



Centre for Sustainability

## **Dacorum Borough Council**

Sustainability Appraisal (incorporating Strategic  
Environmental Assessment) Working Note for the  
Emerging Core Strategy

Appendix B

June 2009

## Appendix B: Emerging Strategy Assessment

The following tables outline the symbols and abbreviations used to document the results of the assessment process.

### Key to Assessment Scores

Scale		
Symbol	Meaning	Comment
<b>L</b>	Local	Within the settlement and immediate vicinity
<b>R</b>	Regional	Within the Dacorum Borough and neighbouring local authorities
<b>N</b>	National	UK or a wider global impact

Permanence		
Symbol	Meaning	Comment
<b>P</b>	Permanent	E.g. Effects lasting during and beyond the life of the plan
<b>T</b>	Temporary	E.g. Effects during construction

Timescale	
<b>In the Short Term</b>	0-10 years
<b>In the Medium Term</b>	10-20 years
<b>In the Long Term</b>	After life of plan

Significance Assessment	Description
✓✓	Very sustainable - Option is likely to contribute significantly to the SA/SEA objective
✓	Sustainable - Option is likely to contribute in some way to the SA/SEA objective
?	Uncertain - It is uncertain how or if the Option impacts on the SA/SEA objective
–	Neutral - Option is unlikely to impact on the SA/SEA objective
x	Unsustainable - Option is likely to have minor adverse impacts on the SA/SEA objective
xx	Very unsustainable - Option is likely to have significant adverse impacts on the SA/SEA objective

The table below outlines the Sustainability Objectives that have been used to focus the assessment process and details the reference term which is used in the assessment tables for the sake of brevity. The full framework of objectives and associated sub-objectives can be found in the main working note.

<b>SA Objective</b>		<b>Reference Term</b>
1	To protect, maintain and enhance biodiversity and geodiversity at all levels, including the maintenance and enhancement of Biodiversity Action Plan habitats and species in line with local targets	Biodiversity
2	To protect, maintain and enhance water resources (including water quality and quantity) while taking into account the impacts of climate change	Water quality/ quantity
3	Ensure that new developments avoid areas which are at risk from flooding and natural flood storage areas	Flood risk
4	Minimise development of land with high quality soils and minimise the degradation/loss of soils due to new developments	Soils
5	Reduce the impacts of climate change, with a particular focus on reducing the consumption of fossil fuels and levels of CO <sub>2</sub>	Greenhouse gas emissions
6	Ensure that developments are capable of withstanding the effects of climate change (adaptation to climate change)	Climate change proof
7	Achieve good air quality, especially in urban areas	Air Quality
8	Maximise the use of previously developed land and buildings, and the efficient use of land	Use of brownfield sites
9	To use natural resources, both finite and renewable, as efficiently as possible, and re-use finite resources or recycled alternatives wherever possible	Resource efficiency
10	To identify, maintain and enhance the historic environment and cultural assets	Historic & cultural assets
11	To conserve and enhance landscape and townscape character and encourage local distinctiveness	Landscape & Townscape
12	To encourage healthier lifestyles and reduce adverse health impacts of new developments	Health
13	To deliver more sustainable patterns of location of development.	Sustainable locations
14	Promote equity & address social exclusion by closing the gap between the poorest communities and the rest	Equality & social exclusion
15	Ensure that everyone has access to good quality housing that meets their needs	Good quality housing
16	Enhance community identity and participation	Community Identity & participation
17	Reduce both crime and fear of crime	Crime and fear of crime
18	Achieve sustainable levels of prosperity and economic growth	Sustainable prosperity and growth
19	Achieve a more equitable sharing of the benefits of prosperity across all sectors of society and fairer access to services, focusing on deprived areas in the region	Fairer access to services
20	Revitalise town centres to promote a return to sustainable urban living	Revitalise town centres

### Borough Theme 1 – Sustainable Development

- a. Location of Development and Change
- b. Accessibility of Facilities
- c. Quality of Design
- d. Response to Climate Change

SA Objective		Assessment of Effect					Mitigation and Enhancement [measures already included in the Core Strategy are in <i>italics</i> ]	
		Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects			
					In the short term	In the medium		In the long term
1	Biodiversity	Concentrating housing and employment development within Hemel Hempstead should help to protect, maintain and enhance designated sites and their buffer zones. It should reduce the loss of agricultural land which may have biodiversity value.	P	L	✓	✓	✓	
		High quality urban design which considers the pattern of open space within the development should help to develop urban greenspaces which could encourage more people to come into contact with nature.	P	L	✓	✓	✓	
		Using green infrastructure to 'fix carbon' could help to protect, maintain and enhance greenspaces and biodiversity. Increasing the level of and connections between green infrastructure could help biodiversity to adapt to the effects of climate change, i.e. through allowing species to move.	P	L R N	✓	✓	✓	
		Although focusing development on previously developed land should reduce the use of greenfield land, brownfield sites can be important areas for urban biodiversity. Therefore this effect is considered to be uncertain depending on the biodiversity quality of the previously developed land to be developed.	-	-	?	?	?	The policy approach towards treating established species in brownfield sites is unclear and should be addressed.
		Supporting the national and regional targets for the Code for Sustainable Homes and BREEAM could also help to progress this objective. The standards discourage development on ecologically valuable	P	L	✓	✓	✓	The Core Strategy should require new developments to meet the national minimum standard for Code

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	Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects				
				In the short term	In the medium term	In the long term		
	sites, require that existing ecological features are protected from damage and encourage ecological enhancement.						for Sustainable Homes and high BREEAM ratings.	
2	Water quality/ quantity	Minimising the consumption of water and minimising adverse effects on water quality in new developments will help to progress this objective.	P	L R	✓	✓	✓	<i>Theme 4 encourages the use of SUDs.</i>
		Supporting the national and regional targets for the Code for Sustainable Homes and BREEAM could also help to progress this objective. The National Minimum Level 3 requires maximum average water consumption to be 105 litres per capita per day. The Code also encourages the recycling of rainwater and reducing the amount of mains potable water used for external water uses, i.e. through the use of rainwater butts and central rainwater collection systems.	P	L	✓	✓	✓	The Core Strategy should require new developments to meet the national minimum standard for Code for Sustainable Homes and high BREEAM ratings.
		The code for sustainable homes also includes standards which could help to improve water quality by managing surface water run off and encouraging the use of SUDS. Designing housing developments which avoid, reduce and delay the discharge of rainfall to public sewers and watercourses will protect watercourses and reduce the risk of localised flooding, pollution and other environmental damage.						
	Incorporating facilities for recycling of water should progress this objective.	P	L R	✓	✓	✓		
3	Flood risk	Supporting the national and regional targets for the Code for Sustainable Homes and BREEAM could also help to progress this objective. The CSH requires that peak rates of run-off into watercourses are no greater for the developed site than they were for the pre-development site. This should help to reduce the risk of localised flooding.	P	L	✓	✓	✓	<i>Theme 4 supports locating development away from floodplains.</i>

SA Objective		Assessment of Effect					Mitigation and Enhancement [measures already included in the Core Strategy are in <i>italics</i> ]	
		Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects			
					In the short term	In the medium term		In the long term
4	Soils	A sequential approach to land selection for new development, prioritising previously developed land will aid in the protection of top soil in the short term. The effects in the medium and long term are uncertain as once brownfield land is used there could be need for greenfield development.	T	L	✓	?	?	
		Limiting development in the countryside should help to preserve the natural environment and biodiversity. This could lead to indirect positive effects on soils.	P	L	✓	✓	✓	
5	Greenhouse gas emissions	Planning the location, accessibility and designs of developments so as to contribute to reduced carbon emissions and lower energy/natural resource consumption should help to progress this SA objective.	P	N	✓	✓	✓	
		Supporting the national and regional targets for the Code for Sustainable Homes and BREEAM could also help to progress this objective. The CSH includes nine standards relating to energy and carbon emissions.	P	N	✓	✓	✓	The Core Strategy should require new developments to meet the national minimum standard for Code for Sustainable Homes and high BREEAM ratings.
		Incentivising reductions in carbon emissions in existing buildings through energy efficiency retrofitting should also have a positive effect.	P	N	✓	✓	✓	
		Concentrating housing and economic growth in Hemel Hempstead could help to reduce the need to travel and the average distance travelled which could have a positive impact on ghg emissions from transport.	P	N	✓	✓	✓	
		A sequential approach to land selection for new development which focuses development in town centres and locations which are more accessible to all forms of transport could have a positive effect on reducing ghg emissions from transport.	P	N	✓	✓	✓	Consider policy wording that supports initiatives aimed at behavioural change to increase the likelihood of reducing average distances

SA Objective	Assessment of Effect						Mitigation and Enhancement [measures already included in the Core Strategy are in <i>italics</i> ]
	Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects			
				In the short term	In the medium term	In the long term	
							travelled.
	Improving neighbourhood service provision in local centres to reduce the need to travel should progress this objective.	P	N	✓	✓	✓	
	Policies which aim to reduce private car use and encourage alternative forms of sustainable transport through creating better public transport links and interchanges, providing better pedestrian links and additional cycle lanes could also help to reduce ghg emissions.	P	N	✓	✓	✓	
	Policies which minimise waste, minimise the use and consumption of energy sources, including fossil fuels and seek designs which utilise sustainable construction techniques and recycle construction materials should help to progress this objective.	P	N	✓	✓	✓	
	Identifying suitable areas for the generation of renewable and low carbon energy sources could help to reduce ghg emissions through increased use of low carbon forms of energy.	P	N	✓	✓	✓	The policy should consider requiring all new developments to generate renewable energy, e.g. through the use of photo voltaic cells, solar panels or mini-wind turbines.
6	Climate change proof						Consider policy wording linked to developments which are 'climate change proof' or resilient to the effects of climate change, such as through robust and weather resistant building structures.
	Requiring development that can adapt and respond to changing environmental conditions should have a positive effect on this SA objective.	P	L	✓	✓	✓	
	Minimising water consumption and incorporating facilities for recycling of water could help communities to cope with drier summers.	P	L	✓	✓	✓	

SA Objective		Assessment of Effect					Mitigation and Enhancement [measures already included in the Core Strategy are in <i>italics</i> ]	
		Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects			
					In the short term	In the medium term		In the long term
7	Air Quality	Transport is a key source of air pollution. Focusing housing and economic development in Hemel should help to reduce the need to travel and the average distance travelled which should have a positive impact on reducing pollutants from transport.	P	L	✓	✓	✓	
		Reducing private car usage and encouraging alternative forms of sustainable transport through various policies such as improving public transport, improving local services, and focusing development in accessible locations should help to improve air quality.	P	L	✓	✓	✓	
		Achieving high quality development that is compatible with sustainable management of air could help to progress this objective.	P	L	✓	✓	✓	
8	Use of brownfield sites	Following a sequential approach to land selection using previously developed land before the use of greenfield land should have a positive effect on this objective in the short term. The effects in the medium and long term are uncertain as once brownfield land is used there could be need for greenfield development.	P	L	✓	?	?	The biodiversity of brownfield sites should be assessed prior to redevelopment.
		The density of developments will be considered as part of the key urban design considerations. This could led to more efficient use of land should higher densities be recommended.	P	L	✓	✓	✓	
9	Resource efficiency	The theme states that with sustainable development at the heart of the Core Strategy, local planning policy will be capable of limiting the use of natural resources. Planning the location, accessibility and designs of developments so as to contribute to lower energy/natural resource consumption should help to progress this SA objective.	P	N	✓	✓	✓	



SA Objective	Assessment of Effect						Mitigation and Enhancement [measures already included in the Core Strategy are in <i>italics</i> ]
	Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects			
				In the short term	In the medium term	In the long term	
	Supporting the national and regional targets for the Code for Sustainable Homes and BREEAM could also help to progress this objective. During construction the CSH homes encourages the use of materials with lower environmental impacts over their lifecycle, responsible sourcing of materials and the reduction and effective management of construction waste.  The CSH also encourages developments to include storage areas for recyclable waste and facilities for composting. Thereby requiring all new housing developments to meet national targets should help to progress this objective.	P	N	✓	✓	✓	The Core Strategy should require new developments to meet the national minimum standard for Code for Sustainable Homes and high BREEAM ratings.
	Incentivising reductions in carbon emissions in existing buildings through energy efficiency retrofitting should also have a positive effect on resource efficiency.	P	N	✓	✓	✓	
	Identifying suitable areas for renewable energy generation may help to promote the use of renewable sources of energy.	P	N	✓	✓	✓	<i>Theme 4 encourages the generation of energy from renewable resources.</i>  The CS should consider requiring all new developments to generate renewable energy, e.g. through the use of photo voltaic cells, solar panels or mini-wind turbines.
	Minimising waste, recycling construction materials and seeking designs which utilise sustainable construction technologies should progress this objective.	P	N	✓	✓	✓	
	Policies to minimise water and energy consumption	P	N	✓	✓	✓	

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				In the short term	In the medium term	In the long term		
		should help to use these natural resources more efficiently.						
10	Historic & cultural assets	Encouraging high quality urban design that considers local character, including building types, materials and architectural styles, listed buildings and Conservations Areas, building heights, density and topography could have a positive effect on safeguarding and enhancing the historic environment.	P	L	✓	✓	✓	
		Reducing car usage and encouraging sustainable modes of transport should be beneficial for the setting of cultural heritage features.	P	L	✓	✓	✓	
11	Landscape & Townscape	Encouraging high quality urban design that considers local character, including building types, materials and architectural styles, listed buildings and Conservations Areas, building heights, density and topography could have a positive effect on safeguarding and enhancing townscapes.	P	L	✓	✓	✓	
		Applying the Chilterns Buildings Design Guide should help to ensure that design is given a high priority within the countryside, thereby protecting rural landscapes.	P	L	✓	✓	✓	
		Reducing car usage and encouraging sustainable modes of transport should be beneficial for townscape.	P	L	✓	✓	✓	
		Hemel Hempstead is ageing and therefore focusing growth in the town and ensuring that the new developments are high quality could improve its townscape.	P	L	✓	✓	✓	
		Focusing growth in Hemel Hempstead and restraining growth in the countryside should reduce impacts on the borough's rural landscapes.	P	L	✓	✓	✓	

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				In the short term	In the medium term	In the long term	
	Allowing infilling within the Greenbelt villages (Chipperfield, Flamstead, Potten End and Wiggington) may have an adverse effect this objective. The effect will be dependent on the area and exact location of the land to be infilled.	-	-	?	?	?	
	Restraining development in the countryside from Tring and Wiggington to Flamstead and Markyate which is part of the Chilterns AONB should have a positive effect on this SA objective.	P	L	✓	✓	✓	
12	Health						
	Focusing development in Hemel Hempstead could provide opportunities for physical activity by promoting access to recreation and by providing walkable and cyclable neighbourhoods. This would encourage healthy lifestyles.	P	L	✓	✓	✓	
	Promoting more sustainable modes of transport could encourage more active travel such as walking and cycling.	P	L	✓	✓	✓	
	By reducing CO2 emissions and reducing the need to travel by private car the theme should help to improve air quality which may have public health benefits.	P	L	✓	✓	✓	
	Supporting the national and regional targets for the Code for Sustainable Homes and BREEAM could also help to progress this objective. The CSH includes standards on ensuring the provision of improved sound insulation to reduce the likelihood of noise complaints from neighbours.	P	L	✓	✓	✓	
	The CSH also contains other standards aimed at improving health and well-being, such as improving the quality of life in homes through good daylighting and provision of private open space. Thereby requiring all new housing developments to meet						

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	Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects				
				In the short term	In the medium term	In the long term		
	national targets should help to progress this objective.							
	Considering patterns of open space within the design of new developments and using green infrastructure to help 'fix carbon' should provide for new greenspaces in urban areas thereby encouraging healthy lifestyles.	P	L	✓	✓	✓		
13	Sustainable locations	Planning the location, accessibility and designs of developments so as to contribute to reduced carbon emissions and to lower energy/natural resource consumption should help to provide for more sustainable patterns of development.	P	L	✓	✓	✓	
		Focusing both housing and economic development in Hemel Hempstead should reduce the need to travel thereby helping to progress this SA objective.	P	L	✓	✓	✓	
		A sequential approach to land selection for new development which focuses development in town centres and locations which are more accessible to all forms of transport could have a positive effect on this SA objective.	P	L	✓	✓	✓	
		Improving neighbourhood service provision in local centres to reduce the need to travel. In particular, this could lead to improved access to local health services.	P	L	✓	✓	✓	
14	Equality & social exclusion	Focusing development in town centres and locations which are most accessible by all forms of transport should improve access to facilities and services, particularly for those people without access to a private car. Also encouraging sustainable modes of transport should also progress this objective.	P	L	✓	✓	✓	
		A sequential approach to land selection for new development which focuses development in town	P	L	✓	✓	✓	

SA Objective	Assessment of Effect						Mitigation and Enhancement [measures already included in the Core Strategy are in <i>italics</i> ]	
	Nature of Effect Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects				
				In the short term	In the medium term	In the long term		
	centres and locations which are more accessible to all forms of transport could have a positive effect on this SA objective, as should improving neighbourhood service provision in local centres to reduce the need to travel.							
	Designing new developments which put the needs of people, particularly those who are disabled or on foot first, should assist providing facilities which accessible by all people.	<b>P</b>	<b>L</b>	✓	✓	✓	The Core Strategy should propose that all new homes will meet the Governments Lifetime Homes Standards. This should ensure that accommodation is accessible and adaptable for everyone from young families to older people and individuals with a temporary or permanent physical impairment.	
	Focusing development and associated services in Hemel Hempstead could lead to communities becoming isolated due to a loss of facilities.	<b>P</b>	<b>L</b>	x	x	x	<i>Improving neighbourhood service provision in local centres should help to mitigate this effect.</i>	
15	Good quality housing	Encouraging high quality urban design should provide for high quality housing.	<b>P</b>	<b>L</b>	✓	✓	✓	
16	Community Identity & participation	Encouraging high quality urban design should make urban areas more attractive places to live. Considering local character should help to maintain local identity.	<b>P</b>	<b>L</b>	✓	✓	✓	
		Enhancing neighbourhood service provision in local centres should help to improve access to community services thereby making areas more attractive places to live.	<b>P</b>	<b>L</b>	✓	✓	✓	
		Supporting the national and regional targets for the Code for Sustainable Homes and BREEAM could also help to progress this objective. The CSH contains	<b>P</b>	<b>L</b>	✓	✓	✓	

SA Objective	Assessment of Effect						Mitigation and Enhancement [measures already included in the Core Strategy are in <i>italics</i> ]	
	Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects				
				In the short term	In the medium term	In the long term		
	standards aimed at improving the quality of life in homes through good daylighting and provision of private open space. Thereby requiring all new housing developments to national targets should help to progress this objective by providing high quality design.							
	Promoting sustainable transport should ensure that community facilities are accessible by all the community, particularly those without access to a private vehicle.	P	L	✓	✓	✓		
17	Crime and fear of crime	Encouraging high quality urban design could help to 'design out crime' from developments, such as through the use of active frontages which increase natural surveillance.	P	L	✓	✓	✓	
		Supporting the national and regional targets for the Code for Sustainable Homes and BREEAM could also help to progress this objective. The CSH encourages the design of developments where people feel safe and secure; where crime and disorder, or the fear of crime, does not undermine quality of life or community cohesion.	P	L	✓	✓	✓	
18	Sustainable prosperity & growth	Providing for economic growth in Hemel Hempstead should help to develop the local economy. Providing opportunities for developing employment in accessible locations, such as close to residential areas, could reduce levels of out-commuting.	P	L	✓	✓	✓	
		Encouraging high quality developments should also help to support the local economy.	P	L	✓	✓	✓	
19	Fairer access to services	Providing for economic growth in Hemel Hempstead should lead to the provision of employment opportunities, close to the major residential areas in the borough.	P	L	✓	✓	✓	

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	Nature of Effect Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects			
				In the short term	In the medium term	In the long term	
	Promoting the use of sustainable modes of transport could improve access to employment for those without access to a private vehicle.	P	L	✓	✓	✓	
	Aiming to maintain and develop a prosperous countryside, encouraging rural regeneration and diversification should help to support the rural economy.	P	L	✓	✓	✓	
20	Revitalise town centres						
	Focusing development in Hemel Hempstead could contribute to the viability and vitality of the town centre.	P	L	✓	✓	✓	
	Improving neighbourhood service provision should promote the role of local centres.	P	L	✓	✓	✓	
	Encouraging high quality developments should help to create attractive town centres.	P	L	✓	✓	✓	

## Borough Theme 2 – Social and Personal Welfare

a. Homes

b. Community and Leisure Facilities

SA Objective		Assessment of Effect					Mitigation and Enhancement	
		Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects			
					In the short term	In the medium term		In the long term
1	Biodiversity	The level of housing required in the borough has been shown to require some development on greenfield land. Development of greenfield land could have adverse impacts on habitats and species due to landtake, habitat fragmentation and urban pollution issues. The significance of the effect will be dependent on the biodiversity value of the greenfield land to be developed.	P	L	x	x	x	When developing on greenfield land measures should be taken to avoid adverse impacts on biodiversity, such as maintaining and enhancing green corridors and providing green open spaces.  <i>Theme 4 requires that where new development involves key habitats, it must result in no net loss of or fragmentation of biodiversity value.</i>
		The draft policy approach for gypsy and traveller accommodation aims to consider important environmental features and conservation of natural resources when locating sites. This should help to minimise effects on biodiversity from these sites.	P	L	✓	✓	✓	
		Protecting and enhancing existing open spaces should have a positive effect on the biodiversity value of these sites.	P	L	✓	✓	✓	
2	Water quality/ quantity	Dacorum Borough is within an area already identified as 'over-abstracted' (Colne CAM, EA). Providing a minimum of 9,000 new homes will put direct pressure on these already under pressure water	P	R	x	x	xx	<i>Theme 4 encourages the use of water minimisation methods, such as grey water recycling, and the use of</i>



SA Objective	Assessment of Effect						Mitigation and Enhancement
	Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects			
				In the short term	In the medium term	In the long term	
	resources. The effect is likely to become more significant over time as more dwellings are built and risk of periodic water shortages increase. Domestic daily water consumption in the borough is currently 192 litres per capita, which is above the national average of 148 litres.						<i>SUDS.</i>  <i>To help inform the Core Strategy a water cycle study will be undertaken.</i>
	Providing a minimum of 9,000 new homes could overload the sewerage system leading to potential increased pollution of water resources in the Borough.	<b>P</b>	<b>R</b>	x	x	x	
	New development on greenfield sites will inevitably increase impermeable surfaces resulting in increased water run-off and potential pollution to water courses.	<b>P</b>	<b>R</b>	x	x	x	<i>Theme 4 encourages the use of SUDS in new developments.</i>  Use of porous paving and green roofs may help to alleviate run off.
3	Flood risk			?	?	?	<i>Theme 4 notes that development will be located away from floodplains. It also encourages the use of SUDS in new developments.</i>
4	Soils			✓	x	x	<i>Prioritising the use of previously developed land, identified by Theme 1, should aid the protection of soils.</i>
	The draft policy approach for gypsy and traveller accommodation aims to consider conservation of	<b>P</b>	<b>L</b>	✓	✓	✓	

SA Objective	Assessment of Effect						Mitigation and Enhancement	
	Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects				
				In the short term	In the medium term	In the long term		
	natural resources when locating sites. This should help to minimise effects on soils from the development of these sites.							
	Protecting existing open spaces should have a positive effect by protecting soils on these sites.	P	L	✓	✓	✓		
5	Greenhouse gas emissions	Housing development will result in an increase in greenhouse gas emissions from new housing and associated activities. Building a minimum of 9,000 new homes could lead to an increase in green house gas emissions of approximately 52,000 tonnes per annum. This is based upon estimated per capita domestic CO <sub>2</sub> emissions of 2.4 tonnes multiplied by the average number of occupants per household in the borough of 2.4 [Source: Audit Commission Local Area Profile].	P	N	x	x	x	<p><i>Themes 1 and 4 encourage the generation of energy from renewable energy resources.</i></p> <p><i>Themes 1 and 4 discuss the need for policies relating to energy consumption.</i></p> <p>The Core Strategy should encourage developments to use district heating systems and combined heat and power wherever appropriate.</p>
		Locating health care and educational facilities in places which are accessible by walking, cycling and public transport could encourage use of more sustainable modes of transport thereby reducing ghg emissions from transport.	P	N	✓	✓	✓	
6	Climate change proof	No predicted effects. The theme does not outline measures which would require housing developments to withstand and accommodate the likely impacts and results of climate change.	-	-	-	-	-	Consider policy wording linked to developments which are 'climate change proof' or resilient to the effects of climate change, such as through robust and weather resistant building structures.
7	Air Quality	Building a minimum of 9,000 new homes will	P	L	x	x	x	<i>Theme 1 encourages the use</i>

SA Objective	Assessment of Effect						Mitigation and Enhancement	
	Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects				
				In the short term	In the medium term	In the long term		
	contribute to background emissions through an increase in vehicles on the road.						<p><i>of more sustainable modes of transport, including public transport, cycling and walking.</i></p> <p><i>Theme 2 encourages the location of community facilities in locations accessible by walking, cycling and public transport.</i></p>	
	During construction there are potential adverse effects on local air quality close to the development sites.	<b>T</b>	<b>L</b>	x	x	x		
8	Use of brownfield sites	Although Theme 1 advocates a sequential approach in which previously developed land will be used before greenfield land. Given the number of houses to be built in the medium and long term there is likely to be development on greenfield sites.	<b>P</b>	<b>L</b>	✓	x	x	
9	Resource efficiency	Housing growth will put demands on natural resources and result in increased waste generation.	<b>P</b>	<b>L</b>	x	x	x	<p><i>Maximising opportunities for the use of recycled materials and encouraging on-site recycling, as identified by Theme 4, will help to reduce these demands.</i></p> <p>The Core Strategy needs to encourage minimising levels of household waste and increasing levels of recycling and composting.</p>
10	Historic & cultural assets	Housing development could have adverse effects on known or undiscovered cultural heritage resources. A few of the potential development sites contain	-	-	?	?	?	<i>Theme 4 aims to protect and enhance the borough's diverse and high quality built</i>

SA Objective	Assessment of Effect						Mitigation and Enhancement	
	Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects				
				In the short term	In the medium term	In the long term		
	historic or cultural assets and should these sites be developed there may be adverse effects on these assets.						<i>heritage, including its many Listed Buildings, Conservation Areas and archaeological remains.</i>	
11	Landscape & Townscape	Constructing a minimum of 9,000 new homes, with some potentially being located on green field sites and in the greenbelt, there are likely to be adverse effects on landscape. The effects may be significant in the long term once brownfield sites have been used up and houses will have to build on greenfield sites on the edge of settlements.	<b>P</b>	<b>L</b>	x	x	x	<i>Theme 4 aims to protect and enhance the distinctive landscape character of the borough, particularly the Chilterns AONB. It also requires all development proposals to be assessed in terms of their impact on landscape features.</i>
		The draft policy approach for gypsy and traveller accommodation aims to consider important environmental features and conservation of natural resources when identifying sites. The theme also states that new sites should be landscaped to provide for an appropriate setting and to integrate the site with existing residential areas.	<b>P</b>	<b>L</b>	✓	✓	✓	
		Protecting and enhancing existing open space and improving provision of open space should help to progress this objective.	<b>P</b>	<b>L</b>	✓	✓	✓	
12	Health	Providing health care facilities in locations accessible by walking, cycling and public transport could reduce health inequalities in the borough by improving access to healthcare.	<b>P</b>	<b>L</b>	✓	✓	✓	
		Locating facilities that are easily accessible by walking and cycling could allow for increased daily physical activity. Reducing the need to travel by private vehicles may also limit vehicular emissions, leading to improved air quality and associated health benefits for the local community.	<b>P</b>	<b>L</b>	✓	✓	✓	

SA Objective	Assessment of Effect						Mitigation and Enhancement	
	Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects				
				In the short term	In the medium term	In the long term		
	Improving access to leisure and recreation facilities and open space could also encourage increased participation in healthy activities. The creation of public open space could also help people to interact socially.	P	L	✓	✓	✓		
13	Sustainable locations	Providing health care facilities in locations accessible by walking, cycling and public transport should progress this objective.	P	L	✓✓	✓✓	✓✓	
		The draft policy approach for gypsy and traveller accommodation aims to consider proximity to services when locating new sites. This should help to reduce the need to travel.	P	L	✓	✓	✓	
14	Equality & social exclusion	The draft policy approach for gypsy and traveller accommodation aims to consider proximity to services when locating new sites. This should help to progress this objective by improving access to services for this minority group.	P	L	✓	✓	✓	
		Providing education and health care in locations accessible by walking, cycling and public transport should progress this objective by improving everyone's access to these facilities. Providing easy access to leisure and recreation facilities, including open space, will also help to progress this objective.	P	L	✓	✓	✓	
15	Good quality housing	Providing pitches for gypsies and travellers should improve accommodation for these individuals.	P	L	✓	✓	✓	
		Providing a minimum of 9,000 new homes should help to progress this objective by increasing the number of houses available.	P	L	✓	✓	✓	
		Providing for a higher level of affordable housing (39%) should progress this objective by allowing for a wider range of housing.	P	L	✓✓	✓✓	✓✓	Policy should consider the need for key worker housing.
16	Community Identity &	Providing pitches for gypsies and travellers recognises the needs of different groups of people	P	L	✓	✓	✓	

SA Objective		Assessment of Effect					Mitigation and Enhancement	
		Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects			
					In the short term	In the medium term		In the long term
participation		within the borough. Considering the integration of both the gypsy and traveller communities and the settled community when locating and designing new pitches could encourage social cohesion and a shared sense of place and community.						
		Ensuring good provision of and easy access to leisure and recreation facilities should make areas more attractive places to live, work and visit. Also ensuring education facilities and health care are easily accessible should also progress this objective.	P	L	✓	✓	✓	
		Protecting and enhancing existing open space and improving provision of open space should help to improve the quality of urban life.	P	L	✓	✓	✓	Policy should consider specifically protecting and enhancing green and open spaces within urban areas.
17	Crime and fear of crime	Developing an inclusive society which integrates gypsy and traveller communities with settled communities should help reduce crime levels and fear of crime.	P	L	✓	✓	✓	
18	Sustainable prosperity & growth	Providing a minimum of 9,000 new homes and improving access to community and leisure activities will support the economy by providing necessary infrastructure and producing a high quality environment in which people will want to live and work.	P	L	✓	✓	✓	
19	Fairer access to services	Providing 9,000 new homes should provide employment opportunities in construction. In the longer term employment in construction may decrease as developments are completed.	P	L	✓	✓	?	
20	Revitalise town centres	No predicted effects.	-	-	-	-	-	

### Borough Theme 3 – Economic Prosperity

- a. Business
- b. Retail
- c. Tourism

SA Objective		Assessment of Effect					Mitigation and Enhancement	
		Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects			
					In the short term	In the medium term		In the long term
1	Biodiversity	The allocation of new employment land on greenfield sites could have an adverse effect on biodiversity. The significance of the effect depends on the location of the development and the biodiversity value of the proposed site.	P	L	x	x	x	When developing on greenfield land measures should be taken to avoid adverse impacts on biodiversity, such as maintaining and enhancing green corridors and providing green open spaces.  <i>Theme 4 requires that where new development involves key habitats, it must result in no net loss of or fragmentation of biodiversity value.</i>
		The development of new tourist facilities, such as the new Snow Centre and proposed new stadium may have an adverse effect on biodiversity, depending on the location of the development and the biodiversity value of the proposed site.	-	-	?	?	?	
		The theme aims to protect the environment while supporting and encouraging sustainable tourism in the borough. This could encourage more people to visit wildlife sites.	P	L	✓	✓	✓	
2	Water quality/ quantity	The theme aims to protect the environment while supporting and encouraging sustainable tourism in	-	-	?	?	?	

SA Objective	Assessment of Effect						Mitigation and Enhancement	
	Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects				
				In the short term	In the medium term	In the long term		
	the borough. However increasing the number of visitor to the Grand Union canal and other water courses in the borough may have an adverse effect on water quality.							
	Dacorum Borough is within an area already identified as 'over-abstracted' (Colne CAM, EA). Providing new employment will put direct pressure on these already under pressure water resources. The effect is likely to become more significant over time as the risk of periodic water shortages increase.	P	R	x	x	xx	<p><i>Theme 4 encourages the use of water minimisation methods, such as grey water recycling, and the use of SUDS.</i></p> <p><i>To help inform the Core Strategy a water cycle study will be undertaken.</i></p>	
	New development on greenfield sites will inevitably increase impermeable surfaces resulting in increased water run-off and potential pollution to water courses.	P	R	x	x	x	<p><i>Theme 4 encourages the use of SUDS in new developments.</i></p> <p>Use of porous paving and green roofs may help to alleviate run off.</p>	
3	Flood risk	Parts of Dacorum lie within areas of flood risk, which may expand due to the implications of climate change. A number of the potential employment sites are located within flood risk zones. Therefore should these sites be developed there is potential for adverse effects on this objective.	-	-	?	?	?	<i>Theme 4 notes that development will be located away from floodplains and encourages the use of SUDs.</i>
4	Soils	Releasing general employment areas for housing or other uses is likely to result in the clean up of potentially contaminated soils.	P	L	✓	✓	✓	
		Although Theme 1 advocates a sequential approach in which previously developed land will be used before greenfield the development of greenfield land	P	L	✓	x	x	<i>Prioritising the use of previously developed land, identified by Theme 1,</i>



SA Objective	Assessment of Effect						Mitigation and Enhancement	
	Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects				
				In the short term	In the medium term	In the long term		
							<i>should aid the protection of soils.</i>	
5	Greenhouse gas emissions	for employment could have adverse impacts on this objective through soil sealing and loss.						
		Maintaining a wide distribution of general employment areas (GEAs) across the borough (although mainly in the Hemel Hempstead, Berkhamsted and Tring) could help to encourage the use of sustainable modes of travel thereby helping to progress this objective.	P	N	✓	✓	✓	
		Concentrating employment development around the three towns and smaller settlements should allow residents the opportunity to live and work in the same town therefore reducing the number/length of trips and traffic movements which could in turn help to reduce ghg emissions.	P	N	✓	✓	✓	
		Activities relating to the new employment sites and the provision of 18,000 new jobs, i.e. transport activities will result in some increases in greenhouse gas emissions.	P	N	x	x	x	<i>Theme 1 encourages the use of more sustainable modes of transport, including public transport, cycling and walking.</i>
		Maintaining the retail hierarchy and discouraging out of centre retail development should progress this objective as more people may use town centre shopping centres which are more accessible by sustainable modes of transport.	P	N	✓	✓	✓	
		Intensifying the use of Jarmen Fields as a retail and leisure out of town centre contradicts the Core Strategy's aim to discourage out of town shopping. Encouraging out of town shopping could result in some increases in greenhouse gas emissions as people are more likely to use private vehicles to access these locations.	P	N	x	x	x	
6	Climate change proof	The theme does not outline measures which would enable employment developments to withstand and	-	-	-	-	-	Consider policy wording linked to developments

SA Objective	Assessment of Effect						Mitigation and Enhancement	
	Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects				
				In the short term	In the medium term	In the long term		
	accommodate the likely impacts and results of climate change.						which are 'climate change proof' or resilient to the effects of climate change, such as through robust and weather resistant building structures.	
7	Air Quality	Maintaining a wide distribution of GEAs across the borough could help to encourage the use of sustainable modes of travel thereby helping to progress this objective by improving air quality.	P	L	✓	✓	✓	
		Concentrating employment development around the three towns and smaller settlements should allow residents the opportunity to live and work in the same town therefore reducing the number/length of trips and traffic movements which could in turn help to improve air quality.	P	L	✓	✓	✓	
		Activities relating to the new employment sites and the provision of 18,000 new jobs, i.e. transport activities will result in some increases in emissions to air therefore potentially having an adverse effect on local air quality close to these sites.	P	L	x	x	x	
		Discouraging out of centre retail development should progress this objective as more people may use town centre shopping centres which are more accessible by sustainable modes of transport which could in turn help to improve air quality.	P	L	✓	✓	✓	
		Intensifying the use of Jarmen Fields as a retail and leisure out of town centre contradicts the Core Strategy's aim to discourage out of town shopping. Encouraging out of town shopping could result in some increases in emissions to air as people are more likely to use private vehicles to access these locations.	P	L	x	x	x	

SA Objective		Assessment of Effect					Mitigation and Enhancement	
		Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects			
					In the short term	In the medium term		In the long term
8	Use of brownfield sites	Although Theme 1 advocates a sequential approach in which previously developed land will be used before greenfield land it is likely that some new employment land will be allocated in greenfield land.	P	L	✓	x	x	
9	Resource efficiency	Employment growth will put demands on natural resources through construction and use. It will also result in increased waste generation.	P	L	x	x	x	<p><i>Maximising opportunities for the use of recycled materials and encouraging on-site recycling, as identified by Theme 4, will help to reduce these demands.</i></p> <p>Policy should consider ensuring developments demonstrate that they have made provision for reducing waste and facilitating the re-use and recycling of waste.</p>
10	Historic & cultural assets	Employment development could have adverse effects on known or undiscovered cultural heritage resources. A few of the potential employment sites contain historic or cultural assets and should these sites be developed there may be adverse effects on these assets.	-	-	?	?	?	<i>Theme 4 aims to protect and enhance the borough's diverse and high quality built heritage, including its many Listed Buildings, Conservation Areas and archaeological remains.</i>
11	Landscape & Townscape	By providing for 18,000 new jobs, with some employment land potentially being located in the greenbelt and on green field sites, there are likely to be adverse effects on landscape.	P	L	x	x	x	<i>Theme 4 aims to protect and enhance the distinctive landscape character of the borough, particularly the Chilterns AONB. It also requires all development proposals to be assessed in terms of their impact on landscape features.</i>

SA Objective	Assessment of Effect						Mitigation and Enhancement	
	Nature of Effect Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects				
				In the short term	In the medium term	In the long term		
	Regenerating Maylands should improve the appearance of the site thereby helping to progress this objective.	P	L	✓	✓	✓		
	The theme aims to protect the environment while supporting and encouraging sustainable tourism in the borough. This could progress this objective helping to protect landscapes.	P	L	✓	✓	✓		
	Protecting and enhancing town, village and local centres for retail should help to protect existing retail townscapes.	P	L	✓	✓	✓		
12	Health	P	L	✓	✓	✓		
13	Sustainable locations	Supporting a wide distribution of general employment areas could reduce the need to travel by providing employment close to housing.	P	L	✓	✓	✓	
		Focusing economic development in Hemel Hempstead close to the main areas of housing growth should reduce the need to travel thereby helping to progress this SA objective. Providing other employment development in the two main towns or smaller settlements should also support this objective.	P	L	✓	✓	✓	
		Discouraging standalone employment development in rural locations should progress this objective.	P	L	✓	✓	✓	
		Focusing retail development in Hemel Hempstead, discouraging out of centre locations and protecting town, village and local centres supports this SA objective by ensuring most retail is located close to the centres of population while still ensuring some provision in smaller settlements.	P	L	✓	✓	✓	
		Intensifying the use of Jarmen Fields as a retail and leisure out of town centre contradicts the Core	P	L	x	x	x	

SA Objective	Assessment of Effect						Mitigation and Enhancement	
	Nature of Effect Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects				
				In the short term	In the medium term	In the long term		
		Strategy's aim to discourage out of town shopping.						
14	Equality & social exclusion	Protecting local retail centres will maintain access to shops for local people.	P	L	✓	✓	✓	
		Providing additional food shops and other retail, i.e. in the Waterhouse Square development, in Hemel Hempstead should improve access to these services.	P	L	✓	✓	✓	
15	Good quality housing	No predicted effects.	-	-	-	-	-	
16	Community Identity & participation	Protecting and enhancing retail opportunities in the borough could make the urban areas more attractive places to live, work and visit.	P	L	✓	✓	✓	
17	Crime and fear of crime	Increasing employment opportunities in the borough could result in reduced levels of crime.	P	L	✓	✓	✓	
18	Sustainable prosperity & growth	Protecting and enhancing existing employment areas will progress this objective by supporting the expansion of the local economy. Supporting appropriate new employment land and the potential provision of 18,000 new jobs in the borough should also progress this objective.	P	L	✓✓	✓✓	✓✓	
		Supporting and encouraging sustainable tourism should progress this SA objective.	P	L	✓	✓	✓	
		Regenerating the Maylands business area will help to support the expansion of the local economy.	P	L	✓✓	✓✓	✓✓	
19	Fairer access to services	Supporting appropriate new employment land and the potential provision of 18,000 new jobs in the borough should progress this objective through the provision of local jobs.	P	L	✓	✓	✓	
		Focusing employment development in Hemel Hempstead should provide accessible employment opportunities to support the new housing developments.	P	L	✓	✓	✓	
		Protecting local retail centres will maintain access to	P	L	✓	✓	✓	

SA Objective	Assessment of Effect						Mitigation and Enhancement
	Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects			
				In the short term	In the medium term	In the long term	
	shops for local people.						
	Regenerating the Maylands business area and providing a new local centre at the Heart of Maylands will provide local jobs and increase access to services for the business community working in Maylands.	P	L	✓	✓	✓	
20	Revitalise town centres						
	Focusing employment development in Hemel Hempstead and the two other main towns could progress this objective. However as it unclear whether the potential new employment is within the town centres the effects on this objective are unclear.	-	-	?	?	?	
	Developing the Maylands sites would have a negative effect on this SA objective as it is an out of town development.	P	L	x	x	x	
	Major regeneration in Hemel Hempstead town centre supports this SA objective.	P	L	✓	✓	✓	
	Protecting and strengthening shopping frontages in Hemel Hempstead town centre (Marlowes, Riverside and the Riverside Centre) supports this SA objective.	P	L	✓	✓	✓	
	Intensifying the use of Jarmen Fields as a retail and leisure out of town centre contradicts the Core Strategy's aim to discourage out of town shopping.	P	L	x	x	x	
	Protecting local retail centres in towns and villages will progress this SA objective.	P	L	✓	✓	✓	

## Borough Theme 4 – Looking after the Environment

- a. Heritage, Biodiversity and Landscape Character
- b. Natural Resources

SA Objective		Assessment of Effect					Mitigation and Enhancement	
		Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects			
					In the short term	In the medium term		In the long term
1	Biodiversity	Protecting and enhancing the Borough's biodiversity should have a positive effect on this SA objective. This should include the protection of the Chiltern's Beechwood SAC, eight SSSIs and 3 Local Nature Reserves.	P	L	✓	✓	✓	The Core Strategy needs to consider the protection and enhancement of biodiversity.
		Supporting a hierarchical approach to biodiversity that promotes the creation of a network of greenspaces and green infrastructure should help to enhance biodiversity and could help to achieve BAP targets depending on the habitats created.	P	L	✓✓	✓✓	✓✓	
		Minimising emissions of pollutants into the natural environment, i.e. into the ground, atmosphere or water should have an indirect positive effect on protecting and maintaining biodiversity.	P	L	✓	✓	✓	
		Controlling the impact of contaminated land on wildlife through site investigation, assessing the extent of pollutants and level of risk and undertaking remediation should progress this objective.	P	L	✓	✓	✓	
		The effects of the production of biomass on biodiversity are uncertain. This will be dependent on the type of biomass being used, i.e. type of energy crop, and the scale of the production.	P	L	?	?	?	
2	Water quality/ quantity	Safeguarding water supplies should progress this objective.	P	L	✓	✓	✓	
		Minimising emissions of pollutants into the natural environment, i.e. into the ground, atmosphere or water should have a positive effect on protecting and maintaining water quality.	P	L	✓	✓	✓	

SA Objective	Assessment of Effect						Mitigation and Enhancement	
	Nature of Effect Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects				
				In the short term	In the medium term	In the long term		
	Controlling the impact of contaminated land on water resources through site investigation, assessing the extent of pollutants and level of risk and undertaking remediation should progress this objective.	P	L	✓	✓	✓		
	Promoting the efficient use of water in new developments through water conservation measures (e.g. dual flush systems), the effective management of grey water and the use of SUDS should progress this objective.	P	L	✓	✓	✓		
3	Flood risk	Locating development away from floodplains and managing run-off should have a positive effect on this objective. Using SUDs in new developments could reduce the risk of surface flooding in new developments.	P	L	✓	✓	✓	
4	Soils	Minimising emissions of pollutants into the natural environment, i.e. into the ground, atmosphere or water should have a positive effect on soils by protecting them from contamination.	P	L	✓	✓	✓	
		Controlling the impact of contaminated land through site investigation, assessing the extent of pollutants and level of risk and undertaking remediation should progress this objective.	P	L	✓	✓	✓	
		Safeguarding high quality agricultural land should progress this objective.	P	L	✓	✓	✓	
5	Greenhouse gas emissions	Encouraging the generation of energy from renewable resources should reduce greenhouse gas emissions. Efficient use of energy should also progress this SA objective.	P	N	✓	✓	✓	
6	Climate change proof	Efficient use of water resources, through the use of water conservation measures and the effective management of grey water could help new developments to cope with drier summers.	P	L	✓	✓	✓	
7	Air Quality	Minimising emissions of pollutants should have a	P	L	✓	✓	✓	



SA Objective	Assessment of Effect						Mitigation and Enhancement	
	Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects				
				In the short term	In the medium term	In the long term		
		positive effect on local air quality.						
8	Use of brownfield sites	Controlling the impact of contaminated land through site investigation, assessing the extent of pollutants and level of risk and undertaking remediation should progress this objective.	P	L	✓	✓	✓	
9	Resource efficiency	Maximising opportunities for the use of recycled materials and encouraging on-site recycling will have a positive effect on this objective.	P	L	✓	✓	✓	The Core Strategy needs to encourage minimising levels of household waste and increasing levels of recycling and composting.
		Safeguarding minerals reserves should progress this objective.	P	L	✓	✓	✓	
		Encouraging the generation of energy from renewable resources should have a positive effect on this SA objective. Efficient use of energy should also progress this SA objective.	P	N	✓	✓	✓	
10	Historic & cultural assets	Protecting and enhancing the Borough's diverse and high quality built heritage, including its many Listed Buildings, Conservation Areas and archaeological remains should have a positive effect on this SA objective. The theme also aims to protect parks and gardens, the Grand Union Canal and buildings of local interest.	P	L	✓	✓	✓	
11	Landscape & Townscape	Protecting and enhancing the distinctive landscape character of the Borough, particularly the Chilterns AONB, should have a positive effect on this SA objective.	P	L	✓	✓	✓	
		Requiring all development proposals to be assessed in terms of their impact on landscape features should help to avoid inappropriate development.	P	L	✓	✓	✓	
		Considering tranquillity and quietness should also help to progress this objective.	P	L	✓	✓	✓	

SA Objective	Assessment of Effect						Mitigation and Enhancement	
	Nature of Effect Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects				
				In the short term	In the medium term	In the long term		
12	Health	Protecting and enhancing the Borough's heritage, biodiversity and landscapes, including the network of greenspaces, parks and gardens, the Grand Union Canal should have a positive effect on this SA objective.	P	L	✓	✓	✓	
		Improving access to natural green space and green space in urban environments can help to improve life expectancy and decrease health complaints. It is increasingly recognised that a favourable environment can encourage people to exercise, providing psychological and social benefits that may also increase the motivation to exercise <sup>1</sup> .	P	L	✓	✓	✓	
		Considering tranquillity and quietness may help to progress this objective if it will led to reducing noise in residential area.	-	-	?	?	?	The Core Strategy needs to consider minimising noise in residential areas.
		Minimising emissions of pollutants into the atmosphere should help to maintain and improve air quality thereby having a positive effect on the health of local communities.	P	L	✓	✓	✓	
13	Sustainable locations	No predicted effects.	-	-	-	-	-	
14	Equality & social exclusion	Protecting and enhancing the Boroughs heritage, biodiversity and landscapes, including the network of greenspaces, parks and gardens, the Grand Union Canal should have a positive effect on this SA objective by improving access to recreation areas.	P	L	✓	✓	✓	
15	Good quality housing	No predicted effects.	-	-	-	-	-	
16	Community Identity &	Protecting and enhancing the Borough's high quality built heritage, biodiversity and landscape character	P	L	✓	✓	✓	

<sup>1</sup> Bird, W (2004) Natural Fit: Can Green Space and Biodiversity Increase Levels of Physical Activity? RSPB. UK.

SA Objective		Assessment of Effect						Mitigation and Enhancement
		Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects			
					In the short term	In the medium term	In the long term	
	participation	<p>should encourage high quality design in new developments.</p> <p>Promoting the creation of a network of greenspaces, in settlements, should improve the quality of life in urban areas, by making them more attractive environments.</p>						
17	Crime and fear of crime	No predicted effects.	-	-	-	-	-	
18	Sustainable prosperity & growth	Protecting and enhancing the Borough's high quality built heritage, biodiversity and landscape character should support the economy through the provision of a high quality environment.	<b>P</b>	<b>L</b>	✓	✓	✓	
19	Fairer access to services	No predicted effects.	-	-	-	-	-	
20	Revitalise town centres	Protecting and enhancing the Borough's high quality built heritage, biodiversity and landscape character could support the development of well-designed town centre developments.	<b>P</b>	<b>L</b>	✓	✓	✓	

## Berkhamsted Spatial Strategy

### **Vision**

Berkhamsted will be a vibrant market town respecting its Fair Trade and Transition Town status. As an important town it will accommodate similar levels of new housing as in the recent past while maintaining the strong valley character of the settlement, and protecting key assets such as the Grand Union Canal. The settlement will have quality educational facilities in the public and private sectors. New development will be high quality, sustainable and locally distinctive that respects and protects the built and natural heritage of the town, the canal side environment, and the character of neighbourhoods. There will be more affordable housing and more, accessible open space. The town centre will be an attractive commercial, cultural and social focal point of the settlement with a strong district shopping and service centre role. It will be maintained and enhanced together with the neighbourhood role of Northchurch local centre. Employment areas around Billet Lane will provide local job opportunities and offer an attractive location for small to medium sized firms.

### Vision Assessment

This Vision supports the majority of the SA/SEA objectives, particularly those that relate to social aspects, such as housing, economy, access and provision of services. There is also consideration of the natural environment (i.e. landscape, water and biodiversity). In terms of the less tangible SA/SEA topics such as air and soil, the Vision is less supportive; however, this is not indication of any negative relationships being identified. In relation to the local economy, the Vision provides support for local supply chains which should help to achieve the related SA/SEA objective. There is uncertainty over how the Vision will meet the SA objectives such as 'resource efficiency' and 'climate change proof', which could be considered at the next stage in the preparation of the Core Strategy if appropriate.

### Development Options Assessment

SA Objective		Option 1 Land off New Road	Option 2 Land south of Hilltop Road	Option 3 Land adjacent to Hanburys, Shootersway	Option 4 Land adjacent to Blegberry Gardens, Shootersway
1	Biodiversity	The site is greenfield and there would therefore be loss of some habitats. <span style="background-color: yellow;">x</span>	The site is greenfield and there would therefore be loss of some habitats. <span style="background-color: yellow;">x</span>	The site is greenfield and there would therefore be loss of some habitats. <span style="background-color: yellow;">x</span>	The site is greenfield and there would therefore be loss of some habitats. The site is also adjacent to a wildlife site. <span style="background-color: yellow;">x</span>
2	Water quality/ quantity	Uncertain effect from this option on water quality and quantity. This is due to the proximity of the site to the canal and dependent on amount of run off. <span style="background-color: yellow;">?</span>	No predicted effects. -	No predicted effects. -	No predicted effects. -

SA Objective		Option 1 Land off New Road	Option 2 Land south of Hilltop Road	Option 3 Land adjacent to Hanburys, Shootersway	Option 4 Land adjacent to Blegberry Gardens, Shootersway
3	Flood risk	This option is in a low risk flood zone and not in flood risk zone 2 or 3.	- This option is in a low risk flood zone and not in flood risk zone 2 or 3.	- This option is in a low risk flood zone and not in flood risk zone 2 or 3.	- This option is in a low risk flood zone and not in flood risk zone 2 or 3.
4	Soils	This option would result in a loss of greenfield land, and development would result in soil sealing.	x This option would result in a loss of greenfield land, and development would result in soil sealing.	x This option would result in a loss of greenfield land, and development would result in soil sealing.	x This option would result in a loss of greenfield land, and development would result in soil sealing.
5	Greenhouse gas emissions	The option is located at a distance from the town centre, which could encourage greater car use to access the town. There is also poor pedestrian access to local facilities, which could mean there is an increase in car use. This could mean that there is an increase in the level of ghg emissions.	x The site is relatively close to the town centre and the railway station which should reduce the need to travel by car. However the gradient between the town centre and the site may make walking and cycling difficult which could result in increased car use and growth in the level of ghg emissions.	? The option is located at a distance from the town centre, which discourages walking and cycling, and there are poor bus services. This could mean that the use of the car could increase, giving an increase in ghg emissions. The gradient between the town centre and the site may also make walking and cycling difficult. These factors could mean that there is an increase in the level of ghg emissions.	x This option is located furthest from the town centre, so the effect of increased use of the car will be more significant than the other options. The gradient between the town centre and the site may make walking and cycling difficult. These factors could mean that there is an increase in the level of ghg emissions.
6	Climate change proof	Neutral Effects.	- Neutral Effects.	- Neutral Effects.	- Neutral Effects.
7	Air Quality	The option is located at a distance from the town centre, which could encourage greater car use to access the town. There is also poor pedestrian access to local facilities,	x The proximity of the site to the town centre and the railway station should reduce the need to travel by car. However, the gradient between the town centre and the site may	? The option is located at a distance from the town centre, which discourages walking and cycling, and there are poor bus services. This could mean that the use of the car could	x This option is located furthest from the town centre, so the effect of increased use of the car will be more significant than the other options. The gradient between the town centre and the site

SA Objective		Option 1 Land off New Road	Option 2 Land south of Hilltop Road	Option 3 Land adjacent to Hanburys, Shootersway	Option 4 Land adjacent to Blegberry Gardens, Shootersway
		which could mean there is an increase in car use. There could be adverse effects on air quality due to a possible increase in emissions.	make walking and cycling difficult. There could be adverse effects on air quality due to a possible increase in emissions.	increase. The gradient between the town centre and the site may make walking and cycling difficult. There could be adverse effects on air quality due to a possible increase in emissions.	may make walking and cycling difficult. There could be adverse effects on air quality due to a possible increase in emissions.
8	Use of brownfield sites	This option uses a greenfield site for development.	x This option uses a greenfield site for development (including the loss of the school playing fields).	x This option uses a greenfield site for development.	x This option uses a greenfield site for development.
9	Resource efficiency	Neutral Effects.	- Neutral Effects.	- Neutral Effects.	- Neutral Effects.
10	Historic & cultural assets	There is a potential impact on the setting of the Grand Union Canal, and the site is located in an area of archaeological significance. The area is classified as "18 <sup>th</sup> -19 <sup>th</sup> century enclosure" (HLC) <sup>2</sup>	x There is no predicted effect of this option on historic assets. The area is classified as "built up modern" (HLC).	- There is no predicted effect of this option on historic assets. The area is classified as "built up modern" (HLC).	- The option is located in an area of archaeological significance. The vast majority of the site is "20th century agriculture" (HLC).
11	Landscape & Townscape	The option is located in a visually prominent, Greenbelt site, near the Chilterns AONB.	x The option is located in the Greenbelt. The development could also have an impact on the setting of the school and open space.	x The option is located in the Greenbelt and could also impact on the setting of the British Film Institute (BFI) site. There could also be an effect on the transition area from urban to countryside.	x The option is located in the Greenbelt. There could be a possible impact on the AONB and on the transition area from urban to countryside.
12	Health	The option is located at	x This option would result	x The option is located at	x The option is located at a

<sup>2</sup> HLC= Hertfordshire Historic Landscape Characterisation

SA Objective		Option 1 Land off New Road	Option 2 Land south of Hilltop Road	Option 3 Land adjacent to Hanburys, Shootersway	Option 4 Land adjacent to Blegberry Gardens, Shootersway
		a distance from the town centre, which could discourage walking and cycling. There is also poor pedestrian access to local facilities and lack of leisure facilities.	in loss of playing fields, which could limit leisure opportunities and restrict opportunities for healthier lifestyles.	a distance from the town centre, which could discourage walking and cycling. The site is located near the A41 which could result in noise levels that could affect health. The gradient between the town centre and the site may discourage walking and cycling.	distance from the town centre, which could discourage walking and cycling. The site is located near the A41 which could result in noise levels that could affect health. The gradient between the town centre and the site may discourage walking and cycling.
13	Sustainable locations	The option is located at a distance from the town centre, and there is poor pedestrian access to local facilities.	The option is located closer to the town centre and the railway station than the other options. The option is located near to schools.	The option is located at a distance from the town centre.	The option is located at a distance from the town centre. It is close to a private school, but some distance from state schools.
		The option is located near a school and local centre.		The option is located close to the BFI site which would reduce the need to travel for those working at the site.	
14	Equality & social exclusion	The option is located at a distance from the town centre, and there is poor pedestrian access to local facilities.	The option is located closer to the town centre and the railway station than the other options.	The option is located at a distance from the town centre.	The option is located at a distance from the town centre. It is close to a private school, but some distance from state schools.
		The option is located near a school and local centre.		The option is located close to the BFI site which reduces the need to travel by employees who occupy the new housing.	
15	Good quality housing	This option should provide affordable housing.	This option should provide affordable housing.	This option should provide affordable housing.	This option is the largest, and should provide more affordable housing.

SA Objective		Option 1 Land off New Road		Option 2 Land south of Hilltop Road		Option 3 Land adjacent to Hanburys, Shootersway		Option 4 Land adjacent to Blegberry Gardens, Shootersway	
16	Community Identity & participation	Neutral Effects.	-	Neutral Effects.	-	Neutral Effects.	-	Neutral Effects.	-
17	Crime and fear of crime	Neutral Effects.	-	Neutral Effects.	-	Neutral Effects.	-	Neutral Effects.	-
18	Sustainable prosperity & growth	Provision of additional housing means there are more residents, making facilities and shops more viable. This would help with the local economy.	✓	Provision of additional housing means there are more residents, making facilities and shops more viable. This would help with the local economy.	✓	This option could support expansion of the BFI site, which is a key local employer. This could create more jobs, helping the local economy. Provision of additional housing means there are more residents, making facilities and shops more viable. This would help with the local economy.	✓	As this should provide the largest amount of additional housing, this means there is potential for more residents, making facilities and shops more viable. This would help with the local economy. There is more potential for developer contributions than for the other sites.	✓
19	Fairer access to services	Provision of housing could help the local economy and encourage provision of local services.	✓	Provision of housing could help the local economy and encourage provision of local services.	✓	Provision of housing could help the local economy and encourage provision of local services.	✓	Provision of housing could help the local economy and encourage provision of local services. There would also be more potential for developer contributions.	✓
20	Revitalise town centres	The option can help revitalise the town or local centres by providing additional housing to help maintain community vibrancy and vitality.	✓	The option can help revitalise the town or local centres by providing additional housing to help maintain community vibrancy and vitality.	✓	The option can help revitalise the town or local centres by providing additional housing to help maintain community vibrancy and vitality.	✓	The option can help revitalise the town or local centres by providing additional housing to help maintain community vibrancy and vitality.	✓



Spatial Strategy Theme Assessment

SA Objective		Assessment of Effect					Mitigation and Enhancement	
		Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects			
					In the short term	In the medium term		In the long term
1	Biodiversity	Theme 1: The spatial strategy intends to carry forward the existing Open Land Strategy, where it is identified that 'Open Land' remains important as a biodiversity resource, to protect, maintain and enhance designated wildlife and geological sites. If the river is deculverted there could be positive effects for biodiversity.	P	L	✓	✓	✓	
		Theme 4: The effect of the completion of the link between Tunnel Fields estate and New Road may impact on biodiversity as it would be cutting through open land and may impact on a wildlife site. However it is not certain that this completion will occur due to lack of funding. The uncertain assessment relates to both the potential impact of the link on biodiversity, and whether or not the completion of the link will go ahead.	P	L	?	?	?	
		Themes 2 and 3 have no predicted effects.	-	-	-	-	-	
2	Water quality/ quantity	Theme 1: The Grand Union Canal and River Bulbourne are both identified as having an important role in linking the urban areas to the countryside. Both should be protected, and de-culverting the river where appropriate could have a positive impact on water quality and should help to maintain the water dependent wildlife sites in the area.	P	R	✓	✓	✓	
		Themes 2, 3 and 4 have no predicted effects.	-	-	-	-	-	
3	Flood risk	Theme 1: There is potential for a breach or overtopping due to flooding of the Grand Union Canal but the risk is considered to be low. However it is stated that a cautious approach to development close to the embankment will be taken, ensuring a positive	P	L	✓	✓	✓	

SA Objective	Assessment of Effect						Mitigation and Enhancement
	Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects			
				In the short term	In the medium term	In the long term	
	impact as this will reduce flood risk for new developments. If the river is deculverted and is subsequently better maintained it could provide improved flood attenuation compared to the culvert. Themes 2, 3 and 4 have no predicted effects.	-	-	-	-	-	
4	Soils Themes 1, 2, 3 and 4 have no predicted effects.	-	-	-	-	-	
5	Greenhouse gas emissions Theme 4: The spatial strategy recognises that there is a need for improved cycle routes and facilities and additional footways/cyclepaths. This may have a positive effect on reducing greenhouse gas emissions from private vehicles. The level of the effect will be dependent on whether private car users change their mode of travel and use the cyclepaths/footpaths instead of their car. Themes 1, 2 and 3 have no predicted effects.	P	N	✓	✓	✓	The strategy should consider ways in which it may encourage behavioural change which could help to achieve the modal shift.
6	Climate change proof Themes 1, 2, 3 and 4 have no predicted effects.	-	-	-	-	-	
7	Air Quality Theme 4: There is recognition in the spatial strategy that there is a need for improved cycle routes and facilities and additional footways/cyclepaths. This may have positive effect on air quality, as transport is a key source of air pollution, and should private car users change their mode of travel and use the cyclepaths/footpaths instead of their car this could reduce emission to air. This level of effect is uncertain as it is dependent on whether more people are encouraged to use these non-polluting modes instead of private cars. Themes 1, 2 and 3 have no predicted effects.	P	R	✓	✓	✓	The strategy should consider ways in which it may encourage behavioural change which could help to achieve the modal shift.
8	Use of brownfield sites Theme 1: Lower density development is progressively encouraged moving away from the town centre, which means that it would have adverse	P	L	x	x	x	

SA Objective	Assessment of Effect						Mitigation and Enhancement
	Nature of Effect Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects			
				In the short term	In the medium term	In the long term	
	effects against this objective as the SA objective encourages maximising efficient use of land, including higher density developments.						
	Theme 2: Most of the housing is anticipated to come forward from sites within the existing urban areas, which implies use of brownfield sites, giving a positive effect against this SA objective.	P	L	✓	✓	✓	
	Theme 2: To meet the needs of the local area, there may be use of a greenfield site to provide housing. This does not meet the SA objective which aims to avoid use of greenfield sites for developments.	P	L	x	x	x	
	Themes 3 and 4 have no predicted effects.	-	-	-	-	-	
9	Resource efficiency						
10	Historic & cultural assets						
11	Landscape & Townscape						
	Theme 1: New development in Berkhamstead will not be allowed along open valley sides and ridge top locations, as these areas are sensitive to new development, due to their farmland, mixed woodlands, large country estates and historic parklands, as well as scenic views.	P	L	✓	✓	✓	
	Theme 1: Lower density development is progressively encouraged, allowing reinforcement of the existing character and quality of the settlement.	P	L	✓	✓	✓	
	Theme 4: Development of Water Lane/ High Street site will include improved landscaping in this area.	P	L	✓	✓	✓	
	Themes 2 and 3 have no predicted effects.	-	-	-	-	-	
12	Health						
	Theme 1: The spatial strategy intends to carry forward the existing Open Land Strategy, where open land will be protected, thereby giving opportunities for healthier lifestyles as people have access to open	P	L	✓	✓	✓	

SA Objective	Assessment of Effect						Mitigation and Enhancement	
	Nature of Effect Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects				
				In the short term	In the medium term	In the long term		
	land for recreation.							
	Theme 4: Recognises that there is a need for improved cycle routes and facilities and additional footways/cyclepaths which would encourage healthier lifestyles.	P	L	✓	✓	✓		
	Themes 1, 2 and 3 have no predicted effects.	-	-	-	-	-		
13	Sustainable locations	Theme 2: A key strategic site at Egerton Rothersey School has been identified, which could deliver housing, leisure space, and private school facilities, thereby reducing the need to travel.	P	L	✓	✓	✓	
		Theme 3: The town centre has a mix of shopping, services, food and drink outlets, leisure facilities, and the UDA <sup>3</sup> encourages a mix of uses. The spatial strategy recognises that there is a need to protect the key district shopping and service role of the centre. This will progress this objective by reducing the need to travel due to closer integration of services.	P	L	✓	✓	✓	
		Themes 1 and 4 have no predicted effects.	-	-	-	-	-	
14	Equality & social exclusion	Theme 2: Recognises that first and middle schools are operating close to capacity, and there may be a review of the current three tier system. The possibility of using Greenbelt for further expansion of schools will be covered by a new policy approach.	P	L	✓	✓	✓	
		Theme 4: The spatial strategy aims to provide a range of facilities and services within the settlement and improve public transport connections. This could improve the public's access to services and facilities.	P	L	✓	✓	✓	
		Themes 1 and 3 have no predicted effects.	-	-	-	-	-	
15	Good quality	Theme 1: Appropriate forms and densities of housing	P	L	✓	✓	✓	

<sup>3</sup> Urban Design Assessment

SA Objective	Assessment of Effect						Mitigation and Enhancement
	Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects			
				In the short term	In the medium term	In the long term	
housing	development are sought, including housing types and building heights, which all should contribute to the provision of good quality housing to meet the needs of the local population.						
	Theme 2: The spatial strategy identifies that a key priority is to maximise opportunities for affordable homes, which is a key criterion of the SA objective. However beyond the life of the Spatial Strategy this effect will be uncertain.	P	L	✓✓	✓✓	?	
	Themes 3 and 4 have no predicted effects.	-	-	-	-	-	
16 Community Identity & participation	Theme 3: The spatial strategy encourages development of the town to ensure that it is a more attractive place in which to live and work. This should progress this SA objective by contributing to providing a sense of community and identity.	P	L	✓	✓	✓	
	Themes 1, 2, and 4 have no predicted effects.	-	-	-	-	-	
17 Crime and fear of crime	Theme 3: The spatial strategy discusses the provision of a secure improved public car park environment on Berkhamstead High Street, which could help to reduce levels of crime and increase safety.	P	L	✓	✓	✓	
	Themes 1, 2, and 4 have no predicted effects.	-	-	-	-	-	
18 Sustainable prosperity & growth	Theme 3: Existing employment space within the industrial estates around Billet Lane and Northbridge Road is to be protected as they offer an attractive location for small to medium sized firms.	P	R	✓	✓	✓	
	Themes 1, 2 and 4 have no predicted effects.	-	-	-	-	-	
19 Fairer access to services	Theme 3: The British Film Institute (BFI) site is important as it is a key local employer, but potential for expansion is limited to due to the surrounding Green Belt. This could mean that local provision of jobs could be affected if the BFI move elsewhere or	P	R	x	x	x	

SA Objective	Assessment of Effect						Mitigation and Enhancement	
	Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects				
				In the short term	In the medium term	In the long term		
20	Revitalise town centres	there is no opportunity for new jobs to be created. Themes 1, 2 and 4 have no predicted effects.	-	-	-	-	-	
		Theme 3: The town centre has a mix of shopping, services, food and drink outlets, leisure facilities, and the UDA encourages a mix of uses. The spatial strategy recognises that there is a need to protect the key district shopping and service role of the centre.	P	L	✓	✓	✓	
		Themes 1, 2 and 4 have no predicted effects.	-	-	-	-	-	

## Bovingdon Spatial Strategy

### **Vision:**

Bovingdon will remain a vibrant compact village, delivering a high quality of life for local residents and businesses. Its long-term strategy to 2031 will emphasise the conservation of the natural, historic and built heritage of the village, particularly in the context of its setting within gently undulating open countryside and the village centre. Locally distinctive features of the village such as The Dock will be enhanced, and Bovingdon Brickworks will be protected. New housing development will be used to secure new open space for the village and a high level of affordable housing. The local centre will remain the heart of the village and continue to deliver a range of local shops, services and facilities. Congestion and on-street parking along the High Street will be tackled to promote a better environment for residents and businesses. Support will be given to local businesses, schools and community facilities, and the existing wildlife and biodiversity resources on the outskirts of the village will be protected.

### Vision Assessment

This Vision supports the majority of the SA/SEA objectives, particularly those that relate to social aspects, such as housing, economy, access and provision of services. There is also consideration of the natural and historic environment, for example The Dock and Bovingdon Brickworks (i.e. landscape, biodiversity and cultural heritage). In terms of the less tangible SA/SEA topics such as air and soil, the Vision is less supportive; however, this is not indication of any negative relationships being identified. In relation to the local economy, the Vision provides support for local supply chains which should help to achieve the related SA/SEA objective. There is uncertainty over how the Vision will meet the SA objectives such as 'resource efficiency' and 'climate change proof', which could be considered at the next stage in the preparation of the Core Strategy if appropriate.

### Development Options Assessment

SA Objective		Option 1 Duckhall Farm	Option 2 Rear of Green Lane	Option 3 Grange Farm	Option 4 North of Chesham Road
1	Biodiversity	This greenfield site is located in a high value local biodiversity wildlife corridor, with hedgerows and grassland being an important part of the site.	<p>This greenfield site is located in a potentially important wildlife habitat, with old hedgerows.</p> <p>The site is within an area of biodiversity deficiency, so this option could provide opportunities for new habitat creation</p>	This greenfield site is located in a high value local biodiversity wildlife corridor. Part of Bovingdon Brickworks is managed by Box Trust as a wildlife habitat.	This greenfield site is located in a high value local biodiversity wildlife corridor.
		✘	✘	✘	✘
			✔		

SA Objective		Option 1 Duckhall Farm		Option 2 Rear of Green Lane		Option 3 Grange Farm		Option 4 North of Chesham Road	
2	Maintain/enhance water quality/quantity	Neutral Effects.	-	Neutral Effects.	-	Neutral Effects.	-	Neutral Effects.	-
3	Flood risk	The option is located in a low risk flood zone.	-	The option is located in a low risk flood zone.	-	The option is located in a low risk flood zone.	-	The option is located in a low risk flood zone.	-
4	Soils	This option would result in a loss of greenfield land, and development would result in soil sealing.	x	This option would result in a loss of greenfield land, and development would result in soil sealing.	x	This option would result in a loss of greenfield land, and development would result in soil sealing.	x	This option would result in a loss of greenfield land, and development would result in soil sealing.	x
5	Greenhouse gas emissions	The option is located close to the village, which could encourage cycling and walking rather than use of the car, thereby helping to reduce the growth in ghg emissions. The presence of the busy road between the site and the village centre may however discourage pedestrians and cyclists.	✓	The option is located close to the village, which could encourage cycling and walking rather than use of the car, thereby helping to reduce the growth in ghg emissions.	✓	The option is located further from the village, which could discourage cycling and walking rather than use of the car, thereby helping to reduce the growth in ghg emissions. However the area between the site and the village centre is relatively flat, which makes it feasible for walking and cycling access to the village.	✓	The option is located further from the village, which could discourage cycling and walking rather than use of the car, which would help to reduce the growth in ghg emissions. However the area between the site and the village centre is relatively flat, which makes it feasible for walking and cycling access to the village. The presence of the busy road between the site and the village centre may however discourage pedestrians and cyclists.	✓
		There is traffic congestion in the village, which may increase with more people locating to the area. This could result in an increase in the level of ghg emissions.	x	There is traffic congestion in the village, which may increase with more people locating to the area. This could result in an increase in the level of ghg emissions.	x	There is traffic congestion in the village, which may increase with more people locating to the area. This could result in an increase in the level of ghg emissions.	x	There is traffic congestion in the village, which may increase with more people locating to the area. This could result in an increase in the level of ghg emissions.	x



SA Objective		Option 1 Duckhall Farm		Option 2 Rear of Green Lane		Option 3 Grange Farm		Option 4 North of Chesham Road	
6	Climate change proof	Neutral Effects.	-	Neutral Effects.	-	Neutral Effects.	-	Neutral Effects.	-
7	Air Quality	The option is located close to the village, which could encourage cycling and walking rather than use of the car, thereby helping to improve air quality. The presence of the busy road between the site and the village centre may however discourage pedestrians and cyclists.	✓	The option is located close to the village, which could encourage cycling and walking rather than use of the car, thereby helping to improve air quality.	✓	The option is located further from the village, which could discourage cycling and walking rather than use of the car, which would help to improve air quality. The topographical nature makes it feasible for walking and cycling access to the village.	✓	The option is located further from the village, which could discourage cycling and walking rather than use of the car, which would help to improve air quality. The topographical nature makes it feasible for walking and cycling access to the village. The presence of the busy road between the site and the village centre may however discourage pedestrians and cyclists.	✗
		There is traffic congestion in the village, which may increase with more people locating to the area. This could result in a decline in local air quality.	✗	There is traffic congestion in the village, which may increase with more people locating to the area. This could result in a decline of local air quality.	✗	There is traffic congestion in the village, which may increase with more people locating to the area. This could result in a decline in local air quality.	✗	There is traffic congestion in the village, which may increase with more people locating to the area. This could result in a decline in local air quality.	
8	Use of brownfield sites	The site is located in an area of predominantly greenfield.	✗	The site is located in an area of predominantly greenfield.	✗	The site is located in an area of predominantly greenfield.	✗	The site is located on a site of approx 60% previously developed land, which gives opportunities for this option to make environmental improvements.	✓
9	Resource efficiency	Neutral Effects.	-	Neutral Effects.	-	Neutral Effects.	-	Neutral Effects.	-
10	Historic & cultural assets	The site contains two listed buildings, and is in an area of "pre 18 <sup>th</sup> century enclosure" (HLC).	✗	The site is classified as "20 <sup>th</sup> century agriculture" (HLC).	-	The site is classified as "20 <sup>th</sup> century agriculture" (HLC).	-	The site classified as 60% "communications" (airfield) and 40% "agricultural land"(HLC)	-

SA Objective		Option 1 Duckhall Farm	Option 2 Rear of Green Lane	Option 3 Grange Farm	Option 4 North of Chesham Road
11	Landscape & Townscape	The site is an important part of the countryside, and there could be an increase in the sprawl of the village. The site is also located in the Greenbelt. ✘	The site is located in the Greenbelt and is situated outside an important boundary to the village. This option would mean there will be encroachment of the village into the countryside. ✘	The site is located in the Greenbelt and is a prominent site, as it is an important part of the countryside. ✘	The site is located in the Greenbelt. ✘
12	Health	This option would provide opportunities for open space, and encourage walking and cycling; however there is a busy road separating the site from the village centre which may pose an accident risk and discourage the elderly, disabled people and children from moving around freely in the area. ?	This option would provide opportunities for open space, and encourage walking and cycling. ✓	This option provides the largest amount of open space of the options. This could encourage recreational use. ✓	This option would provide opportunities for open space, and encourage walking and cycling; however there is a busy road separating the site from the village centre which may pose an accident risk and discourage the elderly, disabled people and children from moving around freely in the area. ?
13	Sustainable locational development	This option is located near facilities, but the busy road between the site and the village centre may restrict the easy movement of people. ✓	This option provides good access to facilities. ✓	This option is further from the village, so facilities would be harder to access. ✘	This option is further from the village, so facilities would be harder to access, and there is a busy road between the site and the village centre which may restrict the easy movement of people. ✘
14	Equality & social exclusion	Neutral Effects. -	Neutral Effects. -	Neutral Effects. -	Neutral Effects. -
15	Good quality housing	This option could provide a significant level of affordable housing. ✓	This option could provide a significant level of affordable housing. ✓	This option could provide a significant level of affordable housing. ✓	This option could provide a significant level of affordable housing. ✓

SA Objective		Option 1 Duckhall Farm		Option 2 Rear of Green Lane		Option 3 Grange Farm		Option 4 North of Chesham Road	
16	Community Identity & participation	Neutral Effects.	-	Neutral Effects.	-	Neutral Effects.	-	Neutral Effects.	-
17	Crime and fear of crime	The site is located near the prison which could result in anxiety related to the fear of crime.	x	Neutral Effects.	-	Neutral Effects.	-	The site is located near the prison which could result in anxiety related to the fear of crime.	x
18	Sustainable prosperity and growth	Provision of additional housing means there are more residents, making facilities and shops more viable. This would help with the local economy.	✓	Provision of additional housing means there are more residents, making facilities and shops more viable. This would help with the local economy.	✓	Provision of additional housing means there are more residents, making facilities and shops more viable. This would help with the local economy.	✓	Provision of additional housing means there are more residents, making facilities and shops more viable. This would help with the local economy.	✓
19	Fairer access to services	This option would support provision of and access to jobs and services.	✓	This option would support provision of and access to jobs and services.	✓	This option would support provision of and access to jobs and services.	✓	This option would support provision of and access to jobs and services more significantly than other options, as it is the largest site.	✓
20	Revitalise town centres	This option could help promote the role of the local centre, providing services, housing and employment.	✓	This option could help promote the role of the local centre, providing services, housing and employment.	✓	This option could help promote the role of the local centre, providing services, housing and employment.	✓	This option could help promote the role of the local centre, providing services, housing and employment.	✓

#### High Street Parking Options

SA Objective		Option 1 Two small car parks		Option 2 Formal parking bays	
1	Biodiversity	Potential for adverse effects on biodiversity if the car parks are created on greenfield sites.	?	Neutral Effect.	-
2	Water quality/ quantity	Neutral Effect.	-	Neutral Effect.	-
3	Flood risk	Neutral Effect.	-	Neutral Effect.	-
4	Soils	Potential for soil sealing if the car parks are created on greenfield sites.	?	Neutral Effect.	-

SA Objective		Option 1 Two small car parks		Option 2 Formal parking bays	
5	Greenhouse gas emissions	If this option has the desired effect of reducing congestion in the High Street, this could lead to lower levels of emissions due to traffic flowing more freely. This option should also make it more attractive for cyclists and pedestrians to use the High Street which could have a further positive effect on reducing ghg emissions, but this is dependent on whether car users will switch to cycling or walking as a means of access to the High Street.	✓	If this option has the desired effect of reducing congestion in the High Street, this could lead to lower levels of emissions due to traffic flowing more freely. This option should also make it more attractive for cyclists and pedestrians to use the High Street which could have a further positive effect on reducing ghg emissions, but this is dependent on whether car users will switch to cycling or walking as a means of access to the High Street.	✓
6	Climate change proof	Neutral Effect.	-	Neutral Effect.	-
7	Air Quality	As for SA Objective 5, if the option results in reduced congestion there could be improvements in local air quality which could be further improved if more people walk and cycle. The level of effect is dependent on whether car users will switch to cycling or walking as a means of access to the High Street.	✓	As for SA Objective 5, if the option results in reduced congestion there could be improvements in local air quality which could be further improved if more people walk and cycle. The level of effect is dependent on whether car users will switch to cycling or walking as a means of access to the High Street.	✓
8	Use of brownfield sites	The effects will be dependent on the sites that are used for car parks if this option is taken forward.	?	Neutral Effect.	-
9	Resource efficiency	Neutral Effect.	-	Neutral Effect.	-
10	Historic & cultural assets	Neutral Effect.	-	Neutral Effect.	-
11	Landscape & Townscape	If on-street parking levels are reduced and construction of the car parks has the desired effect of reducing congestion, these should both generate improvements to the townscape and public realm.	✓	Formal parking bays and restriction of other on-street parking should help increase the attractiveness of the High Street but not as significantly as option 1.	✓
		The development of the car parks may result in adverse effects on the landscape/townscape in the areas chosen for the car parking.	?		
12	Health	By encouraging this option, and improving the environment in the High Street for cyclists and	✓	By encouraging this option, and improving the environment in the High Street for cyclists and	✓

SA Objective		Option 1 Two small car parks		Option 2 Formal parking bays	
		walkers, this could have a positive benefit on health and will help promote healthier lifestyles.		walkers, this could have a positive benefit on health and will help promote healthier lifestyles.	
13	Sustainable locations	This option would provide improved access to services and facilities in the High Street.	✓	This option would provide improved access to services and facilities in the High Street.	✓
14	Equality & social exclusion	This option would provide improved access to High Street services and facilities for non-car users.	✓	This option would provide improved access to High Street services and facilities for non-car users.	✓
15	Good quality housing	Neutral Effect.	-	Neutral Effect.	-
16	Community Identity & participation	This option should improve the public realm in the High Street, making it a more attractive place to work or to access services & facilities.	✓	This option should improve the public realm in the High Street, making it a more attractive place to work or to access services & facilities. However if it results in an increase in on-street parking in roads off the High Street, it could adversely affect the quality of life of the residents of those streets.	?
17	Crime and fear of crime	There could be an opportunity in this option for the provision of security measures, such as CCTV in the car parks, which could help reduce crime and the fear of crime.	?	If the formal parking bays are monitored by security measures such as CCTV (for example to monitor payments if charges are imposed) this could help reduce crime and the fear of crime.	?
18	Sustainable prosperity & growth	This option could provide improved access to services and facilities and encourage more people to shop locally. However if shoppers find it inconvenient to use the car parks and walk to the High Street they may choose to shop elsewhere, where parking may be more convenient for the shops. This could result in reduced levels of trade for local retailers and service providers.	?	This option could provide improved access to services and facilities, and encourage more people to shop locally. However if the option results in fewer car parking spaces than were previously available it may become more difficult for people to park and they may then choose to shop elsewhere. This could result in reduced levels of trade for local retailers and service providers.	?
19	Fairer access to services	As for SA Objective 18, the performance against this objective will be dependent on how local businesses are affected by the proposed changes to car parking in Bovingdon.	?	As for SA Objective 18, the performance against this objective will be dependent on how local businesses are affected by the proposed changes to car parking in Bovingdon.	?
20	Revitalise town centres	By seeking to improve the public realm and pedestrian environment in the High Street this option would support the promotion of Bovingdon as a local centre based on sustainable development principles.	✓	By seeking to improve the public realm and pedestrian environment in the High Street this option would support the promotion of Bovingdon as a local centre based on sustainable development principles.	✓

Spatial Strategy Theme Assessment

SA Objective		Assessment of Effect					Mitigation and Enhancement	
		Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects			
					In the short term	In the medium term		In the long term
1	Biodiversity	Theme 1: The spatial strategy recognises that there are some sites of significant wildlife and biodiversity value on the outskirts of the village and therefore the strategy aims to maintain and enhance these, as well as the countryside setting of village. This should have positive effects on this SA objective. Themes 2, 3 and 4 have no predicted effects.	P	L	✓	✓	✓	
2	Water quality/ quantity	Themes 2, 3 and 4 have no predicted effects.	-	-	-	-	-	
3	Flood risk	Themes 1, 2, 3 and 4 have no predicted effects.	-	-	-	-	-	
4	Soils	Themes 1, 2, 3 and 4 have no predicted effects.	-	-	-	-	-	
5	Greenhouse gas emissions	Theme 4: The High Street has high levels of on street parking which makes cycling unattractive. Options are outlined within the Spatial Strategy to help to resolve this issue which should make the High Street more accessible to cyclists. This could encourage more cycling thereby reducing ghg emissions from transport. Themes 1, 2 and 3 have no predicted effects.	P	N	✓	✓	✓	
6	Climate change proof	Themes 1, 2, 3 and 4 have no predicted effects.	-	-	-	-	-	
7	Air Quality	Theme 4: The spatial strategy could encourage more cycling through better cycle access to the High Street. This may have positive effect on air quality, as transport is a key source of air pollution, and should private car users change their mode of travel and use the cyclepaths instead of their car this could reduce emissions to air.	P	L	✓	✓	✓	

SA Objective	Assessment of Effect						Mitigation and Enhancement	
	Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects				
				In the short term	In the medium term	In the long term		
	Themes 1, 2, and 3 have no predicted effects.	-	-	-	-	-		
8	Use of brownfield sites	Theme 1: Lower density development is encouraged by the UDA which means that it would have potential adverse effects against this SA objective which encourages maximising efficient use of land, including higher density developments.	P	L	x	x	x	
		Themes 2, 3 and 4 have no predicted effects.	-	-	-	-	-	
9	Resource efficiency	Themes 1, 2, 3 and 4 have no predicted effects.	-	-	-	-	-	
10	Historic & cultural assets	Theme 1: There is a Conservation Area in the village and a number of Listed Buildings. It is stated in the spatial strategy that the design of new development will respect and relate to the Conservation Area and Listed Buildings, so this would have a positive effect on this objective, as it protects and possibly enhances the historic environment and promotes local distinctiveness.	P	L	✓	✓	✓	
		Themes 2, 3 and 4 have no predicted effects.	-	-	-	-	-	
11	Landscape & Townscape	Theme 1: Small scale growth is envisaged in the village, but it is recognised that it is important not to let the growth interfere with the landscape setting and key views. This would have a positive impact as it should protect the village's character and minimise visual impacts of new development.	P	L	✓	✓	✓	
		Theme 2: The Open Land strategy, as part of the Local Plan, will be progressed, and this will have a positive effect on landscape as the strategy intends to protect open land.	P	L	✓	✓	✓	
		Themes 3 and 4 have no predicted effects.	-	-	-	-	-	
12	Health	Theme 2: The spatial strategy intends to carry forward the existing Open Land Strategy, where open land will be protected, thereby giving opportunities	P	L	✓	✓	✓	

SA Objective	Assessment of Effect						Mitigation and Enhancement	
	Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects				
				In the short term	In the medium term	In the long term		
	for healthier lifestyles as people have access to open land for recreation.							
	Themes 1, 3 and 4 have no predicted effects.	-	-	-	-	-		
13	Sustainable locations	Theme 3: The High Street contains a mix of shops and services which reduce the need to travel, and the spatial strategy aims to maintain this. This will progress this objective by reducing the need to travel due to closer integration of services.	P	L	✓	✓	✓	
	Themes 1, 2 and 4 have no predicted effects.	-	-	-	-	-		
14	Equality & social exclusion	Theme 4: The spatial strategy aims to maintain the existing range of facilities and services within the settlement. This will protect the existing access to services and facilities for the local population.	P	L	✓	✓	✓	
	Themes 1, 2, and 3 have no predicted effects.	-	-	-	-	-		
15	Good quality housing	Theme 2: The spatial strategy identifies a key priority to maximise opportunities for affordable homes, which is a key criterion of this SA objective. However beyond the life of the Spatial Strategy this effect will be uncertain.	P	L	✓✓	✓✓	?	
	Themes 1, 3 and 4 have no predicted effects.	-	-	-	-	-		
16	Community Identity & participation	Theme 1: The spatial strategy aims to protect and enhance views and gateways into and out of the village. This should help maintain community identity to make Bovingdon a more attractive place in which to live, work and visit.	P	R	✓	✓	✓	
	Theme 3: The Bovingdon spatial strategy recognises that the High Street is important to the vibrancy of the village, and aims to maintain this, to ensure that Bovingdon is an attractive place in which to live and work. This contributes to providing a sense of community and identity thereby meeting this SA objective.	P	L	✓	✓	✓		



SA Objective	Assessment of Effect							Mitigation and Enhancement
	Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects				
				In the short term	In the medium term	In the long term		
		Themes 2 and 4 have no predicted effects.	-	-	-	-	-	
17	Crime and fear of crime	Themes 1, 2, 3 and 4 have no predicted effects.	-	-	-	-	-	
18	Sustainable prosperity & growth	Theme 3: The spatial strategy will support local businesses by retaining their designation as a major development site (MDS) within the Green Belt, and promote the shopping function of the local centre. This will encourage economic diversity as it provides for a range of businesses within the village.	<b>P</b>	<b>L</b>	✓	✓	✓	
		Themes 1, 2 and 4 have no predicted effects.	-	-	-	-	-	
19	Fairer access to services	Theme 3: The spatial strategy will support local businesses by retaining their designation as MDS's within the Green Belt, and promote the shopping function of the local centre, both of which encourages local provision of jobs and services.	<b>P</b>	<b>L</b>	✓	✓	✓	
		Themes 1, 2 and 4 have no predicted effects.	-	-	-	-	-	
20	Revitalise town centres	Theme 3: The spatial strategy encourages a mix of services, employment and housing. This could help promote the role and the attractiveness of the local centre.	<b>P</b>	<b>L</b>	✓	✓	✓	
		Themes 1, 2 and 4 have no predicted effects.	-	-	-	-	-	

## Hemel Hempstead Spatial Strategy

### **The Vision for Hemel Hempstead**

The vision supports the majority of the SA objectives relating to the social and economic aspects. The vision aims to provide a minimum of 6,500 new dwellings, regenerate and expand existing employment sites and improve the quality of life of its residents, which should help to progress the SA objectives relating to housing, economic prosperity and local communities. The vision also considers environmental aspects which should progress a number of the environmental objectives. For example, enhancing the setting of the River Gade and creating a new urban park should help to progress the biodiversity and landscape objectives, while conserving the Old Town Conservation Area should help to maintain the historic environment.

However, providing new homes and growing the Maylands business area could have adverse effects on a number of the environmental SA objectives. For example, this growth could lead to the development of greenfield land thereby adversely affecting biodiversity, soils and landscape. Also this growth will likely lead to increased greenhouse gas emissions and other emission to air from the new buildings and associated activities such as transport. However, the vision considers the need for renewable energy technologies and improved public transport links which could help to reduce this growth in emissions.

There is uncertainty over how the Vision will meet the SA objective on 'climate change proof', which could be considered at the next stage in the preparation of the Core Strategy if appropriate.

### **Hemel Hempstead Town Centre Vision**

The vision supports the majority of the SA objectives, particularly those relating to the social and economic aspects. For example, promoting the town centre as a mixed use district which provides retail, office, leisure, cultural and residential uses should help to progress the SA objectives relating to housing, economic facilities, sustainable locations and the local communities. The vision should also have positive effects on the SA objectives on revitalising town centres.

The vision also considers environmental aspects which should help to progress a number of the environmental objectives. For example, restoring the natural character of the River Gade should have positive effects on the biodiversity, water quality and landscape SA objectives. In addition, ensuring the town centre has a distinctive identity with an attractive physical environment should help to protect and enhance the historic environment. Finally, providing a town wide public transport system linking key areas within the town centre and maximising the use of pedestrian connections could help to reduce the need to travel and reduce reliance on the private cars. This could thereby help to reduce greenhouse gas emissions and other emissions to air which may be causing lower levels of air quality.

There is uncertainty over how the Vision will meet the SA objectives on 'resource efficiency' and 'climate change proof', which could be considered at the next stage in the preparation of the Core Strategy if appropriate.

## Hemel Hempstead Town Centre Spatial Principles

SA Objective		Assessment of Effect						Mitigation and Enhancement
		Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects			
					In the short term	In the medium term	In the long term	
1	Biodiversity	Requiring all developments to contribute towards enhancing the environment in the town centre by creating a riverside walk, providing a network of urban open spaces and maximising the views and vistas of greenspaces could have a positive effect on this SA objective.	P	L	✓	✓	✓	
2	Water quality/ quantity	Requiring all developments to design sustainable buildings including water conservation measures and the use of SUDS should have a positive effect on this SA objective.	P	L	✓	✓	✓	
3	Flood risk	Requiring all developments to incorporate SUDS should have a positive effect on this SA objective by reducing the risk of surface flooding in new developments.	P	L	✓	✓	✓	
4	Soils	No predicted effects.	-	-	-	-	-	
5	Greenhouse gas emissions	Focusing retail development and other town centres uses including leisure, offices, hotels, and arts and entertainment, within the town centre along with measures to improve integrated transport, such as though improved pedestrian interchange, cycle and bus priority could help to reduce the need to travel and reduce reliance on the private cars. This could thereby help to reduce greenhouse gas emissions.  Requiring all developments to design sustainable buildings and layouts including energy conservation measures and renewable energy generation should help to progress this SA objective.	P	N	✓	✓	✓	
6	Climate change proof	Requiring all developments to design sustainable buildings and layouts may result in developments	-	-	?	?	?	Consider adding policy wording linked to

SA Objective	Assessment of Effect						Mitigation and Enhancement	
	Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects				
				In the short term	In the medium term	In the long term		
	which are able to respond to changing environmental conditions.						developments which are 'climate change proof' or resilient to the effects of climate change, such as through robust and weather resistant building structures.	
7	Air Quality	Focusing retail development and other town centres uses including leisure, offices, hotels, and arts and entertainment, within the town centre along with measures to improve integrated transport, such as though improved pedestrian interchange, cycle and bus priority could help to reduce the need to travel and reduce reliance on the private cars. This could thereby help to reduce emissions from transport and improve local air quality.	P	L	✓	✓	✓	
8	Use of brownfield sites	No predicted effects.	-	-	-	-	-	
9	Resource efficiency	Requiring all developments to design sustainable buildings and layouts including energy conservation measures and renewable energy generation should help to progress this SA objective.	P	N	✓	✓	✓	Consider adding policy wording linked to developments which consider sustainable construction techniques and using renewable, secondary or sustainably sourced local materials in buildings and infrastructure.
10	Historic & cultural assets	Ensuring that individual developments contribute to a coherent and distinctive sense of place for the town centre as a whole and enhancing the distinct identity of each character zone should help to progress this objective by protecting and enhancing the 'Old Town' Conservation Area. Maximising the views and vistas	P	L	✓	✓	✓	

SA Objective	Assessment of Effect						Mitigation and Enhancement	
	Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects				
				In the short term	In the medium term	In the long term		
		of key buildings could also have a positive effect on this SA objective.						
11	Landscape & Townscape	<p>Ensuring that individual developments contribute to a coherent and distinctive sense of place for the town centre as a whole and enhancing the distinct identity of each character zone should help to progress this objective by protecting and enhancing the townscape.</p> <p>Providing high quality streets and public realm through a co-ordinated design strategy which maximises the views and vistas of key buildings public art and greenspaces should also have a positive effect on this SA objective.</p> <p>Creating new urban spaces and gateways into the town centre through the use of buildings, landscape and public art should also help to progress this objective.</p>	P	L	✓	✓	✓	
12	Health	<p>Improved pedestrian interchanges and cycle and bus priority could encourage more active travel thereby leading to healthier lifestyles.</p> <p>Creating a riverside walk and a network of new urban open spaces could also encourage healthier lifestyles.</p> <p>If the policy leads to a reduction in private car use, particularly, in the town centre this could improve air quality which may have public health benefits.</p>	P	L	✓	✓	✓	
13	Sustainable locations	Focusing retail development and other town centres uses including leisure, offices, hotels, and arts and entertainment, within the town centre should reduce the need to travel thereby helping to progress this SA objective.	P	L	✓	✓	✓	
14	Equality & social	Focusing retail development and other town centres	P	L	✓	✓	✓	

SA Objective	Assessment of Effect						Mitigation and Enhancement
	Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects			
				In the short term	In the medium term	In the long term	
	exclusion	uses including leisure, offices, hotels, and arts and entertainment, within the town centre should improve the provision of community facilities. Also focusing this development in a town centre location which is most accessible by all forms of transport should improve access to facilities and services, particularly for those without access to a car. Measures to improve access by walking, cycling and public transport should also help to progress this objective.					
15	Good quality housing	Incorporating residential development within the town centre uses could help to progress this objective by increasing housing numbers within Hemel Hempstead.	P	L	✓	✓	✓
16	Community Identity & participation	All of the spatial principles should help to improve the quality of the town centre thereby making it a more attractive place in which to live, work and to visit. Requiring individual developments to contribute to providing a distinctive sense of place which should have a positive effect on this SA objective.	P	L	✓	✓	✓
17	Crime and fear of crime	Providing high quality streets and a high quality public realm may help to design out crime.	-	-	?	?	?
18	Sustainable prosperity & growth	Focusing retail development and other town centres uses including leisure, offices, hotels, and arts and entertainment, within the town centre should help to support the local economy, for example through the provision of employment opportunities. All of the spatial principles should help to improve the quality of the town centre which should also help	P	L	✓	✓	✓

SA Objective	Assessment of Effect						Mitigation and Enhancement	
	Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects				
				In the short term	In the medium term	In the long term		
19	Fairer access to services	to support the local economy. Focusing retail development and other town centres uses including leisure, offices, hotels, and arts and entertainment, within the town centre should help to provide local employment opportunities. Measures to improve access by walking, cycling and public transport should also help to progress this objective by improving access to employment opportunities for those without access to a car.	P	L	✓	✓	✓	
20	Revitalise town centres	Focusing retail development and other town centres uses including leisure, offices, hotels, and arts and entertainment, within the town centre should improve the viability and vitality of the town centre. Also, all of the spatial principles should improve the quality of the town centre thereby helping to progress this SA objective.	P	L	✓	✓	✓	

## Hemel Hempstead Town Centre Character Zones

This assessment has focused on issues specific to the development on the character. More general issues relating to the development of housing and employment are covered in other assessment tables, including the overall Core Strategy theme assessment.

SA Objective		Assessment of Effect					Mitigation and Enhancement	
		Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects			
					In the short term	In the medium term		In the long term
1	Biodiversity	Waterhouse Square: Opening up of the River Gade to re-establish and enhance its biodiversity value should help to progress this objective. The provision of a network of new urban open spaces could also have a positive effect on this SA objective should these open spaces contain some biodiversity value, such as trees or other planting.	P	L	✓	✓	✓	
		Old Town: No predicted effects.	-	-	-	-	-	
		Hospital Zone: The provision of a new green open space should have a positive effect on this SA objective. The significant of this effect will be dependent on the biodiversity value of the new greenspace. This zone is adjacent to a wildlife site and this should be considered when developing within this area.	P	L	✓	✓	✓	Need to consider whether this greenspace could help to achieve local BAP targets through the provision of required habitats and species.
		Original Marlowes Zone: No predicted effects.	-	-	-	-	-	
		Marlowes Shopping Zone: No predicted effects.	-	-	-	-	-	
		Plough Zone: This zone is adjacent to a wildlife site and this should be considered when developing within this area.	-	-	-	-	-	
2	Water quality/ quantity	Waterhouse Square: The River Gade runs through the centre of this zone. Opening up of the river to re-establish and enhance its biodiversity value could have an indirect positive effect on water quality.	P	L	✓	✓	✓	



SA Objective	Assessment of Effect					Mitigation and Enhancement	
	Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects			
				In the short term	In the medium term		In the long term
	However, developments within this zone close to the river may have an adverse effect on water quality and this will need to be assessed.						
	Old Town: The River Gade runs through the bottom corner of this zone and therefore any developments close to the river may have an adverse effect on water quality.	-	-	?	?	?	
	Hospital Zone: No predicted effects.	-	-	-	-	-	
	Original Marlowes Zone: No predicted effects.	-	-	-	-	-	
	Marlowes Shopping Zone: The River Gade runs through the bottom corner of this zone and therefore any developments close to the river may have an adverse effect on water quality.	-	-	?	?	?	
	Plough Zone: The River Gade runs through the centre of this zone and therefore any developments close to the river may have an adverse effect on water quality.	-	-	?	?	?	
3	Flood risk						
	Waterhouse Square: This is partly located within flood zones 2 and 3. A flood alleviation scheme manages water flows in the town centre thereby reducing flood risk. Any potential effect would be dependent on the ability of the scheme to cope with future major rainfall events.	-	-	?	?	?	
	Old Town: Part of this area is located within floodzones 2 and 3. However, a flood alleviation scheme manages water flows in the town centre thereby reducing flood risk. Any potential effect would be dependent on the ability of the scheme to cope with future major rainfall events.	-	-	?	?	?	
	Hospital Zone: This area is in low flood risk zone. A flood alleviation scheme manages water flows in the town centre thereby reducing flood risk. Any	-	-	-	-	-	

SA Objective	Assessment of Effect						Mitigation and Enhancement	
	Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects				
				In the short term	In the medium term	In the long term		
	potential effect would be dependent on the ability of the scheme to cope with future major rainfall events.							
	Original Marlowes Zone: This area is in low flood risk zone. A flood alleviation scheme manages water flows in the town centre thereby reducing flood risk. Any potential effect would be dependent on the ability of the scheme to cope with future major rainfall events.	-	-	-	-	-		
	Marlowes Shopping Zone: Part of this area is located within floodzones 2 and 3. However, a flood alleviation scheme manages water flows in the town centre thereby reducing flood risk. Any potential effect would be dependent on the ability of the scheme to cope with future major rainfall events.	-	-	?	?	?		
	Plough Zone: Part of this area is located within floodzones 2 and 3. However, a flood alleviation scheme manages water flows in the town centre thereby reducing flood risk. Any potential effect would be dependent on the ability of the scheme to cope with future major rainfall events.	-	-	?	?	?		
4	Soils	Waterhouse Square: No predicted effects.	-	-	-	-	-	
		Old Town: No predicted effects.	-	-	-	-	-	
		Hospital Zone: No predicted effects.	-	-	-	-	-	
		Original Marlowes Zone: No predicted effects.	-	-	-	-	-	
		Marlowes Shopping Zone: No predicted effects.	-	-	-	-	-	
		Plough Zone: No predicted effects.	-	-	-	-	-	
5	Greenhouse gas emissions	Waterhouse Square: Improving pedestrian and cycle links could encourage use of more sustainable modes of transport thereby reducing greenhouse gas emissions from transport.	P	N	✓	✓	✓	
		Old Town: Improving pedestrian and cycle links could encourage use of more sustainable modes of	P	N	✓	✓	✓	

SA Objective	Assessment of Effect						Mitigation and Enhancement
	Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects			
				In the short term	In the medium term	In the long term	
	transport thereby reducing greenhouse gas emissions from transport.						
	Hospital Zone: Improving pedestrian and cycle links could encourage use of more sustainable modes of transport thereby reducing greenhouse gas emissions from transport.  Potential relocation of the hospital to Maylands could reduce access to health facilities from the town centre and may result in increased number of car trips. However, this is uncertain as the hospital may remain on the existing site.	-	-	?	?	?	
	Original Marlowes Zone: Improving pedestrian and cycle links could encourage use of more sustainable modes of transport thereby reducing greenhouse gas emissions from transport.	P	N	✓	✓	✓	
	Marlowes Shopping Zone: Improving the pedestrian streetscape could encourage use of more sustainable modes of transport thereby reducing greenhouse gas emissions from transport.	P	N	✓	✓	✓	
	Plough Zone: Integrating and enhancing pedestrian access and the streetscape could encourage use of more sustainable modes of transport thereby reducing greenhouse gas emissions from transport.	P	N	✓	✓	✓	The strategy should consider improving cycling links within this zone.
6	Climate change proof						
	Waterhouse Square: No predicted effects.	-	-	-	-	-	
	Old Town: No predicted effects.	-	-	-	-	-	
	Hospital Zone: No predicted effects.	-	-	-	-	-	
	Original Marlowes Zone: No predicted effects.	-	-	-	-	-	
	Marlowes Shopping Zone: No predicted effects.	-	-	-	-	-	
	Plough Zone: No predicted effects.	-	-	-	-	-	
7	Air Quality	P	L	✓	✓	✓	

SA Objective	Assessment of Effect						Mitigation and Enhancement
	Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects			
				In the short term	In the medium term	In the long term	
	of transport thereby reducing emissions to air from transport.						
	Old Town: Improving pedestrian and cycle links could encourage use of more sustainable modes of transport thereby reducing emissions to air from transport.	P	L	✓	✓	✓	
	Hospital Zone: Improving pedestrian and cycle links could encourage use of more sustainable modes of transport thereby reducing emissions to air from transport.  Potential relocation of the hospital to Maylands could reduce access to health facilities from the town centre and may result in increased number of car trips. However, this is uncertain as the hospital may remain on the existing site.	-	-	?	?	?	
	Original Marlowes Zone: Improving pedestrian and cycle links could encourage use of more sustainable modes of transport thereby reducing emissions to air from transport.	P	L	✓	✓	✓	
	Marlowes Shopping Zone: Improving the pedestrian streetscape could encourage use of more sustainable modes of transport thereby reducing emissions to air from transport.	P	L	✓	✓	✓	
	Plough Zone: Integrating and enhancing pedestrian access and the streetscape could encourage use of more sustainable modes of transport thereby reducing emissions to air from transport. This may help to mitigate existing air quality issues at the plough roundabout.	P	L	✓	✓	✓	The strategy could consider improving cycling links within this zone.
8	Use of brownfield sites Waterhouse Square: Regeneration of employment areas to provide homes and other economic and	P	L	✓	✓	✓	

SA Objective	Assessment of Effect						Mitigation and Enhancement
	Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects			
				In the short term	In the medium term	In the long term	
	community facilities will help to progress this SA objective.						
	Old Town: No predicted effects.	-	-	-	-	-	
	Hospital Zone: Redeveloping old industrial and hospital sites will help to progress this SA objective.	P	L	✓	✓	✓	
	Original Marlowes Zone: Regeneration of the southern commercial area and car park to provide housing and other economic and community facilities will help to progress this SA objective.	P	L	✓	✓	✓	
	Marlowes Shopping Zone: Regeneration of the original New Town buildings and the ramped area will help to progress this SA objective.	P	L	✓	✓	✓	
	Plough Zone: No predicted effects.	-	-	-	-	-	
9	Resource efficiency						
	Waterhouse Square: No predicted effects.	-	-	-	-	-	
	Old Town: No predicted effects.	-	-	-	-	-	
	Hospital Zone: No predicted effects.	-	-	-	-	-	
	Original Marlowes Zone: No predicted effects.	-	-	-	-	-	
	Marlowes Shopping Zone: No predicted effects.	-	-	-	-	-	
	Plough Zone: No predicted effects.	-	-	-	-	-	
10	Historic & cultural assets						
	Waterhouse Square: This zone is adjacent to a Conservation Area. Enhancing the quality of the formal vista of St Mary's Church in the Old Town should help to progress this objective.	P	L	✓	✓	✓	The strategy needs to ensure that development within Waterhouse Square complements and does not adversely affect the Old Town character zone to the north.
	Old Town: This zone is within an area of archaeological significance and part of it is a Conservation Area. Enhancing the environmental quality of the Old Town and ensuring the distinctive character and sense of place of the zone is maintained and enhanced should have a positive	P	L	✓	✓	✓	

SA Objective	Assessment of Effect					Mitigation and Enhancement	
	Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects			
				In the short term	In the medium term		In the long term
	effect on this SA objective. St Mary's Church and the other Listed Buildings within the zone should be protected.						
	Hospital Zone: No predicted effects.	-	-	-	-	-	
	Original Marlowes Zone: This zone is adjacent to an area of archaeological significance and a Conservation Area. Ensuring the distinctive character of the surviving Listed Buildings is maintained and their surroundings are enhanced should have a positive effect on this SA objective.	P	L	✓	✓	✓	
	Marlowes Shopping Zone: No predicted effects.	-	-	-	-	-	
	Plough Zone: No predicted effects.	-	-	-	-	-	
11	Landscape & Townscape						
	Waterhouse Square: Regenerating old employment areas into mixed use developments could improve the zone's townscape. Providing a new public square, a network of new urban open spaces and opening up of the River Gade could also help to improve the zone's townscape character.	P	L	✓	✓	✓	
	Old Town: Enhancing the environmental quality of the Old Town and ensuring the distinctive character and sense of place of the zone is maintained and enhanced should have a positive effect on townscape character.	P	L	✓	✓	✓	
	Hospital Zone: Redeveloping old industrial and hospital sites should help to progress this SA objective by improving the quality of the townscape. Providing a new green open space should have a positive effect on this SA objective.	P	L	✓	✓	✓	
	Original Marlowes Zone: Regeneration of the southern commercial area and car park to provide housing and other economic and community facilities should help to progress this SA objective by	P	L	✓	✓	✓	

SA Objective	Assessment of Effect					Mitigation and Enhancement	
	Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects			
				In the short term	In the medium term		In the long term
	improving the quality of the townscape. Ensuring the distinctive character of the surviving Listed Buildings is maintained and their surroundings are enhanced should also have a positive effect on this SA objective.						
	Marlowes Shopping Zone: Regeneration of the original New Town buildings and the ramped area should help to progress this SA objective by improving the quality of the townscape. In addition, improving the pedestrian streetscape should also have a positive effect on this SA objective.	P	L	✓	✓	✓	
	Plough Zone: Enhancing the pedestrian streetscape could help to improve the townscape within this zone.	P	L	✓	✓	✓	
12	Health						
	Waterhouse Square: Improving pedestrian and cycle links could allow for increased daily physical activity. Reducing the need to travel by private vehicles may also limit vehicular emissions, leading to improved air quality and associated health benefits for the local community.  Providing a network of new urban open spaces and opening up of the River Gade could improve community well-being and encourage healthier lifestyles. It could also help people to interact socially.	P	L	✓	✓	✓	
	Old Town: Improving pedestrian and cycle links could allow for increased daily physical activity. Reducing the need to travel by private vehicles may also limit vehicular emissions, leading to improved air quality and associated health benefits for the local community.	P	L	✓	✓	✓	
	Hospital Zone: The hospital within this zone could be	-	-	?	?	?	

SA Objective	Assessment of Effect					Mitigation and Enhancement	
	Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects			
				In the short term	In the medium term		In the long term
	<p>relocated to Maylands, which would make it more difficult to access healthcare facilities for a larger proportion of residents. However a new GP surgery may be provided on the old hospital site providing access to local GP services. The existing GP surgery within the zone could be relocated to Apsley, which would improve access to health care in this other area of the town. However, should the hospital and the GP surgery be relocated and no new surgery created, there will be a shortage of healthcare within the town centre.</p> <p>Improving pedestrian and cycle links could allow for increased daily physical activity. Reducing the need to travel by private vehicles may also limit vehicular emissions, leading to improved air quality and associated health benefits for the local community.</p> <p>Providing a new open greenspace could also encourage increased participation in healthy activities and help people to interact socially.</p>						
	<p>Original Marlowes Zone: Improving pedestrian and cycle links could allow for increased daily physical activity. Reducing the need to travel by private vehicles may also limit vehicular emissions, leading to improved air quality and associated health benefits for the local community. The existing GP surgery will remain within this zone.</p>	P	L	✓	✓	✓	
	<p>Marlowes Shopping Zone: Improving the pedestrian streetscape could allow for increased daily physical activity. Reducing the need to travel by private vehicles may also limit vehicular emissions, leading to improved air quality and associated health benefits for the local community.</p>	P	L	✓	✓	✓	



SA Objective	Assessment of Effect						Mitigation and Enhancement	
	Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects				
				In the short term	In the medium term	In the long term		
	Plough Zone: Integrating and enhancing pedestrian access and the streetscape could allow for increased daily physical activity. Reducing the need to travel by private vehicles may also limit vehicular emissions, leading to improved air quality and associated health benefits for the local community.	P	L	✓	✓	✓		
13	Sustainable locations	Waterhouse Square: Ensuring that Waterhouse Square is integrated with the overall town centre and providing a mix of uses, including homes, employment and leisure should have a positive effect in this SA objective.	P	L	✓	✓	✓	
		Old Town: Ensuring the Old Town is integrated with the overall town centre should have a positive effect in this SA objective.	P	L	✓	✓	✓	
		Hospital Zone: If the hospital remains in this zone then the residents of Hemel Hempstead should have good access to this facility as access to the town centre by sustainable modes of transport should also be improved. However, if the hospital is relocated ease of access to the facility could be reduced. The effect will be dependent on whether the hospital remains within this zone, or if it moves, the level of improvements that are made to accessing Maylands by sustainable modes of transport. Regardless of the hospital move a local doctors surgery should remain in the zone however, providing access to GP services	-	-	?	?	?	
		Original Marlowes Zone: Providing a mix of uses should progress this SA objective by integrating housing, employment and other community facilities.	P	L	✓	✓	✓	
		Marlowes Shopping Zone: Providing a mix of uses within the zone should progress this SA objective.	P	L	✓	✓	✓	
		Plough Zone: No predicted effects.	-	-	-	-	-	

SA Objective	Assessment of Effect						Mitigation and Enhancement
	Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects			
				In the short term	In the medium term	In the long term	
14 Equality & social exclusion	Waterhouse Square: Providing a network of urban open spaces, new civic offices, a performing arts venue, an integrated bus terminal, a library and enhancement to West Herts College should help to improve access to community facilities. Providing public access along the River Gade will also help to progress this SA objective.	P	L	✓	✓	✓	
	Old Town: No predicted effects.	-	-	-	-	-	
	Hospital Zone: If the hospital remains in this zone then the residents of Hemel Hempstead should have good access to this facility as access to the town centre should also be improved. However, if the hospital is relocated ease of access to the facility could be reduced. The effect will be dependent on whether the hospital remains within this zone, or if it moves, the level of improvements that are made to accessing Maylands by sustainable modes of transport. Regardless of the hospital move a local doctor's surgery should remain in the zone however, providing access to GP services. Providing a new open greenspace should improve access to recreation for local residents.	-	-	?	?	?	
	Original Marlowes Zone: Providing housing along with complementary locally relevant economic and community facilities should have a positive effect on this SA objective.	P	L	✓	✓	✓	
	Marlowes Shopping Zone: No predicted effects.	-	-	-	-	-	
	Plough Zone: No predicted effects.	-	-	-	-	-	
15 Good quality housing	Waterhouse Square: Providing housing within this zone should have a positive effect on this SA objective.	P	L	✓	✓	✓	
	Old Town: No predicted effects.	-	-	-	-	-	

SA Objective	Assessment of Effect						Mitigation and Enhancement
	Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects			
				In the short term	In the medium term	In the long term	
	Hospital Zone: Providing housing within this zone should have a positive effect on this SA objective.	P	L	✓	✓	✓	
	Original Marlowes Zone: Providing housing within this zone should have a positive effect on this SA objective.	P	L	✓	✓	✓	
	Marlowes Shopping Zone: No predicted effects.	-	-	-	-	-	
	Plough Zone: No predicted effects.	-	-	-	-	-	
16	Community Identity & participation						
	Waterhouse Square: The proposed strategy for this zone should help to improve the quality of life in the urban area by making the town centre a more attractive place to live, work and visit. In particular, opening up the River Gade and providing new community facilities, such as the performing arts centre will help to progress this objective.	P	L	✓	✓	✓	
	Old Town: Enhancing the environmental quality of this zone should help to improve the quality of life in the urban area by making the town centre a more attractive place to live, work and visit.	P	L	✓	✓	✓	
	Hospital Zone: Redeveloping old industrial and hospital sites and providing a new greenspace should help to improve the quality of life in the urban area by making the town centre a more attractive place to live, work and visit.	P	L	✓	✓	✓	
	Original Marlowes Zone: Regenerating the southern commercial zone should help to improve the quality of life in the urban area by making the town centre a more attractive place to live, work and visit.	P	L	✓	✓	✓	
	Marlowes Shopping Zone: Enhancing the shopping facilities and improving the pedestrian environment should help to improve the quality of life in the urban area by making the town centre a more attractive place to live, work and visit.	P	L	✓	✓	✓	

SA Objective	Assessment of Effect						Mitigation and Enhancement	
	Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects				
				In the short term	In the medium term	In the long term		
	Plough Zone: Improving this gateway zone, especially its pedestrian environment should help to improve the quality of life in the urban area by making the town centre a more attractive place to live, work and visit.	P	L	✓	✓	✓		
17	Crime and fear of crime	Waterhouse Square: No predicted effects.	-	-	-	-	-	
		Old Town: No predicted effects.	-	-	-	-	-	
		Hospital Zone: No predicted effects.	-	-	-	-	-	
		Original Marlowes Zone: No predicted effects.	-	-	-	-	-	
		Marlowes Shopping Zone: No predicted effects.	-	-	-	-	-	
	Plough Zone: No predicted effects.	-	-	-	-	-		
18	Sustainable prosperity & growth	Waterhouse Square: Providing some new employment opportunities within this zone, i.e. within the performing art venue, should help to support this objective.	P	L	✓	✓	✓	
		Old Town: Enhancing the environmental quality of the zone may help to protect and enhance its economic standing and further develop its evening economy if the area becomes more attractive to businesses.	-	-	?	?	?	
		Hospital Zone: Retaining core businesses in this zone should help to support the local economy.	P	L	✓	✓	✓	
		Original Marlowes Zone: Providing some locally relevant economic and community facilities, such as professional services, offices and health care should help to support this objective.	P	L	✓	✓	✓	
		Marlowes Shopping Zone: Retaining and enhancing retail facilities should help to support the local economy.	P	L	✓	✓	✓	
		Plough Zone: Improving pedestrian access to this zone should help to improve access to its existing retail and leisure facilities for those without access to	P	L	✓	✓	✓	

SA Objective	Assessment of Effect						Mitigation and Enhancement	
	Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects				
				In the short term	In the medium term	In the long term		
		a private vehicle. This should help to support the local economy.						
19	Fairer access to services	Waterhouse Square: Providing some new employment opportunities within this zone, i.e. within the performing art venue, supports this objective.	P	L	✓	✓	✓	
		Old Town: Enhancing the environmental quality of the zone may help to create further job opportunities should the zone become more attractive to businesses.	P	L	✓	✓	✓	
		Hospital Zone: Retaining core businesses in this zone should help to progress this objective by providing local employment opportunities. As a large local employer, should the hospital be relocated, accessing these jobs may be more difficult due to the location of the site in the Maylands Business Park. The level of this effect would be dependent on the improvements made for accessing Maylands.	P	L	✓	✓	✓	
		Original Marlowes Zone: Providing some locally relevant economic and community facilities, such as professional services, offices and health care should help to support this objective by providing employment.	P	L	✓	✓	✓	
		Marlowes Shopping Zone: Retaining and enhancing shopping facilities should help to support this objective through the provision of local jobs in retail.	P	L	✓	✓	✓	
		Plough Zone: Improving pedestrian access to this zone should help to improve access to its existing employment opportunities for those without access to a private vehicle.	P	L	✓	✓	✓	
20	Revitalise town centres	Waterhouse Square: The proposed strategy for this zone encourages a mixed use development within the	P	L	✓	✓	✓	

SA Objective	Assessment of Effect					Mitigation and Enhancement	
	Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects			
				In the short term	In the medium term		In the long term
	town centre, thereby helping to progress this SA objective. Providing new open spaces, including a new public square, opening up the River Gade and ensuring this zone is well integrated with the overall town centre should also have a positive effect on helping to revitalise the town centre.						
	Old Town: Enhancing the environmental quality of this zone should improve its attractiveness thereby helping to revitalise the town centre. Ensuring this zone is well integrated with the overall town centre should also have a positive effect on helping to revitalise the town centre.	P	L	✓	✓	✓	
	Hospital Zone: The proposed strategy for this zone encourages a mixed use development within the town centre, thereby helping to progress this SA objective. Providing a new greenspace could also have a positive effect on this SA objective. Improving access to this zone should also have a positive effect on helping to revitalise the town centre.	P	L	✓	✓	✓	
	Original Marlowes Zone: The proposed strategy for this zone encourages a mixed use development within the town centre, thereby helping to progress this SA objective. Ensuring this zone is well integrated with the overall town centre should also have a positive effect on helping to revitalise the town centre.	P	L	✓	✓	✓	
	Marlowes Shopping Zone: The proposed strategy for this zone encourages mixed use development within the town centre, thereby helping to progress this SA objective. Enhancing the zones retail facilities and improving the pedestrian streetscape should also have a positive effect on helping to revitalise the	P	L	✓	✓	✓	

SA Objective	Assessment of Effect						Mitigation and Enhancement
	Nature of Effect Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects			
				In the short term	In the medium term	In the long term	
	town centre						
	Plough Zone: Improving vehicular and pedestrian access to this mixed use zone should have a positive effect on helping to revitalise the town centre.	<b>P</b>	<b>L</b>	✓	✓	✓	

## Hemel Hempstead Spatial Strategy Themes

SA Objective		Assessment of Effect					Mitigation and Enhancement	
		Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects			
					In the short term	In the medium term		In the long term
1	Biodiversity	<p>Theme 1: Protecting wildlife corridors and providing additional open space should have a positive effect on this SA objective. The creation of a new Borough Park, better connected greenspaces, and the protection and enhancement of existing open space will help to progress this SA objective.</p> <p>The urban park project which will enhance the Two Water green gateway to the town centre and green corridor along the valley will also help to progress this SA objective.</p>	<b>P</b>	<b>L</b>	✓	✓	✓	
		<p>Theme 2: The level of housing required in the town will require some development on greenfield land. Development of greenfield land could have adverse impacts on habitats and species due to landtake, habitat fragmentation and urban pollution issues. The significance of the effect will be dependent on the biodiversity value of the greenfield to be developed.</p> <p>The proposed new town stadium, extreme sports centre and hospital could also have an adverse effect on biodiversity should these be developed on greenfield land.</p> <p>However these effects may be mitigated through aiming to lead in 'green development' and enhance the town's environment.</p>	<b>P</b>	<b>L</b>	x	x	x	
		<p>Theme 3: Whilst the allocation of new employment land at Maylands could see development on greenfield sites which could have adverse effects on biodiversity the effect on this SA objective has been</p>	-	-	?	?	?	



SA Objective	Assessment of Effect						Mitigation and Enhancement	
	Nature of Effect Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects				
				In the short term	In the medium term	In the long term		
	forecast as uncertain. This is because there is potential at the site to incorporate biodiversity enhancements, e.g. by providing new open spaces and retaining characteristic habitats and species.							
	Theme 4: Traffic modelling suggests that the proposed developments in the town will produce additional traffic thereby requiring a number of infrastructure upgrades. Depending on their location these upgrades could have adverse effects on biodiversity, for example causing habitat fragmentation. In addition, the proposed park and ride site within Maylands may be located on greenfield land and this may also affect biodiversity.	-	-	?	?	?		
2	Water quality/ quantity	Theme 1: No predicted effects.	-	-	-	-	-	
		Theme 2: Dacorum Borough is already within an area identified as 'over-abstracted'. Providing 2,900 new homes will put direct pressure on these already under pressure water resources. The effect may become more significant over time as more dwellings are built and the risk of periodic water shortages increase. Domestic daily water consumption in the Borough is currently 192 litres per capita, which is above the national average of 148 litres. Housing development on greenfield sites will inevitably increase impermeable surfaces resulting in increased water run-off and potential pollution to water courses. However these effects may be mitigated through aiming to lead in 'green development' and enhance the town's environment.	P	L	x	x	x	The strategy should encourage measures which reduce water consumption, such as grey water recycling.
		Theme 3: Dacorum Borough is within an area already	P	R	x	x	x	The strategy should

SA Objective	Assessment of Effect						Mitigation and Enhancement	
	Nature of Effect Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects				
				In the short term	In the medium term	In the long term		
	<p>identified as 'over-abstracted' (Colne CAM, EA). Providing new employment will put direct pressure on these already under pressure water resources. The effect is likely to become more significant over time as the risk of periodic water shortages increase.</p> <p>Within Maylands there are potential effects on groundwater and aquifer supplies resulting from new development, especially as there is existing potential contamination from the Buncefield incident.</p>						encourage the use of water minimisation methods, such as grey water recycling, and the use of SUDS.	
	<p>Theme 4: Traffic modelling suggests that the proposed developments in the town will produce additional traffic thereby requiring a number of infrastructure upgrades. Depending on their location these upgrades could have adverse effects on water quality, for example developing a park and ride site on greenfield land could increase impermeable surfaces resulting in increased water run-off and potential pollution to water courses.</p>	-	-	?	?	?	The proposed park and ride should be constructed of porous surfaces to reduce run-off.	
3	Flood risk	Theme 1: No predicted effects.	-	-	-	-	-	
		Theme 2: Parts of Hemel Hempstead lie within areas of flood risk, which may expand due to the implications of climate change. A number of the potential housing allocation sites are located within flood risk zones. Therefore, should these sites be developed there is potential for adverse effects on this objective.	-	-	?	?	?	The strategy should steer development in Hemel Hempstead away from floodplains.
		Theme 3: Part of the town centre is located within floodzones 2 and 3. However, a flood alleviation scheme manages water flows in the town centre thereby reducing flood risk. Any potential effect would be dependent on the ability of the scheme to	-	-	?	?	?	

SA Objective	Assessment of Effect						Mitigation and Enhancement	
	Nature of Effect Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects				
				In the short term	In the medium term	In the long term		
	cope with future major rainfall events. Even though Maylands is not a risk from fluvial flooding, the additional area of impermeable surfaces and associated soil sealing that will result from new developments may increase the risk of flooding through surface run off in times of heavy rainfall (pluvial flooding).							
	Theme 4: Traffic modelling suggests that the proposed developments in the town will produce additional traffic thereby requiring a number of infrastructure upgrades. Depending on their location these upgrades could have adverse effects on flood risk, for example developing a park and ride site on greenfield land could increase impermeable surfaces resulting in increased water run-off.	-	-	?	?	?	The strategy should steer development in Hemel Hempstead away from floodplains.	
4	Soils	Theme 1: No predicted effects.	-	-	-	-	-	
	Theme 2: Housing development on greenfield land would have adverse effects on this SA objective through soil sealing and soils loss. The proposed new town stadium, extreme sports centre and hospital could also have an adverse effect on soils should these be developed on greenfield land. However these effects may be mitigated through aiming to lead in 'green development'.	P	L	x	x	x	The strategy should steer development in Hemel Hempstead away from high quality agricultural land.	
	Theme 3: The allocation of new employment land at Maylands could see development on greenfield sites which could have adverse effects on soils due to soil sealing and soil loss.	P	L	x	x	x		
	Theme 4: Traffic modelling suggests that the proposed developments in the town will produce	-	-	?	?	?		

SA Objective	Assessment of Effect						Mitigation and Enhancement	
	Nature of Effect Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects				
				In the short term	In the medium term	In the long term		
	additional traffic thereby requiring a number of infrastructure upgrades. Depending on their location these upgrades could have adverse effects on soils, for example developing a park and ride site on greenfield land could result in soil sealing.							
5	Greenhouse gas emissions	<p>Theme 1: The regeneration at Maylands Business Park proposes the development of a Green Energy Centre which should produce heat and power for the business area and potential new residential areas. The Council also proposes that the Waterhouse Square development will include Combined Heat and Power and some Zero Carbon buildings. The strategy also requires new development to reduce carbon emissions in line with the Code for Sustainable Homes (CSH) and other Government policies and Core Strategy policies. These policies should help to reduce the growth of carbon emissions from these new developments.</p> <p>Theme 2: Housing development will result in an increase in greenhouse gas emissions from new housing and associated activities. Building 2,900 new homes could lead to an increase in green house gas emissions of approximately 16,700 tonnes per annum. This is based upon estimated per capita domestic CO<sub>2</sub> emissions of 2.4 tonnes multiplied by the average number of occupants per household in the Borough of 2.4 [Source: Audit Commission Local Area Profile].</p> <p>However these effects may be mitigated through aiming to lead in 'green development'.</p> <p>Relocating the town stadium to the edge of the town</p>	P	N	✓	✓	✓	The strategy should require new commercial development to meet high BREEAM standards.
			P	N	x	x	x	<i>Theme 1 requires new development to reduce greenhouse gas emissions in line with the Code for Sustainable Homes and other government policies.</i>

SA Objective	Assessment of Effect						Mitigation and Enhancement
	Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects			
				In the short term	In the medium term	In the long term	
	at Maylands is likely to result in increased ghg emissions.						
	<p>Theme 3: Activities relating to the new employment sites and the provision of new jobs within the town, i.e. transport activities will result in some increases in greenhouse gas emissions. However increasing employment opportunities in the town could reduce the need to travel.</p> <p>In addition, as much of the proposed economic development is within Maylands, an area which is proposing measures to reduce the growth in emissions through introducing a Green Energy Centre, a sustainable transport network and the Maylands Gateway which will become a high quality office led business park with technology based/green business initiatives, these effects could be mitigated.</p>	-	-	?	?	?	<i>Theme 4 aims to improve access by public transport.</i>
	<p>Theme 4: Developing a new integrated bus station in the town centre, enhancing the railway station, providing a park and ride at Maylands and improving the bus services could reduce the need to travel by private vehicle thereby helping to reduce the growth of green house gas emissions likely as a result of development within the town.</p> <p>Traffic modelling suggests that the proposed developments in the town will produce additional traffic thereby requiring a number of infrastructure upgrades. These upgrades may also lead to induced traffic thereby leading to increased greenhouse gas emissions. The potential effects of these upgrades will need to be carefully considered as the strategy develops.</p>	-	-	?	?	?	

SA Objective	Assessment of Effect						Mitigation and Enhancement	
	Nature of Effect Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects				
				In the short term	In the medium term	In the long term		
6	Climate change proof	Theme 1: No predicted effects.	-	-	-	-	-	Consider policy wording linked to providing developments and infrastructure which is 'climate proof' or resilient to the effects of climate change such as through robust and weather resistant building structures.
		Theme 2: No predicted effects.	-	-	-	-	-	
		Theme 3: No predicted effects.	-	-	-	-	-	
		Theme 4: No predicted effects.	-	-	-	-	-	
7	Air Quality	Theme 1: No predicted effects.	-	-	-	-	-	
		Theme 2: Building new homes will contribute to background emissions through an increase in vehicles on the road in Hemel Hempstead. Relocating the town stadium to the edge of the town at Maylands is likely to result in increased emissions to air.	<b>P</b>	<b>L</b>	<b>x</b>	<b>x</b>	<b>x</b>	<i>Theme 4 aims to improve access by public transport.</i>
		Theme 3: Activities relating to the new employment sites and the provision new jobs, i.e. transport activities will result in some increases in emissions to air therefore potentially having an adverse effect on local air quality close to these sites. The provision of an integrated transport network may help to mitigate these effects.	<b>P</b>	<b>L</b>	<b>x</b>	<b>x</b>	<b>x</b>	<i>Theme 4 aims to improve access by public transport.</i>
		Theme 4: Developing a new integrated bus station in the town centre, enhancing the railway station, providing a park and ride at Maylands and improving the bus services could reduce the need to travel by private vehicle thereby helping to reduce the growth of emissions likely as a result of development within	-	-	?	?	?	

SA Objective	Assessment of Effect						Mitigation and Enhancement	
	Nature of Effect Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects				
				In the short term	In the medium term	In the long term		
	<p>the town.</p> <p>Traffic modelling suggests that the proposed developments in the town will produce additional traffic thereby requiring a number of infrastructure upgrades. These upgrades may also lead to induced traffic thereby leading to increased emissions. The potential effects of these upgrades will need to be carefully considered as the strategy develops.</p> <p>Implementing the North East Relief road could reduce congestion at the Plough Roundabout thereby potentially improving air quality in this area.</p>							
8	Use of brownfield sites	<p>Theme 1: No predicted effects.</p> <p>Theme 2: The level of housing required in the town will require some development on greenfield land (potential sites include Nash Mills and the Manor Estate). The proposed new town stadium, extreme sports centre and hospital could also have an adverse effect on this SA objective should these be developed on greenfield land.</p> <p>Theme 3: Whilst some new employment development will take place on previously developed land, which has a positive effect on this objective, there are areas of open land that will be lost, for example, in the Maylands Gateway. The loss of this open land will have a negative impact on this objective, as it does not encourage development on previously developed land.</p> <p>Theme 4: Traffic modelling suggests that the proposed developments in the town will produce additional traffic thereby requiring a number of infrastructure upgrades. Depending on their location</p>	-	-	-	-	-	
			P	L	x	x	x	
			P	L	x	x	x	
			-	-	?	?	?	

SA Objective	Assessment of Effect						Mitigation and Enhancement	
	Nature of Effect Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects				
				In the short term	In the medium term	In the long term		
	these upgrades could have adverse effects on this SA objective, for example the park and ride site at Maylands may be built on greenfield land.							
9	Resource efficiency	Theme 1: The regeneration at Maylands Business Park proposes the development of a Green Energy Centre which should produce heat and power for the business area and potential new residential areas. The Council also proposes that the Waterhouse Square development will include Combined Heat and Power and some Zero Carbon buildings. The strategy also requires new development to reduce carbon emissions in line with the CSH and other Government and Core Strategy policies. These policies should help to reduce the growth of carbon emissions from these new developments.	P	N	✓	✓	✓	
		Theme 2: Housing growth will put demands on natural resources and result in increased waste generation. However these effects may be mitigated through aiming to lead in 'green development'.	P	L	x	x	x	The Strategy needs to encourage minimising levels of household waste and increasing levels of recycling and composting.
		Theme 3: Employment growth will put demands on natural resources through construction and use. It will also result in increased waste generation. However the vision for Maylands where a large proportion of employment development will take place, to be the focus for high quality energy efficient development, such as though the provision of a Green Energy Centre, could have a positive effect on this SA objective. The effect is therefore considered to be uncertain depending on resource efficiency measures which are put in place in the other new or extended employment zones.	P	L	?	?	?	



SA Objective	Assessment of Effect						Mitigation and Enhancement	
	Nature of Effect Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects				
				In the short term	In the medium term	In the long term		
		Theme 4: No predicted effects.	-	-	-	-	-	
10	Historic & cultural assets	Theme 1: Requiring development in the Old Town to relate sensitively to the existing Conservation Area, buildings and views of key buildings should progress this SA objective.	<b>P</b>	<b>N</b>	✓	✓	✓	
		Theme 2: Housing other developments, including a town stadium, extreme sports centre and hospital could have adverse effects on known or undiscovered cultural heritage resources.	-	-	?	?	?	
		Theme 3: Employment development could have adverse effects on known or undiscovered cultural heritage resources. A few of the potential employment sites contain historic or cultural assets and should these sites be developed there may be adverse effects on these assets. For example, development in the Old Town will need to consider the zones Listed Buildings.	-	-	?	?	?	
		Theme 4: Traffic modelling suggests that the proposed developments in the town will produce additional traffic thereby requiring a number of infrastructure upgrades. Depending on their location these upgrades may have adverse effects on this SA objective.	-	-	?	?	?	
11	Landscape & Townscape	Theme 1: Maintaining existing views (of open space and the countryside) providing additional open space and fitting within the open land structure and green space strategy should have a positive effect on maintaining the character of the town. Enhancing the Two Waters green gateway to the town centre and the green corridor along the valley should have also have a positive effect on this SA objective.	<b>P</b>	<b>L</b>	✓	✓	✓	
		Theme 2: Housing and other developments, including	<b>P</b>	<b>L</b>	x	x	x	

SA Objective	Assessment of Effect						Mitigation and Enhancement
	Nature of Effect Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects			
				In the short term	In the medium term	In the long term	
	a town stadium, extreme sports centre and hospital, on greenfield sites on the edge of the town are likely to have adverse effects on landscape. However these effects may be mitigated through aiming to lead in 'green development' and enhance the town's environment.						
	Theme 3: By providing for new jobs in the town, with some employment land potentially being located on green field sites, there are likely to be adverse effects on landscape. However, there are opportunities for enhancement of areas of poor landscape/ townscape, such as within Maylands and areas within the town centre, through new high quality employment developments and the provision of new urban open space.	-	-	?	?	?	
	Theme 4: Traffic modelling suggests that the proposed developments in the town will produce additional traffic thereby requiring a number of infrastructure upgrades. Depending on their location these upgrades may have adverse effects on this SA objective.	-	-	?	?	?	
12	Health						
	Theme 1: Providing a new Borough Park, additional leisure space and better connected greenspaces could encourage increased participation in healthy activities thereby helping to progress this SA objective.	P	L	✓	✓	✓	
	Theme 2: The large scale development of new community facilities for children young people and the elderly (including day care provision) within the town centre and at Maylands could improve access to health care facilities.	P	L	✓	✓	✓	

SA Objective	Assessment of Effect						Mitigation and Enhancement	
	Nature of Effect Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects				
				In the short term	In the medium term	In the long term		
	<p>Developing a new local hospital with an Urgent Care Centre and GP led services in the town centre or at Maylands could improve healthcare. However consideration will need to be given to access issues should the hospital be located in the east of the town.</p> <p>A new health centre in Apsley, other additional surgeries and improvements to existing health centres should also improve access to health facilities.</p> <p>The provision of new town stadium which includes other leisure and recreation facilities could encourage participation in healthy activities.</p>							
	<p>Theme 3: Increasing employment opportunities in the town could result in improved health and well-being. Providing new open spaces, leisure and health facilities should also have a positive effect on this SA objective through encouraging healthy lifestyles and improving access to health facilities.</p>	P	L	✓	✓	✓		
	<p>Theme 4: Improving public transport services could encourage more people to use this more active form of travel, which normally requires some level of walking or cycling.</p> <p>Improving public transport services could reduce the need to travel by private car thereby reducing the number of vehicles on the road. This could improve local air quality and lead to health benefits for the local community.</p>	P	L	✓	✓	✓		
13	Sustainable locations	Theme 1: No predicted effects.	-	-	-	-	-	
		Theme 2: Focusing housing development (i.e. 2,400 dwellings) in the town centre and providing some	-	-	?	?	?	

SA Objective	Assessment of Effect						Mitigation and Enhancement	
	Nature of Effect Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects				
				In the short term	In the medium term	In the long term		
	<p>housing in Maylands should have a positive effect on this objective through closer integration of housing, employment and other services.</p> <p>Relocation of the hospital to Maylands could reduce accessibility to health care facilities for residents.</p>							
	<p>Theme 3: Providing employment within a few key areas within the town, including the town centre, Maylands, Paradise, and areas in Two Waters and Apsley could support this objective by integrating housing, employment and other services.</p> <p>Focusing retail development in the town centre supports this SA objective by ensuring most retail is located close to the centre of the population. However, increasing the role of the main out of town centres could have a negative effect on this SA objective as people often have to travel by car to these locations.</p>	P	L	✓	✓	✓		
	<p>Theme 4: Improving public transport services could improve access to health facilities.</p>	P	L	✓	✓	✓		
14	Equality & social exclusion	<p>Theme 1: Protecting existing open space and providing additional leisure space could help to improve access to recreation facilities for the local community.</p>	P	L	✓	✓	✓	
		<p>Theme 2: The large scale development of new community facilities for children young people and the elderly (including day care provision) within the town centre and at Maylands should progress this objective.</p> <p>The strategy considers the need to make improvements to existing schools as well as the provision of new schools to accommodate growth in</p>	P	L	✓	✓	✓	

SA Objective	Assessment of Effect						Mitigation and Enhancement	
	Nature of Effect Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects				
				In the short term	In the medium term	In the long term		
	<p>the town. This theme should also lead to improvements in access to healthcare.</p> <p>The strategy also discusses the provision of a new performing arts centre, a multicultural centre, new civic buildings, a riverside walk and community facilities which will provide opportunities for cultural or faith meeting places. All of which should help to progress this SA objective.</p>							
	<p>Theme 3: Regeneration of the town centre, including the provision of improved retail, leisure, employment, health and residential opportunities should have a positive effect on this SA objective by improving access to these types of facilities.</p> <p>Regeneration and expansion of the Maylands area for employment and the increased opportunities that will result should help to provide opportunities for tackling some of the issues relating to deprivation in the parts of the town in and around the Maylands area.</p> <p>Refurbishing local centres could improve access to shops for local people.</p>	<b>P</b>	<b>L</b>	✓	✓	✓		
	<p>Theme 4: Improving public transport services should improve access to community facilities for those people without access to a private vehicle.</p>	<b>P</b>	<b>L</b>	✓	✓	✓		
15	Good quality housing	Theme 1: No predicted effects.	-	-	-	-	-	
		Theme 2: The strategy aims to provide 2,900 new dwellings within the town. The new housing will provide a mix of housing types and tenures.	<b>P</b>	<b>L</b>	✓✓	✓✓	✓✓	
		Theme 3: Providing housing within a number of the town centre zones and within Maylands should have a positive effect on this SA objective.	<b>P</b>	<b>L</b>	✓	✓	✓	

SA Objective	Assessment of Effect						Mitigation and Enhancement	
	Nature of Effect Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects				
				In the short term	In the medium term	In the long term		
		Theme 4: No predicted effects.	-	-	-	-	-	
16	Community Identity & participation	Theme 1: Delivering the urban park project, which aims to enhance the Two Waters green gateway to the town centre and the green corridor along the valley, and providing additional open/greenspaces should help to improve the quality of life in urban areas by making them more attractive places in which to live, work and visit.	P	L	✓	✓	✓	
		Theme 2: The strategy should help to progress this SA objective by providing a multicultural centre and other new community facilities which include opportunities for cultural and/or faith meeting places. Also improving provision of open space should help to improve the quality of urban life.	P	L	✓	✓	✓	
		Theme 3: Enhancing employment, retail and leisure opportunities in the town could make the urban areas more attractive places to live, work and visit.	P	L	✓	✓	✓	
		Theme 4: Improving public transport services could reduce the need to travel by private car thereby reducing the number of vehicles on the road and improve the quality of the urban environment.	P	L	✓	✓	✓	
17	Crime and fear of crime	Theme 1: No predicted effects.	-	-	-	-	-	
		Theme 2: No predicted effects.	-	-	-	-	-	
		Theme 3: Increasing employment opportunities in the town could result in reduced levels of crime.	P	L	✓	✓	✓	
		Theme 4: No predicted effects.	-	-	-	-	-	
18	Sustainable prosperity & growth	Theme 1: Delivering the urban park project, which aims to enhance the Two Waters green gateway to the town centre and the green corridor along the valley, and providing additional open/greenspaces should help to improve the quality of urban environment. This should have a positive effect on	P	L	✓	✓	✓	

SA Objective	Assessment of Effect						Mitigation and Enhancement
	Nature of Effect Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects			
				In the short term	In the medium term	In the long term	
	this SA objective by supporting the local economy through the provision of a high quality environment.						
	Theme 2: Providing 2,900 new homes and improving access to community and leisure activities will support the economy by providing necessary infrastructure and producing a high quality urban environment in which people will want to live and work.	P	L	✓	✓	✓	
	Theme 3: Creating new businesses and employment opportunities in the town would have a positive effect for the SA objective. In particular, regenerating the town centre and Maylands will help to support the expansion of the local economy.	P	L R	✓✓	✓✓	✓✓	
	Theme 4: If by improving public transport services fewer people use their private vehicle this could lead to reduced traffic congestion which would help to support the local economy.  Traffic modelling suggests that the proposed developments in the town will produce additional traffic thereby requiring a number of infrastructure upgrades. However, these upgrades may also lead to induced traffic thereby leading to increased congestion thereby having an adverse effect on the local economy. The potential effects of these upgrades will need to be carefully considered as the strategy develops.  Developing the North East Relief Road should help to support the local economy by reducing traffic problems within the Maylands area.	-	-	?	?	?	
19	Fairer access to services	-	-	-	-	-	
	Theme 1: No predicted effects.						
	Theme 2: New leisure and community facilities	P	L	✓	✓	✓	

SA Objective	Assessment of Effect						Mitigation and Enhancement
	Nature of Effect Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects			
				In the short term	In the medium term	In the long term	
	should help to support this SA objective through the provision of some employment opportunities.						
	Theme 3: Expanding employment opportunities within the town should progress this objective through the provision of local jobs close. Regenerating the Maylands business area will provide local jobs and increase access to services for the business community working in Maylands.	P	L R	✓	✓	✓	
	Theme 4: Improving public transport services should improve access to employment opportunities for those people without access to a private vehicle.	P	L	✓	✓	✓	
20	Revitalise town centres						
	Theme 1: No predicted effects.	-	-	-	-	-	
	Theme 2: Providing 2,400 new dwellings in the town centre is likely to have a positive effect on this SA objective due to the increasing the levels of people living within the centre of the urban area. The provision of new arts and other community facilities within the town centre, including a new public square should also help to progress this SA objective.	P	L	✓	✓	✓	
	Theme 3: Regeneration of the town centre, including the provision of improved retail, leisure, employment, health and residential opportunities should have a positive effect on this SA objective. Buildings a first rate business park at Maylands with additional services and facilities as well as some housing should revitalise the local centre and promote sustainable development principles. Refurbishing the other local centres within the town will also help to progress this SA objective. However it should be noted that developing the Maylands site contradicts the SA objectives other aim of	P	L	✓✓	✓✓	✓✓	



SA Objective	Assessment of Effect						Mitigation and Enhancement
	Nature of Effect Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects			
				In the short term	In the medium term	In the long term	
	discouraging out of town centre development.						
	Theme 4: Improving public transport services could reduce the need to travel by private car thereby reducing the number of vehicles in the town centre and improving the quality of the urban environment.	P	L	✓	✓	✓	

## Kings Langley Spatial Strategy

### **Vision:**

Kings Langley will remain a vibrant compact village, delivering a high quality of life for local residents and businesses. Its long term strategy to 2031 will emphasise the conservation of the natural, historic and built heritage of the village, particularly in the context of its setting in the Gade Valley, the Grand Union Canal and village centre. Limited growth will help support vitality of the village. Development will be sympathetic to local character and will be used to secure a high level of affordable, sustainable housing and improvements to outdoor leisure space. The local centre will remain the heart of the village and continue to deliver a range of local shops, services and facilities. Support will be given to local businesses, schools and community facilities, and important wildlife and biodiversity resources will be protected. The vision will have regard to the Three Rivers District Council Core Strategy.

### Vision Assessment

This Vision supports the majority of the SA/SEA objectives, particularly those that relate to social aspects, such as housing, economy, access and provision of services, as well as open space. There is also consideration of the natural environment (i.e. landscape, water and biodiversity), especially with regards to the setting of Kings Langley in the Gade Valley. In terms of the less tangible SA/SEA topics such as air and soil, the Vision is less supportive; however, this is not indication of any negative relationships being identified. In relation to the local economy, the Vision provides support for local supply chains which should help to achieve the related SA/SEA objective. There is uncertainty over how the Vision will meet the SA objectives such as 'resource efficiency' and 'climate change proof', which could be considered at the next stage in the preparation of the Core Strategy if appropriate.

### Development Options Assessment

SA Objective		Option 1 Rectory Farm		Option 2 Wayside and Broadfield Farms	
1	Biodiversity	Located adjacent to a wildlife site, this is a partly greenfield site and there would therefore be loss of some habitats.	✘	The site is part greenfield and there would therefore be loss of some habitats.	✘
2	Maintain/ enhance water quality/ quantity	The effect of this option on water quality and quantity is uncertain. This is due to the proximity of the site to the canal and the potential for adverse effects from run-off.	?	Neutral Effects.	-
3	Flood risk	A small part of the site is located in flood zones 2 and 3 and there would therefore be a flood risk for	✘	Neutral Effects.	-

SA Objective		Option 1 Rectory Farm		Option 2 Wayside and Broadfield Farms	
		new development and potentially exacerbated flood risk elsewhere. However, the vast majority of the site is in the lower risk flood zone 1.			
4	Soils	This option would result in a loss of greenfield land, and development would result in soil sealing.	✘	This option would result in a loss of greenfield land, and development would result in soil sealing.	✘
5	Greenhouse gas emissions	The option is located close to the village and schools, and whilst being a fair distance from the station it has fairly direct access. This could encourage cycling and walking rather than use of the car, which would help to reduce the growth in ghg emissions.	✓	The option is located close to the village, and is walking distance to the station. This could encourage cycling and walking rather than use of the car, which would help to reduce the growth in ghg emissions.	✓
6	Climate change proof	Neutral Effects.	-	Neutral Effects.	-
7	Air Quality	The option is located close to the village and schools, and whilst being a fair distance from the station it has fairly direct access. This could encourage cycling and walking rather than use of the car, which could improve local air quality.	✓	The option is located close to the village, and is walking distance to the station. This could encourage cycling and walking rather than use of the car, which could improve local air quality.	✓
8	Use of brownfield sites	The site is located in a mixed area of PDL and greenfield, but the majority of the site is open in character.	✘	The site is located in an area that is partly greenfield.	✘
9	Resource efficiency	Neutral Effects.	-	Neutral Effects.	-
10	Historic & cultural assets	The area of the site is classified as "20 <sup>th</sup> century agriculture" (HLC).	-	The site is located in "18 <sup>th</sup> -19 <sup>th</sup> century enclosure" (HLC), and has one Listed Building.	✘
11	Landscape & Townscape	The site is located in Greenbelt, and is located near the Canal corridor, leading to possible erosion of the important wildlife corridor. Removal of unattractive buildings will help improve the townscape by providing a better outlook.	✘	The site is located in the Greenbelt on a sensitive open valley side location and there are no physical constraints to south and west of the site to contain development. Future development in this location could result in encroachment into the countryside in this area.	✘
12	Health	This option would provide opportunities for open space, and encourage walking and cycling.	✓	This option would provide opportunities for open space, and encourage walking and cycling.	✓

SA Objective		Option 1 Rectory Farm		Option 2 Wayside and Broadfield Farms	
				The site would be affected by noise from both the M25 and the A41.	x
13	Sustainable locational development	This option is located near to local facilities.	✓	This option provides good access to local facilities.	✓
14	Equality & social exclusion	This option is located near facilities and open space.	✓	This option provides good access to facilities and open space.	✓
15	Good quality housing	This option would provide a significant level of affordable housing.	✓	This option would provide a significant level of affordable housing.	✓
16	Community Identity & participation	This option would result in removal of unattractive buildings which would improve the local environment.	✓	Neutral Effects.	-
17	Crime and fear of crime	Neutral Effects.	-	Neutral Effects.	-
18	Sustainable prosperity and growth	Provision of additional housing means there are more residents, making facilities and shops more viable. This would help with the local economy.	✓	Provision of additional housing means there are more residents, making facilities and shops more viable. This would help with the local economy.	✓
19	Fairer access to services	This option would support provision of and access to jobs and services.	✓	This option would support provision of and access to jobs and services.	✓
20	Revitalise town centres	This option could help promote the role of the local centre, providing services, housing and employment.	✓	This option could help promote the role of the local centre, providing services, housing and employment.	✓

Spatial Strategy Theme Assessment

SA Objective		Assessment of Effect					Mitigation and Enhancement	
		Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects			
					In the short term	In the medium term		In the long term
1	Biodiversity	Theme 1: Kings Langley has a number of sites of significant wildlife and biodiversity value on the outskirts of the village, which the spatial strategy aims to protect and enhance. This will ensure that this objective is met, and would have a positive effect.	P	L	✓	✓	✓	
		Themes 2, 3 and 4 have no predicted effects.	-	-	-	-	-	
2	Water quality/ quantity	Theme 1: The spatial strategy recognises that the canal is an important part of Kings Langley and that future development must relate well to the canal corridor. Therefore, this could have a positive impact on water quality and should help to maintain the water dependent wildlife sites in the area.	P	R	✓	✓	✓	
		Themes 2, 3 and 4 have no predicted effects.	-	-	-	-	-	
3	Flood risk	Themes 1, 2, 3 and 4 have no predicted effects.	-	-	-	-	-	
4	Soils	Themes 1, 2, 3 and 4 have no predicted effects.	-	-	-	-	-	
5	Greenhouse gas emissions	Theme 1: The spatial strategy indicates that new developments will be built to high, sustainable standards, which should encourage more energy efficient designs which would help reduce greenhouse gas emissions.	P	N	✓	✓	✓	
		Themes 2, 3 and 4 have no predicted effects.	-	-	-	-	-	
6	Climate change proof	Theme 1: The spatial strategy indicates that new developments will be built to high, sustainable standards. It is not however clear whether the	P	L	?	?	?	

SA Objective	Assessment of Effect						Mitigation and Enhancement
	Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects			
				In the short term	In the medium term	In the long term	
	sustainable measures will encourage design measures that will allow buildings to withstand the likely impacts of climate change, hence the uncertain effect.						
	Themes 2, 3 and 4 have no predicted effects.	-	-	-	-	-	
7	Air Quality	Themes 1, 2, 3 and 4 have no predicted effects.	-	-	-	-	-
8	Use of brownfield sites	Theme 1: Lower density development is encouraged by the UDA which means that it would have potential adverse effects against this SA objective which encourages maximising efficient use of land, including higher density developments.	P	L	x	x	x
		Themes 2, 3 and 4 have no predicted effects.	-	-	-	-	-
9	Resource efficiency	Theme 1: The spatial strategy recognises that the head office of a global leader in renewable energy is located on the edge of the village, and that this gives the village an opportunity to draw on this expertise. This could provide opportunities for the village to use renewable energy sources as part of their developments.	P	L	?	?	?
		Themes 2, 3 and 4 have no predicted effects.	-	-	-	-	-
10	Historic & cultural assets	Theme 1: There is a Conservation Area in the village and a number of Listed Buildings. It is stated in the spatial strategy that the design of new development will respect and relate to the Conservation Area and Listed Buildings. This would have a positive effect on this SA objective, as it should protect and possibly enhance the historic environment and promotes local distinctiveness.	P	L	✓	✓	✓
		Themes 2, 3 and 4 have no predicted effects.	-	-	-	-	-
11	Landscape & Townscape	Theme 1: Small scale growth is envisaged in the village, but it is recognised that this should not interfere with the landscape setting of the village and	P	L	✓	✓	✓

SA Objective	Assessment of Effect						Mitigation and Enhancement
	Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects			
				In the short term	In the medium term	In the long term	
	its key views. This would have a positive effect on this SA objective as it should protect the village's landscape character and minimise the visual impact of new development.						
	Theme 1: The village has a relatively high provision of informal open space and this will be protected and possibly enhanced. This would enhance landscape character.	P	L	✓	✓	✓	
	Themes 2, 3 and 4 have no predicted effects.	-	-	-	-	-	
12	Health						
	Theme 1: The village has a relatively high provision of informal open space and this will be protected and possibly enhanced. This could mean that there will be an increase in access for people to undertake recreational activities, thereby promoting healthier lifestyles.	P	L	✓	✓	✓	
	Themes 2, 3 and 4 have no predicted effects.	-	-	-	-	-	
13	Sustainable locations						
	Theme 3: The High Street has a mix of shops and services which reduces the need to travel elsewhere for these services. This will progress this objective by reducing the need to travel due to closer integration of services.	P	L	✓	✓	✓	
	Themes 1, 2 and 4 have no predicted effects.	-	-	-	-	-	
14	Equality & social exclusion						
	Theme 3: The spatial strategy aims to maintain the range of facilities and services within the settlement. This will protect the public's access to services and facilities.	P	L	✓	✓	✓	
	Themes 1, 2, and 4 have no predicted effects.	-	-	-	-	-	
15	Good quality housing						
	Theme 2: The spatial strategy identifies that a key priority is to maximise opportunities for affordable homes, which is a key criterion of this SA objective. However beyond the life of the Spatial Strategy this effect will be uncertain.	P	L	✓✓	✓✓	?	

SA Objective	Assessment of Effect						Mitigation and Enhancement	
	Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects				
				In the short term	In the medium term	In the long term		
	Themes 1, 3 and 4 have no predicted effects.	-	-	-	-	-		
16	Community Identity & participation	Theme 1: By protecting and enhancing the views and gateways in the Upper Gade Valley there could be improved community identity, as this will make Kings Langley a more attractive place to live, work and visit.	P	R	✓	✓	✓	
		Theme 3: The spatial strategy recognises that the village centre is vibrant and will maintain this to ensure that it remains an attractive place in which to live and work. This contributes to providing a sense of community and identity.	P	L	✓	✓	✓	
	Themes 2 and 4 have no predicted effects.	-	-	-	-	-		
17	Crime and fear of crime	Themes 1, 2, 3 and 4 have no predicted effects.	-	-	-	-	-	
18	Sustainable prosperity & growth	Theme 3: A number of local businesses are located on potential sites for housing development and should this housing development proceed these businesses could be lost. If this occurs, there will be a loss of small scale employment sites in the Dacorum part of Kings Langley, placing more reliance on retention of employment sites in Three Rivers District.	P	R	-	x	x	
		Themes 1, 2 and 4 have no predicted effects.	-	-	-	-	-	
19	Fairer access to services	Theme 3: The spatial strategy expects local businesses to contribute to local services, employ local people and benefit the rural environment. This could have a positive effect on this SA objective as it encourages local provision of and access to jobs and services.	P	L	✓	✓	✓	
		Theme 4: The spatial strategy aims to provide better signage for local transport and pedestrian links, in the village and along the canal. This could improve	P	L	✓	✓	✓	



SA Objective	Assessment of Effect						Mitigation and Enhancement
	Nature of Effect Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects			
				In the short term	In the medium term	In the long term	
	access to services.						
	Themes 1 and 2 have no predicted effects.	-	-	-	-	-	
20	Revitalise town centres Theme 3: The spatial strategy encourages a mix of services, employment and housing. This could help promote the role and the attractiveness of the local centre.	<b>P</b>	<b>L</b>	✓	✓	✓	
	Themes 1, 2 and 4 have no predicted effects.	-	-	-	-	-	

## Markyate Spatial Strategy

### **Vision:**

Markyate will remain a cohesive large village. The long term strategy to 2031 will concentrate on increasing the vibrancy of the village by improving the range of services and facilities that are provided, whilst protecting its historic character and setting. The emphasis will be on increasing the number and range of shops and services, and improving health care in the village. New housing development will be used to secure improvements. Tackling congestion in the High Street will be a priority, and improved passenger transport links to Luton and Dunstable will be supported. Sufficient provision of employment opportunities will exist in Markyate reflecting the needs of the village and the wider business community. Existing wildlife and biodiversity resources will be protected.

### Vision Assessment

This Vision supports the majority of the SA/SEA objectives, particularly those that relate to social aspects, such as housing, economy (by providing employment opportunities), access (including improved transport links) and provision of services, including health facilities. There is also consideration of the natural environment (i.e. landscape and biodiversity). In terms of the less tangible SA/SEA topics such as air and soil, the Vision is less supportive; however, this is not indication of any negative relationships being identified. In relation to the local economy, the Vision provides support for local supply chains which should help to achieve the related SA/SEA objective.

There is uncertainty over how the Vision will meet the SA objectives such as 'resource efficiency' and 'climate change proof', which could be considered at the next stage in the preparation of the Core Strategy if appropriate.

### Development Options Assessment

SA Objective		Option 1 Hicks Road (consolidated employment uses and 40- 60 dwellings)	Option 2 Hicks Road (100 dwellings and shops). Relocation of employment uses to a site on the southern edge of the village		
1	Biodiversity	The site is not located in greenfield. Deculverting the River Ver could result in biodiversity enhancements.	✓		
			Hicks Road Site: see option1	✓	
			New employment site: This greenfield site is located in a wildlife corridor and there is therefore likely to be the loss of some habitats. If the River Ver is deculverted, as in Option 1, there is the potential for biodiversity enhancements.	✗	
2	Water quality/ quantity	Deculverting the River Ver would mean that water quantity could be improved.	✓	Neutral Effects. If the River Ver is deculverted, as in Option 1, there is the potential for water quality improvements.	?
3	Flood risk	A large area of the site is in flood zones 2 and 3	✗	Hicks Road site: see option 1	✗

SA Objective		Option 1 Hicks Road (consolidated employment uses and 40- 60 dwellings)		Option 2 Hicks Road (100 dwellings and shops). Relocation of employment uses to a site on the southern edge of the village	
		and there would therefore be flood risk for new developments. However, deculverting the River Ver should provide an opportunity for improved river maintenance which could help reduce the flood risk.		New employment site: The area is on the edge of flood zones 2 and 3 and there would therefore be flood risk for new developments.	x
4	Soils	Development on this site could mean remediation of any contaminated soils, thereby improving soil quality.	?	Hicks Road site: see option 1	?
				New employment site: This option would result in a loss of greenfield land, and development could result in soil sealing.	x
5	Greenhouse gas emissions	The site is located in the centre of the village. This could encourage cycling and walking rather than use of the car, which would thereby help to reduce the growth in ghg emissions.	✓	This option results in relocation of employment uses out of the centre of the village, which is likely to increase the dependency on private transport to access employment. This could result in an increase in the level of ghg emissions.	x
		The poor public transport connections may result in higher car use. If this then exacerbates the existing congestion this could result in an increase in the level of ghg emissions.	x		
6	Climate change proof	Neutral Effects.	-	Neutral Effects.	-
7	Air Quality	The option is located close to the centre of the village. This could encourage cycling and walking rather than use of the car, which would reduce thereby help to reduce the growth in ghg emissions.	✓	Removing lorries and vans associated with the Hicks Road Industrial Estate from the village centre is likely to result in local air quality improvements.	✓
		The poor public transport connections may result in higher car use. If this then exacerbates the existing congestion this could result in a decrease in local air quality.	x	This option results in relocation of employment uses out of the centre of the village, increasing the dependency on private transport. This could result in a decline of local air quality.	x
8	Use of brownfield sites	This site is a brownfield site.	✓	The Hicks Road site is brownfield site.	✓
				This site on the edge of the village is a greenfield site.	x
9	Resource efficiency	Neutral Effects.	-	Neutral Effects.	-
10	Historic & cultural assets	This site is located adjacent to an area of archaeological significance and is classified as a "built up modern" area (HLC).	-	Hicks Road site: see option 1	-
				New employment site: This site is located in an area classified as "18-19 <sup>th</sup> century enclosure" (HLC).	?

SA Objective		Option 1 Hicks Road (consolidated employment uses and 40- 60 dwellings)	Option 2 Hicks Road (100 dwellings and shops). Relocation of employment uses to a site on the southern edge of the village		
11	Landscape & Townscape	The option is located adjacent to, but not in, the Greenbelt. Redevelopment of the vacant and redundant buildings in the existing industrial estate would help to improve the appearance of this part of the village.	✓	Redevelopment of the vacant and redundant buildings in the existing industrial estate would help to improve the appearance of this part of the village.	✓
				Relocating the employment area to the outskirts of the village would require some development in Greenbelt.	x
12	Health	This central location would provide opportunities for walking and cycling and encourage healthier lifestyles.	✓	The central location of Hick Road would provide opportunities for walking and cycling and encourage healthier lifestyles. The option provides more potential than option 1 to provide additional facilities and services.	✓
		New housing on the Hicks Road site would be affected by noise from commercial operations as well as from the nearby A5.	x	This option could mean that noise is removed from centre of village if there is a relocation of industry to the southern edge of the village. New housing on the Hicks Road site would be affected by noise from the nearby A5.	?
13	Sustainable Locations	This site is located in the village centre, providing good access to facilities.	✓	This option is located in the centre of the village, but the employment site will be relocated to the southern edge of the village. Therefore, this will still provide access to facilities, but it would not be as significant as the previous option. The option provides more potential than option 1 to provide additional facilities and services.	✓
				This option would mean that the relocation of the employment uses to the southern edge of the village, thereby decreasing accessibility to employment for those who have to travel further.	x
14	Equality & social exclusion	This site is located in the village centre, providing good access to facilities.	✓	The Hicks Road site is located in the centre of the village providing good access to facilities.	✓
		This option would mean there is a mix of housing and industrial uses, which could cause traffic congestion and conflict, as lorries etc travel through the village centre to access the businesses.	x	This option would mean the relocation of the employment uses to the southern edge of the village, thereby decreasing accessibility for some.	x
15	Good quality housing	This option should help to provide some affordable housing.	✓	This option should help to provide higher levels of housing than option 1, including affordable housing.	

SA Objective		Option 1 Hicks Road (consolidated employment uses and 40- 60 dwellings)		Option 2 Hicks Road (100 dwellings and shops). Relocation of employment uses to a site on the southern edge of the village	
16	Community Identity & participation	This option could improve appearance of area by encouraging redevelopment of the area, including the redundant buildings, and making it more attractive for the community.	✓	This option could improve the appearance of area by relocating the employment uses to the edge of the village, and thereby improving the quality of life. The option provides more potential than option 1 to provide additional facilities and services.	✓
17	Crime and fear of crime	Neutral Effects.	-	Neutral Effects.	-
18	Sustainable prosperity and growth	This option considers the consolidation of the employment uses, which could restrict opportunities for further growth.	?	This option would support the provision of employment opportunities in the village, which would help to maintain the local economy. Provision of additional housing means there are more residents, making facilities and shops more viable. This would help with the local economy.	✓
19	Fairer access to services	This option is located in the village centre, providing good access to facilities.	✓	The larger scale of development that would take place under this option, compared to Option 1, would enable more new facilities and services to be delivered. This could provide more local opportunities to access both jobs and services.	✓
20	Revitalise town centres	This option would support the vitality of the village facilities.	✓	The option provides more potential than option 1 to provide additional facilities and services. The larger scale of housing development would also have more of a significant impact on supporting the vitality of the existing village facilities.	✓

Spatial Strategy Theme Assessment

SA Objective		Assessment of Effect						Mitigation and Enhancement
		Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects			
					In the short term	In the medium term	In the long term	
1	Biodiversity	Themes 1, 2, 3 and 4 have no predicted effects.	-	-	-	-	-	
2	Water quality/ quantity	Themes 1, 2, 3 and 4 have no predicted effects.	-	-	-	-	-	
3	Flood risk	Themes 1, 2, 3 and 4 have no predicted effects.	-	-	-	-	-	
4	Soils	Themes 1, 2, 3 and 4 have no predicted effects.	-	-	-	-	-	
5	Greenhouse gas emissions	Theme 1: The spatial strategy indicates that a high quality new development is proposed, which could encourage more energy efficient designs, therefore reducing greenhouse gas emissions.	<b>P</b>	<b>N</b>	✓	✓	✓	
		Themes 2, 3 and 4 have no predicted effects.	-	-	-	-	-	
6	Climate change proof	Theme 1: The spatial strategy indicates that new developments will be built to high, sustainable standards. It is not clear whether the sustainable measures will encourage design measures that will allow buildings to withstand the likely impacts of climate change, hence the uncertain effect.	<b>P</b>	<b>L</b>	?	?	?	
		Themes 2, 3 and 4 have no predicted effects.	-	-	-	-	-	
7	Air Quality	Themes 1, 2, 3 and 4 have no predicted effects.	-	-	-	-	-	
8	Use of brownfield sites	Theme 1: Lower density development is encouraged by the UDA which means that it would have potential adverse effects against this SA objective as it encourages maximising efficient use of land, including higher density developments.	<b>P</b>	<b>L</b>	x	x	x	
		Themes 2, 3 and 4 have no predicted effects.	-	-	-	-	-	
9	Resource efficiency	Themes 1, 2, 3 and 4 have no predicted effects.	-	-	-	-	-	
10	Historic & cultural assets	Theme 1: There is a Conservation Area in the Markyate village and a number of Listed Buildings. It is stated in the spatial strategy that the design of	<b>P</b>	<b>L</b>	✓	✓	✓	

SA Objective	Assessment of Effect						Mitigation and Enhancement	
	Nature of Effect Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects				
				In the short term	In the medium term	In the long term		
	new development will respect and relate to the Conservation Area and Listed Buildings, so this would have a positive effect on this SA objective, as it protects and possibly enhances the historic environment and promotes local distinctiveness. Themes 2, 3 and 4 have no predicted effects.							
		-	-	-	-	-		
11	Landscape & Townscape	Theme 1: Small scale growth is envisaged in the village, but it is recognised that it is important to not let the growth interfere with the landscape setting and key views, as well as the Markyatecell Park and Cheverell's tree belt. This would have a positive effect as it protects the landscape character and would minimise the visual impact of new developments. Themes 2, 3 and 4 have no predicted effects.	P	L	✓	✓	✓	
		-	-	-	-	-		
12	Health	Theme 2: The village has a limited provision of informal open space, and as a result new developments are to be required to provide areas of open space. This could give opportunities for healthier lifestyles by providing access for recreational use. Themes 1, 3 and 4 have no predicted effects.	P	L	✓	✓	✓	
		-	-	-	-	-		
13	Sustainable locations	Theme 4: The spatial strategy aims to provide a range of facilities and services within the settlement and improve public transport connections, so this could reduce the need for the use of car to access services elsewhere. Themes 1, 2 and 3 have no predicted effects.	P	L	✓	✓	✓	
		-	-	-	-	-		
14	Equality & social exclusion	Theme 4: The spatial strategy aims to provide a range of facilities and services within the settlement and improve public transport connections. This could improve the public's access to services and facilities.	P	L	✓	✓	✓	

SA Objective	Assessment of Effect						Mitigation and Enhancement	
	Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects				
				In the short term	In the medium term	In the long term		
	Themes 1, 2, and 3 have no predicted effects.	-	-	-	-	-		
15	Good quality housing	Theme 2: The spatial strategy identifies a key priority is to maximise opportunities for affordable homes, which is a key criterion of the objective. However beyond the life of the Spatial Strategy this effect will be uncertain.	P	L	✓✓	✓✓	?	
		Themes 1, 3 and 4 have no predicted effects.	-	-	-	-	-	
16	Community Identity & participation	Theme 1: By conserving and enhancing the views of the Ver Valley, this will make Markyate a more attractive place to live, work and visit.	P	R	✓	✓	✓	
		Theme 3: Markyate is to be revitalised, as a successful village, and the spatial strategy aims to encourage a range of new services and facilities. This will help ensure that the village is an attractive place in which to live and work, and contributing to providing a sense of community and identity in the village.	P	L	✓	✓	✓	
		Themes 2 and 4 have no predicted effects.	-	-	-	-	-	
17	Crime and fear of crime	Themes 1, 2, 3 and 4 have no predicted effects.	-	-	-	-	-	
18	Sustainable prosperity & growth	Theme 3: Markyate has a designated employment site, and the spatial strategy could make sure the conditions exist for businesses to invest and for local jobs to be provided. There is also potential for future employment sites to be identified which would further support job opportunities within the village.	P	R	✓	✓	✓	
		Themes 1, 2 and 4 have no predicted effects.	-	-	-	-	-	
19	Fairer access to services	Theme 3: The spatial strategy expects local businesses to contribute to local services, employ local people and benefit the rural environment. This could have a positive effect on this SA objective as it encourages local provision of and access to jobs and	P	L	✓	✓	✓	



SA Objective	Assessment of Effect						Mitigation and Enhancement
	Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects			
				In the short term	In the medium term	In the long term	
	services.						
	Theme 4: Encourages improved public transport connections, and a better car park close the village centre which should increase access to the services and facilities.	P	L	✓	✓	✓	
	Themes 1 and 2 have no predicted effects.	-	-	-	-	-	
20	Revitalise town centres	P	L	✓	✓	✓	
	Theme 3: The spatial strategy encourages a mix of services, employment and housing. This could help promote the role and the attractiveness of the local centre.						
	Themes 1, 2 and 4 have no predicted effects.	-	-	-	-	-	

## Tring Spatial Strategy

### **Vision:**

Tring will remain a small successful market town. The aim is to seek a better quality of life and prosperity for its residents and business community. This will be achieved by delivering a greater range of high quality housing to suit long term local need whilst retaining and enhancing the town centre vitality and character of the town. Small scale business activity will be encouraged, public transport links improved and promoted, and advantage taken of the town's tourist attractions, such as the Zoological Museum and the town's green hinterland and Tring Reservoirs. A cohesive community will be developed with additional social facilities for the young and elderly with improved outdoor leisure facilities.

### Vision Assessment

This Vision supports the majority of the SA/SEA objectives, particularly those that relate to social aspects, such as housing, economy (including tourism), access and provision of social and outdoor leisure services. There is also consideration of the natural environment (i.e. landscape, water and biodiversity). In terms of the less tangible SA/SEA topics such as air and soil, the Vision is less supportive; however, this is not indication of any negative relationships being identified. In relation to the local economy, the Vision provides support for local supply chains which should help to achieve the related SA/SEA objective. There is uncertainty over how the Vision will meet the SA objectives such as 'resource efficiency' and 'climate change proof', which could be considered at the next stage in the preparation of the Core Strategy if appropriate.

### Development Options Assessment

SA Objective		Option 1 Land to the West		Option 2 Land to the East	
1	Biodiversity	The site is greenfield and there would therefore be loss of some habitats.	✘	The site is mainly greenfield and there would therefore be loss of some habitats. The site also contains a wildlife site.	✘
2	Water quality/ quantity	Neutral Effects.	-	Neutral Effects.	-
3	Flood risk	The site is in a low flood risk zone.	-	The site is in a low flood risk zone.	-
4	Soils	This option would result in a loss of greenfield land, and development would result in soil sealing.	✘	This option would result in a loss of greenfield land, and development would result in soil sealing.	✘
5	Greenhouse gas emissions	The option is located near a local centre and is adjacent to the town's main employment area. However it is located 2km from the town centre. This could increase the use of the car to access town centre facilities and services, thereby increasing the growth of ghg emissions.	?	This option is closer to the town centre (1km) than option 1. This could encourage cycling and walking rather than use of the car, which would help to reduce the growth in ghg emissions. This is however dependent on these sustainable travel options being taken up.	✓

SA Objective		Option 1 Land to the West		Option 2 Land to the East	
		There is also uncertainty around the level of out-commuting that may result from building the large number of houses on this site. If this is by car on the A41 there is the potential for ghg emissions.		The large number of houses proposed under this option could result in significant levels of out-commuting. If this is by car on the A41 there is the potential for ghg emissions.	?
6	Climate change proof	Neutral Effects.	-	Neutral Effects.	-
7	Air Quality	The option is located near a local centre and is adjacent to main employment area. However it is located 2km from the town centre. This could increase the use of the car, increasing the possibility of adverse effects on local air quality.	x	This option is closer to the town centre (1km) which could encourage cycling and walking rather than use of the car, which would help improve local air quality. This is however dependent on these non-polluting travel options being taken up.	✓
8	Use of brownfield sites	This site is located in greenfield.	x	The site is mainly located in greenfield.	x
9	Resource efficiency	Neutral Effects.	-	Neutral Effects.	-
10	Historic & cultural assets	This site is located in an area classified as "20 <sup>th</sup> century agriculture" (HLC).	-	This option is located adjacent to a historic park and garden, and has three Listed buildings on site. The site is classified as "pre 18 <sup>th</sup> century enclosure" (approx 50% and the area closest to the town centre), "18-19 <sup>th</sup> century enclosure" (approx.45% of the site), and the remainder is "built up modern" (HLC).	x
11	Landscape & Townscape	The site is in the Greenbelt and is located adjacent to the Chilterns AONB. Development of this site would be visible from Icknield Way and the Chilterns AONB, which could have adverse visual impacts.	x	The site is located in the Greenbelt and is adjacent to the Chilterns AONB. It is a large sprawling site and development would have some adverse effects on the landscape.	x
12	Health	This option would allow for open space, but it would not be big enough for all the leisure space aspirations for Tring.	✓	This option would provide the wider town with significant areas of open space, and improved facilities.	✓
		This option is close to the A41, which means there would be noise disturbance which could affect the health and well-being of the new residents.	x	This option is close to the A41, which means there would be noise disturbance which could affect the health and well-being of the new residents.	x

SA Objective		Option 1 Land to the West		Option 2 Land to the East	
13	Sustainable Locations	The option is located near the local centre and is adjacent to main employment area. However it is located 2km from the town centre.	x	This option is located nearer to the town centre (1km).	✓
14	Equality & social exclusion	The option is located near the local centre and is adjacent to main employment area. However it is located 2km from the town centre.	x	This option is located nearer to the town centre (1km).	✓
				The option would mean that leisure space would be in one location in Tring, making it harder to access from other areas of the town.	x
15	Good quality housing	This option would provide 380 dwellings with the potential for high levels of affordable housing.	✓	This option would provide 600 dwellings with the potential for significant levels of affordable housing.	✓✓
16	Community Identity & participation	Neutral Effects.	-	This option could improve the community identity and participation for the residents of Tring due to the significant area of open space proposed.	✓
17	Crime and fear of crime	Neutral Effects.	-	Neutral Effects.	-
18	Sustainable prosperity and growth	Development of this site could involve provision of some employment space, thereby helping to support the local economy. Also, the new housing should help to support the local services in the town, maintaining their viability and boosting the local economy.	✓	Provision of significant additional housing means there are more residents, making facilities and shops more viable. This would help with the local economy.	✓
19	Fairer access to services	This option provides new housing which could result in improved services and jobs for the town and should help to support the local services, thereby maintaining their viability.	✓	This option provides more new housing which can result in improved services and jobs for the town. The large number of houses proposed under this option will also result in higher levels of developer contributions which should improve facilities and services.	✓
20	Revitalise town centres	The new housing should help to support the local services in the town, maintaining their viability and boosting the local economy, thereby helping to support sustainable urban living.	✓	The new housing should help to support the local services in the town, maintaining their viability and boosting the local economy, thereby helping to support sustainable urban living. This option would have more of a significant impact on supporting the vitality of the town's facilities due to the site being a larger site, with	✓

SA Objective	Option 1 Land to the West	Option 2 Land to the East
		the potential for increased developer contributions.

Spatial Strategy Theme Assessment

SA Objective	Assessment of Effect						Mitigation and Enhancement	
	Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects				
				In the short term	In the medium	In the long term		
1	Biodiversity	Theme 1: There are sites of biodiversity importance; Tring Woodlands SSSI, Tring Reservoirs, Tring Park, Grand Union Canal and Streamside Walk. These are key features of the town would be maintained in the Core Strategy.	P	L	✓	✓	✓	
		Theme 1: Tring contains a County Wildlife Site which may be affected by housing development depending on the sites taken forward. This could therefore have potential adverse effects on biodiversity as the site may be used for development.	P	L	?	?	?	
		Themes 2, 3 and 4 have no predicted effects.	-	-	-	-	-	
2	Water quality/ quantity	Themes 1, 2, 3 and 4 have no predicted effects.	-	-	-	-	-	
3	Flood risk	Themes 1, 2, 3 and 4 have no predicted effects.	-	-	-	-	-	
4	Soils	Themes 1, 2, 3 and 4 have no predicted effects.	-	-	-	-	-	
5	Greenhouse gas emissions	Theme 1: The spatial strategy states that new developments must reduce carbon emissions, in line with Code for Sustainable Homes, which should have a positive effect on reducing growth in greenhouse gas emissions as new buildings would be more energy efficient.	P	N	✓	✓	✓	
		Theme 4: The spatial strategy highlights the need for improved cycle routes, which could encourage an	P	N	✓	✓	✓	

SA Objective	Assessment of Effect						Mitigation and Enhancement
	Nature of Effect Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects			
				In the short term	In the medium term	In the long term	
	increase in the number of cyclists in the town, thereby reducing the use of private transport. This would help to reduce greenhouse gas emissions, although it is dependent on this modal shift taking place. Themes 2 and 3 have no predicted effects.	-	-				
6	Climate change proof Theme 1: The spatial strategy indicates that new developments will be built to high, sustainable standards. It is not clear whether the sustainable measures will encourage design measures that will allow buildings to withstand the likely impacts of climate change, hence the uncertain effect. Themes 2, 3 and 4 have no predicted effects.	P	L	?	?	?	
7	Air Quality Theme 4: The spatial strategy highlights the need for improved cycle routes, which could encourage an increase in the number of cyclists in the town, thereby reducing the use of private transport. This may have positive effects on air quality, as transport is a key source of air pollution, and should private car users change their mode of travel and use the cyclepaths instead of their car this could reduce emission to air although it is dependent on this modal shift taking place. Themes 1, 2, and 3 have no predicted effects.	P	N	✓	✓	✓	
8	Use of brownfield sites Theme 2: Lower density development is encouraged by the UDA which means that it would have potential adverse effects against this SA objective as the objective encourages maximising efficient use of land, including higher density developments. Themes 1, 3 and 4 have no predicted effects.	P	L	x	x	x	
9	Resource efficiency Themes 1, 2, 3 and 4 have no predicted effects.	-	-	-	-	-	

SA Objective		Assessment of Effect					Mitigation and Enhancement	
		Nature of Effect Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects			
					In the short term	In the medium term		In the long term
10	Historic & cultural assets	Theme 1: Tring contains a Conservation Area which includes buildings from the Rothschild period and Tudor revival period. The spatial strategy states that new development must relate sensitively to the existing Conservation Area and Listed Buildings, which should protect these historic and cultural assets.	P	L	✓	✓	✓	
		Theme 2: Tring has a historic backdrop of architecturally rich buildings, such as the Natural History Museum and the spatial strategy states that these will be sustained and protected from redevelopment and incompatible change of use. This should help to protect and possibly enhance the historic environment and also promote local distinctiveness.	P	L	✓	✓	✓	
		Themes 3 and 4 have no predicted effects.	-	-	-	-	-	
11	Landscape & Townscape	Theme 1: Small scale growth is envisaged in the village, which should enhance the existing landscape setting, gateways and views of the Chiltern escarpment. This would have a positive effect as it protects Tring's landscape character.	P	L	✓	✓	✓	
		Themes 2, 3 and 4 have no predicted effects.	-	-	-	-	-	
12	Health	Theme 1: Development options, if taken forward, could provide areas of open space. This could give opportunities for healthier lifestyles by providing access for recreational use.	P	L	✓	✓	✓	
		Theme 2: The spatial strategy intends to encourage use of leisure facilities, and will continue to support the amalgamation of Miswell Lane playing fields into one open space, and will consider provision for further sports facilities. This should have a positive effect on this objective as it provides access to facilities which could encourage healthier lifestyles.	P	L	✓	✓	✓	

SA Objective	Assessment of Effect						Mitigation and Enhancement	
	Nature of Effect Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects				
				In the short term	In the medium term	In the long term		
	Theme 4: The spatial strategy highlights the need for improved cycle routes, which could encourage an increase in the number of cyclists, encouraging healthier lifestyles.	P	L	✓	✓	✓		
	Theme 3 has no predicted effects.	-	-	-	-	-		
13	Sustainable locations	Theme 4: The spatial strategy aims to provide a range of facilities and services within the settlement and improve public transport connections. This could reduce the need for using a car to access services.	P	L	✓	✓	✓	
		Themes 1, 2 and 3 have no predicted effects.	-	-	-	-	-	
14	Equality & social exclusion	Theme 4: The spatial strategy aims to provide a range of facilities and services within the settlement and improve public transport connections. This could improve the public's access to services and facilities.	P	L	✓	✓	✓	
		Themes 1, 2, and 3 have no predicted effects.	-	-	-	-	-	
15	Good quality housing	Theme 2: The spatial strategy indicates that small scale housing will be delivered to meet local needs only. This could imply that there are opportunities for affordable homes to be provided, which is a key criterion of this SA objective.	P	L	✓	✓	✓	
		Themes 1, 3 and 4 have no predicted effects.	-	-	-	-	-	
16	Community Identity & participation	Theme 1: The spatial strategy aims to protect and enhance the views and environment around the Chiltern escarpment. This could make Tring a more attractive place in which to live, work and visit.	P	L	✓	✓	✓	
		Theme 3: Tring town has an unusual vibrant mix of retail and leisure facilities, and this will be sustained through the spatial strategy. This should help to ensure that the town remains an attractive place in which to live and work, and contributes to providing a sense of community and identity.	P	L	✓	✓	✓	
		Themes 2 and 4 have no predicted effects.	-	-	-	-	-	
17	Crime and fear of	Themes 1, 2, 3 and 4 have no predicted effects.	-	-	-	-	-	



SA Objective	Assessment of Effect						Mitigation and Enhancement
	Nature of Effect Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects			
				In the short term	In the medium term	In the long term	
crime							
18 Sustainable prosperity & growth	Theme 3: Tring has clear opportunities to provide more employment land by extending existing industrial estates, and possibly changing the use of a residential area to either employment land or a form of mixed use. There is also further potential for Akeman Street employment area to provide diverse economic opportunities. This would have a positive effect on economic growth levels.	P	R	✓	✓	✓	
	Themes 1, 2 and 4 have no predicted effects.	-	-	-	-	-	
19 Fairer access to services	Theme 3: The spatial strategy expects local businesses to contribute to local services, employ local people and benefit the rural environment. This could have a positive effect on this SA objective as it encourages local provision of and access to jobs and services.	P	L	✓	✓	✓	
	Themes 1, 2 and 4 have no predicted effects.	-	-	-	-	-	
20 Revitalise town centres	Theme 3: The spatial strategy encourages a mix of services, employment and housing. This could help promote the role and the attractiveness of the local centre.	P	L	✓	✓	✓	
	Themes 1, 2 and 4 have no predicted effects.	-	-	-	-	-	

**The Countryside Spatial Strategy**

**Vision:**

Dacorum's countryside will be sustainable, attractive and accessible, producing high quality food and biomass, rich in wildlife and with thriving villages. Its woodlands will be well managed to provide wood fuel, whilst being accessible to the public and resilient to climate change. The quality and flow of chalk streams will have improved, and brown trout reintroduced. Most countryside visitors will arrive by public transport or bicycle. The best and most distinctive features will be protected, and visually intrusive areas improved. A limited amount of new housing to support the rural workforce and meet local needs will be encouraged.

Vision Assessment

This Vision supports the majority of the SA/SEA objectives, particularly those that relate to landscape, water, biodiversity and access by improving public transport. There is consideration of the cultural/historic environment and townscape. The need for housing and employment is recognised but is not as prominent as for the spatial strategies for the settlements. In terms of the less tangible SA/SEA topics such as air and soil, the Vision is less supportive; however, this is not indication of any negative relationships being identified. There is uncertainty over how the Vision will meet the SA objectives such as 'resource efficiency' and 'climate change proof', which could be considered at the next stage in the preparation of the Core Strategy if appropriate.

Level of Housing Assessment

SA Objective		Option 1: 389 dwellings		Option 2: 567 dwellings	
1	Biodiversity	Minimises development on greenfield sites. However, infill or change of use sites could have biodiversity value.	✓	Allows for more development than option 1, therefore increasing the potential for adverse effects on biodiversity.	x
2	Maintain/ enhance water quality/ quantity	Neutral Effects.	-	Neutral Effects.	-
3	Flood risk	Neutral Effects.	-	Neutral Effects.	-
4	Soils	Minimises development on greenfield sites.	✓	Allows for more development than option 1, therefore increasing the potential for adverse effects on biodiversity.	x
5	Greenhouse gas emissions	Lower levels of housing could result in more people having to move into towns and then travel back to villages to work.	?	Higher levels of housing could result in more out-commuting from the villages if those who buy the houses are town/city workers.	?
6	Climate change proof	Neutral Effects.	-	Neutral Effects.	-
7	Air Quality	Neutral Effects.	-	Neutral Effects.	-
8	Use of brownfield sites	Minimises development on greenfield sites outside of settlements and encourages infill.	✓	Allows for more development than option 1, therefore increasing the potential for the need to build on greenfield sites.	x

SA Objective		Option 1: 389 dwellings		Option 2: 567 dwellings	
9	Resource efficiency	Neutral Effects.	-	Neutral Effects.	-
10	Historic & cultural assets	Uncertain effects. Dependent on sites chosen. May affect the character of Conservation Areas.	?	Uncertain effects. Dependent on sites chosen. May affect the character of Conservation Areas.	?
11	Landscape & Townscape	Infilling may affect local "villagescapes". Lower levels of housing under this option should minimise adverse effects on the landscape.	?	Infilling may affect local "villagescapes". Higher levels of housing under this option May increase adverse effects on the landscape where development takes place on the edge of settlements.	x
12	Health	Neutral Effects.	-	Neutral Effects.	-
13	Sustainable locational development	Lower levels of housing could result in more people having to move into towns to live and then travel back to the villages to work.	?	Higher levels of housing could result in more out-commuting from the villages. It would however allow more people to live and work in the villages compared to option 1.	?
14	Equality & social exclusion	The affordable housing that will be delivered under this option will allow some people to remain living in their local area. However there will be fewer than under option 2.  With fewer houses being built under this option there is likely to be increased pressure on housing in sought after villages, which could see house price increases that would further disadvantage those on lower incomes.	x	Higher levels of affordable housing under this option will allow a larger number of people to remain living in their local area. The larger number of houses under this option should also help to make local facilities more viable, thereby preventing them from closing which would be particularly to the detriment of the more vulnerable members of the community (e.g. the elderly).	✓
15	Good quality housing	The affordable housing that will be delivered under this option will allow some people to remain living in their local area. However there will be fewer than under option 2.	x	Higher levels of affordable housing under this option will allow a larger number of people to remain living in their local area.	✓
16	Community Identity & participation	Less potential for retaining community identity through a lower proportion of young residents being able to remain in the villages.	x	Greater potential for retaining community identity through a higher proportion of young residents being able to remain in the villages.	✓
17	Crime and fear of crime	Neutral Effects.	-	Neutral Effects.	-
18	Sustainable prosperity and growth	The smaller number of houses and the subsequent decrease in predicted overall population of settlements may mean that local services are no longer viable and are forced to close.	x	The larger number of houses under this option should help to keep local services more viable, thereby supporting local enterprises.	✓

SA Objective		Option 1: 389 dwellings		Option 2: 567 dwellings	
19	Fairer access to services	This option could result in those who work in rural areas having to move to towns in order to find suitable affordable housing. This would reduce their access to their existing local jobs.	x	This option would provide more opportunities for those who live and work in the countryside to continue with these arrangements.	✓
20	Revitalise town centres	Neutral Effects.	-	Neutral Effects.	-

### Spatial Strategy Theme Assessment

SA Objective	Assessment of Effect						Mitigation and Enhancement	
	Nature of Effect Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects				
				In the short term	In the medium term	In the long term		
1	Biodiversity	Theme 1: The spatial strategy recognises that there are some sites of significant wildlife and biodiversity value, such as Chilterns escarpment and Tring Park amongst others, in various settlements. The spatial strategy aims to maintain and enhance these, and protect views, as well as the countryside setting of the settlements. This should have positive effects on this SA objective. Themes 2, 3 and 4 have no predicted effects.	P	L	✓	✓	✓	
2	Water quality/ quantity	Themes 1, 2, 3 and 4 have no predicted effects.	-	-	-	-	-	
3	Flood risk	Themes 1, 2, 3 and 4 have no predicted effects.	-	-	-	-	-	
4	Soils	Themes 1, 2, 3 and 4 have no predicted effects.	-	-	-	-	-	
5	Greenhouse gas emissions	Theme 3: The spatial strategy describes the Chilterns LEADER project, which aims to develop environmentally sustainable tourism and meet the challenges of climate change, as well as other aims. This could indicate that there are opportunities to reduce greenhouse gas emissions through more	P	N	✓	✓	✓	

SA Objective	Assessment of Effect						Mitigation and Enhancement
	Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects			
				In the short term	In the medium term	In the long term	
	energy efficient tourist facilities and through sustainable modes of transport e.g. improved footpaths and cyclepaths as ways of accessing the countryside.						
	Theme 4: The spatial strategy highlights the need for improved cycle and pedestrian routes, which could encourage an increase in walking and cycling. This would help reduce greenhouse gas emissions if the desired modal shift results.	P	N	✓	✓	✓	
	Themes 2 and 3 have no predicted effects.	-	-	-	-	-	
6	Climate change proof						
	Themes 1, 2, 3 and 4 have no predicted effects.	-	-	-	-	-	
7	Air Quality						
	Theme 4: The spatial strategy highlights the need for improved cycle and pedestrian routes, which could encourage an increase in walking and cycling as an alternative to the use of private cars. This would help improve air quality if the desired modal shift results.	P	N	✓	✓	✓	
	Themes 1, 2, and 3 have no predicted effects.	-	-	-	-	-	
8	Use of brownfield sites						
	Themes 1, 2, 3 and 4 have no predicted effects.	-	-	-	-	-	
9	Resource efficiency						
	Themes 1, 2, 3 and 4 have no predicted effects.	-	-	-	-	-	
10	Historic & cultural assets						
	Theme 1: The spatial strategy states that new development must relate sensitively to the existing Conservation Area and Listed Buildings, in the various settlements, which protects the historic and cultural assets of the area.	P	L	✓	✓	✓	
	Themes 2, 3 and 4 have no predicted effects.	-	-	-	-	-	
11	Landscape & Townscape						
	Theme 1: Small scale growth is envisaged to meet local needs, which should enhance the existing landscape setting, gateways and views of the countryside. This would have a positive effect as it	P	L	✓	✓	✓	

SA Objective	Assessment of Effect						Mitigation and Enhancement	
	Nature of Effect  Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects				
				In the short term	In the medium term	In the long term		
	protects the landscape character. Themes 2, 3 and 4 have no predicted effects.	-	-	-	-	-		
12	Health	Theme 2: Provision will be made for further sports facilities and accessible open spaces where shortages have been identified. This could give opportunities for healthier lifestyles by providing access for recreational use.	P	L	✓	✓	✓	
	Theme 4: The spatial strategy highlights the need for improved cycle routes and footpaths, which could encourage an increase in the number of cyclists. This could give opportunities for healthier lifestyles by providing access for recreational use.	P	L	✓	✓	✓		
	Themes 1 and 3 have no predicted effects.	-	-	-	-	-		
13	Sustainable locations	Theme 2: The spatial strategy recognises there is a clear need to retain village shops, pubs and post offices, meeting spaces and open space. This could have a positive effect on this objective as it protects the existing integration of housing and services.	P	L	✓	✓	✓	
	Themes 1, 3 and 4 have no predicted effects.	-	-	-	-	-		
14	Equality & social exclusion	Theme 4: The spatial strategy aims to retain a range of facilities and services within the settlement, which protects the existing access to services and facilities for everyone.	P	L	✓	✓	✓	
	Themes 1, 2, and 3 have no predicted effects.	-	-	-	-	-		
15	Good quality housing	Theme 2: The spatial strategy indicates that small scale housing will be delivered to meet local needs only, so this could imply that there are opportunities for affordable homes to be provided, which is a key criterion of the objective.	P	L	✓	✓	✓	
	Themes 1, 3 and 4 have no predicted effects.	-	-	-	-	-		
16	Community Identity &	Theme 2: The spatial strategy recognises that there is a clear need to retain village shops, pubs and post	P	L	✓	✓	✓	

SA Objective		Assessment of Effect					Mitigation and Enhancement	
		Nature of Effect Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects			
					In the short term	In the medium term		In the long term
	participation	offices, meeting spaces and open space. This will help ensure that the village remains an attractive place in which to live and work. It also contributes to providing a sense of community and identity. Themes 1, 3 and 4 have no predicted effects.	-	-	-	-	-	
17	Crime and fear of crime	Theme 4: The spatial strategy recognises that safe links between sections of public footpaths and bridleways should be a priority. This could have a positive effect on this SA objective as it provides a safer environment, possibly through better lighting provision and better design. Themes 1, 2, and 3 have no predicted effects.	P	L	✓	✓	✓	
18	Sustainable prosperity & growth	Theme 2: The spatial strategy indicates that employment space will be provided to meet local needs only. This could have a potential adverse effect on economic growth levels as it may restrict opportunities for further growth in future, when the needs have changed. Theme 3: The spatial strategy encourages new avenues of businesses, such as contributing to growing renewable energy sources through wood fuels and biofuels. This is further encouraged by using external grants, which can start up new initiatives/businesses. Themes 1 and 4 have no predicted effects.	P	L	?	?	?	
19	Fairer access to services	Theme 3: The spatial strategy expects local businesses to contribute to local services, employ local people and benefit the rural environment. This could have a positive effect on this SA objective as it encourages local provision of and access to jobs and services. Theme 4: The spatial strategy encourages	P	L	✓	✓	✓	

SA Objective	Assessment of Effect						Mitigation and Enhancement	
	Nature of Effect Including where appropriate whether the effects are direct/indirect and likely/unlikely.  Justification and Evidence	Permanence	Scale	Significance of Effects				
				In the short term	In the medium term	In the long term		
	strengthening of links to public transport and enhanced availability of bus services and demand responsive transport. Combined with improved cyclepaths/footpaths these should help increase access to services and facilities for the rural population.							
	Themes 1 and 2 have no predicted effects.	-	-	-	-	-		
20	Revitalise town centres	Theme 3: The spatial strategy encourages a mix of services, employment and housing. This could help promote the role and the attractiveness of the local centre.	<b>P</b>	<b>L</b>	✓	✓	✓	
	Themes 1, 2 and 4 have no predicted effects.	-	-	-	-	-		