Chapter 4

Key Sustainability Issues and Likely Evolution without the Plan

4.1 Analysis of the baseline information has enabled a number of key sustainability issues facing SW Hertfordshire to be identified. Identification of the key sustainability issues and consideration of how these issues might develop over time if the JSP is not implemented help to meet the requirements of Annex 1 of the SEA Directive to provide information on:

"the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan; and any existing environmental problems which are relevant to the plan."

- **4.2** Key sustainability issues for SW Hertfordshire, as identified through the baseline information, are presented below.
- **4.3** It is also a requirement of the SEA Directive that consideration is given to the likely evolution of the environment in the plan area (in this case SW Hertfordshire) if the new JSP was not to be implemented. This analysis is presented below each of the key sustainability issues.

Key Sustainability Issues and their Likely Evolution without the JSP

Sustainability Issue 1: Impacts of climate change including temperature rises and an increase in extreme weather events

- Without the emerging JSP, it is likely that the impacts of climate change will still be mitigated against. National Policy will continue to seek to reduce carbon emissions through encouraging the switch to renewable energy, and more efficient use of energy and reduce the risk of flooding. The Sustainable Hertfordshire Strategy (2020) sets out the county council's vision for tackling climate change, detailing policies and initiatives. Therefore, this is likely to continue without the JSP and will be encouraged through the District and Borough Local Plans.
- However, the JSP provides the opportunity to strengthen the area's policy framework and provide regional guidance to encourage energy efficient development within SW Hertfordshire, to reduce the need to use the car through planning and support active and public transport options and presents an opportunity for the five Councils to work together alongside the Environment Agency to locate development in sustainable locations that would be significantly impacted by flooding and to mitigate the effects of potential future flooding. The JSP will help to guide future plans and strategies by setting out high-level policies on climate change mitigation and energy use.

Sustainability Issue 2: High house prices and affordability issues

■ Without the emerging JSP, it is likely that housing and services and facilities would still be delivered through each of the District and Borough Local Plans, but without a strategic approach it may be more difficult to

keep pace with demand. Without the JSP it is likely that house prices will continue to rise within the area. As highlighted in the South West Hertfordshire Local Housing Needs Assessment (LHNA), there are affordability pressures within the South West Hertfordshire Housing Market Area (HMA), and without a strategic approach it will be difficult for affordable housing delivery. The JSP offers the opportunity to facilitate and expedite the delivery of affording housing across the area.

Sustainability Issue 3: Inadequate access to natural green space in various parts of SW Hertfordshire

■ The JSP presents an opportunity to help address any existing deficiencies in accessible greenspace and to consider the multi-functionality of the green infrastructure network at a more strategic level to ensure there is connectivity between the walking, cycling and bridleway network as well additional greenspace.

Sustainability Issue 4: Health issues including excess weight in adults

The JSP could further contribute to tackling issues of health and wellbeing and general health disparities through policies that strongly support uptake of active modes of transport. access to green space, community facilities, improved public realm and other recreation opportunities, an in particular in more deprived areas.

Sustainability Issue 5: Ageing population

■ Without the emerging JSP, it is possible that the diverse and distinct nature of socio-economic challenges occurring across SW Hertfordshire will remain.

As the JSP encourages more collaborative working between the five SW Hertfordshire Councils, the JSP offers the opportunity to ensure that appropriate resources are being targeted to areas with the greatest specific needs.

Sustainability Issue 6: Pockets of deprivation within an otherwise affluent area

As above, the JSP offers the opportunity to ensure that appropriate resources are being targeted to areas with the greatest specific needs. As the JSP encourages more collaborative working between the five SW Hertfordshire Councils, it could result in opportunities for economic growth and development, which can help to reduce inequality.

Sustainability Issue 7: Critically low amount of available employment space

■ The JSP provides the opportunity to focus planning and investment on key economic sectors and strategic corridors and locations, supported by sufficient infrastructure to provide the conditions to attract investment and support the growth of SW Herts indigenous businesses to help promote a competitive economy across the area.

Sustainability Issue 8: Impacts of the Covid-19 pandemic including drop in productivity

■ The JSP offers the opportunity to promote the Local Industrial Strategy and district level recovery plans, where published, throughout the area to promote employment and productivity focusing directly on strategic employment need, supporting the growth of established sectors to target productivity challenges, especially within communities in need of economic investment.

Sustainability Issue 9: Poor public transport linkages

■ The JSP provides additional opportunity to improve the public transport choices within SW Hertfordshire through the promotion of alternative travel modes to the motorised vehicle, in line with wider county and national policy aspirations. Additionally, through collaborative working between the five Councils, the JSP could help to deliver and better fund essential local transport links to discourage car dependency and encourage modal shift.

Sustainability Issue 10: Congestion and stress on the road network across SW Hertfordshire

Recent national policies and the emergence of new technologies (such as improved electric vehicles, e-bikes and cleaner fuels/energy sources) are likely to help reduce the release of air pollutants. The JSP presents the opportunity to address issues associated with congestion through providing clarity for infrastructure providers at the same time as promoting a joined-up strategic approach to transport planning, integrated with the delivery of housing and economic development. Additionally, the JSP provides opportunities to support a modal shift and discourage car dependency.

Sustainability Issue 11: Pressure on water resources

■ The JSP provides the opportunity to create a framework at a localised scale to ensure that strategic development is located to take into account the sensitivities of the water resources and provide an opportunity to encourage better and more sustainable use of water resources.

Sustainability Issue 12: Loss of biodiversity.

Ongoing development, in addition to pollution and intensive recreational use, produce ongoing pressures that the JSP can help to address at a strategic scale, seeking to safeguard and improve not only designated sites, but the ecological networks and supporting habitats that support them and their species. Additionally, the JSP provides the opportunity to coordinate the provision of alternative SANGs to alleviate recreational pressure at designated biodiversity sites.

Sustainability Issue 13: Potential harm to the local landscape, specifically the Chilterns Area of **Outstanding Natural Beauty (AONB)**

■ The JSP provides a further opportunity to ensure that the character and quality of the landscape is taken into account in the siting of strategic development, whilst maximising any opportunity for the protection and enhancement of the landscape.

Chapter 5

Sustainability Appraisal Framework

- **5.1** The development of a set of SA objectives (known as the SA framework) is a recognised way in which the likely environmental and sustainability effects of a plan can be described, analysed and compared.
- **5.2** The proposed SA framework for the new JSP is presented in Table 5.1. The framework has been developed from the analysis of international, national and local policy objectives, the baseline information, and the key sustainability issues identified for the Plan area.
- **5.3** It comprises a series of SA objectives against which the sustainability of the JSP will be appraised. The appraisal of the JSP options and policies against these SA objectives will be guided in part by the appraisal questions accompanying each objective. The questions included in the framework are not exhaustive, and some may be more relevant to certain Plan elements than others.
- **5.4** All of the topics specifically required by the SEA Regulations (set out in Schedule 2 of the SEA Regulations) are addressed by the SA objectives.

SA Framework for the SW Hertfordshire Joint Strategic Plan

SA Objective 1: To minimise SW Hertfordshire's contribution to climate change and build resilience for adaptation to the changing climate

Appraisal Questions:

- Promote climate change resilience through sustainable siting, design, landscaping and infrastructure?
- Promote energy efficient approach and sustainable construction?
- Encourage the provision of renewable energy infrastructure?

SA Objective 2: To support meeting SW Hertfordshire's housing needs

- Provide opportunities to deliver the range of housing types and tenures and the affordable homes needed over the Plan period?
- Support addressing the housing needs of an ageing population?
- Enable the delivery of housing where it is most needed?
- Promote high quality housing?

SA Objective 3: To improve the health and wellbeing of SW Hertfordshire's population

Appraisal Questions:

- Promote access to healthcare facilities?
- Maintain, connect and create multifunctional open spaces and green infrastructure?
- Provide access to recreation and sports facilities?
- Encourage and facilitate walking and cycling?
- Put healthy placemaking at the core of the plan?

SA Objective 4: To reduce inequalities within SW Hertfordshire

- Reduce the disadvantage faced by those with protected characteristics?
- Assist in the reduction of health inequalities?
- Reduce poverty and social exclusion in the areas most affected?
- Promote developments that benefit SW Hertfordshire's most deprived areas?

SA Objective 5: To sustain and create vibrant and safe communities with good access to services and facilities

Appraisal Questions:

- Facilitate the integration of new communities with existing communities?
- Ensure access to a range of services and facilities?
- Help create places that address safety, crime and the fear of crime, and disorder?

SA Objective 6: To support the development of SW Hertfordshire's economy and achieve high and stable levels of employment

- Support the provision of a sufficient range, type and location of employment land to meet local needs?
- Allow for sufficient flexibility to respond to uncertainties and changing economic circumstances?
- Support opportunities for the expansion and diversification of business and inward investment?
- Support opportunities for new and improved education and training facilities?
- Support the diversification of employment types?

SA Objective 7: To reduce the need to travel by car

Appraisal Questions:

- Promote the delivery of integrated, compact communities (15 minute neighbourhoods) made-up of a complementary mix of land uses?
- Support the maintenance and expansion of high-quality public transport networks?
- Enhance connectivity of the sustainable transport network?
- Support the provision of new cycling and walking infrastructure?

SA Objective 8: To minimise air and noise pollution in **SW Hertfordshire**

- Minimise increases in polluting traffic, and its impact on Air Quality Management Areas?
- Reduce congestion, particularly involving HGVs?
- Support the take up of low / zero emission vehicles?
- Help reduce air pollution from commercial and industrial sources?
- Help minimise exposure to noise pollution?

SA Objective 9: To maintain and enhance water quality and quantity

Appraisal Questions:

- Minimise inappropriate development in Source Protection Zones?
- Ensure there is sufficient waste water treatment capacity to serve SW Hertfordshire?
- Ensure there are sufficient water resources to support existing and new development?
- Support efficient use of water in new development?
- Help safeguard the water quality and ecological integrity of waterbodies?

SA Objective 10: To reduce the risk from all sources of flooding in SW Hertfordshire

Appraisal Questions:

- Minimise built development in areas prone to flooding?
- Help promote the use of SuDS and flood resilient design?
- Help promote the use of Natural Flood Management techniques?

SA Objective 11: To protect SW Hertfordshire's soils and ensure efficient use of land

Appraisal Questions:

Prioritise the development of brownfield land over greenfield land?

Chapter 5 Sustainability Appraisal Framework

- Avoid development on best and most versatile agricultural land?
- Take an appropriate approach to remediating contaminated land?
- Promote nutrient neutral development?

SA Objective 12: To safeguard SW Hertfordshire's mineral resources

Appraisal Questions:

- Avoid sterilising mineral resources?
- Promote the appropriate restoration of sites that are no longer used?

SA Objective 13: To conserve and enhance SW Hertfordshire's biodiversity and geodiversity

- Safeguard and enhance SW Hertfordshire's internationally, nationally and locally designated biodiversity assets?
- Safeguard and enhance SW Hertfordshire's ancient woodlands, chalk grasslands and other characteristic habitats?
- Help to conserve, connect and enhance ecological networks?
- Achieve overall net gains in biodiversity?
- Provide and manage opportunities for people to come into contact with resilient wildlife places whilst encouraging respect for and raising awareness of the sensitivity of such locations?
- Protect SW Hertfordshire's designated geodiversity sites?

SA Objective 14: To protect and enhance the significance of SW Hertfordshire's historic environment

Appraisal Questions:

- Conserve and enhance SW Hertfordshire's designated and undesignated heritage assets, including their setting?
- Encourage the conservation, management and enhancement of the region's heritage assets, particularly heritage at risk and historic landscapes?
- Help raise awareness, understanding and appreciation of, and access to, the historic environment?

SA Objective 15: To protect and enhance SW Hertfordshire's landscape character and quality

- Protect and enhance the character of the Chilterns AONB including its setting?
- Avoid development that would have adverse effects on sensitive landscapes?
- Safeguard the character and distinctiveness of SW Hertfordshire's settlements?

Use of the SA Framework

- **5.5** The SA should be undertaken in close collaboration with the officers responsible for drafting the new JSP in order to fully integrate the SA process with the production of the plan.
- **5.6** The findings of the SA will be presented using matrices, with a colour coded symbol showing for the likely effect of the option or policy on each of the SA objectives along with a concise justification for the effect identified, where appropriate.
- **5.7** The use of colour coding in the matrices will allow for likely significant effects (both positive and negative) to be easily identified, as shown in Table **5.1** below.

Table 5.1: Key to symbols and colour coding to be used in the **SA** of the SW Hertfordshire Joint Strategic Plan

Symbol and Colour Coding	Description
++	The option or policy is likely to have a significant positive effect on the SA objective(s).
+	The option or policy is likely to have a positive effect of the SA objective(s).
0	The option or policy is likely to have a negligible or no effect on the SA objective(s).
-	The option or policy is likely to have a negative effect on the SA objective(s).
	The option or policy is likely to have a significant negative effect on the SA objective(s).
?	It is uncertain what effect the option or policy will have on the SA objective(s), due to a lack of data.

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Symbol and Colour Coding	Description			
+/-	The option or policy is likely to have a mixture of positive and negative effects on the SA objective(s).			

- **5.8** The dividing line between sustainability effects is often quite small. Where significant effects are distinguished from more minor effects this is because, using the appraisal questions and criteria and applying professional judgement, the effect of the option or policy in question on an SA objective will be of such magnitude that it will have a noticeable and measurable effect compared with other factors that may influence the achievement of that objective.
- **5.9** In determining the significance of the effects of the options for potential inclusion in the JSP it will be important to bear in mind its relationship with the other components of the planning system such as the NPPF, as these may provide additional safeguards or mitigation for potentially significant adverse effects.

Health Impact Assessment

5.10 Health Impact Assessment (HIA) aims to ensure that health-related issues are integrated into the plan-making process. As described in Chapter 1, the HIA will be incorporated into the SA. SA objective 3 directly addresses health issues, while achievement of SA objectives 1, 4, 5, 6, 7, 8, 13, 14 and 15 would also indirectly benefit people's health. The high level growth types and policy options for the JSP will all be assessed against these objectives as part of the SA. The SA Report will make recommendations for how the health-related impacts of the JSP can be optimised as the options are developed into more detailed policies.

Equalities Impact Assessment

- **5.11** There are three main duties set out in the Equality Act 2010, which public authorities, including the five planning authorities within SW Hertfordshire, must meet in exercising their functions:
 - To eliminate discrimination, harassment, victimisation and other conduct that is prohibited under the Act.
 - To advance equality of opportunity between persons who share relevant protected characteristics and persons who do not share it.
 - To foster good relations between persons who share a relevant protected characteristic and persons who do not share it.
- **5.12** The Equality Act 2010 identifies nine 'protected characteristics' and seeks to protect people from discrimination on the basis of these characteristics. Socio-economic status (people on low incomes, young and adult carers, people living in deprived areas/rural areas, groups suffering multiple disadvantages etc.) is not a characteristic protected by the Equality Act 2010. However, the SW Herts Councils are committed to also considering the impact that the JSP will have on these groups. As described in Chapter 1, the EqIA will be incorporated into the SA SA objective 4 directly addressed equality issues.

Chapter 6

SA Findings for the Vision, Objectives and Growth Types

- **6.1** The initial JSP Vision for 2050 represents the overarching goal for the area. The vision is an aspirational, crosscutting statement and as such is not itself suitable for appraisal, but the following six draft pillars that support the vision are appraised below. It should be noted that the vision and set of pillars/objectives may change as a result of the feedback received from the consultation.
- 1. Living green in a healthy natural environment
- 2. Growing opportunities to work locally
- 3. Living in healthy, thriving local communities
- 4. Moving easily in well-connected places
- 5. Building homes and places that people are proud of
- 6. Delivering robust and sustainable infrastructure
- **6.2 Table 6.1** summarises the SA findings for these six draft pillars, which are explained below the table.

Table 6.1: SA Scores for the Six Draft Pillars

SA objectives	Pillar 1	Pillar 2	Pillar 3	Pillar 4	Pillar 5	Pillar 6
SA1 – Climate change	++	0	0 0		+ 0	
SA2 - Housing	0	0 +		0	0 ++	
SA3 - Health	+	+	++	+ +		0
SA4 - Inequalities	+	+			0 +	
SA5 - Communities	+	+	++	0 ++		0
SA6 - Economy	+	++	0	0	0	+
SA7 - Travel	0	0	0	++ +		0
SA8 - Pollution	+	0	0	+	0	0
SA9 - Water	0	0	0	0 0		0
SA10 - Flooding	++	0	0	0 0		0
SA11 - Soils	0	0	0	0 0		0
SA12 - Minerals	+	0	0	0 0		+
SA13 – Biodiversity & Geodiversity	++	-?	0	0	-?	-?
SA14 – Historic Environment	0	-?	0	0	-?	-?

SA objectives	Pillar 1	Pillar 2	Pillar 3	Pillar 4	Pillar 5	Pillar 6
SA15 - Landscape	0	-?	0	0	-?	-?

Pillars and associated Objectives

Living green in a healthy natural environment

- **6.3** Pillar 1 aims to ensure that all new development is net zero carbon, carbon negative and incorporates nature-based solutions to build climate resilience. As such, a significant positive effect is expected for SA objectives 1 (climate change) and 10 (flooding). Pillar 1 also seeks to protect, enhance and connect new and existing biodiversity and ecological networks; therefore a significant positive effect is expected in relation to SA objective 13 (biodiversity and geodiversity). A minor positive effect is also expected for SA objective 12 (Minerals) as the reuse and recycling of construction materials could reduce the consumption of mineral resources.
- **6.4** Adapting to and mitigating against the impacts of climate change will also have minor positive effects on SA objectives 3 (Health), 4 (Inequalities), 5 (Communities), 6 (Economy) and 8 (Pollution) as this may help protect people from extreme weather events as well as the associated economic costs, increase job opportunities and minimise air pollution.

Growing opportunities to work locally

6.5 Pillar 2 promotes targeted investment into the local economy and workforce, supports the provision of education and training facilities and aims to diversify local job prospects thereby making the local economy more resilient. As such, a significant positive effect is expected in relation to SA objective 6 (Economy).

- **6.6** Minor positive effects are expected in relation to SA objectives 3 (Health), 4 (Inequalities) and 5 (Communities) as an increase in training opportunities and the provision of local facilities will help to support local communities and reduce deprivation in the areas most affected.
- **6.7** It is possible that the delivery of new workspaces could have negative effects on the environmental SA objectives, e.g. SA objectives 13 (Biodiversity and Geodiversity), 14 (Historic Environment) and 15 (Landscape); however this is uncertain until the precise location and design of any such development is known.

Living in healthy, thriving local communities

6.8 Pillar 3 seeks to provide healthy places that are inclusive, safe and interactive. This could increase levels of pedestrian activity and outdoor interaction; therefore significant positive effects are expected in relation to SA objectives 3 (Health) and 5 (Communities). Additionally, this pillar aims to create homes that provide opportunities for healthy and supported living, therefore minor positive effects are expected in relation to SA objectives 2 (Housing) and 4 (Inequalities).

Moving easily in connected places

6.9 Pillar 4 seeks to give people the opportunity for active and healthy living through the improved provision of public transport and active travel options. As such, significant positive effects are expected in relation to SA objective 7 (Travel). Minor positive effects are also expected for SA objectives 1 (Climate change), 3 (Health) and 8 (Pollution) as an improvements to the cycling and walking network can benefit physical and mental health and minimise the greenhouse gas emissions and air and noise pollution associated with vehicle traffic.

Building homes and places that people are proud of

- **6.10** Significant positive effects are recorded for SA Objective 2 (Housing) because this pillar aims to create homes and places that will fit the current and future needs of the local residents. It also seeks to create high quality public spaces creating sustainable communities. Therefore, a significant positive effect is expected for SA objective 5 (Communities). Additionally, the homes will be flexible, adaptable and built in sustainable locations; therefore minor positive effects are expected for SA objectives 3 (Health), 4 (Inequalities) and 7 (Travel).
- **6.11** It is possible that the delivery of new residential development could have negative effects on the environmental SA objectives, e.g. SA objectives 13 (Biodiversity and Geodiversity), 14 (Historic Environment) and 15 (Landscape); however this is uncertain until the precise location and design of any such development is known.

Delivering robust and sustainable infrastructure

- **6.12** Pillar 6 aims to deliver key infrastructure to meet local needs and adapt to climate change. To do this, this pillar promotes local renewable energy generation, the reuse and recycling of materials and access to fast digital networks for all. As such, minor positive effects are expected in relation to SA objectives 1 (Climate change), 6 (Economy) and 12 (Minerals).
- **6.13** It is possible that the delivery of new infrastructure could have negative effects on the environmental SA objectives, e.g. SA objectives 13 (Biodiversity and Geodiversity), 14 (Historic Environment) and 15 (Landscape); however this is uncertain until the precise location and nature of any such infrastructure is known.

Growth Types

- **6.14 Table 6.2** presents the SA findings for the seven potential growth types identified in the SW Hertfordshire JSP Regulation 18 Issues and Options document. These are broad and conceptual development types and not linked to an overall spatial scenario at this stage:
- a. **Growth within existing large settlements** a continued focus on the existing city, towns and large villages, through a combination of more dense development than traditionally seen in SW Herts and maximising redevelopment opportunities.
- b. **Outward growth of existing large settlements** the outward growth of existing city, towns and large villages through urban extensions.
- c. New settlements the creation of completely new communities. These would need to be large enough to ensure they can provide key local facilities.
- d. **Growth of groups of settlements** expanding the size of a number of existing communities which are located near to one another. These would need to be large enough in total to ensure they can provide key local facilities.
- e. **Growth along sustainable transport corridors** locating growth where there is potential to create new connected and improved public transport corridors, particularly those running east-west through the area.
- f. **Growing the best-connected places** a focus on areas that already have, or have the potential for, good access to railway stations, high frequency bus routes, high quality cycle routes and good pedestrian accessibility.
- g. **Scattered growth** growth across the whole area, in all sizes of settlements, from large to small.

Table 6.2: SA findings for Growth Types

SA Objective	Growth Type a	Growth Type b	Growth Type c	Growth Type d	Growth Type e	Growth Type f	Growth Type g
SA1 – Climate change	++?	++?	-	-	++?	++?	+/-?
SA2 - Housing	++?	++?	++?	++?	++?	++?	++?
SA3 - Health	+/-	+/-	+/-	+/-	+/-	+/-	+/-
SA4 - Inequalities	+/-	+/-	+/-	+/-	+/-	+/-	+/-
SA5 - Communities	+/-	+/-	+/-	+/-	+/-	+/-	+/-
SA6 - Economy	++	++	+?	+?	++	++	+/-
SA7 - Travel	++?	++	-	-	++	++	+/-?
SA8 - Pollution	-?	-?	-	-	-?	-?	+/-?
SA9 - Water	-	-	-	-	-	-	?
SA10 - Flooding	-	-	-	-	-	-	?
SA11 - Soils	+/-?	+/-?	?	?	+/-?	+/-?	?
SA12 - Minerals	0?	0?	0?	0?	0?	0?	0?
SA13 - Biodiversity	-	-	?	?	-	-	?
SA14 - Historic Environment	-	-	-	-	-	-	?
SA15 - Landscape	-	-	-	-	-	-	?

- **6.15** There is limited variation between the likely effects identified for Growth Types a, b, e and f as they all would result in some or all new development being either within or close to existing towns and cities, along sustainable transport corridors and/or around strategic transport hubs, which means all would offer more alternatives to private vehicle use including more active travel modes, and generally better access to jobs, services and facilities. Growth Types c, d and g are likely to have the most potential negative effects because they may result in more new growth across the more rural areas of the area, where environmental assets are more likely to be adversely affected and where accessibility may be less good and levels of car use higher.
- 6.16 For the purposes of this initial appraisal it is assumed that the same scale of growth would occur under each growth type. However, as the Issues and Options document explains, it is likely that a number of growth types would ultimately make up the spatial strategy for the plan. Given that the overall scale of growth to be planned for has yet to be determined and will be established later in the plan making process, all growth types have been identified as having potential but uncertain significant positive effects on SA objective 2 (Housing) at this stage. Although all growth types have the potential to deliver a significant number of new homes, their affordability is unknown. The same general assumption has been made with regards to the provision of employment land; however the spatial pattern of existing employment opportunities has offered greater scope to draw out variations in likely effects of the growth types to SA objective 6 (Economy), which are described in more detail below.
- **6.17** Growth Types a, b, e and f are considered likely to have similar effects across all the SA objectives, because concentrating development in and around existing settlements and areas of good public transport connectivity is assumed to mean that development would be located mostly within SW Hertfordshire's existing towns and cities. These growth types would all have significant positive effects in relation to SA objective 6 (Economy) because development would take place in areas where there are already employment and educational facilities, allowing economic clusters to form and providing access to local employment opportunities. Employment opportunities could be more easily accessed by walking, cycling and public transport, potentially resulting in '20 minute neighbourhoods', in part because development would be intensified in

existing urban areas, resulting in significant positive effects on SA objective 7 (Travel). Minor positive effects are expected for SA objective 11 (Soils) because development within existing settlements could result in the use of brownfield land thereby minimising the loss of greenfield land, particularly land which is in agricultural use. However, this is uncertain at this stage.

6.18 Denser development in urban areas and/or around sustainable transport nodes would make district heating easier and use less energy per dwelling than lower density communities. This, combined with the reduced need to travel, would likely result in significant positive effects from Growth Types a, b, e and f on SA objective 1 (climate change). It is uncertain whether a range of services, facilities and infrastructure would be developed alongside new housing under these Growth Types, therefore uncertainty is attached to the likely effects on SA objectives 1 (climate change), 7 (travel) and 8 (pollution) as the use of private vehicles may still be needed, particularly in the early stages of development. Minor negative effects are expected from these Growth Types in relation to SA objective 8 (pollution) as there are currently 17 Air Quality Management Areas within SW Hertfordshire, many of which lie within existing settlements; therefore focussing new development in these areas would place more people in close proximity to these air quality issues, and potentially exacerbate them as a result of new traffic generation, including from HGVs in the short to medium term during the construction phase.

6.19 Growth Types a, b, e and f would have mixed minor positive and negative effects on SA objectives 3 (Health), 4 (Inequalities) and 5 (Communities). Existing towns and cities tend to have the highest concentration of existing healthcare facilities which could be accessed by new residents; however concentrating new development in those areas could also place existing facilities under increased pressure and would miss opportunities to potentially stimulate improved services in more rural areas. Existing residents are likely to feel negative impacts from a large increase in population, although new residents are likely to benefit from the existing services (e.g., leisure and retail facilities).

Although Growth Type e in particular may result in the development of greenfield land along existing transport corridors, Growth Types a, b, e and f are

all based on a principle of maximising development in and around existing centres. This has the potential to help minimise negative effects on biodiversity assets and achieve the more efficient use of land. However, Growth Type b in particular is still likely to result in large urban extensions at existing settlements, resulting in the loss of greenfield land. Furthermore, the densification of existing centres could result in fewer green spaces in and around urban areas, with associated losses of biodiversity. Therefore, a minor negative effect is expected for SA objective 13 (Biodiversity). Minor negative effects are also expected on SA objectives 9 (water), 10 (Flooding), 11 (Soils),14 (Heritage) and 15 (Landscape) because some key existing settlements such as Watford are mostly in/near the floodplain therefore additional development in those areas could increase the risk of flooding. Additionally, existing settlements tend to have a higher number of designated heritage assets and attractive and distinctive townscapes, which would be affected by significant quantities of new development.

- **6.20** Growth Types d and g are considered likely to have broadly similar effects across the SA objectives as they would involve more dispersed growth across the area. The expansion of existing settlements could lead to the creation of new service centres able to support new healthy and vibrant communities, but it is likely that, at least in the short term, additional residents could put pressure on existing services and facilities. Therefore, mixed minor positive and minor negative effects are recorded against SA objectives 3 (Health), 4 (Inequalities) and 5 (Communities).
- **6.21** Growth Types d and g could result in growth within the rural areas of SW Hertfordshire away from the main service centres. As such, it is likely these Growth Types will utilise more greenfield land for development compared to the other Growth Types, resulting in less efficient use of land and greater potential for the loss of habitats. In addition, there are many Local Wildlife Sites, patches of Ancient Woodland, Local Nature Reserves and SSSIs that could be adversely impacted by development in the rural areas of the area, resulting in the potential for significant negative effects on SA objectives 11 (soils) and 13 (biodiversity). However, uncertainty is attached to the effects of Growth Type g because development could be directed to larger existing settlements which

could provide opportunities for the development of brownfield land over greenfield land.

- **6.22** Although new service centres would be created in new settlements and growth of groups of settlements, they are unlikely to be of a scale to be able to support significant new and improved local service centres of a scale needed for the level of growth likely to be required in the area, resulting in the need for more commuting to larger centres in existing and larger settlements. Growth Types d and g would therefore likely increase greenhouse gas emissions, traffic congestion and use of the private car resulting in minor negative effects on SA objectives 1 (climate change), 7 (travel), and 8 (pollution). However, uncertainty is attached to the effects of Growth Type g as development could be directed to larger existing settlements which are likely to be in closer proximity to sustainable methods of transport.
- **6.23** Additional development throughout the area including within the rural areas could result in more rural infrastructure which would open up new opportunities within the rural economy and encourage residents to stay within the rural areas for work, resulting in minor positive effects in relation to SA objective 6 (economy). For example, there is potential for an innovative rural economy with regard to farming practices in response to climate change and policy changes, as well as more home working. However, the long-term viability and capacity of these practices is currently uncertain.
- **6.24** With the potential greater loss of open countryside resulting from Growth Types d and g, development could result in the loss of permeable land thereby increasing the risk of flooding. Development could also result in the deterioration of the water supply. As such, minor negative effects are expected on SA objectives 9 (water) and 10 (flooding). Although the density of development outside of the main settlements would likely be lower, it would have to be more dispersed across SW Hertfordshire, which could potentially affect the setting and special character of the area's historic and landscape character. Therefore, minor negative effects on SA objectives 14 (historic environment) and 15 (landscape) are expected. However, uncertainty is attached to Growth Type g as development could be directed to larger existing

settlements and therefore could have less of a negative impact on the landscape.

- **6.25** Growth Type c would involve creating new settlements within the area which would provide key local facilities alongside housing. As such, the new settlements could promote the cohesion of new communities through provision of social infrastructure and could provide communities in surrounding areas with additional services and facilities. Therefore, minor positive effects are expected in relation to SA objectives 3 (Health), 4 (Inequalities) and 5 (communities). However, the additional social infrastructure that will be provided by new settlements may not provide easy access for existing residents and could be quite remote from existing service centres, introducing a risk that some new communities become commuter suburbs, acting as dormitories for local workers. In addition, new settlements can take a long time to deliver, which means that additional infrastructure may not be provided in the early years of the plan period but only once the settlement reaches a size large enough to support them. As such, minor negative effects are also expected in relation to SA objectives 3 (Health), 4 (Inequalities) and 5 (communities).
- **6.26** In addition to social infrastructure, new settlements are likely to provide additional local job opportunities, however it may take some time to attract businesses to invest in new settlements. Therefore, mixed minor positive and negative effects are expected in relation to SA objective 6 (economy). Mixed effects are also expected in relation to SA objectives 1 (climate change), 7 (travel) and 8 (pollution) as new settlements would provide services and facilities on site; however this may not be the case in the short term, so increased use of the private car is likely, thereby increasing traffic congestion and greenhouse gas emissions. New settlements could be masterplanned and sensitively planned to reduce the need for travel through good site layout and the creation of '20-minute neighbourhoods'; however the design and layout is unknown at this stage.
- **6.27** Similar to Growth Types d and g, Growth Type c is likely to utilise more greenfield land for new settlements compared to the other Growth Types, resulting in less efficient use of land and greater potential for the loss of habitats. Additionally, the conversion of greenfield land to impermeable surfaces

through development could increase the risk of flooding within the area. Therefore, under the precautionary principle, uncertain significant negative effects are identified in relation to SA objectives 10 (flooding), 11 (soils), 13 (biodiversity), 14 (heritage) and 15 (landscape).

- **6.28** All of the Growth Types are considered to have likely negligible effects on SA objective 12 (minerals) on the assumption that safeguarded minerals within allocated areas would be recovered before development occurred.
- **6.29** These growth types will be reassessed within future SA reports when it is clear how they will be configured as part of the overall growth/spatial strategy for SW Hertfordshire.

Chapter 7

Next Steps

7.1 In order to meet the requirements of the SEA Regulations, the views of the three statutory consultees (Environment Agency, Historic England and Natural England) are being sought in relation to the scope and level of detail to be included in the SA Report. In particular, consultees are in particular requested to consider whether:

- The scope of the SA is appropriate considering the role and priorities of the SW Herts JSP.
- The plans, policies or programmes referenced comprehensively cover those relevant to the SA of the SW Herts JSP.
- The baseline information provided is robust and comprehensive and provides a suitable baseline for the SA of the SW Herts JSP.
- All known significant sustainability issues of relevance to SW Herts and the JSP have been accurately represented.
- The defined SA framework is fit for purpose and includes a suitable set of SA objectives for assessing the effects of the SW Herts JSP and reasonable alternatives.
- **7.2** Responses from all consultees (both statutory and non-statutory) will be reviewed and appropriate amendments made to the Scoping Report, including to the baseline, policy context and SA framework where necessary. This may be addressed during the preparation of the first iteration of the full SA report.

Appendix A

Review of Relevant International and National Plans and Programmes

Population, health and wellbeing

International

A.1 The United Nations Declaration on Sustainable Development (Johannesburg Declaration) (2002) sets the broad framework for international sustainable development, including building a humane, equitable and caring global society aware of the need for human dignity for all, renewable energy and energy efficiency, sustainable consumption and production and resource efficiency.

A.2 United Nations Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (the 'Aarhus Convention') (1998): Establishes a number of rights of the public (individuals and their associations) with regard to the environment. The Parties to the Convention are required to make the necessary provisions so that public authorities (at national, regional or local level) will contribute to these rights to become effective.

A.3 Other topic based international policies relating to human health and wellbeing are described under the relevant topics below:

National

A.4 The NPPF includes as part of its social objective the promotion of "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 well-designed, beautiful and safe places, with accessible services and open spaces that reflect current and future needs and support communities' health, social and cultural wellbeing."

A.5 Ultimately planning policies and planning decision making should "aim to achieve healthy, inclusive and safe places".

A.6 The document states that strategic policies should set out an overall strategy for the pattern, scale and design quality of places, and make sufficient provision for: housing (including affordable housing) ... [as well as] community facilities (such as health, education and cultural infrastructure)." Policies should reflect "the size, type and tenure of housing needed". This policy approach is to include but should not be limited to housing requirements relating to affordable homes, families with children, older people, students, people with disabilities, service families, travellers, those who rent their homes and people wishing to commission the construction of their own homes. Major developments that involve the provision of new housing planning policies and decisions should expect at least 10% of the total number of homes to be delivered for affordable home ownership subject to conditions and exemptions.

A.7 To help to diversify opportunities for builders, promote the development of a good mix of sites, local planning authorities should identify, through the development plan and brownfield registers, land to accommodate at least 10% of their housing requirement on sites no larger than one hectare; unless it can be shown, through the preparation of relevant plan policies, that there are strong reasons why this 10% target cannot be achieved.

Appendix A Review of Relevant International and National Plans and Programmes

A.8 Where there is an identified need, development of sites not already allocated for housing to provide entry-level homes suitable for first-time buyers is to be supported by local planning authorities unless such need is already to be met at other locations within the authority area. These sites should comprise of entry-level homes that offer one or more types of affordable housing.

A.9 The document also promotes a theme of enhancing healthy and safe communities which is to be achieved by creating places which "promote social interaction (and) enable and support healthy lifestyles."

A.10 To provide the social, recreational and cultural facilities and services the community needs, planning policies and decisions should :

- plan positively for the provision and use of shared spaces, community facilities (such as local shops, meeting places, sports venues, open space, cultural buildings, public houses and places of worship) and other local services to enhance the sustainability of communities and residential environments;
- take into account and support the delivery of local strategies to improve health, social and cultural well-being for all sections of the community;
- guard against the unnecessary loss of valued facilities and services, particularly where this would reduce the community's ability to meet its day-to-day needs;
- ensure that established shops, facilities and services are able to develop and modernise, and are retained for the benefit of the community; and
- ensure an integrated approach to considering the location of housing,
 economic uses and community facilities and services.

A.11 Plan making through the guidance of the NPPF recognises the important role of access to open spaces and other facilities which provide opportunities for sport and physical activity has in terms of health and wellbeing of communities. The importance of delivering a sufficient choice of school places to meet the needs of existing and new communities is also recognised in the document and

Appendix A Review of Relevant International and National Plans and Programmes

local planning authorities should take a "proactive, positive and collaborative approach to meeting this requirement".

A.12 The NPPF also sets out that the standard method provided in national planning guidance should be used to undertake a local housing need assessment identifying the minimum number of homes needed. The Housing Delivery Test Measurement Rule Book [See reference 109] provides this standard method allowing for calculation of objectively assessed housing need using government household forecasts adjusted for local house prices and local earnings. Unmet need from neighbouring areas will also need to be taken into account as part of the calculation.

A.13 National Design Guide [See reference 110]: sets out the Government's priorities for well-designed places in the form of ten characteristics: context, identity, built form, movement, nature, public spaces, uses, homes and buildings, resources and lifespan.

A.14 Fair Society, Healthy Lives [See reference 111] 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".

A.15 Select Committee on Public Service and Demographic Change report Ready for Ageing? [See reference 112]: warns that society is underprepared for the ageing population. The report states "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 highlights the under provision of specialist housing for older people and the need to plan for the housing needs of the older population as well as younger people.

Appendix A Review of Relevant International and National Plans and Programmes

A.16 Laying the foundations: a housing strategy for England [See reference 113]: Aims to provide support to deliver new homes and improve social mobility.

A.17 Homes England Strategic Plan 2018 to 2023 [See reference 114]: Sets out a vision to ensure more homes are built in areas of greatest need, to improve affordability, and make a more resilient and diverse housing market.

A.18 Planning Policy for Traveller Sites [See reference 115] sets out the Government's planning policy for traveller sites. The Government's overarching aim is to ensure fair and equal treatment for travellers, in a way that facilitates the traditional and nomadic way of life of travellers while respecting the interests of the settled community.

A.19 Planning for the Future White Paper [See reference 116]: Sets out a series of potential reforms to the English planning system, to deliver growth faster. The White Paper focuses on the following:

- Simplifying the role of Local Plans and the process of producing them.
- Digitising plan-making and development management processes.
- Focus on design, sustainability and infrastructure delivery.
- Nationally determined, binding housing requirements for local planning authorities to deliver through Local Plans.

A.20 The Housing White Paper 2017 (Fixing our broken housing market) [See reference 117]: sets out ways to address the shortfall in affordable homes and boost housing supply. The White Paper focuses on the following:

■ Planning for the right homes in the right places – Higher densities in appropriate areas, protecting the Green Belt while making more land available for housing by maximising the contribution from brownfield and surplus public land, regenerating estates, releasing more small and medium-sized sites, allowing rural communities to grow and making it easier to build new settlements.

- Building homes faster Improved speed of planning cases, ensuring infrastructure is provided and supporting developers to build out more quickly.
- Diversifying the Market Backing small and medium-sized house builders, custom-build, institutional investors, new contractors, housing associations.
- Helping people now supporting home ownership and providing affordable housing for all types of people, including the most vulnerable.

A.21 Public Health England, PHE Strategy 2020-25 [See reference 118]: identifies PHE's priorities upon which to focus over this five-year period to protect people and help people to live longer in good health.

A.22 Healthy Lives, Healthy People [See reference 119]: Our strategy for public health in England : Sets out how our approach to public health challenges will:

- Protect the population from health threats led by central government, with a strong system to the frontline.
- Empower local leadership and encourage wide responsibility across society to improve everyone's health and wellbeing, and tackle the wider factors that influence it.
- Focus on key outcomes, doing what works to deliver them, with transparency of outcomes to enable accountability through a proposed new public health outcomes framework.
- Reflect the Government's core values of freedom, fairness and responsibility by strengthening self-esteem, confidence and personal responsibility; positively promoting healthy behaviours and lifestyles; and adapting the environment to make healthy choices easier.
- Balance the freedoms of individuals and organisations with the need to avoid harm to others, use a 'ladder' of interventions to determine the least intrusive approach necessary to achieve the desired effect and aim to make voluntary approaches work before resorting to regulation.

A.23 The 25 Year Environment Plan sets out goals for improving the environment over the next 25 years. It details how the Government will work with communities and businesses to leave the environment in a better state than it is presently. The document identifies six key areas upon which action will be focused. Those of relevance to the topics of population growth, health and wellbeing are using and managing land sustainably; and connecting people with the environment to improve health and wellbeing.

Economy

International and National

A.24 There are no specific international economic policy agreements relevant to the preparation of the South West Hertfordshire Joint Strategic Plan, although there are a large number of trading agreements, regulations and standards that set down the basis of trade within the European Union (subject to changes post-Brexit) and with other nations.

A.25 The **NPPF** contains an economic objective to "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."

A.26 It also requires that planning seeks to "create the conditions in which businesses can invest, expand and adapt" with policies required to "set out a clear economic vision and strategy which positively and proactively encourages sustainable economic growth". Policies addressing the economy should also seek "to address potential barriers to investment, such as inadequate infrastructure, services or housing, or a poor environment."

A.27 Of particular relevance to South West Hertfordshire is the requirement for planning policies to "recognise and address the specific locational requirements of different sectors. This includes making provision for clusters or networks of

knowledge and data-driven, creative or high technology industries; and for storage and distribution operations at a variety of scales and in suitably accessible locations."

A.28 Planning policies are also required specifically to address support for the rural economy. Sustainable growth and expansion of all types of business and enterprise in rural areas should be supported, both through conversion of existing buildings and well-designed new buildings, while the diversification of the rural economy and promotion of sustainable rural tourism and leisure developments is also supported.

A.29 The **NPPF** also supports the role of town centres as functioning at the heart of local communities. This support is required to provide for a "positive approach to [town centres"] growth, management and adaptation." Included within this support is a requirement to "allocate a range of suitable sites in town centres to meet the scale and type of development needed, looking at least ten years ahead."

A.30 The Local Growth White Paper (2010) [See reference 120] highlights the importance of economic policy that focusses on the delivery of strong, sustainable and balanced growth of income and employment over the long-term, growth which is broad-based industrially and geographically to provide equality of access and opportunity and build businesses that are competitive internationally.

A.31 Build Back Better: Our Plan for Growth [See reference 121]: Sets out a plan to 'build back better' tackling long-term problems to deliver growth that delivers high-quality jobs across the UK while supporting the transition to net zero. This will build on three core pillars of growth: infrastructure, skills and innovation.

A.32 The Ten Point Plan for Green Industrial Revolution [See reference 122] outlines the national strategy for accelerating the UK's transition to a net zero carbon economy. A key theme running through the document is the opportunity to 'build back better' through investing in strategies to mitigate and

adapt to climate change. The Government has committed to investing a total of £12 billion in various programmes and estimates this will leverage up to £36 billion of private investment and create up to 250,000 new 'green' jobs by 2030.

A.33 The Agriculture Act 2020 [See reference 123] sets out a framework for the Government to establish new regulations for farming in the UK following Brexit. These include: financial assistance, multi-annual support and reporting programmes, food security, fair dealing in the supply chain and the reform of agricultural tenancies.

A.34 Agricultural Transition Plan 2021 to 2024 [See reference 124] aims to achieve a renewed agricultural sector where farms are profitable and economically sustainable and where farming contributes to environmental goals such as addressing climate change.

A.35 National Infrastructure Delivery Plan (2016-2021) [See reference 125] sets out the government's plans for economic infrastructure over a five year period with those to support delivery of housing and social infrastructure.

A.36 UK Industrial Strategy: building a Britain fit for the future (2018) [See reference 126] lays down a vision and foundations for a transformed economy. Areas including: artificial intelligence and big data; clean growth; the future of mobility; and meeting the needs of an ageing society are identified as the four 'Grand Challenges' of the future.

Transport

International

A.35 The Trans-European Networks (TEN) was created by the European Union by Articles 154-156 of the Treaty of Rome (1957), with the stated goals of the creation of an internal market and the reinforcement of economic and social cohesion. These include the Trans-European Transport Networks (TEN-T), which includes High Speed 1, and the Trans-European Telecommunications Networks (eTEN).

National

A.36 The **NPPF** requires that "transport issues should be considered from the earliest stages of plan-making". The scale, location and density of development should reflect "opportunities from existing or proposed transport infrastructure". To help reduce congestion and emissions, and improve air quality and public health the planning system should focus significant development "on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes."

A.37 The framework also requires that planning policies support an appropriate mix of uses across an area to further help reduce the need to travel as well as the provision of high quality walking and cycling network. While the framework promotes the use and development of sustainable transport networks it also requires that "where there is robust evidence, sites and routes which could be critical in developing infrastructure to widen transport choice and realise opportunities for large scale development" should be identified and protected.

A.38 The Road to Zero [See reference 127] sets out new measures towards cleaner road transport, aiming to put the UK at the forefront of the design and manufacturing of zero emission vehicles. It explains how cleaner air, a better

environment, zero emission vehicles and a strong, clean economy will be achieved. One of the main aims of the document is for all new cars and vans to be effectively zero emission by 2040.

A.39 Transport Investment Strategy [See reference 128]: Sets out the four objectives that the strategy aims to achieve:

- Create a more reliable, less congested, and better connected transport network that works for the users who rely on it.
- Build a stronger, more balanced economy by enhancing productivity and responding to local growth priorities.
- Enhance our global competitiveness by making Britain a more attractive place to trade and invest; and
- Support the creation of new housing.

A.40 Door to Door: A strategy for improving sustainable transport integration [See reference 129]: Focuses on four core areas which need to be addressed so that people can be confident in choosing greener modes of transport. There are as follows:

- Accurate, accessible and reliable information about different transport options.
- Convenient and affordable tickets.
- Regular and straightforward connections at all stages of the journey and between different modes of transport.
- Safe and comfortable transport facilities.

A.41 The strategy also includes details on how the Government is using behavioural change methods to reduce or remove barriers to the use of sustainable transport and working closely with stakeholders to deliver a better-connected transport system.

A.42 Department for Transport, Decarbonising Transport: Setting the Challenge (2020) [See reference 130] sets out the strategic priorities for a new Transport Decarbonisation Plan (TDP), to be published later in 2020, will set out in detail what government, business and society will need to do to deliver the significant emissions reduction needed across all modes of transport, putting us on a pathway to achieving carbon budgets and net zero emissions across every single mode of transport by 2050. This document acknowledges that while there have been recently published strategies [See reference 131] to reduce greenhouse gas emissions in individual transport modes, transport as a whole sector needs to go further and more quickly, therefore the TDP will take a coordinated, cross-modal approach to deliver the transport sector's contribution to both carbon budgets and net zero.

A.43 Department for Transport, Decarbonising: A Better, Greener Britain [See reference 132] sets out the government's commitments and the actions needed to decarbonise the entire transport system in the UK. It includes:

- the pathway to net zero transport in the UK.
- the wider benefits net zero transport can deliver.
- the principles that underpin our approach to delivering net zero transport.

A.44 The plan follows on from Decarbonising transport: setting the challenge, published in March 2020, which laid out the scale of additional reductions needed to deliver transport's contribution to legally binding carbon budgets and delivering net zero by 2050. This plan takes into account the changes in transport demand following the pandemic.

Air, land, and water quality

National

A.45 The **NPPF** states that planning policies and decisions should contribute to and enhance the natural and local environment by protecting and enhancing valued soil and the economic and other benefits of the best and most versatile agricultural land. Policies should also prevent new and existing development from "contributing to, being put at unacceptable risk from, or being adversely affected by unacceptable levels of soil, air, water or noise pollution."

A.46 The document also requires that strategic policies should seek to make the most effective use of land in meeting local requirements making as much use as possible of previously-developed or 'brownfield' land. Furthermore policies should "support appropriate opportunities to remediate despoiled, degraded, derelict, contaminated or unstable land".

A.47 Environmental Protection Act 1990 [See reference 133]: makes provision for the improved control of pollution to the air, water and land by regulating the management of waste and the control of emissions. Seeks to ensure that decisions pertaining to the environment are made in an integrated manner, in collaboration with appropriate authorities, non-governmental organisations and other persons.

A.48 Building Regulations [See reference 134]: requires that reasonable precautions are taken to avoid risks to health and safety cause by contaminants in ground to be covered by building and associated ground.

A.49 National Planning Policy for Waste (NPPW) [See reference 135]: Key planning objectives are identified within the NPPW, requiring planning authorities to:

- Help deliver sustainable development through driving waste management up the waste hierarchy.
- Ensure waste management is considered alongside other spatial planning concerns.
- Provide a framework in which communities take more responsibility for their own waste.
- Help secure the recovery or disposal of waste without endangering human health and without harming the environment.
- Ensure the design and layout of new development supports sustainable waste management.

A.50 The Nitrate Pollution Prevention Regulations [See reference 136] provides for the designation of land as nitrate vulnerable zones and imposes annual limits on the amount of nitrogen from organic manure that may be applied or spread in a holding in a nitrate vulnerable zone. The Regulations also specify the amount of nitrogen to be spread on a crop and how, where and when to spread nitrogen fertiliser, and how it should be stored. It also establishes closed periods during which the spreading of nitrogen fertiliser is prohibited.

A.51 The Urban Waste Water Treatment Regulations [See reference 137] protect the environment from the adverse effects of urban waste water discharges and certain industrial sectors, notably domestic and industrial waste water. The regulations require the collection of waste water and specifies how different types of waste water should be treated, disposed and reused.

A.52 The Water Environment (Water Framework Directive) Regulations [See reference 138] protect inland surface waters, transitional waters, coastal waters and groundwater, and outlines the associated river basin management process

A.53 The Water Supply (Water Quality) Regulations [See reference 139] focus on the quality of water for drinking, washing, cooking and food

preparation, and for food production. Their purpose is to protect human health from the adverse effects of any contamination of water intended for human consumption by ensuring it is wholesome and clean.

A.54 The Environmental Permitting Regulations [See reference 140] streamline the legislative system for industrial and waste installations into a single permitting structure for those activities which have the potential to cause harm to human health or the environment. They set out how to prevent or, where that is not practicable, to reduce emissions into air, water and land and to prevent the generation of waste, in order to achieve a high level of protection of the environment and human health.

A.55 The Air Quality Standards Regulations [See reference 141] set out limits on concentrations of outdoor air pollutants that impact public health, most notably particulate matter (PM10 and PM2.5) and nitrogen dioxide (NO2). It also sets out the procedure and requirements for the designation of Air Quality Management Areas (AQMAs).

A.56 The Environmental Noise Regulations [See reference 142] apply to environmental noise, mainly from transport. The regulations require regular noise mapping and action planning for road, rail and aviation noise and noise in large urban areas. They also require Noise Action Plans based on the maps for road and rail noise and noise in large urban areas. The Action Plans identify Important Areas (areas exposed to the highest levels of noise) and suggest ways the relevant authorities can reduce these. Major airports and those which affect large urban areas are also required to produce and publish their own Noise Action Plans separately. The Regulations do not apply to noise from domestic activities such as noise created by neighbours; at work places; inside means of transport; or military activities in military areas.

A.57 The Waste (Circular Economy) (Amendment) Regulations [See reference 143] amend a range of legislation to prevent waste generation and to monitor and assess the implementation of measures included in waste prevention programmes. They set out requirements to justify not separating waste streams close to source for re-use, recycling or other recovery

operations, prohibit incineration and landfilling of waste unless such treatment process represent the best environmental outcome in accordance with the waste hierarchy. The Regulations set out when waste management plans and in waste prevention programmes are required. The Regulations focus on the circular economy as a means for businesses to maximise the value of waste and waste treatment.

A.58 Safeguarding our Soils – A Strategy for England [See reference 144] sets out how England's soils will be managed sustainably. It highlights those areas which Defra will prioritise and focus attention in tackling degradation threats, including: better protection for agricultural soils; protecting and enhancing stores of soil carbon; building the resilience of soils to a changing climate; preventing soil pollution; effective soil protection during construction and; dealing with contaminated land.

A.59 The Water White Paper [See reference 145] provides out the Government's vision for the water sector including proposals on protecting water resources and reforming the water supply industry. It outlines 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.

A.60 National Policy Statement for Waste Water [See reference 146]: sets out Government policy for the provision of major waste water infrastructure. The policy set out in this NPS is, for the most part, intended to make existing policy and practice in consenting nationally significant waste water infrastructure clearer and more transparent.

A.61 Future Water: The Government's Water Strategy for England [See reference 147]: Sets out how the Government wants the water sector to look by 2030, providing an outline of steps which need to be taken to get there. These steps include: improving the supply of water; agreeing on important new infrastructure such as reservoirs; proposals to time limit abstraction licences; and reducing leakage. The document also states that pollution to rivers will be tackled, whilst discharge from sewers will be reduced.

A.62 The Air Quality Strategy for England, Scotland, Wales and Northern Ireland [See reference 148] sets out a way forward for work and planning on air quality issues by setting out the air quality standards and objectives to be achieved. It introduces a new policy framework for tackling fine particles, and identifies potential new national policy measures which modelling indicates could give further health benefits and move closer towards meeting the Strategy's objectives. The objectives of the Strategy are to:

- Further improve air quality in the UK from today and long term.
- Provide benefits to health quality of life and the environment.

A.63 The Road to Zero [See reference 149] sets out new measures towards cleaner road transport, aiming to put the UK at the forefront of the design and manufacturing of zero emission vehicles. It explains how cleaner air, a better environment, zero emission vehicles and a strong, clean economy will be achieved. One of the main aims of the document is for all new cars and vans to be effectively zero emission by 2040.

A.64 The UK Plan for Tackling Roadside Nitrogen Dioxide Concentrations [See reference 150] provides the Government's ambition and actions for delivering a better environment and cleaner air, including £1 billion investment in ultra-low emission vehicles (ULESvs), a £290 million National Productivity Investment Fund, a £11 million Air Quality Grant Fund and £255 million Implementation Fund to help local authorities to prepare Air Quality Action Plans and improve air quality, an £89 million Green Bus Fund, £1.2 billion Cycling and Walking Investment Strategy and £100 million to help improve air quality on the National road network.

A.65 Of the key areas in the **25 Year Environment Plan** around which action will be focused, those of relevance to the South West Hertfordshire in terms of the protection of air, land and water quality are: using and managing land sustainably; recovering nature and enhancing the beauty of landscapes; and increasing resource efficiency, and reducing pollution and waste:

Using and managing land sustainably:

- Embed a 'net environmental gain' principle for development, including natural capital benefits to improved and water quality.
- Protect best agricultural land.
- Improve soil health, and restore and protect peatlands.
- Recovering nature and enhancing the beauty of landscapes:
- Respect nature by using our water more sustainably.
- Increasing resource efficiency and reducing pollution and waste.
- Reduce pollution by tackling air pollution in our Clean Air Strategy and reduce the impact of chemicals.

A.66 Our Waste, Our Resources: A strategy for England (2018) [See reference 151] aims to increase resource productivity and eliminate avoidable waste by 2050. The Strategy sets out key targets which include: a 50% recycling rate for household waste by 2020, a 75% recycling rate for packaging by 2030, 65% recycling rate for municipal solid waste by 2035 and municipal waste to landfill 10% or less by 2035.

A.67 Clean Air Strategy 2019 [See reference 152]: This strategy sets out the comprehensive action that is required from across all parts of government and society to meet these goals. New legislation will create a stronger and more coherent framework for action to tackle air pollution. This will be underpinned by new England-wide powers to control major sources of air pollution, in line with the risk they pose to public health and the environment, plus new local powers to take action in areas with an air pollution problem. These will support the creation of Clean Air Zones to lower emissions from all sources of air pollution, backed up with clear enforcement mechanisms. The UK has set stringent targets to cut emissions 2030. The goal is to reduce the harm to human health from air pollution by half.

Climate change mitigation and adaptation

International

A.68 United Nations Paris Climate Change Agreement (2015) is an international agreement to keep global temperature rise this century well below 2 degrees Celsius above pre-industrial levels.

National

A.69 The Climate Change Act 2008 (amended 2019) [See reference 153] sets targets for UK greenhouse gas emission reductions of at least 80% by 2050 and CO2 emission reductions of at least 26% by 2015, against a 1990 baseline. An update to the act was made in 2019 which sets a new target for UK greenhouse gas emissions of 100% by 2050.

A.70 Planning and Energy Act (2008) [See reference 154]: enables local planning authorities to set requirements for carbon reduction and renewable energy provision. It should be noted that while the Housing Standards Review proposed to repeal some of these provisions, at the time of writing there have been no amendments to the Planning and Energy Act.

A.71 The **NPPF** contains as part of its environmental objective a requirement to mitigate and adapt to climate change, "including moving to a low carbon economy". The document also states that 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." To achieve these aims new development should be planned to ensure appropriate adaptation measures are included (including green infrastructure) and should be designed, located and orientated as to help to reduce greenhouse gas emissions.

A.72 The revised framework also requires that development is directed away from areas which are at highest existing or future risk of flooding. Where development is required in such areas, the "development should be made safe for its lifetime without increasing flood risk elsewhere."

A.73 In relation to coastal change in England planning policies and decisions should take account of the UK Marine Policy Statement and marine plans. Furthermore, plans should "reduce risk from coastal change by avoiding inappropriate development in vulnerable areas and not exacerbating the impacts of physical changes to the coast".

A.74 The Energy Performance of Buildings Regulations [See reference 155] seek to improve the energy efficiency of buildings, reducing their carbon emissions and lessening the impact of climate change. The Regulations require the adoption of a standard methodology for calculating energy performance and minimum requirements for energy performance, reported through Energy Performance Certificates and Display Energy Certificates.

A.75 The UK Renewable Energy Strategy [See reference 156] describes out the ways in which we will tackle climate change by reducing our CO2 emissions through the generation of a renewable electricity, heat and transport technologies.

A.76 The Energy Efficiency Strategy [See reference 157] aims to realise the wider energy efficiency potential that is available in the UK economy by maximising the potential of existing dwellings by implementing 21st century energy management initiatives on 19th century homes.

A.77 The UK Low Carbon Transition Plan: National Strategy for Climate and Energy [See reference 158]: sets out a five point plan to tackle climate change. The points are as follows: protecting the public from immediate risk, preparing for the future, limiting the severity of future climate change through a new international climate agreement, building a low carbon UK and supporting individuals, communities and businesses to play their part.

A.78 UK Climate Change Risk Assessment 2017 [See reference 159]: sets out six priority areas needing urgent further action over the next five years. These include:

- flooding and coastal change risks to communities, businesses and infrastructure,
- health, well-being and productivity from high temperatures,
- shortages in public water supply, and for agriculture, energy generation and industry with impacts on freshwater ecology,
- natural capital, including terrestrial, coastal, marine and freshwater ecosystems, soils and biodiversity,
- domestic and international food production and trade and
- new and emerging pests and diseases and invasive non-native species affecting people, plants and animals.

A.79 Independent Assessment of UK Climate Risk [See reference 160]: published by the Committee on Climate Change as an independent assessment of the UK's climate risk. It will feed into the UK's third National Adaptation Programme when it is published later in 2022. As such it represents the latest thinking in terms of the level of risk that the UK faces in relation to climate change. One of the key findings of this report is that there is new evidence to suggest that the gap between the level of risk we face and the level of adaptation underway has widened since the publication of the previous National Adaptation Programme in 2018.

A.80 The National Adaptation Programme and the Third Strategy for Climate Adaptation Reporting [See reference 161] sets out visions for the following sectors:

■ People and the Built Environment – "to promote the development of a healthy, equitable and resilient population, well placed to reduce the harmful health impacts of climate change...buildings and places (including built heritage) and the people who live and work in them are resilient and organisations in the built environment sector have an increased capacity to

address the risks and make the most of the opportunities of a changing climate."

- Infrastructure "an infrastructure network that is resilient to today's natural hazards and prepared for the future changing climate".
- Natural Environment "the natural environment, with diverse and healthy ecosystems, is resilient to climate change, able to accommodate change and valued for the adaptation services it provides."
- Business and Industry "UK businesses are resilient to extreme weather and prepared for future risks and opportunities from climate change."
- Local Government "Local government plays a central in leading and supporting local places to become more resilient to a range of future risks and to be prepared for the opportunities from a changing climate."

A.81 The Flood and Water Management Act 2010 [See reference 162] and The Flood and Water Regulations [See reference 163] sets out measures to ensure that risk from all sources of flooding is 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; rolling back development in coastal areas to avoid damage from flooding or coastal erosion; and creating sustainable drainage systems (SuDS).

A.82 Understanding the risks, empowering communities, building resilience: The national flood and coastal erosion risk management strategy for England [See reference 164] This Strategy sets out the national framework for managing the risk of flooding and coastal erosion. It sets out the roles for risk management authorities and communities to help them understand their responsibilities. The strategic aims and objectives of the Strategy are to:

- Manage the risk to people and their property.
- Facilitate decision-making and action at the appropriate level individual, community or local authority, river catchment, coastal cell or national.
- Achieve environmental, social and economic benefits, consistent with the principles of sustainable development.

A.83 The 25 Year Environment Plan sets out policy priorities with respect to: responding to climate change are using and managing land sustainably; and protecting and improving our global environment. Actions that will be taken as part of these two key areas are as follows:

- Using and managing land sustainably:
- Take action to reduce the risk of harm from flooding and coastal erosion including greater use of natural flood management solutions.
- Protecting and improving our global environment:
- Provide international leadership and lead by example in tackling climate change and protecting and improving international biodiversity.

A.84 The Ten Point Plan for Green Industiral Revolution [See reference 165] outlines the national strategy for accelerating the UK's transition to a net zero carbon economy. A key theme running through the document is the opportunity to 'build back better' through investing in strategies to mitigate and adapt to climate change. The Government has committed to investing a total of £12 billion in various programmes and estimates this will leverage up to £36 billion of private investment and create up to 250,000 new 'green' jobs by 2030.

Biodiversity

International

A.83 International Convention on Wetlands (Ramsar Convention) (1976) is an international agreement with the aim of conserving and managing the use of wetlands and their resources.

A.84 European Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) (1979) aims to ensure conservation and protection of wild plant and animal species and their natural habitats, to

increase cooperation between contracting parties, and to regulate the exploitation of those species (including migratory species).

A.85 International Convention on Biological Diversity (1992) is an international commitment to biodiversity conservation through national strategies and action plans.

A.86 United Nations Declaration on Forests (New York Declaration) (2014) sets out international commitment to cut natural forest loss by 2020 and end loss by 2030.

National

A.87 A requirement of the **NPPF's** environmental objective is that the planning system should contribute to protecting and enhancing the natural environment including helping to improve biodiversity, and using natural resources prudently. In support of this aim the framework states that Local Plans should "identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks" and should also "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."

A.88 The framework requires that plans should take a strategic approach in terms of "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".

A.89 The Environment Act 2021 [See reference 166] introduces a requirement that all applications for the development of land will have to deliver a 10% biodiversity net gain above the ecological baseline for the application site. The Act also introduces Local Nature Recovery Strategies which will guide the delivery of biodiversity net gain projects. The requirements of the Environment Act will come into force in 2023 following a two-year transition

period to enable local planning authorities, developers and others to prepare for the proposed requirement.

A.90 The Conservation of Habitats and Species Regulations [See reference 167] protect biodiversity through the conservation of natural habitats and species of wild fauna and flora, including birds. The Regulations lay down rules for the protection, management and exploitation of such habitats and species, including how adverse effects on such habitats and species should be avoided, minimised and reported.

A.91 The Natural Environment and Rural Communities Act 2006 [See reference 168] places a duty on public bodies to conserve biodiversity.

A.92 England Biodiversity Strategy Climate Change Adaptation Principles [See reference 169]: sets out principles to guide adaptation to climate change. The principles are: take practical action now, maintain and increase ecological resilience, accommodate change, integrate action across all sectors and develop knowledge and plan strategically. The precautionary principle underpin all of these.

A.93 Biodiversity 2020: A strategy for England's wildlife and ecosystem services [See reference 170] guides conservation efforts in England up to 2020 by requiring a national halt to biodiversity loss, supporting healthy ecosystems and establishing ecological networks. The Strategy includes 22 priorities which include actions for the following sectors: Agriculture, Forestry, Planning & Development, Water Management, Marine Management, Fisheries, Air Pollution and Invasive Non-Native Species.

A.94 Biodiversity Offsetting in England Green Paper [See reference 171] sets out a framework for offsetting. Biodiversity offsets are conservation activities designed to compensate for residual losses.

A.95 The key areas of the **25 Year Environment Plan** of relevance in terms of the protection and promotion of biodiversity are recovering nature and enhancing the beauty of landscapes; securing clean, productive and biologically

diverse seas and oceans; and protecting and improving our global environment. Actions that will be taken as part of these three key areas are as follows:

- Develop a Nature Recovery Network to protect and restore wildlife, and provide opportunities to re-introduce species that have been lost from the countryside.
- Achieve a good environmental status of the UK's seas while allowing marine industries to thrive, and complete our economically coherent network of well-managed marine protected areas.
- Provide international leadership and lead by example in tackling climate change and protecting and improving international biodiversity.
- Support and protect international forests and sustainable agriculture.

Heritage

International

A.95 United Nations (UNESCO) World Heritage Convention (1972): promotes co-operation among nations to protect heritage around the world that is of such outstanding universal value that its conservation is important for current and future generations.

A.96 European Convention for the Protection of the Architectural Heritage of Europe (1985): defines 'architectural heritage' and requires that the signatories maintain an inventory of it and take statutory measures to ensure its protection. Conservation policies are also required to be integrated into planning systems and other spheres of government influence as per the text of the convention.

A.97 Valletta Treaty, formerly the European Convention on the Protection of Archaeological Heritage (1992): agreed that the conservation and enhancement of an archaeological heritage is one of the goals of urban and

regional planning policy. It is concerned in particular with the need for cooperation between archaeologists and planners to ensure optimum conservation of archaeological heritage.

National

A.98 Of relevance to the approach of the planning system to the historic environment the **NPPF** contains an environmental objective to contribute to the protection and enhancement of the built and historic environment. The document also sets out a strategy to seek "the conservation and enjoyment of the historic environment, including heritage assets most at risk through neglect, decay and other threats." Such a strategy is required to take into consideration the desirability of sustaining and enhancing the significance of heritage assets and bringing them into viable use.

A.99 It should also be considerate of the wider benefits of conserving the historic environment, the contribution new development can make in terms of character and distinctiveness and the opportunity for the historic environment to contribute to this character and distinctiveness. Local authorities should also maintain or have access to a historic environment record which is to be supported by up to date evidence.

A.100 Ancient Monuments & Archaeological Areas Act 1979 [See reference 172]: a law passed by the UK government to protect the archaeological heritage of England & Wales and Scotland. Under this Act, the Secretary of State has a duty to compile and maintain a schedule of ancient monuments of national importance, in order to help preserve them. It also creates criminal offences for unauthorised works to, or damage of, these monuments.

A.101 Planning (Listed Buildings & Conservation Areas) Act 1990 [See reference 173]: An Act of Parliament that changed the laws for granting of planning permission for building works, with a particular focus on listed buildings and conservation areas.

A.102 Historic Buildings and Ancient Monuments Act 1953 [See reference 174]: An Act of Parliament that makes provision for the compilation of a register of gardens and other land (parks and gardens, and battlefields).

A.103 The Government's Statement on the Historic Environment for England [See reference 175] sets out the Government's vision for the historic environment. It calls for those who have the power to shape the historic environment to recognise its value and to manage it in an intelligent manner in light of the contribution that it can make to social, economic and cultural life. It includes reference to promoting the role of the historic environment within the Government's response to climate change and the wider sustainable development agenda.

A.104 The Heritage Statement [See reference 176] describes out how the Government will support the heritage sector and help it to protect and care for our heritage and historic environment, in order to maximise the economic and social impact of heritage and to ensure that everyone can enjoy and benefit from it.

A.105 Sustainability Appraisal and Strategic Environmental Assessment, Historic England Advice Note 8 [See reference 177]: Sets out Historic England's guidance and expectations for the consideration and appraisal of effects on the historic environment as part of the Sustainability Appraisal/Strategic Environmental Assessment process.

Landscape

International

A.106 The European Landscape Convention (2002): promotes landscape protection, management and planning. The Convention is aimed at the protection, management and planning of all landscapes and raising awareness of the value of a living landscape.

National

A.107 The South West Hertfordshire Joint Strategic Plan will be required to have consideration for the conservation and enhancement of landscape character in the District. The **NPPF** includes as part of its approach to protecting the natural environment, recognition for the intrinsic character and beauty of the countryside, and the wider benefits to be secured from natural capital. Importantly, great weight is to be given to conserving landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural Beauty.

A.108 As part of the approach to achieving well-designed places the NPPF states that planning policies and decisions should ensure that developments "are sympathetic to local character and history, including the surrounding built environment and landscape setting."

A.109 National Parks and Access to the Countryside Act 1949 [See reference 178]: An Act of Parliament to make provision for National Parks and the establishment of a National Parks Commission; to confer on the Nature Conservancy and local authorities powers for the establishment and maintenance of nature reserves; to make further provision for the recording, creation, maintenance and improvement of public paths and for securing access to open country.

A.110 Countryside and Rights of Way Act 2010 [See reference 179]: An Act of Parliament to make new provision for public access to the countryside.

A.111 England National Parks and the Broads: UK Government Vision and Circular 2010 [See reference 180]: provides updated policy guidance on the English National Parks and Broads. It also sets out a vision for 2030 and the key outcomes the Government is seeking over the next five years to ensure early progress towards the vision.

A.112 The key area in the **25 Year Environment Plan** of relevance in terms of the conservation and enhancement of landscape character is recovering nature

and enhancing the beauty of landscapes. Actions that will be taken as part of this key area are as follows:

- Working with AONB authorities to deliver environmental enhancements.
- Identifying opportunities for environmental enhancement of all England's Natural Character Areas, and monitoring indicators of landscape character and quality.

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