



Centre for Sustainability

Dacorum Local Development Framework Core Strategy – Consultation Draft

Sustainability Appraisal Report

Appendix E – Policy Assessment

November 2010

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Appendix E: Policy Assessment

Methodology

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
L	Local	Within the settlement and immediate vicinity
R	Regional	Within the Dacorum Borough and neighbouring local authorities
N	National	UK or a wider global impact

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

Timescale	
In the Short Term	0-10 years
In the Medium Term	10-20 years
In the Long Term	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 Appendix C.

SA Objective		Reference Term
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 ₂	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

The Sustainable Development Strategy

Policy CS1: Distribution of Development

SA Objective		Assessment of Effect					
		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	Concentrating housing and employment development in the urban areas 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	✓	✓	✓
2	Water quality/ quantity	No predicted effects.	-	-	-	-	-
3	Flood risk	No predicted effects.	-	-	-	-	-
4	Soils	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	Using the settlement hierarchy to determine the scale and location of new development will focus development in the main centres which should have positive effects on reducing the growth of ghg emissions from transport and reducing the need to travel.	P	N	✓	✓	✓
6	Climate change proof	No predicted effects.	-	-	-	-	-
7	Air Quality	Transport is a key source of air pollution. Focusing housing and economic development in the main settlements 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	✓	✓	✓
8	Use of brownfield sites	Growth and rejuvenation of the Maylands business areas should lead to efficient use being made of previously developed sites in this area of Hemel Hempstead. 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	✓	?	?
9	Resource efficiency	No predicted effects.	-	-	-	-	-
10	Historic & cultural assets	Development that supports the existing character of a village and/or surrounding area could encourage enhancement or protection of the historic environment.	P	L	✓	✓	✓

SA Objective		Assessment of Effect					
		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
11	Landscape & Townscape	Development that supports the policies that protect and enhance the Green Belt, rural area and Chilterns AONB should have a positive effect on safeguarding and enhancing landscapes and townscapes.	P	L	✓	✓	✓
		Hemel Hempstead town centre is in need of regeneration 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	✓	✓	✓
12	Health	Focusing development in Hemel Hempstead and other market towns/large villages 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	✓	✓	✓
		Making best use of existing green infrastructure should help in encouraging healthy lifestyles.	P	L	✓	✓	✓
13	Sustainable locations	Focusing both housing and economic development in Hemel Hempstead should reduce the need to travel thereby helping to progress this SA objective. Also, allowing some development in the market towns and large villages should help improve accessibility to facilities in these areas.	P	L	✓	✓	✓
		A settlement hierarchy of 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	✓	✓	✓
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.	P	L	✓	✓	✓
		Using the settlement hierarchy to determine the scale and location of new development will focus development in town centres and locations which are more accessible to all forms of transport. This should have a positive effect on this SA objective, as should improving neighbourhood service provision in local centres to reduce the need to travel.	P	L	✓	✓	✓
		Focusing development and associated services in Hemel Hempstead could lead to other communities becoming isolated if it results in a loss of local facilities.	P	L	x	x	x
15	Good quality housing	No predicted effects.	-	-	-	-	-
16	Community Identity &	Development that supports the existing character of a village and/or surrounding area, as well as helping to maintain the vitality and viability of the settlement should help	P	L	✓	✓	✓

SA Objective		Assessment of Effect					
		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	maintain local identity. Enhancing neighbourhood service provision in local centres should help to improve access to community services thereby making areas more attractive places to live.	P	L	✓	✓	✓
17	Crime and fear of crime	No predicted effects.	-	-	-	-	-
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. Limiting the level of development in the market towns and large villages will help to maintain Hemel Hempstead as the key centre in the Borough and not undermine its key service role.	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	✓	✓	✓
20	Revitalise town centres	Focusing development in Hemel Hempstead should contribute to improving the viability and vitality of the town centre.	P	L	✓	✓	✓
		Improving neighbourhood service provision should promote the role of local centres.	P	L	✓	✓	✓
		Development that supports the existing character of a village and/or surrounding area, as well as helping to maintain the vitality and viability of the settlement could help revitalise the local centres.	P	L	✓	✓	✓
Summary of Assessment		The policy should provide a good balance between focusing development in the key settlements whilst allowing for demonstrated local needs to be met in smaller settlements and rural areas. The growth in key settlements will help to support certain regeneration needs in the towns and improve levels of community vitality, with associated social and economic benefits. It will also help to service the needs of surrounding areas. By concentrating growth in Hemel Hempstead and the other larger settlements the impacts on the Borough's natural environment will be minimised.					

Policies: CS2 Selection of Development Sites; CS3 Managing Selected Development Sites

SA Objective		Assessment of Effect					
		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	Policy CS2 aims to focus development away from greenfield sites which should have overall positive effects against this objective. This is supported by the element of the policy that requires development to have full regard to environmental assets, constraints and opportunities.	P	L	✓	✓	✓
		Prioritising development on previously developed land could have adverse effects as some areas of PDL can have a high biodiversity value.	P	L	?	?	?
2	Water quality/ quantity	No predicted effects.	-	-	-	-	-
3	Flood risk	No predicted effects.	-	-	-	-	-
4	Soils	A sequential approach to land selection for new development, prioritising previously developed land will aid in the protection of soils in the short term. The effects in the medium and long term are uncertain as once brownfield land is used there would be the need for greenfield development with subsequent soil sealing. However by ensuring the most effective use of land any adverse effects should be minimised.	T	L	✓	?	?
5	Greenhouse gas emissions	Ensuring that all development will be well located and accessible should reduce the need to travel to access local service and facilities, thereby helping to reduce growth in transport related greenhouse gas emissions.	P	N	✓	✓	✓
6	Climate change proof	No predicted effects.	-	-	-	-	-
7	Air Quality	Ensuring that all development will be well located and accessible should reduce the need to travel to access local service and facilities, thereby helping to reduce emissions to air.	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	✓	?	?
9	Resource efficiency	Policy CS2 encourages development on previously developed land and buildings, which could contribute to help to progress this SA objective.	P	N	✓	✓	✓

SA Objective		Assessment of Effect					
		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	Development that respects local character could also help protect and enhance the historic environment.	P	L	✓	✓	✓
11	Landscape & Townscape	Development that respects the local character and landscape context and has full regard to environmental assets, constraints and opportunities, will be encouraged. This should have positive implications on this SA objective. Only allowing extensions to defined settlements once all other appropriate sites within settlements have been allocated will help to protect local landscapes on the settlement fringes. However in the medium to long term it is likely that these 'edge of settlement' sites will be needed for development.	P	L	✓	?	?
12	Health	Ensuring that all development will be well located and accessible should provide opportunities for physical activity by promoting access to recreation and by providing walkable and neighbourhoods. This should encourage healthy lifestyles.	P	L	✓	✓	✓
13	Sustainable locations	Ensuring that all development will be well located and accessible should reduce the need to travel to access local service and facilities.	P	L	✓	✓	✓
14	Equality & social exclusion	Focusing development in 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 releasing sites for development based on the benefits it will bring to the settlement could have a positive effect on this objective.	P	L	✓	✓	✓
15	Good quality housing	No predicted effects.	-	-	-	-	-
16	Community Identity & participation	Development that respects local character should help maintain local identity.	P	L	✓	✓	✓
17	Crime and fear of crime	No predicted effects.	-	-	-	-	-
18	Sustainable prosperity & growth	The requirement for all development to be well located and accessible should help to support the local economy.	P	L	✓	✓	✓
19	Fairer access to services	Ensuring that all development will be well located and accessible should help support fairer access to services.	P	L	✓	✓	✓
20	Revitalise town centres	Focusing development within settlements will help to promote the role of local centres and town centres in need of regeneration.	P	L	✓	✓	✓
Summary of		The policies are predicted to have mainly positive effects against the majority of SA objectives, although in the medium					

SA Objective	Assessment of Effect					
	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
Assessment	to long-term when the supply of previously developed land has diminished the effects are more uncertain against the environmental objectives. Ensuring that all development is well located and accessible will help to reduce the need to travel and help towards meeting objectives for greenhouse gas emissions, air quality, health, equality, economy and fairer access to services. It will also help to improve the vitality and viability of settlements, particularly the town centres.					

Policy CS4: The Towns and Large Villages

SA Objective	Assessment of Effect					
	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 policy aims to maintain the generally open character of open land areas, which should protect habitats and species, thus providing a positive impact on this objective.	P	L	✓	✓	✓
2 Water quality/ quantity	No predicted effects	-	-	-	-	-
3 Flood risk	Limiting development on open land areas should help to reduce the amount of greenfield loss and therefore have an indirect positive effect on reducing flood risk.	P	L	✓	✓	✓
4 Soils	Limiting development on open land areas should help to preserve the natural environment and biodiversity. This could lead to indirect positive effects on soils.	P	L	✓	✓	✓
5 Greenhouse gas emissions	This policy supports a mix of uses for new development which should help to integrate housing with services and facilities. This should reduce the need to travel, which should have a positive impact on this objective.	P	N	✓	✓	✓
6 Climate change proof	No predicted effects	-	-	-	-	-

SA Objective		Assessment of Effect					
		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. Encouraging a mix of uses for new development, which integrates housing and services and facilities, 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	✓	✓	✓
8	Use of brownfield sites	The policy encourages a high density of development and encourages mixed uses of individual buildings. This could lead to more efficient use of land.	P	L	✓	✓	✓
9	Resource efficiency	No predicted effects	-	-	-	-	-
10	Historic & cultural assets	The policy requires that development is compatible with its surroundings which should help to protect the historic character of settlements.	P	L	✓	✓	✓
11	Landscape & Townscape	The policy requires that development is compatible with its surroundings which should help to protect the character of local townscapes.	P	L	✓	✓	✓
12	Health	The policy encourages a mix of uses which includes compatible leisure uses and social/community uses which provides opportunities for recreational facilities, thereby encouraging healthy lifestyles.	P	L	✓	✓	✓
13	Sustainable locations	The policy encourages a mix of uses which should integrate housing and services and facilities, reducing the need to travel.	P	L	✓	✓	✓
14	Equality & social exclusion	This policy encourages a mix of uses which should improve access to services and facilities.	P	L	✓	✓	✓
15	Good quality housing	No predicted effects	-	-	-	-	-
16	Community Identity & participation	The policy encourages a mix of uses which should make the area more attractive to live and work in, thus progressing this objective.	P	L	✓	✓	✓
17	Crime and fear of crime	Encouraging a mix of uses, including residential, within town centres could have a positive effect against this objective as the centres will be 'active' for longer periods of the day which could reduce levels of crime and the fear of crime.	P	L	✓	✓	✓
18	Sustainable prosperity &	The policy encourages a mix of uses, which aims to provide services and facilities. This could help support and develop the local economy.	P	L	✓	✓	✓

SA Objective		Assessment of Effect					
		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
	growth						
19	Fairer access to services	The policy encourages a mix of uses, which aims to provide services and facilities. This could help to provide employment opportunities.	P	L	✓	✓	✓
20	Revitalise town centres	The policy encourages a mix of uses as well as mixed-use development which should contribute to the viability and vitality of the town centre as more people will be living in the town centres.	P	L	✓	✓	✓
Summary of Assessment		The policy supports a mix of uses for new developments which should help to maintain or improve the vitality and viability of town centres and the large villages. The provision of appropriately scaled employment opportunities, services and facilities to meet the needs of the local population will help to reduce the need to travel to other areas for day to day needs, whilst at the same time protecting the areas from developments which are incompatible with the local landscapes and townscapes. By aiming to meet the needs of local communities the policy will help to reduce inequalities, particularly for those without access to the private car as well as supporting local economies.					

Policies: CS5 Green Belt; CS6 Selected Small villages in the Green Belt; CS7 Rural Area

SA Objective		Assessment of Effect					
		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	Limiting development in the countryside should help to preserve the natural environment and biodiversity although developing some limited greenfield sites could have implications for biodiversity due to potential loss of habitats.	P	L	✓	✓	✓
2	Water quality/ quantity	No predicted effects.	-	-	-	-	-

SA Objective		Assessment of Effect						
		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
3	Flood risk	No predicted effects.		-	-	-	-	-
4	Soils	Limiting development in the countryside should help to preserve the natural environment and biodiversity. This could lead to an indirect positive effects on soils.		P	L	✓	✓	✓
5	Greenhouse gas emissions	Allowing for additional development including local facilities within the smaller settlements and countryside will help in reducing the need to travel for essential day to day needs and, for a limited number of people, employment.		P	N	✓	✓	✓
		The policies encourage development for all uses, including for employment opportunities. This could allow for increased travel to access these new developments.		P	N	x	x	x
6	Climate change proof	No predicted effects.		-	-	-	-	-
7	Air quality	No predicted effects.		-	-	-	-	-
8	Use of brownfield sites	Policies CS6 and CS7 both encourage the replacement of existing buildings which 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	✓	?	?
9	Resource efficiency	The policies encourage some re-use of existing buildings, which should contribute to lower natural resource consumption and help to progress this SA objective.		P	N	✓	✓	✓
10	Historic & cultural assets	Policy CS6 encourages development that retains and protects features essential to the character and appearance of the village, which should have a positive impact on this SA objective.		P	L	✓	✓	✓
11	Landscape & Townscape	Whilst allowing limited development in the villages/countryside could have some adverse effects on the local landscapes, Policy CS5 requires that developments are sympathetic to their surroundings and retain and protect features essential to the character and appearance of the village. This will help to minimise any adverse effects and supports this objective.		P	L	✓	✓	✓
12	Health	No predicted effects.		-	-	-	-	-
13	Sustainable locations	Policies CS6 and CS7 encourage a range of development types such as local services and facilities to meet the need of the villages/towns. This could reduce the need to travel and integrate housing, services and jobs.		P	L	✓	✓	✓
14	Equality & social exclusion	Policies CS6 and CS7 encourage a range of development types, such as local services and facilities to meet the need of the villages/towns. This could improve access to health facilities, education, recreation, community facilities and public transport.		P	L	✓	✓	✓

SA Objective		Assessment of Effect					
		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
15	Good quality housing	Policies CS6 and CS7 both allow small scale housing development to take place in rural settlements. This will help to meet local needs, particularly for affordable housing.	P	L	✓	✓	✓
16	Community Identity & participation	The provision of community facilities appropriate to each location will help to support the vitality and viability of the settlements and engender community wellbeing.	P	L	✓	✓	✓
17	Crime and fear of crime	No predicted effects.	-	-	-	-	-
18	Sustainable prosperity & growth	Providing for economic growth 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	✓	✓	✓
19	Fairer access to services	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	Improving neighbourhood service provision should promote the role of local centres.	P	L	✓	✓	✓
Summary of Assessment		Whilst allowing limited development in the villages/countryside could result in some adverse effects on soils, biodiversity and local landscapes the policies generally perform well against the majority of the SA objectives. The policies allow for an appropriate level of development in the smaller settlements which should help to maintain community vitality and the viability of service provision as well as supporting local rural economies. The policies should also help reduce the need to travel to access local services as well as enabling access to everyday needs for those who do not have access to a private car. The policies also prevent the character of settlements from being adversely affected by an inappropriate scale of new development. If new employment development or countryside recreation activities result in an increase in vehicle use to travel into the area there would be adverse effects through increased greenhouse gas emissions.					

Policy CS8: Sustainable Transport

SA Objective		Assessment of Effect					
		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	There should be no direct impacts on biodiversity from this policy; however there may be indirect positive effects from reduced traffic associated pollution in the medium/long term.	P	L	-	✓	✓
2	Water quality/ quantity	No predicted effects.	-	-	-	-	-
3	Flood risk	No predicted effects.	-	-	-	-	-
4	Soils	The creation of footpath and cycle networks as well as possible additional parking may have an impact on soils due to potential soil sealing.	P	L	?	?	?
5	Greenhouse gas emissions	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 help to reduce ghg emissions.	P	N	✓	✓	✓
6	Climate change proof	No predicted effects.	-	-	-	-	-
7	Air Quality	Transport is a key source of air pollution. The policy encourages the use of more sustainable modes of transport such as walking, cycling and passenger transport over the use of private car which should have a positive effect on reducing pollutants from transport.	P	L	✓	✓	✓
8	Use of brownfield sites	No predicted effects.	-	-	-	-	-
9	Resource efficiency	No predicted effects.	-	-	-	-	-
10	Historic & cultural assets	Reducing car usage and encouraging sustainable modes of transport should be beneficial for the setting of cultural heritage features.	P	L	✓	✓	✓
11	Landscape & Townscape	This policy could encourage development of additional parking areas, which could result in a negative impact on the landscape although this is dependent on location.	P	L	?	?	?

SA Objective	Assessment of Effect						
	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 policy should help to reduce the number of vehicles in town centres which should help to improve local townscapes.	P	L	✓	✓	✓	
12	Health	Promoting more sustainable modes of transport and giving priority to healthy forms of transport over the private car should encourage more active travel such as walking and cycling and should also help to improve air quality with associated health benefits. The policy also supports improvements to road safety.	P	L	✓	✓	✓
13	Sustainable locations	Improving access to public transport could reduce the need to travel which progresses this SA objective.	P	L	✓	✓	✓
14	Equality & social exclusion	This policy should help to improve access to facilities and services, particularly for those people without access to a private car. The encouragement of sustainable modes of transport should also progress this objective. The policy encourages good access for people with disabilities.	P	L	✓	✓	✓
15	Good quality housing	No predicted effects.	-	-	-	-	-
16	Community Identity & participation	The promotion of walking, cycling and the use of public transport may enable greater interaction within communities and reduce severance associated with traffic, which could have positive effects for community identity and participation. 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	The policy aims to create safer footpaths and cycle networks which should help to encourage these modes with indirect positive effects on crime through the promotion of well-used streets and public spaces.	P	L	✓	✓	✓
18	Sustainable prosperity & growth	Providing efficient and accessible transport is essential in promoting economic growth and will therefore aid sustainable prosperity and growth.	P	L	✓	✓	✓
19	Fairer access to services	Promoting the use of sustainable modes of transport could improve access to employment for those without access to a private vehicle.	P	L	✓	✓	✓
20	Revitalise town centres	This policy aims to strengthen links to and between key facilities, which could help to promote the role of the local centres. If the policy results in achieving a reduction in urban congestion this will help to make the town centre a more attractive place to visit, aiding the revitalisation of town centres.	P	L	✓	✓	✓
Summary of Assessment		The policy has been assessed as having positive effects against the majority of SA objectives. The policy aims to promote sustainable travel options which could contribute to a reduction in local air pollution and greenhouse gas					

SA Objective	Assessment of Effect					
	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
	emissions. The policy is also likely to bring health benefits through improving local air quality, reduced stress levels due to reduced congestion, and the promotion of walking and cycling leading to enhanced health and physical fitness benefits. Supporting alternative modes to the private car will increase the availability of alternatives for those without access to a private vehicle, increasing equality and reducing social exclusion, and fairer access to services. Providing efficient and accessible transport is essential in promoting economic growth and will therefore aid sustainable prosperity and growth. The promotion of walking, cycling and the use of public transport may enable greater interaction within communities and reduce severance associated with traffic, which could have positive effects for community identity and participation. Achieving a reduction in urban congestion will also help to make the town centre a more attractive place to visit, aiding the revitalisation of town centres.					

Policy CS9: Management of Roads

SA Objective	Assessment of Effect						
	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 proposed delivery of a new north-eastern relief route could have negative implications on biodiversity, depending on the route/land take.	P	L	?	?	?
2	Water quality/ quantity	No predicted effects.	-	-	-	-	-
3	Flood risk	No predicted effects.	-	-	-	-	-
4	Soils	The proposed delivery of a new north-eastern relief route would have an adverse effect on soils due to additional soil sealing.	P	L	x	x	x
5	Greenhouse	The policy could result in reduced congestion with associated reductions in overall	P	N	✓	✓	✓

SA Objective		Assessment of Effect						
		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
	gas emissions	emissions, thus having a positive impact on this objective. However the proposed delivery of a new north-eastern relief route has been predicted as having uncertain effects on this objective as it could result in an increase in overall traffic levels – through induced traffic.	P	L	?	?	?	
6	Climate change proof	No predicted effects.	-	-	-	-	-	
7	Air Quality	The policy could reduce congestion, thereby reducing the levels of pollutants, and thus improving this objective.	P	L	✓	✓	✓	
		However the proposed delivery of a new north-eastern relief route has been predicted as having uncertain effects on this objective as it could result in an increase in overall traffic levels – through induced traffic.	P	L	?	?	?	
8	Use of brownfield sites	The delivery of a new north-eastern relief route would result in the loss of some greenfield land.	P	L	x	x	x	
9	Resource efficiency	No predicted effects.	-	-	-	-	-	
10	Historic & cultural assets	No predicted effects.	-	-	-	-	-	
11	Landscape & Townscape	The proposed delivery of a new north-eastern relief route could have negative implications on local landscape depending on the route/land take.	P	L	?	?	?	
12	Health	The policy could reduce congestion, having a positive effect on this objective as there would be a reduction in levels of pollutants.	P	L	✓	✓	✓	
		The policy encourages improved safety and environmental conditions, which could result in a lower number of accidents, and other benefits for health. The design of local road space to allow shared use will help to encourage the take up of healthier travel choices such as walking and cycling.	P	L	✓	✓	✓	
13	Sustainable locations	No predicted effects.	-	-	-	-	-	
14	Equality & social exclusion	Directing all new development to the appropriate category of road should help to reduce adverse effects of traffic on local communities. The design of local road space to allow shared use will help to encourage walking and cycling, thus encouraging easier	P	L	✓	✓	✓	

SA Objective	Assessment of Effect						
	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	
		movement for those who do not use a private vehicle.					
15	Good quality housing	No predicted effects.	-	-	-	-	-
16	Community Identity & participation	Directing all new development to the appropriate category of road should help to reduce adverse effects of traffic on local communities.	P	L	✓	✓	✓
17	Crime and fear of crime	No predicted effects.	-	-	-	-	-
18	Sustainable prosperity & growth	A reduction in the level of congestion, particularly around Maylands, should help to increase productivity of the local and regional economy.	P	R	✓	✓	✓
19	Fairer access to services	The proposed delivery of a new north-eastern relief route could improve the access to services and facilities.	P	L	✓	✓	✓
20	Revitalise town centres	If the policy results in reduced levels of traffic in the town centres this would have positive effects against this objective.	P	L	?	?	?
Summary of Assessment		The delivery of the north-eastern relief road has been predicted as having some uncertain and negative effects as it would require development of greenfield land and may result in increased traffic levels resulting from induced traffic. However other elements of the policy have been assessed as having positive effects, particularly in relation to the safe movement of all road users which should encourage take-up of walking and cycling with associated health benefits. Directing all new development to the appropriate category of road should help to reduce adverse effects of traffic on local communities.					

Policies: CS10 Quality of Settlement Design; CS11 Quality of Neighbourhood Design; CS12 Quality of Site Design; CS13 Quality of the Public Realm

SA Objective		Assessment of Effect					
		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	Policy CS10 specifically aims to protect identified wildlife corridors and preserve and enhance green gateways. The objective is further supported by policy CS12 which requires new developments to ensure that important trees are retained, encourages the planting of trees and shrubs, and the incorporation of street trees, living walls and soft landscaping, all of which should all have positive effects on biodiversity.	P	L	✓	✓	✓
2	Water quality/ quantity	No predicted effects.	-	-	-	-	-
3	Flood risk	The provision of street trees, living walls and soft landscaping (CS13) could help to reduce surface run-off and reduce flood risk.	P	L	✓	✓	✓
4	Soils	No predicted effects.	-	-	-	-	-
5	Greenhouse gas emissions	The retention of trees and new tree and shrub planting will help with CO ₂ sequestration. In addition good quality and safe neighbourhoods could encourage walking and cycling and reduce private car use.	P	N	✓	✓	✓
6	Climate change proof	Policy CS10 aims to protect wildlife corridors, whilst elements of Policy CS13 such as incorporating street trees, living walls and soft landscaping, retaining important trees, and planting trees and shrubs should all have positive effects on this objective.	P	N	✓	✓	✓
7	Air Quality	No predicted effects.	-	-	-	-	-
8	Use of brownfield sites	No predicted effects.	-	-	-	-	-
9	Resource efficiency	No predicted effects.	-	-	-	-	-
10	Historic & cultural assets	Policy CS11 aims to respect and enhance the character areas of the neighbourhood, which should have a positive impact on this objective.	P	L	✓	✓	✓
11	Landscape &	All policies, especially CS10 and CS11 aim to protect or enhance the views and the	P	L	✓	✓	✓

SA Objective		Assessment of Effect					
		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
	Townscape	landscape character of surroundings. Policy CS10 aims to preserve and enhance identified green gateways, having positive impacts on landscape, and policy CS14 should help to protect and enhance townscapes. The good design promoted through these policies should have overall positive effects on this objective.					
12	Health	The policies encourage high quality development, such as development which considers protecting and enhancing significant views, protecting green gateways and promoting open spaces could help to progress this objective as it encourages people to walk and cycle, which has positive implications for this objective.	P	L	✓	✓	✓
13	Sustainable locations	No predicted effects.	-	-	-	-	-
14	Equality & social exclusion	No predicted effects.	-	-	-	-	-
15	Good quality housing	The policies should allow for the development of good quality new housing developments.	P	L	✓	✓	✓
16	Community Identity & participation	Encouraging high quality urban design should make urban areas more attractive places to live and also help to increase community identity and participation. Considering local character should help to maintain local identity.	P	L	✓	✓	✓
17	Crime and fear of crime	Policy CS11 aims to incorporate natural surveillance which should deter crime and help reduce the fear of crime. CS13 also encourages the provision of active frontages and natural surveillance.	P	L	✓	✓	✓
18	Sustainable prosperity & growth	Policy CS13 encourages the improvement of the public realm, which should attract people to the area, and thus help to improve the local economy. The high quality design of settlements could also have indirect positive effects on the local economy through the encouragement of new businesses to start up in these areas.	P	L	✓	✓	✓
19	Fairer access to services	No predicted effects.	-	-	-	-	-
20	Revitalise town centres	Encouraging high quality design of settlements and neighbourhoods and the quality of the public realm should help to create attractive town centres.	P	L	✓	✓	✓
Summary of Assessment		The design policies have been forecast as having positive effects against many of the environmental objectives, with the natural and built environmental improvements that would be linked to the implementation of the policy being predicted to have associated positive effects on social and economic objectives. Improving the public realm should make urban areas more attractive places to live and also help to increase community identity and participation.					

Strengthening Economic Prosperity

Policies: CS14 Economic Development; CS15 Offices, Research, Industry, Storage and Distribution; CS16 Shops and Commerce

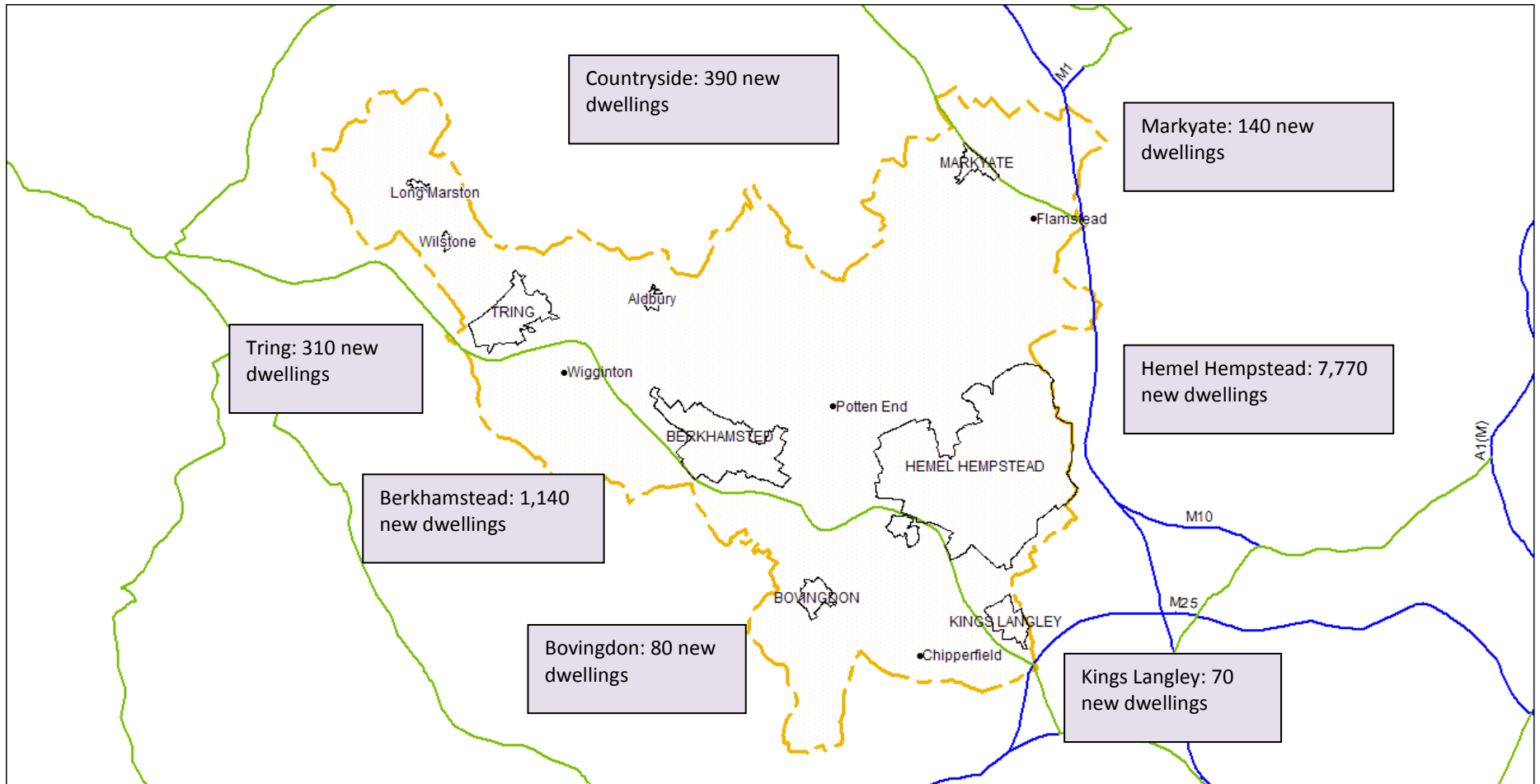
SA Objective		Assessment of Effect					
		Nature of Effect Including where appropriate whether the effects are direct/indirect and likely/unlikely. Justification and Evidence	Permanence	Scale	Significance of Effects		
					In the short term	In the medium term	In the long term
1	Biodiversity	Encouraging economic development could mean additional land take, which could have adverse impacts on habitats and species. The significance of the effect will be dependent on the biodiversity value of the land to be developed.	P	L	?	?	?
2	Water quality/ quantity	No predicted effects.	-	-	-	-	-
3	Flood risk	No predicted effects.	-	-	-	-	-
4	Soils	Providing new economic developments on undeveloped sites would result in some soil sealing.	P	L	x	x	x
5	Greenhouse gas emissions	The policy encourages development that supports the transition to a low carbon economy which should have positive effects on ghg emissions.	P	R	✓	✓	✓
		Focusing economic 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. It may also help to reduce levels of out-commuting.	P	R	✓	✓	✓
		New retail development supported by Policy CS16 should improve the retail offerings of the larger towns and reduce the need for people to travel to other centres to access retail facilities.	P	R	x	x	x
6	Climate change proof	No predicted effects.	-	-	-	-	-

SA Objective		Assessment of Effect					
		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	Policy CS14 encourages development that supports the transition to a low carbon economy which should have positive effects on air quality.	P	L	✓	✓	✓
		Focusing economic 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. This should have positive effects on local air quality.	P	L	✓	✓	✓
		Transport is a key source of air pollution. Encouraging economic development could increase the need to travel and the average distance travelled which could have adverse impacts on increasing pollutants from transport.	P	R	x	x	x
8	Use of brownfield sites	Policy CS14 encourages development that will be located in town and local centres, as well as General Employment Areas which is positive for this SA objective.	P	L	✓	✓	✓
9	Resource efficiency	No predicted effects.	-	-	-	-	-
10	Historic & cultural assets	No predicted effects.	-	-	-	-	-
11	Landscape & Townscape	Policy CS15 encourages development in Employment Areas within the Green Belt which could have adverse impacts on landscape, whilst other economic developments could have a visual impact on the landscape.	P	L	x	x	x
12	Health	Improving the local economy could have positive effects on health through improved overall prosperity.	P	L	✓	✓	✓
13	Sustainable locations	Encouraging economic development in Employment Areas and within towns should integrate housing, and jobs, as well as services.	P	L	✓	✓	✓
14	Equality & social exclusion	Focusing economic 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. Improving the retail offering of Hemel Hempstead, Berkhamsted and Tring should help to provide more equitable access to a range of shops, particularly for those without access to a private car.	P	L	✓	✓	✓
15	Good quality housing	No predicted effects.	-	-	-	-	-
16	Community	Policy CS16 aims to provide retail facilities which should improve the quality of life in the	P	L	✓	✓	✓

SA Objective		Assessment of Effect									
		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
	Identity & participation	area, making it more attractive to live and work in.									
17	Crime and fear of crime	No predicted effects.					-	-	-	-	-
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, and providing retail facilities, could reduce levels of out-commuting.					P	L	✓✓	✓✓	✓✓
19	Fairer access to services	Providing for economic growth in Hemel Hempstead and surrounding towns should lead to the provision of employment opportunities, close to the major residential areas in the Borough.					P	L	✓	✓	✓
		Policy CS16 supports the provision of new retail facilities which should progress this objective.					P	L	✓	✓	✓
20	Revitalise town centres	Focusing development in Hemel Hempstead could contribute to improving the viability and vitality of the town centre.					P	L	✓	✓	✓
Summary of Assessment		The policies support the development of a sustainable economy within the area and should help to reduce the need to travel to access employment opportunities. The policies aim to concentrate new development in Hemel Hempstead but should also help to maintain the vitality of local communities by enabling employment opportunities appropriate to the size and character of the settlements to be provided. The protection of employment areas should help ensure that communities do not suffer from the loss of important employment opportunities. The provision of a supply of employment land from within the Green Belt is likely to have adverse effects on local landscapes, and any new greenfield or brownfield development could have impacts on biodiversity, dependent on the characteristics of the individual locations. By providing a range of employment opportunities and retail provision locally the needs of the local population are more likely to be met and this would have a positive effects in terms of reducing the need to travel (with associated greenhouse gas emissions) and providing fairer access to jobs and services.									

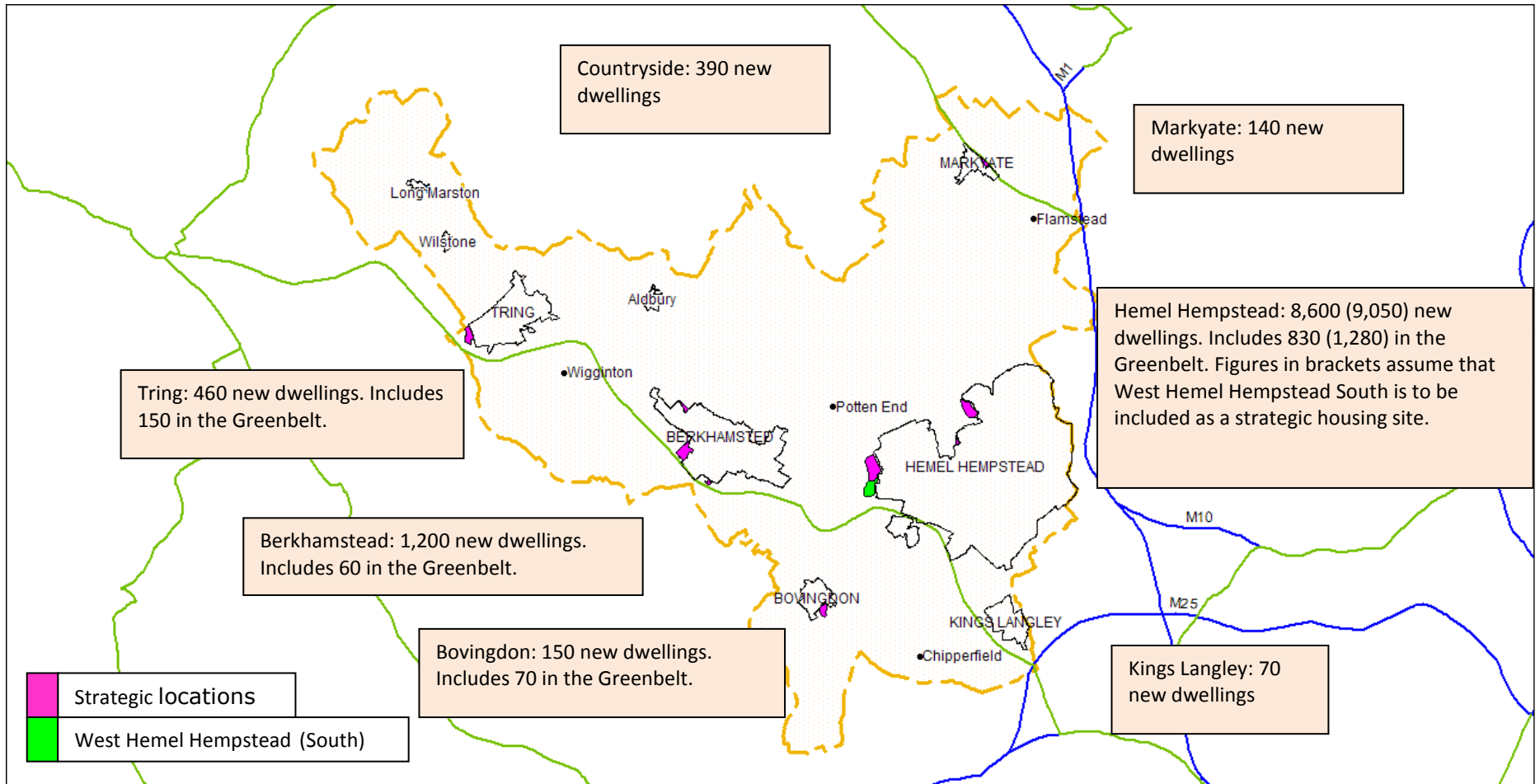
Providing Homes and Community Services

Option 1: About 9,900 new dwellings. No Greenbelt development.



Option 2: About 11,010 new dwellings. Includes some Greenbelt development at Tring, Berkhamsted, Bovingdon and Hemel Hempstead.

NB: Number of new dwellings could increase to 11,600 if the additional Greenbelt site (West Hemel Hempstead (South)) is also included.



Policy CS17: Housing Programme

Dacorum Draft Core Strategy Options for Growth

The assessments in the table below provide a comparison between the two options for growth included in the Dacorum Core Strategy Working Draft (July 2010) and a third option that assumes the provision of the amount of new dwellings required to meet the natural growth in Dacorum's population.

SA Objective		Option 1 370 dpa (9,250 total)	Option 2 430 dpa (10,750 total)	Option 3: Natural Growth 500 dpa 12,500 total			
1	Biodiversity	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. Potential water shortages as discussed in relation to the water objective may result in secondary effects on the environment, specifically biodiversity.					
		Lower levels of growth would mean less need for development on greenfield sites and would therefore reduce the potential for adverse effects on biodiversity. Effects will be dependent on the specific sites taken forward for development.	?	Additional greenfield sites would be required to deliver the number of new dwellings under Option 2 which could result in adverse effects on biodiversity. However effects will be dependent on the specific sites taken forward for development.	?	As a higher proportion of greenfield land would be required to deliver this option there is a greater potential for adverse effects on biodiversity through habitat fragmentation and loss. However effects will be dependent on the specific sites taken forward for development.	?
				Development on strategic Greenbelt sites could provide opportunities for habitat creation and enhancement which would have benefits if the sites are currently of low biodiversity value.	?	Development on strategic Greenbelt sites could provides opportunities for habitat creation and enhancement which would have benefits if the sites are currently of low biodiversity value.	?
2	Water quality/ quantity	Domestic daily water consumption in the Borough is currently 192 litres per capita, which is above the national average of 148 litres. Dacorum Borough is within an area already identified as 'over-abstracted' (Colne CAM, EA) and the area has been designated as being under serious water stress ¹ . The Water Cycle Scoping Study that is currently being undertaken has looked at two different housing growth scenarios of 9,000 and 17,000 new dwellings for the period 2006-2031. For the lower level of growth, the study indicates that for potable water supply; waste water and					

¹ Environment Agency. Areas of water stress: final classification [online] available at: <http://publications.environment-agency.gov.uk/pdf/GEHO1207BNOC-e-e.pdf>

		sewerage network capacity; flood risk; and the water environment, the only major constraints are those related to the Maple Lodge waste water treatment works which serve Hemel Hempstead and Kings Langley. However for the higher growth scenario there would be wider issues including the supply of potable water. NB: this higher growth scenario is considerably higher than Option 3.							
		Providing 370 dpa would put additional pressure on water resources and which could cause issues with potable water supply. The effect is likely to become more significant over time as more dwellings are built and risk of periodic water shortages increase.	?	x	Providing 430 dpa would put increased additional pressure on water resources and which could cause issues with potable water supply. The effect is likely to become more significant over time as more dwellings are built and risk of periodic water shortages increase.	?	Providing 500dpa would put further additional pressure on water resources and which could cause issues with potable water supply. The effect is likely to become more significant over time as more dwellings are built and risk of periodic water shortages increase.	?	
		Lower level of growth will limit the area of new impermeable surfacing and therefore limit increased risk of run-off polluting watercourses. However there could still be some adverse effects.	x		The higher levels of growth will result in greater areas of impermeable surfaces with a corresponding increase in the risk of polluted run-off entering watercourses.	x		The increased levels of growth will result in further areas of impermeable surfaces being created with a corresponding increase in the risk of polluted run-off entering watercourses.	x
		There is uncertainty whether the local waste water treatment works will be able to accommodate this level of growth, particularly in relation to Hemel Hempstead and Kings Langley. Any overload of the sewerage system could result in adverse effects on water quality. Further water cycle study work will be required to support the ongoing development of the Core Strategy.	?		There is uncertainty whether the local waste water treatment works will be able to accommodate this level of growth, particularly in relation to Hemel Hempstead and Kings Langley. Any overload of the sewerage system could result in adverse effects on water quality. Further water cycle study work will be required to support the ongoing development of the Core Strategy.	?		There is uncertainty whether the local waste water treatment works will be able to accommodate this level of growth, particularly in relation to Hemel Hempstead and Kings Langley. Any overload of the sewerage system could result in adverse effects on water quality. Further water cycle study work will be required to support the ongoing development of the Core Strategy.	?
3	Flood risk	Parts of Dacorum lie within areas of flood risk, which may expand due to the implications of climate change.							
		This level of growth could be delivered without having to build new dwellings in areas at risk from flooding.	-		This level of growth could be delivered without having to build new dwellings in areas at risk from flooding.	-		This level of growth could be delivered without having to build new dwellings in areas at risk from flooding.	-
4	Soils	Housing development will result in soil sealing from new housing and associated infrastructure. Development on brownfield sites may provide opportunities for remediating contaminated land.							
		Lower levels of growth will limit the area of soil sealing. However delivery of 370 dpa will result in some soil loss.	x		Increased development under this option would lead to an increase in the area of soil sealing	x		The higher level of growth will result in the greatest levels of soil sealing.	x
5	Greenhouse gas emissions	Housing development will result in an increase in greenhouse gas emissions from energy used in new housing and associated activities including increases in traffic. Building a minimum of 9,250 new homes could lead to an increase in green house gas emissions of approximately 53,280 tonnes per annum. This is based upon estimated per capita domestic CO ₂ emissions of 2.4 tonnes multiplied by the average number of							

<p>occupants per household in the Borough of 2.4 [Source: Audit Commission Local Area Profile].</p> <p>The three options for growth are limited to considering different numbers of new dwellings and do not include options for levels of employment growth. Any mis-match between the new jobs provided and the skills of the local workforce (including those in the new dwellings) would result in an increase in the levels of in-commuting to the area with associated increases in CO₂ emissions. In some respects such a situation is inevitable as any growth at Maylands will be serving the wider London Arc sub-region.</p>					
Based on the estimates above this option would result in an increase of 53,280 tonnes of CO ₂ per annum.	x	Based on the estimates above this option would result in an increase of 61,920 tonnes of CO ₂ per annum.	x	Based on the estimates above this option would result in an increase of 72,000 tonnes of CO ₂ per annum.	x
		Delivering this number of new dwellings would require some development in the Greenbelt on the edge of settlements. This could result in increased car use to access town centre services with associated increases in CO ₂ emissions, particularly if existing congestion is exacerbated.		Delivering this number of new dwellings would require development in the Greenbelt on the edge of settlements. This could result in increased car use to access town centre services with associated increases in CO ₂ emissions, particularly if existing congestion is exacerbated.	
The lower levels of housing provided under this option does not match the increase in new employment opportunities that are proposed (up to 18,000 new jobs). This could result a rise in levels of in-commuting with an associated increase in CO ₂ emissions.	x	This option would provide a better match between new homes and new jobs than Option 1. However there would still be a shortfall in the housing provision needed to support employment growth and there would therefore be some level of in-commuting with associated increases in CO ₂ emissions.	x	This option provides the best match between new dwellings and proposed new jobs. This should help to limit the amount of in-commuting and associated increases in CO ₂ emissions. However there would still be a shortfall in the number of new dwellings required to support the proposed 18,000 new jobs and some in-commuting would be inevitable.	x
There would be some opportunities for district heating systems at Maylands and Hemel Hempstead under this option.	✓	In addition to the opportunities identified for Option 1, the development of new urban extensions that would be required to deliver the level of housing growth in this option would provide further opportunities for the introduction of district heating systems which can help reduce CO ₂ emissions, particularly if fuelled by biomass.	✓	Higher levels of growth provide further potential opportunities for the incorporation of district heating systems into new developments and the introduction of other low carbon initiatives (e.g. renewable energy schemes).	✓
Lower levels of growth will result in lower contributions into the Carbon	-	Increased levels of growth will result in higher contributions into the Carbon	-	Higher levels of growth will result in higher contributions into the Carbon	-

		Offset fund.		Offset fund than for Option 1.		Offset fund.	
6	Climate change proof	No predicted effects	-	No predicted effects	-	No predicted effects	-
7	Air quality	Building a minimum of about 9,250 new homes will contribute to background emissions through an increase in vehicles on the road. During construction there are potential adverse effects on local air quality close to the development sites. Dacorum Borough Council have completed the 2010 Progress Report which confirms that annual mean nitrogen dioxide concentrations continue to exceed the relevant Air Quality Objectives at three locations within the Borough, namely Lawn Lane Hemel Hempstead, London Road Apsley and High Street Northchurch. These areas are to be designated as Air Quality Management Areas (AQMAS).					
		Lower levels of growth under this option will result in the lowest levels of increase in air borne emissions during both construction and once the dwellings are occupied.	-	Increased levels of construction and the subsequent vehicle activity and domestic emissions that would result from this option will result in increased levels of emissions over option 1. This could exacerbate some of the air quality issues that currently exist in the Borough.	x	Higher levels of construction and the subsequent vehicle activity and domestic emissions that would result from this option will result in increased levels of emissions over options 1 and 2. This could exacerbate some of the air quality issues that currently exist in the Borough.	x
8	Use of brownfield sites	The lower levels of growth under this option will result in a lower proportion of the new dwellings being built on greenfield sites.	-	The increased levels of growth under this option will result in a greater proportion of the new dwellings being built on greenfield sites.	x	The higher levels of growth under this option will result in a greater proportion of the new dwellings being built on greenfield sites.	x
9	Resource efficiency	All levels of housing growth will put demands on natural resources and result in increased waste generation. The Dacorum Infrastructure Study shows there to be no issues at WWTWs at Markyate, Bovingdon or Berkhamsted, where any necessary upgrades have already taken place. There may need to be small-scale upgrades at Tring in the future. The main issue is Hemel and Kings Langley which share the same sewers and both feed in to the Maple Lodge treatment works. This facility will need significant upgrading in the future.					
		Lower levels of growth will place less demand on waste and sewerage infrastructures although even at the lower levels of growth there will be issues with the capacity of waste water treatment works serving Hemel Hempstead and Kings Langley.	-	Increased levels of growth will place more demand on waste and sewerage infrastructures. There will be issues with the capacity of waste water treatment works serving Hemel Hempstead and Kings Langley.	x	Higher levels of growth will place an increased demand for waste management facilities and sewerage treatment. New capacity at the Waste Water Treatment Works (WWTWs) serving Hemel Hempstead and Kings Langley would be required and there may also be similar issues for Tring ² .	x
		Lowest level of growth will result in the	-	Increased levels of growth under this	x	Highest level of growth will result in the	x

² DBC Strategic Infrastructure Study – Draft Report, June 2010.

		lowest level of resource use in construction and waste generation once the dwellings are occupied.		option would result in greater resource use and increased waste generation.		highest level of resource use in construction and waste generation once the dwellings are occupied.	
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 historic or cultural assets and should these sites be developed there may be adverse effects on these assets.					
		Lowest level of growth will result in the least impact on the historic environment. Effects will be dependent on the specific sites taken forward for development.	?	Higher levels of development increase the risk for adverse effects on the historic environment. Effects will be dependent on the specific sites taken forward for development.	?	Increased levels of housing could result in increased impacts on historic landscapes and features. Effects will be dependent on the specific sites taken forward for development.	?
11	Landscape & Townscape	Constructing new dwellings is likely to result in some adverse effects on landscapes and townscapes. The effects will be more significant in the long term once brownfield sites have been used up and houses will have to be built on greenfield sites on the edge of settlements.					
		Lower level of growth reduces the need to develop greenfield sites and negates the need to develop in the Greenbelt with its associated adverse effects on local landscapes, tranquillity and light pollution.	-	More greenfield sites required to deliver this option. Greenbelt land release would be required with associated adverse effects on local landscapes and erosion of green links between some existing residential areas and the countryside. There would also be a loss of tranquillity and increased light pollution in the area affected by the new developments.	x	More greenfield sites required to deliver this option. Additional Greenbelt land release would be required with associated adverse effects on local landscapes and the potential for coalescence of settlements. There would also be a loss of tranquillity and increased light pollution in the area affected by the new developments.	x x
12	Health	There are existing deficits of leisure space (including child play space), allotments and natural green space in some parts of the Borough, all levels of growth will create further demand. Whilst some GP surgeries in Hemel Hempstead are more crowded than the Hertfordshire average, across Dacorum as a whole there is considerable capacity within existing practices. However an assessment of future new demand associated with growth in Dacorum indicates that new surgeries will be required to accommodate growth. A large proportion of this demand will be at Hemel Hempstead. Due to a lack of information from providers relating to secondary health care planning there is uncertainty as to whether the new local General Hospital at Hemel Hempstead will be able to cope with demand resulting from future growth.					
		The lower levels of growth under this option would result in the lowest impact on existing healthcare facilities.	-	The increased levels of additional housing proposed under this option would put pressure on existing health care facilities. However if new neighbourhoods were to be created as part of this growth option there would be opportunities for the provision of new healthcare facilities.	?	The higher levels of additional housing proposed under this option would put pressure on existing health care facilities. However if new neighbourhoods were to be created as part of this growth option there would be opportunities for the provision of new healthcare facilities.	?

		The number of new dwellings proposed under this option would not meet the identified needs of the local population and as a result health issues related to a lack of appropriate housing would be exacerbated (e.g. through overcrowding).	x	This option would go some way towards meeting the local housing need and could therefore help to reduce levels of housing related ill health and low levels of wellbeing (e.g. as a result of overcrowding).	✓	The provision of higher levels of housing growth will help to meet the housing needs of the local population and reduce issues of overcrowding and stress related to inadequacy of housing provision.	✓
13	Sustainable Locations	The smaller scale housing developments under this option provide limited opportunities for integrating new local services and facilities.	-	Increased levels of development under this option could provide increased scope for integrating new local services and facilities and increasing the viability of existing services.	✓	The larger developments that would need to be taken forward to deliver the number of new dwellings under this option would be more likely to incorporate a range of local facilities thereby reducing the need to travel to access everyday needs.	✓
				The edge of town locations would mean that the housing sites would be at a distance from the town centre facilities and services.	x	The edge of town locations would mean that the housing sites would be at a distance from the town centre facilities and services.	x
14	Equality & social exclusion	Lower levels of growth will put less pressure on local infrastructure than the higher growth options.	-	Increased levels of growth will put pressure on local infrastructure, particularly schools, many of which are already under pressure.	x	Higher levels of growth will put pressure on local infrastructure, particularly schools, many of which are already under pressure.	x
		Lower levels of growth provide fewer opportunities for new community facilities to come forward as a result of developer contributions and could reduce the viability of existing facilities and services. This would have the greatest effect on those without access to private transport.	x	Higher levels of housing growth will result in increased levels of developer contributions which could result in an increased provision of health, education, recreation and community facilities, as well as supporting the viability of existing services and facilities.	✓	Higher levels of housing growth will result in increased levels of developer contributions which could result in an increased provision of health, education, recreation and community facilities, as well as supporting the viability of existing services and facilities.	✓
		This option provides an allocation for new gypsy and traveller pitches which will help to meet the needs of these minority groups.	✓	This option provides an allocation for new gypsy and traveller pitches which will help to meet the needs of these minority groups.	✓	It is assumed that this option provides an allocation for new gypsy and traveller pitches which will help to meet the needs of these minority groups.	✓
		The option allows for provision of rural exception sites which will help to meet the needs for affordable housing for	✓	The option allows for provision of rural exception sites which will help to meet the needs for affordable housing for	✓	This option would result in approximately 570 new dwellings being provided in the villages and countryside	✓

		local residents in rural areas where there is a shortage of affordable homes for local people, particularly first time buyers.		local residents in rural areas where there is a shortage of affordable homes for local people, particularly first time buyers.		of Dacorum which would meet the natural population growth needs. 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	Providing a minimum of 9,250 new homes should help to progress this objective by increasing the number of houses (including affordable homes) available.					
		The lower levels of growth under this option limits the opportunities for providing the additional new dwellings required in the Borough. This could result in an out-migration to other areas which do have available housing. Low levels of growth will limit the supply of affordable housing and restrict the types of dwellings that would be delivered (e.g. less opportunity for a mix of family homes). This could have disproportionate effects on certain sections of the population such as first-time buyers and larger / extended families.	x	This option will be an improvement over Option 1 in terms of meeting local housing needs, particularly the need for affordable homes. However the levels of new housing under Option 2 do not fully meet the identified local needs required to support natural growth levels.	✓	This option provides the greatest opportunities for meeting local housing needs, particularly the need for affordable homes and a mix of family homes.	✓ ✓
16	Community Identity & participation	Lower levels of growth provide fewer opportunities for new community facilities to come forward due to lower levels of developer contributions. At the same time this level of growth could put more pressure on the existing facilities, although in some cases this	?	Increased levels of growth under this option will result in a higher level of developer contributions which will allow for the provision of new community facilities. However the higher growth will put more pressure on the existing facilities,	?	Higher levels of housing growth will result in increased levels of developer contributions which could result in an increased provision of community facilities. ? However the higher growth will put more pressure on the existing facilities,	?

		could help to maintain the viability of a particular facility.		although in some cases this could help to maintain the viability of a particular facility.		although in some cases this could help to maintain the viability of a particular facility.	
						There is a 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	Any increase in population within the Borough could put additional strain on the police force. The draft Dacorum Infrastructure Study indicates that a low growth scenario (9,000 dwellings) leads to a requirement for 5 additional police staff and 35 sqm additional police floorspace, whilst a high growth scenario (16,000 dwellings) leads to a requirement for 43 additional police staff and 270 sqm additional police floorspace.					
		Lower levels of housing growth are likely to result in limited changes to the status quo.	-	Additional levels of housing, and the additional services and facilities that would be delivered alongside housing growth, could help to reduce levels of crime.	?	Meeting community needs for housing, and the additional services and facilities that would be delivered with increased levels of housing, could help to reduce levels of crime.	?
18	Sustainable prosperity and growth	Hertfordshire's economy underperformed during the 2000s and the current recession has seen it slow down further.					
		The lower levels of housing that would be delivered under this option could hamper the delivery of new jobs to the Borough. A lack of suitable housing for employees could result in potential incoming businesses seeking to locate elsewhere in the region where there is a better supply of new housing. This would affect the viability of plans to revitalise the Borough's economy, particularly in respect to the Maylands Gateway. There is however a degree of uncertainty as to whether lower levels of housing would hamper the delivery of the employment growth, as the strategic location and role of Maylands in the wider sub-region would mean that	x	Housing growth under this option would be more closely aligned to the planned levels of employment growth than Option 1. This would help to support the regeneration of Hemel Hempstead and planned levels of economic growth in the Borough. However there is still likely to be a shortfall in the number of new homes that would be required to meet the needs of new employees. There is however a degree of uncertainty as to whether lower levels of housing would hamper the delivery of the employment growth, as the strategic location and role of Maylands in the wider sub-region would mean that people would travel from outside Dacorum to work here, particularly in	✓	Housing growth under this option would be more closely aligned to the planned levels of employment growth than Options 1 and 2. This would help to support the regeneration of Hemel Hempstead and planned levels of economic growth in the Borough. However there is still likely to be a shortfall in the number of new homes that would be required to meet the needs of new employees. There is however a degree of uncertainty as to whether lower levels of housing would hamper the delivery of the employment growth, as the strategic location and role of Maylands in the wider sub-region would mean that people would travel from outside	✓

		<p>people would travel from outside Dacorum to work here, particularly in the B-class employment uses.</p> <p>The lower levels of new dwellings planned under Option 1 may not provide the 'critical mass' of new residents that would be required to support the successful regeneration of Hemel Hempstead.</p>		<p>the B-class employment uses.</p> <p>The higher level of growth under this option will help to support the key regeneration projects that are planned for Hemel Hempstead.</p>		<p>Dacorum to work here, particularly in the B-class employment uses.</p>	
						<p>The larger number of houses under this option to meet local needs in the countryside should help to keep local services more viable, thereby supporting local enterprises.</p>	✓
19	Fairer access to services	<p>The lower number of new dwellings provided under this option will limit the opportunities for people to stay living in the area and benefit from the planned expansion of jobs in the Borough. The lower levels of growth will also reduce the potential for new services and facilities to be developed that would be a benefit for all sectors of the community.</p>	x	<p>Provision of higher levels of housing growth will enable people to remain living in the area and therefore have improved access to newly created employment opportunities.</p>	✓	<p>Provision of higher levels of housing growth will enable people to remain living in the area and therefore have improved access to newly created employment opportunities.</p> <p>Allowing the housing levels in the villages and countryside to match natural growth will help to allow workers in rural businesses to remain living in their communities and help to support the rural economy.</p>	✓
20	Revitalise town centres	<p>Low levels of growth could result in shops and services in local centres becoming unviable and closing down.</p>	?	<p>Higher levels of housing growth will help to support the viability of local centres and town centres.</p>	✓	<p>Higher levels of housing growth will help to support the viability of local centres and town centres.</p>	✓
Option summaries		<p>Compared to options 2 and 3, the lower levels of growth proposed under this option will result in less adverse effects on the environment that are inevitably associated with new development (e.g. effects on local landscapes, soil sealing, natural resource use, increased waste, and increased emissions to air).</p>		<p>Delivering Option 2 would result in the need for some development in the Greenbelt with associated adverse effects on some of the environmental objectives. Resource use will increase and there will be increased waste, increased emissions to air and some loss of tranquillity.</p> <p>However the higher levels of new dwellings</p>		<p>Delivering Option 3 would result in the need for additional development in the Greenbelt over Option 2 with associated adverse effects on some of the environmental objectives. Resource use will increase and there will be increased waste, increased emissions to air and some loss of tranquillity.</p> <p>However the higher levels of new dwellings</p>	

	<p>However conversely, the lower level of growth will limit the success of meeting a number of the social and economic objectives. The needs of the local community for new housing, particularly affordable housing, will not be met which could result in increased levels of out-migration to neighbouring areas. This would in turn have implications for the viability of existing services and facilities in the Borough and reduce the vitality of the town and village centres. The lower level of growth would also not support the planned delivery of a significant number of new jobs which would hamper the economic regeneration of both Hemel Hempstead town centre and the Maylands Business District.</p>	<p>will go further towards supporting the planned job expansion in Maylands as well as the regeneration of Hemel Hempstead. The option will result in a greater provision of affordable housing than Option 1, and will help to maintain viability of existing services whilst also encouraging the provision of new and expanded facilities.</p>	<p>will go further towards supporting the planned job expansion in Maylands as well as the regeneration of Hemel Hempstead. The option will result in a greater provision of affordable housing than Options 1 and 2, and will help to maintain viability of existing services whilst also encouraging the provision of new and expanded facilities.</p> <p>By fully meeting the needs for new housing in the villages and countryside this option goes the furthest towards helping to sustain the rural communities of the Borough.</p>
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Policies: CS18 Mix of Housing; CS19 Affordable Housing; CS20 Rural Exception Sites

SA Objective		Assessment of Effect						
		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	Potential for some adverse effects on biodiversity associated with development of rural exception sites.	P	L	?	?	?	
2	Water quality/ quantity	No predicted effects.	-	-	-	-	-	
3	Flood risk	No predicted effects.	-	-	-	-	-	
4	Soils	No predicted effects.	-	-	-	-	-	

SA Objective		Assessment of Effect					
		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
5	Greenhouse gas emissions	Provision of affordable housing in rural areas to allow local people to remain living in the communities in which they work will help to reduce the need to travel.	P	N	✓	✓	✓
6	Climate change proof	No predicted effects.	-	-	-	-	-
7	Air Quality	No predicted effects.	-	-	-	-	-
8	Use of brownfield sites	No predicted effects.	-	-	-	-	-
9	Resource efficiency	No predicted effects.	-	-	-	-	-
10	Historic & cultural assets	No predicted effects.	-	-	-	-	-
11	Landscape & Townscape	Potential for some adverse effects on local landscapes associated with development of rural exception sites.	P	L	?	?	?
12	Health	Provision of affordable housing should help to reduce the likelihood of lower income households living in deteriorating housing and poorer living conditions, which can have negative effects on health and wellbeing.	P	L	✓	✓	✓
13	Sustainable locations	Allowing the development of affordable homes on rural exception sites will help those who work in the villages and countryside to live close to their place of employment.	P	L	✓	✓	✓
14	Equality & social exclusion	The promotion of a mix of housing types will help to increase equality and reduce social exclusion. The requirement for a minimum of 75% of the affordable housing units to be for social rent will help to meet the needs of the more disadvantaged sections of society and the provision of housing for those with special needs will further support the objective.	P	L	✓✓	✓✓	✓✓
15	Good quality housing	The mix of different types of homes that are required through this policy will directly support this SA objective. The policy allows for proposals which would help meet local housing needs, particularly those for affordable housing, and help maintain the viability	P	L	✓✓	✓✓	✓✓

SA Objective	Assessment of Effect						
	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 rural communities.						
16	Community Identity & participation	Delivery of affordable homes will provide housing for local communities and meet identified needs. This will help in the retention of younger people and disadvantaged groups within the communities in which they have grown up thereby contributing to a retention of community identity.	P	L	✓	✓	✓
17	Crime and fear of crime	No predicted effects.	-	-	-	-	-
18	Sustainable prosperity & growth	Affordable home provision may enable households with a range of salaries and skills to live locally, which could aid the local economy, contributing to sustainable prosperity and growth. The provision of affordable housing on rural exception sites should help to support rural enterprises that rely on skilled workers living locally.	P	L	✓	✓	✓
19	Fairer access to services	The objective on fairer access to services will be achieved through the provision of affordable housing, increasing the equality of this access.	P	L	✓	✓	✓
20	Revitalise town centres	No predicted effects.	-	-	-	-	-
Summary of Assessment	These policies are forecast to have some significant positive effects against the social objectives as the provision of an appropriate mix of housing, including affordable housing aims will help to promote equality and social inclusion. The provision of rural exceptions sites could have some adverse effects on biodiversity and local landscapes, however this will be dependent on the sites selected.						

Policies: CS21 Existing Accommodation for Travelling Communities; CS22: New Accommodation for Gypsies and Travellers

SA Objective		Assessment of Effect					
		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	There are uncertain effects on biodiversity resulting from this policy, dependent on the characteristics of the sites that are taken forward.	P	L	?	?	?
2	Water quality/ quantity	No predicted effects.	-	-	-	-	-
3	Flood risk	No predicted effects.	-	-	-	-	-
4	Soils	No predicted effects.	-	-	-	-	-
5	Greenhouse gas emissions	No predicted effects.	-	-	-	-	-
6	Climate change proof	No predicted effects.	-	-	-	-	-
7	Air Quality	No predicted effects.	-	-	-	-	-
8	Use of brownfield sites	The impacts on this objective are uncertain, as it is dependent what sites are selected for accommodating travelling communities and gypsies.	P	L	?	?	?
9	Resource efficiency	Providing new sites for travelling communities will put some additional demands on natural resources and result in increased waste generation however these effects are expected to be minor.	P	L	x	x	x
10	Historic & cultural assets	No predicted effects.	-	-	-	-	-
11	Landscape & Townscape	Policy CS22 states that new sites should be landscaped to provide for an appropriate setting and to integrate the site with existing residential areas.	P	L	✓	✓	✓

SA Objective		Assessment of Effect					
		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	The policies seek to ensure that sites are located close to facilities, including healthcare, having a positive effect on the health objective.	P	L	✓	✓	✓
13	Sustainable locations	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 significantly progress this objective by improving access to services for this minority group.	P	L	✓✓	✓✓	✓✓
15	Good quality housing	Providing pitches for gypsies and travellers should improve accommodation for these minority groups.	P	L	✓	✓	✓
16	Community Identity & participation	Providing pitches for gypsies and travellers recognises the needs of different groups of people 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.	P	L	✓	✓	✓
17	Crime and fear of crime	Developing an inclusive society which integrates gypsy and traveller communities with settled communities may help reduce crime levels and fear of crime.	P	L	?	?	?
18	Sustainable prosperity & growth	No predicted effects.	-	-	-	-	-
19	Fairer access to services	Locating sites close to facilities will help to ensure that communities are able to access local facilities, including schools and healthcare, achieving the fairer access to services objective	P	L	✓	✓	✓
20	Revitalise town centres	No predicted effects.	-	-	-	-	-
Summary of Assessment		The policy performs well in terms of its contribution to achieving social objectives and it is likely to encourage a more participatory society. As a result significant positive effects have been identified for equality and social exclusion. The policies place constraints on the size and location of sites which should help to support achievement of some of the environmental objectives, however there could be some adverse effects dependent on the location and characteristics of the sites selected.					

Policy CS23: Social Infrastructure

SA Objective		Assessment of Effect					
		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	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	?	?	?
2	Water quality/ quantity	No predicted effects.	-	-	-	-	-
3	Flood risk	No predicted effects.	-	-	-	-	-
4	Soils	Development of greenfield land would have adverse impacts on this objective through soil sealing and soil loss.	P	L	x	x	x
		Protecting existing open spaces should have a positive effect by protecting soils on these sites.	P	L	✓	✓	✓
5	Greenhouse gas emissions	The policy encourages development of services and facilities which should reduce the need to travel thereby reducing ghg emissions from transport.	P	N	✓	✓	✓
6	Climate change proof	No predicted effects.	-	-	-	-	-
7	Air Quality	The policy encourages development of services and facilities which should reduce the need to travel, reducing the growth in emissions and improving air quality.	P	N	✓	✓	✓
8	Use of brownfield sites	No predicted effects.	-	-	-	-	-
9	Resource efficiency	This policy encourages the re-use of a building as a preferred approach, which will progress this SA objective.	P	L	✓	✓	✓
10	Historic & cultural assets	Development of social infrastructure could have adverse effects on known or undiscovered cultural heritage resources. A few of the potential development sites contain historic or cultural assets and should these sites be developed there may be adverse effects on these assets.	-	-	?	?	?

SA Objective		Assessment of Effect					
		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
11	Landscape & Townscape	This policy encourages the development of school facilities on open land and in defined zones in the Green Belt which would have an adverse impact on landscape.	P	L	x	x	x
12	Health	The policy encourages services and facilities to be provided for the community. This could include recreational facilities, as well as health services, which would have a positive impact on this objective.	P	L	✓	✓	✓
13	Sustainable locations	The policy could encourage better and more sustainable access to health facilities.	P	L	✓	✓	✓
14	Equality & social exclusion	The policy encourages services and facilities to be provided for the community, which should have a positive impact on this objective.	P	L	✓	✓	✓
15	Good quality housing	No predicted effects.	-	-	-	-	-
16	Community Identity & participation	The policy encourages services and facilities to be provided for the community, which should enhance the community identity and thus have a significant positive impact on this objective.	P	L	✓✓	✓✓	✓✓
17	Crime and fear of crime	No predicted effects.	-	-	-	-	-
18	Sustainable prosperity & growth	No predicted effects.	-	-	-	-	-
19	Fairer access to services	The policy encourages services and facilities to be provided for the community which should improve access, which should have a positive impact on this objective.	P	L	✓	✓	✓
20	Revitalise town centres	The policy encourages services and facilities to be provided for the community, which should help revitalise local or town centres.	P	L	✓	✓	✓
Summary of Assessment		The provision of social infrastructure that provides service and facilities for the local community, as well as the protection of existing facilities, will help towards the achievement of many of the social objectives, particularly that for enhancing community identity and participation. However the provision of new school facilities on greenfield sites could have adverse effects on several of the environmental objectives although the effects will be dependent on the sites that are selected.					

Looking after the Environment

Policies: CS24 The Chilterns Area of Outstanding Natural Beauty; CS25 Landscape Character; CS26 Green Infrastructure; CS27 Quality of the Historic Environment

SA Objective		Assessment of Effect					
		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	Policy CS26 promotes the creation of a network of green infrastructure which should help to enhance biodiversity and could help to achieve BAP targets depending on the habitats created. This policy also supports the conservation and management of important habitats and species by protecting designated sites.	P	L	✓✓	✓✓	✓✓
2	Water quality/ quantity	Indirect positive effects on water quality are predicted to result through the enhancement and restoration of wildlife habitats.	P	L	✓	✓	✓
3	Flood risk	Policy CS26 requires development to enhance green infrastructure which could help reduce the risk of flooding.	P	L	✓	✓	✓
4	Soils	The policies aim to protect open spaces/landscapes which should prevent soil sealing in these areas.	P	L	✓	✓	✓
5	Greenhouse gas emissions	Policy CS26 promotes green infrastructure which should increase carbon sequestration and have a positive impact on this objective. The provision of green infrastructure should also help to encourage use of sustainable modes of transport thereby reducing ghg emissions.	P	N	✓	✓	✓
6	Climate change proof	Policy CS26 aims to strengthen biodiversity corridors which should help progress this objective. In addition the promotion of green infrastructure will help with adaptation to climate change through urban cooling and the attenuation of flooding.	P	N	✓	✓	✓
7	Air Quality	The provision of green infrastructure should also help to encourage use of sustainable modes of transport thereby reducing air pollution from motorised transport. Green infrastructure can also help to reduce air pollution.	P	L	✓	✓	✓
8	Use of brownfield sites	No predicted effects.	-	-	-	-	-

SA Objective		Assessment of Effect						
		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	
9	Resource efficiency	No predicted effects.	-	-	-	-	-	
10	Historic & cultural assets	Policy CS27 encourages protecting and enhancing the Borough's diverse and high quality built heritage, including its many Listed Buildings, Conservation Areas and archaeological remains which should have a significant positive effect on this SA objective.	P	L	✓✓	✓✓	✓✓	
11	Landscape & Townscape	Protecting and enhancing the distinctive landscape character of the Borough, particularly the Chilterns AONB, should have a significant positive effect on this SA objective. Requiring all development proposals to be assessed in terms of their impact on landscape features should help to avoid inappropriate development.	P	L	✓✓	✓✓	✓✓	
12	Health	The policies aim to protect and enhance the Borough's network of green infrastructure, should have a positive effect on this SA objective. By conserving or restoring landscapes there may be indirect positive impacts on health as more people are able to use the natural environment for leisure purposes.	P	L	✓	✓	✓	
13	Sustainable locations	No predicted effects.	-	-	-	-	-	
14	Equality & social exclusion	The policies encourage protecting and enhancing the Borough's network of green infrastructure, which 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 & participation	The policies encourage protecting and enhancing the Borough's high quality built heritage, biodiversity and landscape character, which should encourage high quality design in new developments. Promoting the creation of a network of green infrastructure, in settlements, should improve the quality of life in urban areas, by making them more attractive environments.	P	L	✓	✓	✓	
17	Crime and fear of crime	No predicted effects.	-	-	-	-	-	
18	Sustainable prosperity & growth	No predicted effects.	-	-	-	-	-	

SA Objective		Assessment of Effect					
		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	No predicted effects.	-	-	-	-	-
20	Revitalise town centres	The policies encourage protecting and enhancing the Borough's high quality built heritage, green infrastructure and landscape character, which could support the development of well-designed town centre developments.	P	L	✓	✓	✓
Summary of Assessment		The policies are forecast to have significant positive effects for biodiversity, cultural heritage and landscapes and other associated indirect positive effects, for example through green infrastructure helping to mitigate the effects of climate change. The protection and enhancement of the natural environment will also have positive effects on several of the social objectives, as creating a higher quality natural environment will encourage more people to use open spaces for recreation and will improve the attractiveness of local environments.					

Policies: CS28 Carbon Reduction Emissions; CS29 Sustainable Design and Construction; CS30 Carbon Offset Fund; CS31 Water Management; CS32 Air, Soil, Water

SA Objective		Assessment of Effect					
		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>Positive effects are predicted for this objective through policies for new tree planting, securing opportunities to conserve and enhance biodiversity (e.g. green roofs) and the provision of SUDS.</p> <p>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>	P	L	✓	✓	✓
2	Water quality/ quantity	<p>Significant effects are predicted against this objective. Policy CS29 aims to safeguard water supplies which should help to progress this objective, whilst Policy CS31 promotes the efficient use of water in both the construction of, and through the occupancy of, new developments which should also progress this objective.</p> <p>In addition, 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>	P	L	✓✓	✓✓	✓✓
3	Flood risk	<p>Policy CS31 aims to encourage development that avoids Flood Zones 2 and 3 and requires Flood Risk Assessments to be submitted with planning applications in these areas. This should help progress this SA objective. In addition the requirement for the use of permeable surfaces within urban areas (Policy 29) should also help to reduce flood risk.</p>	P	L	✓	✓	✓
4	Soils	<p>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> <p>Safeguarding high quality agricultural land should progress this objective. Policy CS32 will maintain soil quality standards and remediate contaminated land, which will have a positive impact on this objective.</p>	P	L	✓	✓	✓

SA Objective		Assessment of Effect					
		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
5	Greenhouse gas emissions	Policy CS28 encouraging the generation of energy from renewable resources should reduce greenhouse gas emissions. Policy CS30 provides funding for energy efficiency improvements in the existing housing stock which should also progress this SA objective.	P	N	✓✓	✓✓	✓✓
6	Climate change proof	Policies CS29 and CS31 encourages the efficient use of water resources which could help new developments to cope with drier summers. Use of lighter surfaces and tree planting should also help with adaptation to climate change. Policy CS29 aims to minimise hard surfaces around the curtilage of buildings which should help progress this objective by reducing vulnerability to pluvial flooding.	P	L	✓	✓	✓
7	Air Quality	Minimising emissions of pollutants should have a positive effect on local air quality.	P	L	✓	✓	✓
8	Use of brownfield sites	Policy CS32 aims to remediate contaminated land which should have a positive impact on this objective.	P	L	✓✓	✓✓	✓✓
9	Resource efficiency	Policy CS29 aims to encourage recycling and reduce construction waste, thereby having a positive effect on this objective. 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	L	✓✓	✓✓	✓✓
10	Historic & cultural assets	There are uncertain effects on this objective resulting from the possible renewable energy infrastructure which is being encouraged by policy CS28.	P	L	?	?	?
11	Landscape & Townscape	Policy CS28 aims to development renewable energy generation infrastructure, which could result in uncertain effects on landscapes/townscapes, depending on the location and the scale of the infrastructure. There is the potential for landscape improvements through tree planting and the use of SUDs.	P	L	?	?	?
12	Health	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 &	No predicted effects.	-	-	-	-	-

SA Objective		Assessment of Effect					
		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
	social exclusion						
15	Good quality housing	No predicted effects.	-	-	-	-	-
16	Community Identity & participation	No predicted effects.	-	-	-	-	-
17	Crime and fear of crime	No predicted effects.	-	-	-	-	-
18	Sustainable prosperity & growth	No predicted effects.	-	-	-	-	-
19	Fairer access to services	No predicted effects.	-	-	-	-	-
20	Revitalise town centres	No predicted effects.	-	-	-	-	-
Summary of Assessment		Significant positive effects relating to efficient water use, remediation of contaminated land, waste reduction, renewable energy generation and energy efficiency have been predicted for this suite of policies. Other positive effects have been predicted against the environmental objectives particularly as a result of the sustainable design and construction policy. There is uncertainty as to how the provision of renewable energy generating equipment will affect local landscapes & townscapes as well as the historic environment. Limited effects have been identified against the social and economic objectives.					

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SA Objective		Assessment of Effect					
		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	Through the provision of green infrastructure the policy could result in some biodiversity gain.	P	L	✓	✓	✓
2	Water quality/ quantity	By ensuring that infrastructure capacity is not breached, and by requiring the provision of new physical infrastructure, water quality could be protected by avoidance of overloading of waste water treatment works.	P	L	✓	✓	✓
3	Flood risk	No predicted effects.	-	-	-	-	-
4	Soils	No predicted effects.	-	-	-	-	-
5	Greenhouse gas emissions	No predicted effects.	-	-	-	-	-
6	Climate change proof	No predicted effects.	-	-	-	-	-
7	Air Quality	No predicted effects.	-	-	-	-	-
8	Use of brownfield sites	No predicted effects.	-	-	-	-	-
9	Resource efficiency	The policy seeks to ensure that critical infrastructure capacity limits are not breached by new development. New physical infrastructure is supported through this policy.	P	L	✓	✓	✓
10	Historic & cultural assets	No predicted effects.	-	-	-	-	-
11	Landscape & Townscape	No predicted effects.	-	-	-	-	-
12	Health	Provision of new green and social infrastructure will help to encourage healthy lifestyles	P	L	✓	✓	✓

SA Objective	Assessment of Effect						
	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	
	and provision of healthcare facilities.						
13	Sustainable locations	Provision of new social infrastructure will help to reduce the need to travel through closer integration of services with housing and jobs.	P	L	✓	✓	✓
14	Equality & social exclusion	No predicted effects.	-	-	-	-	-
15	Good quality housing	No predicted effects.	-	-	-	-	-
16	Community Identity & participation	Delivery of new social infrastructure will improve the provision of community facilities.	P	L	✓	✓	✓
17	Crime and fear of crime	No predicted effects.	-	-	-	-	-
18	Sustainable prosperity & growth	The provision of strategic infrastructure should help to support the local economy.	P	L	✓	✓	✓
19	Fairer access to services	No predicted effects.	-	-	-	-	-
20	Revitalise town centres	No predicted effects.	-	-	-	-	-
Summary of Assessment	By requiring the provision/contribution towards physical, social and green infrastructure, positive effects have been forecast for a range of objectives. There could be some environmental enhancements resulting from the provision of green infrastructure as well as benefits to the local communities. Ensuring that new physical infrastructure is provided will help to avoid overloading existing infrastructure such as waste water treatment works, both protecting material assets as well as helping to avoid adverse effects on the natural environment. The provision of social infrastructure will support social objectives, whilst new physical infrastructure will help support the local economy.						