resultant difference in effects is likely to be minor; however, the options is preferred overall on this basis.

SA theme		Option E	Option F	Option G
Climate change	Likely significant effect?	No	No	No
	Rank	3	1	2

Commentary:

Woodland in this area (under Options F and G) is likely to provide natural drainage and reduce the risk of surface water flooding, though the area is currently largely not at risk, it would also deliver additional benefits related to carbon sequestration. However, it also recognised that wildflower or reed bed planting within open space could also achieve many of the same benefits in relation to surface water. The additional benefits of carbon sequestration under Options F and G are considered to make these options perform marginally better than Option E.

SA theme		Option E	Option F	Option G
Community wellbeing	Likely significant effect?	No	No	No
	Rank	-	-	-

Commentary:

All options are considered likely to support long-term minor positive effects for community health and wellbeing through the provision of natural space and access to nature, the type of buffer provided is unlikely to significantly affect this SA theme and the options are difficult to meaningfully differentiate between.

SA theme		Option E	Option F	Option G
Economy and employment	Likely significant effect?	No	No	No
	Rank	-	-	-

Commentary:

The location for the boundary treatment under all options is set and the options explore the type of boundary treatment in this location. None of the options are considered likely to affect the SA theme of economy and employment and neutral effects are anticipated overall in this respect. The options cannot be meaningfully differentiated in relation to this SA theme.

SA theme		Option E	Option F	Option G
Historic environment	Likely significant effect?	No	No	No
	Rank	3	1	2

Commentary:

The landscape buffer area lies directly opposite Listed Buildings on Kiln Lane. The buffer is likely to soften the approach of development in the setting of these assets, positively supporting the contribution that the setting makes to the significance of the assets. The additional benefit of screening provided by tree coverage could enhance the potential minor positive effects under Option F and G, and by providing a greater degree of woodland coverage, Option F is preferred overall.

SA theme		Option E	Option F	Option G
Landscape	Likely significant effect?	No	No	No
	Rank	1	2	1

Commentary:

The landscape buffer along this boundary will provide the necessary separation between the site and Hawks Hill/ Harvest Hill in line with Local Plan policy requirements, positively supporting the minimisation of landscape impacts. With regards to the type of buffer, the additional benefit of screening provided by tree coverage (under Options F and G) is noted; however, the identified Landscape Character Type⁹⁹ (Thames Floodplain) for this area notes the open character of this landscape, alongside sparse woodland (with trees typically associated with hedgerow borders and watercourses). In keeping with a landscape-led approach, evidence suggests Options E and G could perform marginally better against this SA theme than Option F.

SA theme		Option E	Option F	Option G
Natural resources	Likely significant effect?	No	No	No
	Rank	-	-	-

Commentary:

All options will support the retention of greenfield land in this area of the site with the potential for minor long-term positive effects in this respect. Woodland in this area (under Options F and G) is likely to provide natural drainage supporting water quality, though this could equally be achieved in open space (under Option E) for example with wildflower or reed beds. As such the options are easily differentiated in respect of this SA theme.

SA theme		Option E	Option F	Option G
Transport and traffic	Likely significant effect?	No	No	No
	Rank	-	-	-

Commentary:

The type of landscape buffer provided at this location is unlikely to affect to the SA theme of transport and traffic, and neutral effects are anticipated in this respect for all options.

Summary of assessment of options for the landscape buffer at Hawks Hill/ Harvest Hill:

None of the options are considered likely to lead to any significant effects in relation to any of the SA themes. The provision of the buffer at this location (under all options) is likely to support positive effects by providing additional habitat supporting biodiversity and providing natural drainage. Woodland (under Options F and G) is also noted for the additional benefits of carbon sequestration. The buffer supports the setting of Listed Buildings along Kiln Lane and woodland (under Options F and G) is recognised for additional screening benefits in this respect. However, landscape character evidence suggests that open space and sparse woodland is more in keeping with the overall landscape character of this area. Therefore, evidence suggests Option E followed by Option G would perform marginally better against the SA theme of Landscape than Option F.

⁹⁹ Land Use Consultants (2011) Wycombe District Landscape Character Assessment [online] available at: <https://www.buckscc.gov.uk/services/environment/landscape/landscape-character-assessments/wycombe-district/>

Sub-theme 3c - Alternative options for boundary treatment at Hedsor Road and Riversdale Conservation Area

The three alternative options identified for boundary treatment at Hedsor Road and Riversdale Conservation Area are:

- **Option H:** Back-to-back with no buffer
- **Option J:** Back-to-back with a private green buffer between residential gardens
- **Option K:** Green buffer with houses fronting onto public road

The summary findings for the assessment of these options is provided in **Table AIII.7** below.

Table AIII.7: Assessment of options for boundary treatment at Hedsor Road and Riversdale Conservation Area

SA theme		Option H	Option J	Option K
Biodiversity	Likely significant effect?	No	No	No
	Rank	3	1	2

Commentary:

New gardens in this area under all options are likely to support minor long-term positive effects in relation to biodiversity through new and varied planting. The inclusion of a green buffer under Option J and K are likely to deliver additional minor long-term positive effects for biodiversity, making these two options perform slightly better when compared to Option H in which no green buffer is included. A private green buffer may provide additional benefits for biodiversity through reduced physical presence and disturbance, and on this basis, Option J is preferred overall.

SA theme		Option H	Option J	Option K
Climate change	Likely significant effect?	No	No	No
	Rank	2	2	1

Commentary:

None of the options are considered likely to significantly affect climate change mitigation; however, the addition of a new public road adjacent to the green buffer under Option K could improve local and scenic connections and support active travel in this respect, thus Option K is considered to perform marginally better in terms of climate change mitigation.

However, in terms of climate change adaptation, the area for this buffer lies within/ adjacent to areas of fluvial and surface water flood risk and additional impermeable surfaces (a new public road) may increase run-off and flood risk in this respect. A potential for minor long-term negative effects is noted at this stage. Placing the impermeable surfaces of the new public road adjacent to a green buffer under Option K provides the opportunity to ensure that sustainable drainage systems could be effectively utilised to capture and reduce any risk associated with run-off. As such Option K is considered to perform better than the remaining options and may deliver minor long-term positive effects in reducing flood risk in this part of the site.

SA theme		Option H	Option J	Option K
Community wellbeing	Likely significant effect?	No	No	No
	Rank	1	1	2

Commentary:

None of the options are considered likely to significantly affect this SA theme; however, all options will benefit residents through the inclusion of a new public road, and locating this road adjacent to the green buffer under Option K could improve local scenic connections and support active travel in this respect. However, the public road will overlook existing private gardens which is recognised for potential negative effects relating to crime/ fear of crime. On this basis Option K is not considered to perform as well as the alternative options in relation to community health and wellbeing.

SA theme		Option H	Option J	Option K
Economy and employment	Likely significant effect?	No	No	No
	Rank	-	-	-

Commentary:

The location for the boundary treatment under all options is set and the options explore the type of boundary treatment in this location. None of the options are considered likely to affect the SA theme of economy and employment and neutral effects are anticipated overall in this respect. The options cannot be meaningfully differentiated in relation to this SA theme.

SA theme		Option H	Option J	Option K
Historic environment	Likely significant effect?	No	No	No
	Rank	3	1	2

Commentary:

The options all relate to boundary treatment affecting the Conservation Area along Hedsor Road. Option H would ultimately directly adjoin new housing with the existing, providing limited screening or separation. In comparison both Options J and K would provide a green buffer protecting the transition between new and old to some degree and providing additional screening to support heritage settings. As such, these Options are both considered to perform slightly better than Option H. However, placing the new road adjacent to the green buffer is likely to increase vehicle presence in the direct vicinity of heritage assets and reduce tranquillity, potentially affecting the setting. As such, Option J is preferred overall by further removing the new public road from the Conservation Area setting.

SA theme		Option H	Option J	Option K
Landscape	Likely significant effect?	No	No	No
	Rank	3	1	2

Commentary:

The options all relate to boundary treatment affecting the historic townscape along Hedsor Road. Option H would ultimately directly adjoin new housing with the existing, providing limited screening. In comparison both Options J and K would provide a green buffer protecting the transition between new and old to some degree and providing additional screening to support heritage settings. As such, these Options are both considered to perform slightly better than Option H. However, placing the new road adjacent to the green buffer is likely to increase vehicle presence in the direct vicinity of heritage assets and reduce tranquillity in this historic setting. As such, Option J is preferred overall by further removing the new public road from the historic townscape area and its setting.

SA theme		Option H	Option J	Option K
Natural resources	Likely significant effect?	No	No	No
	Rank	2	1	1

Commentary:

None of the options are considered likely to significantly affect this SA theme; however, all options involve an element of greenfield and high-quality (best and most versatile) agricultural land loss to housing development and minor negative effects are anticipated in this respect. Additional green buffers as identified under Options J and K may support increased retention of high-quality soils and thus these options are marginally preferred when compared to Option H which does not include a green buffer.

SA theme		Option H	Option J	Option K
	Likely significant effect?	No	No	No
Transport and traffic	Rank	2	2	1

Commentary:

None of the options are considered likely to significantly affect this SA theme; however, all options will benefit residents through the inclusion of a new public road, and locating this road adjacent to the green buffer under Option K could improve local scenic connections and support active travel in this respect, thus Option K is considered to perform marginally better in terms of promoting sustainable transport access and active travel opportunities.

Summary of assessment of options for boundary treatment at Hedsor Road:

None of the options are considered likely to lead to any significant effects. The additional green buffer included within Options J and K is considered likely to support enhanced minor positive effects in relation to biodiversity and the historic environment (through additional screening). This is particularly enhanced under Option J which minimises disturbance to biodiversity (by making the green buffer private) and reduces vehicle presence in the immediate setting of the conservation area (by setting the road further back beyond new housing). However, Option K is considered for its potential to support road development with natural sustainable drainage systems potentially supporting reduced surface water flood risk in this area, and for providing scenic routes to promote active travel.

Theme 4: Housing density

The three alternative options identified for housing density are:

- **Option 1:** Uniform medium density
- **Option 2:** East-west gradient
- **Option 3:** North-south gradient

The summary findings for the assessment of these options is provided in **Table AIII.8** below.

Table AIII.8: Assessment of options for housing density on site

SA theme		Option 1	Option 2	Option 3
Biodiversity	Likely significant effect?	No	No	No
	Rank	1	1	2

Commentary:

Whilst the housing development proposed under each option has the potential to disturb species on-site and adjacent habitats, this is an inevitable consequence as assessed through the Local Plan process. The options relate to density on site and given that Option 3 increases density around the existing habitat off Hawks Hill and within the area on-site where notable species have been recorded, minor negative effects are likely to be most predominant under this option. On this basis, Option 3 is not considered to perform as well when compared to Options 1 and 2 with regards to biodiversity.

SA theme		Option 1	Option 2	Option 3
Climate change	Likely significant effect?	No	No	No
	Rank	2	2	1

Commentary:

The overall level of growth remains the same across the options, and thus similar effects across the options are anticipated in relation to climate change mitigation; given that each has equal potential to employ sustainable construction methods and building practices, supporting sustainable waste management and energy efficiency in development. However, lower densities in the south of the site under Option 3 would reduce the level of development adjacent to fluvial flood risk areas, and support reduced future risk to people and properties. As such, Option 3 is considered to perform better than Options 1 and 2 in respect of climate change adaptation. No significant effects are anticipated overall under any of the options.

SA theme		Option 1	Option 2	Option 3
Community wellbeing	Likely significant effect?	No	No	No
	Rank	1	2	1

Commentary:

The overall delivery of housing across the site is considered likely to support long-term positive effects for communities by delivering high-quality new housing that contributes to meeting the identified District housing needs and reducing deprivation in this respect. In terms of the density variations, Option 2 will deliver higher densities adjacent to existing industrial buildings west of the site. This could have implications for community health, safety and wellbeing (though these are not expected to be significant) and on this basis, Options 1 and 3 are considered to perform marginally better than Option 2 by either more evenly distributing density or focusing higher densities in the north of the site.

SA theme		Option 1	Option 2	Option 3
Economy and employment	Likely significant effect?	No	No	No
	Rank	-	-	-

Commentary:

Housing density on-site is unlikely to significantly affect this SA theme; and all options will deliver housing with excellent access to the adjacent employment areas along Millboard Road and Wessex Road. Neutral effects are anticipated, and the options cannot be meaningfully differentiated at this stage.

SA theme		Option 1	Option 2	Option 3
Historic environment	Likely significant effect?	No	No	No
	Rank	2	2	1

Commentary:

The Hedsor Road and Riversdale Conservation Area borders the site in the south, and a few Listed Buildings are also located north of the site along Kiln Lane. Housing development is likely to affect designated heritage settings and the Conservation Area is considered the most sensitive heritage asset in relation to the site and potential impacts on views. As such, Option 3 is considered to offer greater potential to reduce potential impacts through lower densities in the south of the site. This option is ranked higher than Options 1 and 2 on this basis; however, it is recognised that it increases density north of the site in proximity of the Listed Building there. It is considered likely that these effects could be mitigated to some degree by the provision of the landscape border along the eastern edge of the site, and potentially further if the school is sited in the north to soften the transition here. However, the overall effects are ultimately dependent upon the design and layout of housing development, particularly in supporting the setting of the Conservation Area and Listed Buildings.

SA theme		Option 1	Option 2	Option 3
Landscape	Likely significant effect?	No	No	No
	Rank	2	2	1

Commentary:

The identified Landscape Character Type¹⁰⁰ (Thames Floodplain) for this area notes the flat and open character of this landscape, with far-reaching views. It also notes that the suburban edge of Bourne End is abrupt in places. In keeping with this evidence, it therefore naturally follows that lower densities will support the retention of an open character, and a softened edge in the south of the site particularly will support the settlement fringe and views south and south west to the River Thames. Development is also likely to deliver positive effects by reducing the abrupt edge of industrial buildings west of the site. Increased density in the north of the site is also considered consistent with the character of surrounding housing north of the site; however, it is more likely to affect existing long-distance views north of the site from footpath WOO/20/4. On this basis minor long-term positive effects could be achieved under all options; however, given the reduced density in the south of the site, Option 3 is considered to perform marginally better than Options 1 and 2 overall.

SA theme		Option 1	Option 2	Option 3
Natural resources	Likely significant effect?	No	No	No
	Rank	2	2	1

Commentary:

The same level of development occurs under all options which will result in the loss of greenfield and high-quality (best and most versatile) agricultural land. As such, long-term minor negative effects are anticipated for all density options. However, fluvial and surface water flood risk is predominant in the south of the site, so reduced density here under Option 3 could support reduced levels of polluted run-off in this area, making this option preferred overall when compared to Options 1 and 2.

¹⁰⁰ Land Use Consultants (2011) Wycombe District Landscape Character Assessment [online] available at: <https://www.buckscc.gov.uk/services/environment/landscape/landscape-character-assessments/wycombe-district/>

SA theme		Option 1	Option 2	Option 3
Transport and traffic	Likely significant effect?	No	No	No
	Rank	-	-	-

Commentary:

All density options are considered likely to be supported by primary road access and additional active travel connections through the site. As such the options are considered unlikely to affect this SA theme (with neutral effects are identified) and cannot be meaningfully differentiated.

Housing density options assessment summary:

None of the options are considered likely to lead to any significant effects; however, the assessment identified some differences between them:

- Option 1; uniform densities are largely considered to 'fall in between' Options 2 and 3 in terms of performance. Whilst uniform densities offer potential to integrate housing more consistently in the landscape, it may also miss opportunities for example to reduce impacts in relation to the settlement edge in the south and designated Conservation Area.
- Option 2; by increasing density in the west of the site, this option is noted for potential minor negative effects in relation to community wellbeing (predominantly safety) given its proximity to the adjacent industrial warehousing employment area.
- Option 3; by increasing density in the north of the site this option is considered for potential minor negative effects of greater significance in relation to biodiversity, as a result of increased disturbance, noise, light and air pollution at the adjacent woodland habitat off Hawks Hill. Alternatively by reducing density in the south of the site, enhanced positive effects are anticipated in relation to climate change adaptation (by reducing development in the vicinity of fluvial flood risk zones) and landscape and historic environment (by reducing development in the setting of the designated Conservation Area and area where views are most predominant into the site impacting the settlement edge).