Luton and Southern Bedfordshire Joint Committee Local Development Framework

Sustainability Appraisal Report for the Core Strategy Pre-Submission

October 2010

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APPENDIX 1

Issues and Options SA Recommendations

Table A1.1 Issues and Options SA Recommendations

Spatial Option 7 is considered to be the best performing spatial option. The Option is observed to perform well under most of the economic and social factors and has some positive effect under environmental themes. The proposed development to the north of Houghton Regis (F and G) and Luton (I and J) could also potential benefit from an extension to the Guided Busway thus encouraging public transport usage. Notwithstanding its positive performance, this Spatial Option has the potential to be improved by strengthening the community inclusiveness, soil and cultural heritage aspects.

The following recommendations with regard to Economic, Social and Environmental Factors should be considered in order to enhance the sustainability performance of the spatial option taken forward. In particular, it is recommended that the mitigation measures to minimise the possible adverse effects on the Joint Area should be considered at the Preferred Options stage, wherever practicable.

Economic factors

The spatial option should include a spread of urban extensions across the whole Joint Area to maximise the potential for social, economic and environmental improvements across the Joint Area.

The distribution of social, cultural, educational and retail services between the proposed new urban extensions and existing urban areas is crucial to maintain the balance between urban expansion and urban regeneration, in particular, the enhancement of the town centres.

While balancing the urban regeneration and urban extension ratio, due consideration should be given to the development of building conservation, urban design and public realm policies. In addition to supporting the Cultural Heritage and Townscape sustainability objectives, these policies will help create attractive spaces both in the existing urban areas as well as in the proposed urban extensions, therefore contributing to economic prosperity.

The preferred approach should seek to ensure that all the existing and new development areas have good transport infrastructure and connectivity to improve accessibility. This would include improving transport connectivity between Leighton Buzzard Town Centre and areas C and D.

The preferred approach should strive to increase public transport catchments and patronage as well as ensure that the services will be effective and efficient. For example, the Guided Bus Way between Luton and Dunstable is likely to facilitate improved accessibility between these towns. An extension of this service into the new urban extension areas will help achieve many identified sustainability objectives.

Align the timing of the development of urban extension areas near Houghton Regis and Dunstable, namely proposed development areas F, G and H, to the completion of the A5-M1 link to minimise or avoid congestion and related problems at Houghton Regis.

Social factors

The DPD should consider introducing policies that will reduce crime and the fear of crime, including good lighting of public spaces, convenient parking that is overlooked, security lighting and CCTV.

The DPD should consider referring to development or adoption of policies relating to social equality (including ethnic minorities), social inclusiveness and prevention of crime (both actual and perceived). It may be possible for the DPD to refer to any relevant document that may be under production or that is proposed within the LDF to address this gap.

Future developments should consider access to the disabled particularly in public transport areas as well as community facilities.

Throughout the Joint Area desired housing types and tenures should be outlined e.g. public/private housing, apartments, high density, family housing and low-rise apartments. Housing types should also respond to the growing population profile, and take into account the diverse needs of ethnic minority groups who tend to be clustered in and around Luton. The allocation of sites for gypsies will be the subject of a further public examination in autumn of 2008 at the Single Issue Review of

Gypsies and Travellers for the East of England Plan. Appropriate reference to this examination document should be made to direct future course of action regarding gypsy and traveller and travelling showmen sites.

A detailed phasing strategy should be produced for the A5-M1 link, Luton Northern Bypass and the proposed urban extensions F, G, H, I and J. It is critical for the developments to occur after or in parallel to these transport projects to ensure accessibility to the proposed areas and to limit disturbance to the existing towns as well as to attract developer funding.

Environmental factors

The Core Strategy should establish guidance/policies to ensure minimal or no effect on established biodiversity habitats while allocating green field/brown field sites for development.

Avoid development on designated sites of biodiversity importance (including priority species).

Ensure Greenfield sites are not locations for priority species identified in the Local BAP.

Developers should be encouraged from the outset to incorporate Biodiversity Action Plan habitats into all new types of developments proposed – retail, leisure, cultural, employment and housing.

The Core Strategy should ensure minimal loss of high-grade agricultural top soil, wherever applicable.

The Core Strategy should acknowledge potential increase in water demand due to the proposed development in the Joint Area. Additionally, reference to the ongoing Water Cycle Strategy should be made and recommendations to use this document to inform future infrastructure planning should be made.

The Core Strategy should include measures to protect river corridors from development especially in flood risk zones that potentially affect Luton and parts of Southern Central Bedfordshire.

All new developments should incorporate Sustainable Urban Drainage Systems (SUDS) in order to reduce the risk of internal flooding as well as to augment the ground water quantity. Requirement for appropriate studies to address this at a detailed development stage should be incorporated within the DPD.

Commercial uses, which may generate incidental nuisances (noise and odour), should not be situated close to residential areas where they may have an impact. There may also be some scope for indicating the suitability of sites for changes of use where mixed-use development is appropriate.

Consideration should be given to incorporate measures to promote re-use of construction waste and use of low environmental impact materials and the application of sustainable construction methods.

Commitment to energy efficiency should be written into LDF policy with reference to CfSH and BREEAM targets. These targets also include measures to reduce water.

Water saving technology should be considered at the stage of layout and design of development. This should include consideration of rainwater capture, grey water recycling, water efficient appliances as part of the design and layout of buildings.

Consideration should be given to include measures to encourage creative solutions for managing extreme weather events. Design should respond to measures required for climate change adaptation with suitable defences in the most vulnerable areas, the incorporation of SUDS and micro regeneration renewables –particularly for all types of new development. SUDS will require ongoing management to maximise habitat potential.

Consideration should be given in the Core Strategy to include initiatives to reduce run off (during construction and operation of development) and include green roofs, rainwater storage and grey water recycling.

Preferred Options SA Recommendations

Table A2.1 Potential effects of the Core Strategy

Potential effects	SA Objectives
Environmental	
Loss/depletion/fragmentation of habitats, the deterioration of landscape character.	
Damage to soil structure/quality and water pollution, particularly during construction.	
Large-scale developments may also increase impermeable surfaces in the plan area, place significant pressure upon water resources and generate waste during both construction and operation.	
A key aim of the Spatial Strategy is to ensure that the distribution of new development is environmentally sustainable. Such measures as prioritising the reuse of previously developed land, concentrating development in and around existing settlements and placing strict controls on growth within the countryside should work to lessen potentially adverse effects.	
The potential reduction in traffic that may be brought about through the provision of more sustainable modes of transport should work to reduce the emission of air pollutants and greenhouse gasses, which could result in knock-on benefits for biodiversity and reduce transport related water pollution.	1,2,3,8 and 11
Potential new road schemes are also promoted by the Core Strategy. These will have similar impacts upon the natural environment to those of general development. They can be particularly adverse for biodiversity through the fragmentation of habitats, severing of wildlife corridors and road kill. New roads may also encourage the use of unsustainable transport modes, potentially increasing the emission of greenhouse gasses. With regard to local air quality, new roads may result in a redistribution of air pollution, potentially drawing traffic away from currently congested areas while introducing it to those where there is currently no traffic. In addition, construction activities will result in air pollution and the emission of greenhouse gases through traffic generation and/or the use of machinery. New development is also likely to increase energy usage across the plan area.	
Socio economics	12, 13, 14, 15,
A prime mover behind the growth is to improve quality of life and efforts to deliver this in a sustainable manner increase the possibility of benefits. In particular, the Spatial Strategy should work to improve accessibility in Luton and Southern Central Bedfordshire. This will largely be achieved through concentrating development in and around urban areas, which in turn will help to bring regenerative benefits to existing settlements.	16, 17 and 18

The large increase in housing is likely to be accompanied by a large increase in population. Such an increase may place pressure on existing services/facilities in Luton and Southern Central Bedfordshire. However, the Spatial Strategy acknowledges the need for the timely delivery of infrastructure in line with new development, and the policy direction on developer contributions should work to ensure this happens. Large scale construction could also adversely impact health (SA objective 12) in terms of noise and air pollution, as could traffic generation. The impact of traffic generation may be limited through measures to improve accessibility.

SA objective 10 relates to the protection and enhancement of the historic environment. There is potential for the historic environment to be adversely impacted through the insensitive design of new developments. Currently undiscovered archaeological features may also be lost or damaged.

In addition, issues such as traffic generation can further harm historic buildings through vibration and dust generation.

Table A2.2: Preferred Options SA Recommendations

Consider ways to ensure proposed developments are exposed to the appropriate level of site-specific archaeological/cultural heritage assessment prior to construction and that the recommendations of assessments are implemented.

Consider ways to ensure proposed developments are exposed to the appropriate level of site-specific environmental assessment prior to construction and that the recommendations of assessments are implemented. While the Core Strategy accounts for the protection of nationally and locally important sites it also proposes the development of a significant amount of previously developed land. The potential for smaller, undesignated sites to support biodiversity should be recognised.

Ensure flood defences/alleviation measures are exposed to the appropriate level of site-specific environmental assessment prior to construction and that the recommendations of assessments are implemented.

Recognise the inter-relationship between a healthy environment and a healthy economy, ensuring a holistic/integrated approach is taken.

Utilise opportunities to involve the community in the protection/enhancement of biodiversity and the landscape.

Consider requiring that all new homes achieve a Code for Sustainable Homes rating of 'Level 3'.

Consider ways to ensure that new housing is accompanied by the appropriate level of green/open space provision to conform to Natural England guidelines.

Consider ways to ensure that all new development other than housing achieves a BREEAM rating of 'Very Good'.

Consider integrating different housing tenures on the same sites allocated for housing provision.

Consider ways to ensure that all new developments incorporate Secured by Design principles.

Ensure the capacity of health and recreation facilities can withstand the proposed levels of growth.

Ensure the consideration of community safety in the design of public realm.

Consider ways to ensure the sensitive design of new development/public realm in relation to protection of the historic environment.

Utilise existing buildings and previously developed land where possible.

Consider favourably proposals that provide job opportunities, which also have the potential for training provision.

Ensure developers register with the Considerate Constructors Scheme.

Consider ways to minimise waste generation and encourage recycling both during the construction and operation of new developments. This should include the maximised use of recycled aggregates and ruse of building/construction materials where practicable.

Where practicable, ensure community participation in determining the nature and location of facilities.

The provision of social infrastructure should recognise the value of the natural environment in creating sustainable communities.

Accessibility should be a key consideration in the development of the Core Strategy to reduce the need for vehicular travel and bring about a reduction in greenhouse gas emissions (promote sustainable transport).

Consider transport options/alternatives to the provision of new roads.

New road schemes should be exposed to the appropriate level of environmental assessment as set out in the Design Manual for Roads and Bridges, Volume 11.

Improve cycle and pedestrian routes/links.

Promote access to education for all.

Consider protection of the water environment in determining the location of development (avoid areas where groundwater is vulnerable).

Encourage the use of SuDS in new developments.

Ensure development is not located within the floodplain.

Explore options for the provision of renewable energy facilities.

Promote recycling.

Ensure transport infrastructure can sustain desired levels of growth.

Use opportunities to promote public access/enjoyment of heritage features.

Table A3.1: Main findings of the Scoping Report

Ма	in findings
1	Devise measures to minimise dependence on single economic sectors by ensuring economic diversity, promoting sites for small and local businesses and enhancing capacity for local sufficiency, including food sufficiency
2	Promote creativity, innovation and enterprise but without compromising environmental objectives. Consider the implications of the regional growth agenda in Luton and Southern Central Bedfordshire with its
3	requirement for 23,000 additional jobs, 26,300 new homes and Luton becoming a major town centre. Considering this agenda, Green Belt objectives and boundaries need to be revised as part of the LDF process, the Strategy's area needs to consider the implications of emerging Waste and Mineral DPDs and the LDF should take the opportunity to promote the vitality of the town centres whilst increasing accessibility and reducing social exclusion.
4	Devise objectives/policies for quality, range and affordability of housing, which can help to provide for a mixed and balanced community. DPDs should provide details of the mix of housing types and tenures to be provided, ensuring that the proposed mix is appropriate and affordable.
5	Community facilities should contribute to the sense of place in communities, provide a focal point for community interactions and social cohesion and also provide employment. LDF should promote access to and availability of services and facilities to address social exclusion, increase community interaction and provide more support for people with long-term needs.
6	Improving educational achievement, the overall skills base, access to learning opportunities across Luton and Southern Central Bedfordshire should be a key objective of the LDF.
7	Issues such as delivery of adequate water supply, measures to reduce water consumption, wastewater treatment and the need to reduce run off rates from development need to be given specific consideration as part of all LDDss
8	Water supply is a critical issue affecting the sustainability of future development. The detailed design stage of plans should clearly address how measures to reduce per capita water usage will be integrated into design.
9	The LDF should promote the protection, enhancement and improved access to the natural environment. Biodiversity measures should be incorporated into policies and plans as they safeguard key habitats and wildlife and positively contribute to the quality of life.
10	LDF should help improving air quality by promoting more sustainable modes of transport for people and freight and ensuring that jobs, shopping, leisure facilities and services are accessible by public transport, walking, and cycling, thus reducing the need to travel by private car.
11	The LDF should help minimising CO2 and other green house emissions and promote more sustainable forms of travel. The LDF could support initiatives to promote modal switch and the necessary public transport measures should be included as part of LDDs preparation.
12	Soil loss is likely to be a pertinent issue given the anticipated levels of greenfield development within Luton and Southern Central Bedfordshire. Protecting soil resources should be a key consideration within the LDF, including the remediation of contaminated land on brownfield sites. Future detailed mitigation must ensure soil re-use.
13	The LDF should promote the development of buildings that can adapt to climate change, the use of renewable energy and encourage the implementation of methods that will enable individuals to save energy, use more renewable energy and promote the use of cleaner energy. Consideration should be given to the inclusion of creative solutions for managing extreme weather events, including flood risk.
14	The LDF should support healthy lifestyles by among other means encourage walking and cycling and making provision for/improving public open space and leisure facilities.
15	Address the effects of development on public health and dealing with the social and economic implications of an ageing society
16	Avoid the erosion of recreational open spaces by new development. The LDF should help weigh up any benefits being offered to the community against the loss of open space that will occur.
17	The LDF should help minimise the adverse impacts of noise and introduce transport objectives which could lead to the reduction of noise from transport

18	Good design and efficient use of land will be key to attract new business to Luton and Southern Central Bedfordshire as well as improving the quality of existing environment and reinforcing civic pride.
19	Need to reconcile economic growth with the need to protect the historic environment to preserve historic,
. •	archaeological, environmental and cultural heritage and support the rural economy
20	Ensure that development does not cause adverse impact on sensitive landscapes and townscapes and
20	positively contributes to local character and distinctiveness.

Appraisal of Development Strategy

Description of sites and location map

Site A – West of Leighton Linslade: Located in Aylesbury Vale between the western edge of Leighton Linslade and the A4146 **Site B – South West of Leighton Linslade:** Located to the south of Leighton Linslade, the site is located within the eastern half of the triangle formed by the A418, A4146 and the railway line.

Site C – North East of Leighton Linslade: Located t the north east of Leighton Linslade between Broomshill Far and the Clipstone Brook, with the narrow gauge railway running through the middle.

Site D – East of Leighton Linsalde: Locatedin the southern eastern edge of Leighton Linslade, extending from Clipston Brook in the north to the A505 in the south.

Site E – North West of Dunstable: Located to the north west of Dunstable and includes the Maiden Bower Scheduled Ancient Monument (SAM). Primary access to the A5 is gained from French's Avenue.

Site F- North West of Hougton Regis: Located between the A5 to the west and the A5120 (Bedford Road) to the east. The south of the site is bounded by the existing urban area of Dunstable and Houghton Regis and the northern boundary is the proposed A5-M1 link road.

Site G: North East of Hougton Regis Located to the north of Houghton Regis between the M1 to the east and the A5120 to the west. The southern boundary will comprise the existing urban edge of Houghton Regis and Lewsey Farm and the northern boundary will be the proposed A5-M1 link road.

Site H - North of A5 M1 Link: Located north of Houghton Regis and Dunstable beyond the proposed A5-M1 link road, extending from the M1 in the east to the A5 in the west. The site will encompass Chalton.

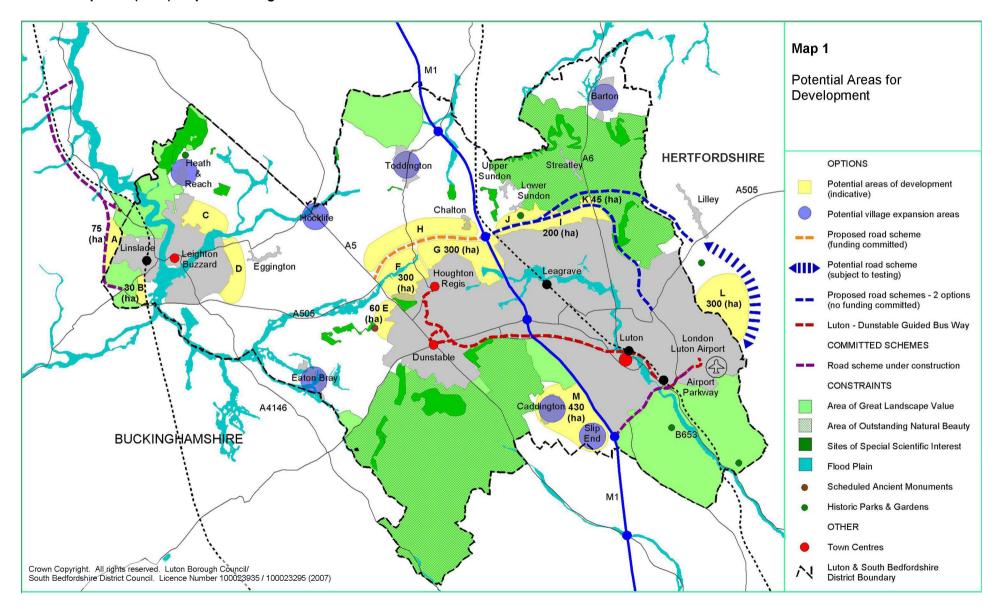
Site I – North of Luton: Located to the north of Luton from the M1 in the west to the A6 in the east with the proposed North Luton Bypass as the northern boundary. rephrase this

Site J – North of North Luton Bypass: Located to the north of Luton, north of Site I and the proposed North Luton Bypass, south of Lower Sundon

Site K – North East of Luton Bypass: Located to the north of Luton beyond Site I and the proposed North Luton Bypass. The site is surrounded by AONB to the north.

Site L – East of Luton: Located to the east of Luton, extending from the A505 in the north to Luton Airport in the south. The eastern boundary would be Lilley Bottom and the site encompasses the villages of Mangrove Green, Cockernhoe and Tea Green. **Site M – West of Luton:** Located to the west of Luton, between the M1 and Chaul End Road and to the north of the villages of Caddington and Slip End.

Issues & Options (2007) map illustrating site location.



Sustainable Urban Extension Site Options

As explained within the SA methodology, all assessment tables should be read in conjunction with Site Assessment Matrix 2010 Update.

Table A4.1: First sieve - Major constraints and contributions to the Core Strategy from development sites

		Oit	UU											
SA Objectives	Site Criteria	Α	В	С	D	Ξ	Ē	G	H		J	K	L	M
2 & 7	Impact on important areas of landscape		-?	-?	-?	-?	-?	0		-?	-?	-?	-?	-?
1 & 7	2) Impact on important areas of biodiversity	-?	-?	-?	-?	-?	-?	-?	0	0	-?	0	-?	-?
2 & 8	Impact on important areas of heritage/archaeological importance	-?	-?	-?	-?	-?	-?	-?	-?	-?	-	0	?	0
2 & 7	4) Impact on important views		-?	0	-?	-?	-?	0	-?	-?	-?		?	-?
9 & 12	16) Contribution to affordable and local housing needs of the area.	+	+	+	+	+	++	++	+	++	+	+	++	++
3,4,5 & 7	5) Potential to flood or impact on flood risk areas.	0	0	-?	-?	0	-?	-?	-?	0	0	0	0	0
Delivery	6) Presence of major infrastructure constraints	?	0	0	0	0	-?	-?	0	0	0	0	0	-?
3, 14 & 15	11) Contribution to the delivery of major transport infrastructure	0	0	+	+	0	++	++	+	++	+	0	++	0
3,13,14 &15	Contribution to the improvement and easing of congestion in known problem areas	0	?	?	?	?	+	+	+	++	+	0	++	-?
3, 5, 6, 7, 8, 9, 10, 11, 13, 14 &15	18) Contribution to the regeneration of the town centres of Luton, Dunstable, Houghton Regis	0	0	0	0	+	++	++	+	++	+	0	++	+?
3, 4, 5, 7 &11	12) Contribution to delivery of strategic Green Infrastructure provision	+	+	++	++	+	++	++	++	++	++	0	++	++
6, 9, 10 & 15	15) Contribution to provision of strategic employment land and premises.	0	0	0	++	0	++	++	++	++	++	0	++	?

SA objectives

- 1.To maintain and enhance biodiversity
- 2. To conserve, restore and enhance landscape and townscape and local character particularly nationally protected assets such as the Chilterns AONB
- 3. Protect and enhance air, soil and water resources
- 4. Ensure that new developments avoid areas which are at risk from flooding and where possible, reduces flood risk $\,$
- 5. Adapt to and mitigate against the impact of climate change
- 6. Increase resource efficiency and reduce resource use and waste
- 7. Maintain, enhance and deliver, new green infrastructure including green open space
- 8. To identify, protect, maintain and enhance the historic environment and cultural assets and their setting

- 9. Reduce poverty and inequality and promote social inclusion
- 10. Reduce both crime and fear of crime
- 11. To encourage healthier lifestyles and reduce adverse health impacts of new developments
- 12. Provide decent, affordable and safe homes for all
- 13. Revitalise town centres to promote a return to sustainable urban living and protect the identity of villages
- 14.To provide and encourage the use of sustainable integrated transport systems, improve access and mobility
- 15. To promote employment, learning, skills and innovation

Commentary:

The likely effect of development in sites A, H, J and K are unlikely to be mitigated against and are not recommended to go forward to the pre-submission stage. Site C would require considerable mitigation to avoid impact on views to and from the Greensand ridge. The mitigations required would affect most of the northern part of the site and together with the need to create habitat links to the east and the wider countryside; there is limited capacity for development. It is recommended that site C is not taken forward.

Sites C&D require considerable mitigation to overcome environmental constraints. However, being adjacent sites, they could be developed together providing wider scope for mitigation and contribution to transport infrastructure. The scale of development at sites C & D combined will be substantially greater than A, B and E to contribute significantly to employment and infrastructure needs in Leighton Linslade but less than other sites adjoining the Conurbation. With regards to contribution to affordable and housing needs in the area, the town already has a great number of housing commitments which will help contributing towards local housing need and an allocation of sites C&D would not be directly addressing the wider issues of the Conurbation. However, it addresses identified strategic infrastructure shortages in the area and any allocation should be made on this basis. The sites are recommended to be progressed to the scenario testing of the pre-submission stage.

Most of site E is highly sensitive in landscape and biodiversity terms, being constrained by the setting of the Maiden Bower (SAM). Although the site could contribute to the regeneration of Dunstable, the amount of mitigation against likely environmental impacts limits considerably the site's development potential.

Site M's environmental impact could be mitigated to a similar degree as other sites. However, its contribution towards main sustainable aspects of the strategy is more limited. The separation of the site from Luton by the M1 also limits the potential regeneration benefits to the town. In view of this and the EA objection in relation to the carbon and financial costs of linking the site with Hyde Treatment Works it is recommended that Site M does not progress to the pre-submission stage. Nevertheless, given the scale of the site and the developers' proposals it would be advisable to test the site as part of different development scenarios to see whether the site shortcomings could be outweighed by its combination with other sites.

Significance of effect:

All sites will have a negative impact on the environment and due to their scale, irreversibility of their effect and the vulnerability of the area affected their impact will be significant.

Some mitigation measures for sites recommended to be progressed:

Site C

- 1. Development beyond the urban area up to the Shenley Hill Road is not considered appropriate.
- 2. Hedgerows, streams and other features of green infrastructure importance should be protected.
- 3. Further investigation needed to ensure there is no damage to potential remains of mediaeval settlement and Anglo Saxon cemetery.
- 4. High potential residual and artificial flood risk due to presence of sand pits within 1km and potential flood storage reservoir. Medium constraint risk for fluvial, groundwater and sewer flood risk. Flood risks may be reduced and managed on-site through careful site layout planning.

Site D

- 1. Development should avoid sensitive slope and ridge leading up to Charity Farm.
- 2. Ensure that the Clipstone Brook floodplain remains undisturbed with such a corridor becoming part of a green infrastructure network.
- 3. Area around Eggington is considered to be of high significance in heritage terms and further investigation is needed in this area.
- 4. Development should be contained by ridges and not extend to high ground. Historic hedgerows and watercourses should be enhanced. The setting of Eggington should be safeguarded.

5. Measures to reduce and manage flood risk on-site through careful site layout planning due to potential flood storage reservoir.

Site F

- 1. Houghton Quarry should be preserved.
- 2. Protect and link together all key sites for biodiversity (SSSI and County Wildlife Site of Houghton).
- 3. Preserve the setting of the SAM around Thorn Turn through limiting development in this area.
- 4. Potential for prehistoric, Roman and later sites in this area which should evaluated in advance of development.
- 5. Density and pattern of development should be moderated to preserve and allow historic pattern of farms, homesteads to be visually recognised.
- 6. Key views to and from scarp should be protected.
- 7. Silos at Puddle Hill and sewage works are also a feature that would benefit from integration.
- 8. Need to avoid increasing visual impact of A5 on Thorn Turn area.
- 9. Constraint risk for fluvial, groundwater and sewer flood risk. Flood risks may be reduced and managed on-site through careful site layout planning.
- 10. Sewage treatment works in the northwestern corner of the area and its 'cordon sanitaire' of 400 metres would need to be introduced early in master planning.

Site G

- 1. Potential for prehistoric, Roman and later sites in this area which should evaluated in advance of development.
- 2. The site is extremely prominent from the M1 and would be an important gateway to Houghton Regis.
- 3. Medium constraint risk for fluvial, groundwater and sewer flood risk. Flood risks may be reduced and managed on-site through careful site layout planning.
- 4. Presence of power lines across the site an issue for consideration in master planning. The Environment Agency wish to safeguard land in the South East corner of this site for a Flood Storage Area (FSA) to help minimise flood risk in Luton. These will need to be integrated early in the master planning process.

Site I

- 1. Protect open views to wooded Sundon Ridge and farmland (part of AONB).
- 2. Establish links encompassing habitat fragments between Sundon and Bramingham ancient woods.
- 3. Prevent harmful impact on the setting of Lower Sundon Church and protect setting of Sundon Manor and SAM of Drays Ditches.
- 4. Views south from the AONB important. Crucial to avoid large scale, high-rise development or development where the land is elevated.

Site L

- 1. Development beyond the ridgeline and in Lilley bottom is not recommended. The area is a strong representation of the district character area.
- 2. Expand buffer, and link existing woods to reverse current fragmentation; ensure strong habitat linkages to parkland to the north, habitat within the fringes of Luton and woods and grassland to the south.
- 3. Comprehensive archaeological investigation will be needed of the areas identified as having archaeological remains.
- 4. Significant visual constraints beyond ridgeline.
- 5. Maintain limited inter-visibility with the edge of Luton and protect key views within the area between the ridge and the urban area.

Some mitigation measures if the combination of site M with other sites in a development strategy were to overcome site M's constraints. Site M

- 1. Location of Stadium, P&R and employment as to minimise their intrusiveness on the landscape.
- 2. Preserve chalk landscape to the north of the site.

Table A4.2: Second tier sieve-potential contribution of sites

SA objective	Criteria	Α	В	С	D	E	F	G	Н	ı	J	K	L	M
3, 5, 6 & 14	7) Proximity to neighbourhood centre or local centre	++	++	++	+	+	++	++	-	++	-	-	++	++
6 & 9	8) Proximity to core facilities	++	++	++	++	+	++	++	-	++	-	-	++	++
3, 5, 9 &14	10) Contribution to the improvement of existing public transport provision	+	0	+	+	+	++	++	-?	++	0	+	++	+?
9 &15	13) Contribution to meeting social and community infrastructure needs	+	0	+	+	0	++	++	0	++	0	0	++	+?
7 &11	14) Contribution to meeting existing open space needs	+	+	++	+?	0	++	++	0	++	0	0	++	+?
3, 5 & 6	17) Contribution to the delivery of an integrated sustainable infrastructure system	0	0	+	+	0	+	++	+?	+?	+?	+?	++	++
9, 10, 12, 13 & 15	19) Contribution to reinvigoration and rejuvenation of deprived wards	+?	+?	+	+	+	++	++	?	++	+	+?	+ ?	+?
2, 7, 8, 9. 10, 14	20) Potential to contribute to place making.	-	+	++	++	0	+	++	-	+	-?	-	++	
3 & 6	21) Contribution to retention Green Belt principles	0	_	_	-	-?	-			-?	-?	-?		

SA objectives

- 1.To maintain and enhance biodiversity
- 2. To conserve, restore and enhance landscape and townscape and local character particularly nationally protected assets such as the Chilterns AONB
- 3. Protect and enhance air, soil and water resources
- 4. Ensure that new developments avoid areas which are at risk from flooding and where possible, reduces flood risk
- 5. Adapt to and mitigate against the impact of climate change
- 6. Increase resource efficiency and reduce resource use and waste
- 7. Maintain, enhance and deliver, new green infrastructure including green open space
- 8. To identify, protect, maintain and enhance the historic environment and cultural assets and their setting

- 9. Reduce poverty and inequality and promote social inclusion
- 10. Reduce both crime and fear of crime
- 11. To encourage healthier lifestyles and reduce adverse health impacts of new developments
- 12. Provide decent, affordable and safe homes for all
- 13. Revitalise town centres to promote a return to sustainable urban living and protect the identity of villages
- 14.To provide and encourage the use of sustainable integrated transport systems, improve access and mobility
- 15.To promote employment, learning, skills and innovation

Commentary:

All sites will result in the loss of Green Belt with the exception of site A and the development of most of them would result on the loss of openness and some of them have the potential of resulting on the coalescence of existing settlements mainly sites G, H, M and L. Physical barriers are likely to constrain the integration of sites H, K and M with the existing urban area. This physical constrains are also likely to affect sites ability to contribute to the wider social needs of the existing settlements.

Site M is not sufficiently separated visually from existing settlements (Luton and Caddington) to become a clear and distinct new community on its own. On the other hand, a lack of cohesion with the urban area of Luton makes this approach equally negative when assessing the site's potential to contribute to

place making. Site M does not fall within the Noise Exposure Category C were permission should not normally be granted but the development of the site could affect future airport expansion by limiting future rerouting choices for the airport or the implementation of an increased use of the existing runway. The limited connectivity of Site M public transport services may result on a greater level of patronage which may not be sustainable in the long term.

Robust Green Belt boundaries are essential to the retention of Green Belt principles and the M1 creates a strong edge to the urban area while the Slip End Valley also helps to create a natural limit to the urban form. Large scale Green Belt land review elsewhere in the Luton and Southern Bedfordshire may have a lesser impact on the future of the Green Belt in the area and the regeneration of Luton as a result of re-using previously developed land. Not withstanding this, and given Site M's scale and readiness to delivery it is recommended that the site is tested in the context of wider development scenarios.

The development of sites C&D together are likely to provide wider significant opportunities to provision of open space, sustainable infrastructure and renewable energy and social and community infrastructure within the site and Leighton Linslade town centre to address existing shortfall.

The development of sites F&G together are likely to bring a greater level of positive contributions towards infrastructure and social needs as well as greater opportunities to mitigate against likely impact on the environment.

Site A is likely to have a negative impact on the western setting of Linslade and on settlements like Soulbury. It is considered that development in this location lacks the potential to contribute to place making.

Considering site's E scale and the mitigation required there will be limited capacity for development there.

Significance of effect:

All sites will have a negative impact on the environment and due to their scale, irreversibility of their effect and the vulnerability of the area affected their impact will be significant.

Some mitigation measures for sites recommended to be progressed:

Site B

1. Avoid negative impacts on Southcott Conservation area and respond to its setting.

Sites C & D

- 1. Develop linkages with the town centre and the train station capable of overcoming the constraints of the existing narrow roads to provide public transport access.
- 2. Reinforce linear green infrastructure along watercourses, particularly the Clipstone Brook.
- 3. Reinforce biodiversity links.
- 4. Safeguard the setting of Clipstone Farm.
- 5. Identify suitable site boundary for sites C and D to avoid coalescence of Clipstone and Eggington respectively.

Site E

- 1. Protect key views and provide appropriate landscape.
- 2. Existing development set back from important ridgeline.
- 3. Skyline development should be minimised.

Sites F & G

- 1. Contributions to the on site and off site provision / funding of Green Space to respond to existing deficit in the area.
- The Houghton Regis area has been identified as an area, which would benefit from additional affordable housing and investment in the existing provision.
- 3. Funding towards investment on existing affordable housing in Houghton Regis.
- 4. Contribute towards sustainable infrastructure and renewable energy technology Integrate the sewage works and increase wetland area.
- 5. Contribute to public transport services to provide new services, particularly from this area to the town centres of Houghton Regis, Dunstable and Luton.
- 6. Notably, the site could benefit from an extension to the guided busway.
- 7. Contributions to the on site and off site provision/ funding of Green Space in an area of existing deficit.
- 8. Improve interface with countryside in site G.

Site I

- 1. Contributions to the on site and off site provision/ funding of Green Space in an area of existing deficit.
- 2. Provide new sustainable infrastructure and renewable energy technology if developed alongside sites F and G.
- 3. Take into account the setting of Lower Sundon and make use of the likely connectivity of the urban area to the AONB.
- 4. Minimise loss of separation between Luton and Lower Sundon.

Site L

- 1. Contribute towards a link into the Luton Dunstable guided busway and on road measures to improve public transport efficiency within the existing urban area
- 2. Minimise potential of coalescence to Tea Green and Cockernhoe.

Site M

- 1. Contribute towards new busway linked the Luton Dunstable Guided Busway but no evidence to demonstrate that this would overcome these problems.
- 2. Link with urban area to overcome M1 barrier effect.
- 3. Minimise impact of development on the rural character of the villages and the small rural settlements.
- 4. Proposals to relate to the village scale of Caddington and its associated settlements rather than an expansion of Luton.

Table A4.3: Third sieve - Deliverability within the plan period

	Α	В	С	D	Е	F	G	Н		J	K	L	M
22)Availability of the land for development	+	?	+	+	+	?	+	+	?	+	+	+	+
23)Contamination of the land	0	-?	0	0	0	0	0	0	0	0	0	0	0
24)Availability of utilities infrastructure	+?	-?	+	+	+	+	+	+	-?	+	+	-?	-?
25)Suitability of access arrangements		+	+?	+?	+?	-?	-?	-?	-?	-?	+	+	-?
26)Physical Constraints addressed	0	0	-?	-?	0	-?	-?	-?	-?	0	0	0	-?
27)Dependence on Major Transport Infrastructure	0	0	-?	-?	-?	_	-		-				-?

Commentary:

The deliverability of sites is mainly related to their scale and dependence on major infrastructure. Given the cuts on public spending and uncertainty over the transport infrastructure projects which will receive funding, sites E, F, G. H, I and K will be unlikely to be delivered in their entirety within the next 15 years. The strategy needs to reconsider whether the RSS plan period to 2031 would provide a reasonable prospect of delivery. This needs to be informed by a delivery plan supporting the Core Strategy and setting out the commitments and timeline for the delivery of infrastructure to support the sites taken forward to the pre-submission stage and any contingency arrangements.

All sites are available for development, however, sites A, B, C&D and M performed better against dependence on Major Transport Infrastructure. A better performance against this criterion does not override the sustainability issues identified earlier but may mean that the strategy could mitigate against it by rethinking the phasing of development, the time period of the strategy and monitoring mechanisms to ensure the delivery of both Sustainability and Core Strategy Objectives.

Significance of effect:

The impact of deliverability although significant and long lasting is not necessarily irreversible if a strategy is in place to ensure the most sustainable development scenarios is in place to provide certainty to private investors and confidence to public funding providers when Government spending is finally decided. If such strategy is not in place the effects will be irreversible.

Mitigation measures and contingency arrangements should be developed with a Delivery Plan in place.

Development Options - Mixed-use SSSAs

- **Option 1:** High level of development (34,700 dwellings) with four SSSAs: North of Hougton Regis, North of Luton, West of Luton and East of Leighton Linslade.
- **Option 2:** Medium-high level development with 3 SSSAs: a) North of Hougton Regis, West of Luton and East of Leighton Linslade (26,850 dwellings) or b) North of Hougton Regis, North of Luton and West of Luton (26,150 dwellings).
- **Option 3:** Low level development with 3 SSSAs: a) North of Hougton Regis, North of Luton and East of Leighton Linslade (23,150 dwellings) or with 2 SSSAs: b) North of Hougton Regis and West of Luton (24,350 dwellings)
- **Option 4:** Reduction of the urban capacity

Summary of significant effects:

SA objective 1

At strategic level all the sites will have similar impact on biodiversity the only difference is the scale of the land take and level of development. Although all sites will have the capacity to address Green Infrastructure deficits in the area which could help enhance biodiversity, Options 1, 2a and 3a would help deliver Leighton Lindslade's Green Wheel and identified need for green corridors north of Luton. West of Luton. No corridors have been identified to the West of Luton and any links are likely to be difficult to the barrier created by the M1.

Potentially, a lower urban capacity would reduce pressure on urban green spaces and help maintaining biodiversity in the urban area.

SA objective 2

Reducing the land allocation in North Luton and West of Luton would reduce pressure on AONB and sensitive landscapes to the east of Luton and North of West of Luton.

At the proposed scale, West of Luton would result on the coalescence of Caddington and Slip End with Luton to the detriment of townscape and character aims in objective 2.

A reduction in urban capacity presents potential positives and potential negatives for objective 2. The higher the urban capacity the greater the pressure on townscapes and historic built environment. The smaller scale of urban sites may mean less capacity to mitigate against loss of local character and negative effect on townscape which cumulatively could have a significant effect. On the other hand it alleviates development pressures to build non previously developed land.

Given the level of development needed even if scenarios were limited to natural growth, planned urban extensions may have a greater scope to respond to this objective than small urban sites subject to individual planning applications. However, the cumulative effect of smaller urban sites is better deal with through development management policies.

SA objectives 1& 2

Options 2a) and 3a) provide opportunities to restore and enhance former quarry areas at Houghton Regis and East of Leighton Linslade.

SA objective 3

The location of sites in and around the urban areas is likely to minimise pollution of these resources but need to consider the effect of pollution from construction stage.

Option 1 is unlikely to mitigate against pollution and enhance air quality given the lack of transport infrastructure to support the level of growth proposed. Any

scenario with West of Luton (1, 2a, 2b and 3b) will have a negative effect on water resources unless a solution is fund for the transfer to East Hyde.

Sites in and around the urban areas are likely to minimise use of resources but need to consider the effect of pollution from construction stage.

Sites in and the urban areas are likely to minimise use of resources but need to consider the effect of pollution from construction stage.

On the other hand, the ability of smaller urban sites to contribute to integrated sustainable infrastructure is likely to be limited while their cumulative negative effect on this objective could be significant.

SA objective 4

The screening of possible SSSAs eliminated sites in areas at risk of flooding. All sites could accommodate integrated sustainable infrastructure measures and renewable energy technology, which would minimise their effect on objective 4 and may be able to incorporate measures to help reduce flood risk in some areas.

Given level of water stress in the area, the Core Strategy should introduce earlier code level 4 for water.

SA objectives 5 & 6

The location of development in and around urban areas and sites' capacity to contribute towards integrated sustainable infrastructure and renewable technology help address the causes of climate change with the exception of Option1 which is unlikely to be accompanied by the required transport infrastructure. The rest of the climate change elements are addressed as part of development management environmental policies.

With regards to land efficiency, the Core Strategy sets clearly its development strategy and, considering the level of development needed to support natural growth as a minimum, the strategy generally supports the preservation of the Green Belt's openness through its direction of growth.

Option 1 proposes a maximum distribution of development across the area with maximum land take which is no longer supported by major transport infrastructure. This was a given during the Preferred Options due to the RSS figures. Other lower scenarios can now be explored that provide a more balanced approach between needed growth and environmental priorities.

Decreasing urban capacity will weaken the strategy's commitment to prioritise the development of previously developed land and enhance town centre services and facilities. The concentration of population on established service centres has associated efficiencies with the use of resources. The significance of the effect would depend on the level of the reduction on urban capacity and on whether that reduction were to be directed to increase environmental conditions on identified pressure areas. Although, this would be better addressed in development management documents.

There is less capacity to incorporate integrated sustainable infrastructure as part of smaller urban and rural sites and therefore their cumulative effect should be assessed through the monitoring of development management policies.

SA objective 7

Option 1 provides the greatest opportunity to address green infrastructure and green corridor deficiencies across the plan's area. Although the effect of the locational approach of development options contributes to this objective, the direct effect is contained in development management policies.

While focusing development within the urban area reduces the impact on the surrounding countryside, it could lead to increased development pressure for urban green spaces which are important features of local green infrastructure.

The shortage of existing green space the urban area would make any further loss significant. A reduction on urban capacity could have a positive effect against

this objective.

SA objective 8

This is a site-specific issue relating to the design and layout of proposals. Master planning of SSSAs to ensure that historic and architectural assests and their setting are protected, preserved and enhanced. Policy CS8 on quality of design provides the principles to guide development to respect local character while providing high quality of design. This will be developed further through Development Management policies and a Design SPD.

SA objective 9

Distribution of development and its focus on addressing lack of existing infrastructure in deprived areas maximises opportunities to address social inequalities. However, it is through employment Policy SC9 and Policy SC7 on social and community infrastructure where the Core Strategy addresses this objective.

Require code level 6 (zero carbon) for SSSAs and introduce minimum level 4 by 2013 and level 6 by 2016 for any other sites.

The causes of deprivation are varied and approaches other than spatial polices such as housing management, health and skill programs may be better suited to reduce deprivation.

SA objective 10

Distribution of development to in and around existing centres and its focus on addressing lack of existing infrastructure in deprived areas maximises opportunities to address crime and fear of crime. However, it is through design Policy CS8, masterplanning for the Strategic Site Allocations a forthcoming design SPD and town centre master planning which the Core Strategy addresses this objective.

SA objective 11

With the exception of Option 1, the distribution of growth in all options and their focus on addressing lack of existing infrastructure in deprived areas maximises opportunities to encourage healthier lifestyles. However, it is through Design Policy CS8, Green Infrastructure Policy CS10 and Social and Community Infrastructure Policy CS7 that improved access to services and facilities is provided for.

SA objective 12

The scale of development proposed is likely to result in a significant step change in the provision of affordable housing in the area. When preparing the master plans of SSSAs, proposals should have regard to the tenure mix in the surrounding area to maximise opportunities to create sustainable mixed communities. Option 1 provides the greatest benefit against this objective.

A decrease in urban capacity is likely to increase certainty on the provision of affordable housing and minimise the reliance on urban capacity and the use of thresholds which could preclude smaller sites coming forward or being developed below the threshold.

SA objective 13

Distribution of growth in and around existing centres and the strengthening of the existing town centre hierarchy is likely to have a long-term positive effect on town centres and reduce erosion of village identity through small piece meal development. However, given the lack of transport infrastructure to support the level of growth in option 1, and the potential coalescence of settlements to the West of Luton only option 3a) performs well against this objective.

A decrease in urban capacity may lead to less pressure to use urban sites for housing purposes rather than other town centre or commercial uses.

SA objective14

Distribution of growth in and around existing centres and the strengthening of the existing town centre hierarchy is likely to have a long-term positive effect on town centres and reduce erosion of village identity through small piece meal development. However, it is unlikely that infrastructure will be available to deliver

option 1 within the plan period. The other options have not been tested through transport modelling and not scoring is given in the appraisal table. It can only be assumed based on existing modelling findings that a reduction on number of dwellings with a scaled down transport infrastructure would provide the highest environmental gain. The assessment did not provided evidence which would favour a site over another but there remain concerns with the impact of West of Luton on the transport Network showed in the transport modelling work..

Scenarios without West of Luton would remove concerns on the impact on the transport network.

SA objective 15

Distribution of growth in and around existing centres together with employment allocated in the SSSAs is likely to have a positive effect on employment, skills and innovation. However, it is through employment policy CS9, that the Core Strategy will meet this objective.

A decrease in urban capacity could reduce pressure on the release of employment and commercial uses in the urban areas.

See also site-specific mitigation in Tables A4 to A43 in Appendix 4.

Key	Key for likely option effect														
++	Significant	+	Positive	+?	Depends on		Significant	-	Negative	- ?	Depends on	0	Neutral	?	Uncertain
	positive	, i	not		implementation		negative		not		implementation		effect		effect
			significant		but if there is		-		significant		but if there is				
					an impact is						an impact is				
					likely to be						likely to be				
					positive						negative				

Table A4.4: Development Options – Mixed-use SSSAs

	Option 1 High level of development	Optio Medium-high lev	on 2	Optio Low level de		Reduction of urban capacity
SA objectives	North of Hougton Regis, North of Luton, West of Luton and East of Leighton Linslade	2a) North of Hougton Regis, West of Luton and East of Leighton Linslade	2b)) North of Hougton Regis, North of Luton and West of Luton	3a) North of Hougton Regis, North of Luton and East of Leighton Linslade	3b) North of Hougton Regis and West of Luton	,
	-?	-?	-?	-?	-?	+?
SA objective 1 - To maintain and enhance biodiversity	At strategic level all the sites will have similar impact on biodiversity the only difference is the scale of the land take and level of development. Given their location and the amount of land allocated, the sites could mitigate their effect against this objective with the provision of strategic green infrastructure and green corridors linking into the urban areas. All of them could address open space deficiencies identified in their adjacent urban areas which could contribute to biodiversity. The effect on existing biodiversity could be mitigated through sensitive location and layout of buildings and infrastructure. There are opportunities to provide green corridors and green infrastructure which could enhance biodiversity. Significance of effect: Given the scale of growth and that the consequences would be long lasting and irreversible, the effect would be significant.	Issues the same as option 1 but the lower number of houses would mean less pressure on existing open space but there will be less capacity to address current deficiencies. Not including North of Luton could mean a lost opportunity to create a green corridor from Bramingham Park to the wider countryside or provision of amenity green space in the deficient areas in the north of Luton which could benefit biodiversity. Significance of effect: Although the scale of growth is lower than option 1 the consequences would still be long lasting and irreversible in those areas accommodating development if careful site layout is not planed. Any	Issues the same as option 1 but less houses would mean less pressure on existing open space outside the urban areas. Like option 1, this option addresses most areas of deficiency of open space identified in the green space strategy with potential enhancement to biodiversity. Not allocating East of Leighton Linslade will not help the creation of the Green Wheel (green infrastructure network around the town). Significance of effect: Same as Option 2a)	Issues the same as option 1 but would place the least amount of pressure on existing open space outside the urban areas. Not having West of Luton could mean a lost opportunity to provide for identified deficiencies on seminatural space West of Luton. However, the M1 would make addressing this deficiency difficult as part of this option. No green corridors have been identified in the Green Spaces Strategy to link to the west. Significance of effect: Although the scale of growth is lower than options 1 and 2.	Issues same as option 1 but there will be less capacity to address existing current deficiencies North of Luton which could enhance biodiversity. Not allocating East of Leighton Linslade would not help the creation of the Green Wheel around the town. Significance of effect: Same as Option 3a)	The reduction on urban capacity could alleviate pressure on green spaces of which there is already a deficiency across the urban areas of the plan. Urban green spaces whether they are parks or seminatural spaces and green corridors have a very important role on maintaining and enhancing biodiversity as well as raising environmental awareness. Significance of effect: The significance of the effect would depend on the

	Option 1 High level of development	Optio Medium-high lev		Optio Low level de		Reduction of
SA objectives	North of Hougton Regis, North of Luton, West of Luton and East of Leighton Linslade	2a) North of Hougton Regis, West of Luton and East of Leighton Linslade	2b)) North of Hougton Regis, North of Luton and West of Luton	3a) North of Hougton Regis, North of Luton and East of Leighton Linslade	3b) North of Hougton Regis and West of Luton	urban capacity
		enhancement to biodiversity in the area coming from green infrastructure related to these sites is unlikely to be provided at the same scale without them. The effect would be significant.				level of the reduction and on whether the reduction on urban capacity would have to be accommodated on non previously developed land.
SA objective	-	-	-?	-?	-	-? /+?
2 -	Given their scale, the SSSAs	Issues generally the	Issues generally the	Issues generally the	Issues generally the	This option
To conserve,	are likely to have a	same as for Option 1.	same as for Option 1.	same as for Option 1.	same as for Option	presents
restore and	detrimental effect on local	However, With a	However, Option 2b	However, with a	1. However, Option	potential
enhance	character. However, the sites	smaller allocation of	will decrease pressure	smaller land allocation	3 will decrease	positives and
landscape and	are capable to mitigate	land Option 2a will	on landscape	at North Luton and not	pressure on	potential
townscape	against their effect on sensitive areas of	decrease pressure on landscape sensitive	sensitive areas in Leighton Linslade.	allocating land West of Luton option 3a will	landscape sensitive areas in Leighton	negatives for objective 2. The
and local	landscape subject to	areas and AONB to	The lower number of	decrease pressure on	Linslade and North	higher the
character	sensitive location of	the north of Luton. The	dwellings may result	AONB north and West	of Luton. The lower	urban capacity
particularly	development, use of green	lower number of	on a lesser impact on		number of dwellings	the greater the
nationally	infrastructure and desing.	dwellings may result	this objective than	number of dwellings	may result on a	pressure on
protected	However, West of Luton (Site	on a lesser impact on	Option 1 although this	may result on the least	lesser impact on this	townscapes
assets such	M) could only accommodate	this objective than	will depend on the	impact on this objective	objective than	and historic
as the	limited development on the	Option 1 although this	location, layout and	and the AONB in	options 1 and 2	built
Chilterns	edge of Caddington and Slip	will depend on the	design of	particular of all the	although this will	environment.
AONB	End if impact is to be	location, layout and	development and the	options although this	depend on the	The smaller
	mitigated. This would	design of development	use of green	will depend on the	location, layout and	scale of urban
	considerably reduce the	and the use of green	infrastructure.	location, layout and	design of	sites may mean
	number of dwellings to be	infrastructure.	Mitigating against this	design of development	development and	less capacity to
	provided under option 1.	At the proposed \A/aat	objective could reduce	and the use of green	the use of green	mitigate against
	See mitigation measures for each site. Although not wihitn	At the proposed West of Luton development	considerably the housing capacity at	infrastructure.	infrastructure. Mitigating against	loss of local character and
	the AONB North of Luton	scale, the option could	West of Luton.	See site specific	Mitigating against this objective could	negative effect
	needs to mitigate against	result on the	A smaller land	· ·	reduce considerably	on townscape
	necus to miligate against	result on the	A SITIATION IATIO	mitigation measures	reduce considerably	on townscape

	Option 1 High level of development	Optio Medium-high lev		Optio Low level de		Reduction of
SA objectives	North of Hougton Regis, North of Luton, West of Luton and East of Leighton Linslade	2a) North of Hougton Regis, West of Luton and East of Leighton Linslade	2b)) North of Hougton Regis, North of Luton and West of Luton	3a) North of Hougton Regis, North of Luton and East of Leighton Linslade	3b) North of Hougton Regis and West of Luton	urban capacity
	impact on AONB and highly sensitive landscape to the east of the A6 There are opportunities in West of Luton to Opportunities to reinforce AONB setting, conserve views and vistas, provide stronger mitigation to M1 motorway. Large scale development West of Luton would result in the coalescence of Luton and Caddington and Slip End. See site specific mitigation measures Significance of effect: Given its scale, long term effect and irreversibility the effect is significant.	coalescence of settlements west of Luton. See site specific mitigation measures Significance of effect: Same as Option1.	allocation North of Luton would reduce pressures on AONB. Coalescence of settlements west of Luton. See site specific mitigation measures Significance of effect: Same as Option 1.	Significance of effect: Same as Option 1.	the housing capacity at West of Luton. Depending on the reduction, the option could provide less than the development needed to accommodate natural growth of population in the area. Coalescence of settlements west of Luton. Significance of effect: Same as Option 1.	which cumulatively could have a significant effect. On the other hand it alleviates development pressures to build non previously developed land. Given the level of development needed even if scenarios were limited to natural growth, planned urban extensions may have a greater scope to respond to this objective than small urban sites subject to individual planning applications. However, the cumulative effect of smaller urban sites is better deal with through

	Option 1 High level of development		ion 2 Option 3 vel development Low level development			
SA objectives	North of Hougton Regis, North of Luton, West of Luton and East of Leighton Linslade	2a) North of Hougton Regis, West of Luton and East of Leighton Linslade	2b)) North of Hougton Regis, North of Luton and West of Luton	3a) North of Hougton Regis, North of Luton and East of Leighton Linslade	3b) North of Hougton Regis and West of Luton	игран сараску
OA OSJOGATES						development management policies. Significance of effect: Same as Option 1.
SA objective 3 - Protect	The level of growth required	-? Issues generally the	-? Issues the same as	-? Issues as per option 1	-? Issues as per option	? Sites in and the
and enhance air, soil and water	will increase pressure on air, soil and water resources. The screening of possible SSSAs	same as for Option 1.but a lower scale of development would	for Option 1 and 2a) but a lower scale of development would	and 2a but provides the least amount of development and it is	1 and 2a but provides the lower amount of	urban areas are likely to minimise use of
resources	eliminated sites that could not accommodate measures to mitigate against this objective. Given their location and scale, the proposed areas in Option 1 (subject to C&D and F&G being developed together) could accommodate integrated sustainable infrastructure measures and renewable energy technology to minimise their effect on objective 3. Require code level 6 (zero carbon) for SSSAs and introduce minimum level 4 by 2013 and level 6 by 2016 for any other sites. Given level of water stress in the area, the Core Strategy should introduce earlier code level 4 for water	reduce pressure on resources and acoompanied by a minimum non committed transport infrastructure scenario as per the Transport Appraisal 2009, this scenario is likely to increase the use of public transport. The location of sites in and around the urban areas and intensification of urban areas in Option 2 is likely to minimise pollution of these resources but need to consider the effect of pollution from	reduce pressure on resources. Significance of effect: Same as Option 1.	likely to be the least resource intensive.	development but it is unlikely to provide the infrastructure in the minimum non committed transport infrastructure scenario as per the Transport Appraisal 2009. Its ability to help increasing public transport use is more limited. Further information needed on transport modelling to test the new scenarios.	resources but need to consider the effect of pollution from construction stage. On the other hand, the ability of smaller urban sites to contribute to integrated sustainable infrastructure is likely to be limited while their cumulative negative effect on this objective could

	Option 1 High level of development	Option 2 Medium-high level development		Optio Low level de	Reduction of urban capacity	
SA objectives	North of Hougton Regis, North of Luton, West of Luton and East of Leighton Linslade	2a) North of Hougton Regis, West of Luton and East of Leighton Linslade	2b)) North of Hougton Regis, North of Luton and West of Luton	3a) North of Hougton Regis, North of Luton and East of Leighton Linslade	3b) North of Hougton Regis and West of Luton	urban capacity
	efficiency standards. The location of sites in and around the urban areas in this Option is likely to minimise pollution of these resources but need to consider the effect of pollution from construction stage. See also site mitigation measures. West of Luton is constrained by the lack of capacity of the Sewage Treatment Plant at Caddington and no solution has been fund to the transfer to the plant at East Hydwhich would provide the EA support to the site's development. The Core Strategy area is a Water Stress area and dvelopment management policies will have to be developed to address this by requiring the highest level water efficiency from new development. Site proposals would have to address the Air Quality Management Plans in Luton and southern Central Bedfordshire. All of them relate to transport emissions and given the scale of development the impact on	construction stage. However, any option with West of Luton will encounter EA's opposition due to the lack of capacity of the Caddington SWT or the environmental cost of transferring to East Hyde. See also site mitigation measures. Significance of effect: Same as Option 1				be significant.

	Option 1 High level of development	Optie Medium-high lev		Optio Low level de		Reduction of urban capacity
SA objectives	North of Hougton Regis, North of Luton, West of Luton and East of Leighton Linslade	2a) North of Hougton Regis, West of Luton and East of Leighton Linslade	2b)) North of Hougton Regis, North of Luton and West of Luton	3a) North of Hougton Regis, North of Luton and East of Leighton Linslade	3b) North of Hougton Regis and West of Luton	игран сараску
	this areas may be considerable. Transport infrastructure will no be provided to the scale which would minimise the effects of option one on the transport network and although car development is expected to bring lower emissions over time. Option 1 is likely to have a detrimental effect on this objective. Significance of effect: Given the scale of growth and that the consequences would be long lasting and irreversible, the effect would be significant.					
	+?	+?	+?	+?	+?	0
SA objective 4 - Ensure that new developments avoid areas which are at risk from flooding and where possible, reduces flood risk	The screening of possible SSSAs eliminated sites in areas at risk of flooding. Given their location and scale the proposed areas in Option 1(subject to C&D and F&G being developed together) could accommodate integrated sustainable infrastructure measures and renewable energy technology, which would minimise their effect on objective 4 and may be able to incorporate measures to help reduce	Issues generally the same as for Option 1 Significance of effect: Same as Option 1.	Issues the same as for Option 1. Significance of effect: Same as Option 1.	Issues generally the same as for Option 1 Significance of effect: Same as Option 1.	Issues generally the same as for Option 1 Significance of effect: Same as Option 1.	The ability of smaller urban and rural sites to contribute to integrated sustainable infrastructure is likely to be limited while their cumulative effect could be significant. However, they are unlikely to worsen current

	Option 1 High level of development	Option 2 Medium-high level development		Optio Low level de	Reduction of urban capacity	
SA objectives	North of Hougton Regis, North of Luton, West of Luton and East of Leighton Linslade	2a) North of Hougton Regis, West of Luton and East of Leighton Linslade	2b)) North of Hougton Regis, North of Luton and West of Luton	3a) North of Hougton Regis, North of Luton and East of Leighton Linslade	3b) North of Hougton Regis and West of Luton	urban capacity
	flood risk in some areas. Require code level 6 (zero carbon) for SSSAs and introduce minimum level 4 by 2013 and level 6 by 2016 for any other sites. Given level of water stress in the area, the Core Strategy should introduce earlier code level 4 for water efficiency standards. Significance of effect: This Option directs development away from high-risk areas and has a significant effect in the reduction of risk. Given the scale of growth and that the consequences would be long lasting.					situation subject to appropriate development management policies
	-?	+?	+?	+?	+?	0
SA objective 5- Adapt to and mitigate against the impact of climate change	The location of development in and around urban areas and sites' capacity to contribute towards integrated sustainable infrastructure and renewable technology help address the causes of climate change. The rest of the climate change elements are addressed as part of development management environmental policies. However, without a level of transport infrastructure to	The location of development in and around urban areas and sites' capacity to contribute towards integrated sustainable infrastructure and renewable technology help address the causes of climate change. The rest of the climate change elements are addressed as part of	Issues the same as for Option 2a. Significance of effect: Same as Option 2.	Issues the same as for Option 2a. Significance of effect: Same as Option 1.	Issues the same as for Option 2a. Significance of effect: Same as Option 1.	There is less capacity to incorporate integrated sustainable infrastructure as part of smaller urban and rural sites and therefore their cumulative effect should be assessed through to incorporate in the

	Option 1 High level of development		Option 2 Medium-high level development		Option 3 Low level development		
SA objectives	North of Hougton Regis, North of Luton, West of Luton and East of Leighton Linslade	2a) North of Hougton Regis, West of Luton and East of Leighton Linslade	2b)) North of Hougton Regis, North of Luton and West of Luton	3a) North of Hougton Regis, North of Luton and East of Leighton Linslade	3b) North of Hougton Regis and West of Luton	urban capacity	
	match the level of development Option 1 is unlikely to contribute favourably towards this objective. Significance of effect: Although the lack of transport infrastructure would could lead to a negative impact on this objective, evelopment management policies contain sustainable development proposals. The effect cannot be considered significant.	development management environmental policies. Significance of effect: This growth Option complements sustainable practices but development management policies contain sustainable development proposals. The effect cannot be considered significant.				monitoring of development management policies.	
SA objective 6 - Increase resource efficiency and	Same as objective 5. With regard to land efficiency, the Core Strategy sets clearly its development strategy and, considering the level of development needed to support natural growth as a minimum, generally supports the preservation of the Green Belt's openness through its direction of growth. Option 1 proposes a maximum distribution of	Issues generally the same as for Option 1 with the exception of transport infrastructure and level of growth which result on the negative impact of option 1. Significance of effect: Similar to Option 1 with regards to SSSAs.	Issues the same as for Option 2a. Significance of effect: Same as Option 1.	Issues the same as for Option 2a. Significance of effect: Same as Option 1.	Issues the same as for Option 2a. Significance of effect: Same as Option 1.	Decreasing urban capacity will weaken the strategy's commitment to prioritise the development of previously developed land and enhance town centre services and facilites. The concentration	

	Option 1 High level of development	Opti Medium-high lev		Option 3 ent Low level development		Reduction of
SA objectives	North of Hougton Regis, North of Luton, West of Luton and East of Leighton Linslade	2a) North of Hougton Regis, West of Luton and East of Leighton Linslade	2b)) North of Hougton Regis, North of Luton and West of Luton	3a) North of Hougton Regis, North of Luton and East of Leighton Linslade	3b) North of Hougton Regis and West of Luton	urban capacity
reduce resource use and waste	development across the area with maximum land take. This was a given during the Preferred Options due to the RSS figures. Other lower scenarios can now ne explored that provide a more balanced approach between needed growth and environmental priorities. In addition, this level of growth is no longer accompanied by the transport infrastructure needed. Significance of effect: With regard to land efficiency, Option 1 proposes a distribution of growth that indirectly affects land efficiency but also proposes the integration of different uses, which will have a significant and long lasting effect.					of population on established service centres has associated efficiencies on the use of resources. Significance of effect: The significance of the effect would depend on the level of the reduction on urban capacity and on whether that reduction were to be directed to increase environmental conditions on identified pressure areas. Although, this would be better addressed in development management documents.
SA objective 7 - Maintain, enhance and	The location of development as per Option 1 maximises the opportunity to provide	Focusing development within option 2a would provide the opportunity	Focusing development within option 2b would	Focusing development within option 3a would provide the opportunity	Focusing development within option 3b would	While focusing development within the urban

	Option 1 High level of development	Option 2 Medium-high level development		Optio Low level de	Reduction of	
SA objectives	North of Hougton Regis, North of Luton, West of Luton and East of Leighton Linslade	2a) North of Hougton Regis, West of Luton and East of Leighton Linslade	2b)) North of Hougton Regis, North of Luton and West of Luton	3a) North of Hougton Regis, North of Luton and East of Leighton Linslade	3b) North of Hougton Regis and West of Luton	urban capacity
deliver new green infrastructure including green open space	Green Infrastructure in areas of identified need. However, Policy CS10 deals with green infrastructure provision. Significance of effect: Although the effect of the locational approach of Option 1 contributes positively to this objective, the direct effect is contained in a different policy and the effect of Option 1 is not significant.	to address Green Infrastructure deficiencies across the area but not north of Luton. Significance of effect: Same as option 1.	provide the opportunity to address Green Infrastructure deficiencies across the area but not East of Leighton Linslade. Significance of effect: Same as Option 1.	barrier formed by the M1 is likely to limit access to infrastructure	provide the least opportunity to address deficiencies across the area. Significance of effect: Same as Option 1.	area reduces the impact on the surrounding countryside, it could lead to increased development pressure for urban green spaces which are important features of local green infrastructure. Significance of effect: Depends on implementation but could be significant. The shortage of existing green space the urban area would make any further loss significant. A reduction on urban capacity could have a positive effect against this objective.

	Option 1 High level of development	Opti Medium-high lev		Optio Low level de		Reduction of
SA objectives	North of Hougton Regis, North of Luton, West of Luton and East of Leighton Linslade	2a) North of Hougton Regis, West of Luton and East of Leighton Linslade	2b)) North of Hougton Regis, North of Luton and West of Luton	3a) North of Hougton Regis, North of Luton and East of Leighton Linslade	3b) North of Hougton Regis and West of Luton	urban capacity
SA objective	0	0	0	0	0	0
8 - To	This is a site-specific issue	Issues the same as for	Issues the same as	Issues the same as for	Issues the same as	The effect on
identify, protect,	relating to the design and	Option 1.	for Option 1.	Option 1.	for Option 1.	this objective
maintain and	layout of proposals. Master planning of SSSAs to ensure	Significance of	Significance of	Significance of effect:	Significance of	would be mainly linked to
enhance the	that historic and architectural	effect: Same as	effect: Same as	Same as Option 1.	effect: Same as	Development
historic	assists and their setting are	Option 1.	Option 1.	came as option i.	Option 1.	Management
environment	protected, preserved and					policies and
and cultural assets and	enhanced. See site mitigation					decisions on
their setting	measures. Policy CS8 on quality of					individual sites
inon ooung	design provides the principles					
	to guide development to					
	respect local character while					
	providing high quality of design. This will be					
	developed further through					
	Development Management					
	policies and a Design SPD.					
	There is no significant					
	effect.					

	Option 1 High level of development	Option Medium-high lev		Optio Low level de		Reduction of urban capacity
SA objectives	North of Hougton Regis, North of Luton, West of Luton and East of Leighton Linslade	2a) North of Hougton Regis, West of Luton and East of Leighton Linslade	2b)) North of Hougton Regis, North of Luton and West of Luton	3a) North of Hougton Regis, North of Luton and East of Leighton Linslade	3b) North of Hougton Regis and West of Luton	urbair capacity
	+	+	+	+	+	0
SA objective 9 - Reduce poverty and inequality and promote social inclusion	Distribution of development in Option 1 and its focus on addressing lack of existing infrastructure in deprived areas maximises opportunities to address social inequalities. However, it is through employment policy CS9 and Policy CS7 on social and community infrastructure where the Core Strategy addresses this objective. The causes of deprivation are varied and approaches other than spatial polices such as housing management, health and skill programs may be better suited to reduce deprivation. Significance of effect: Although the effect of the locational approach of Option 1 contributes positively to this objective, the direct effect is contained in different policies and the effect of Option 1 is not significant.	Same general effect as option 1, but it will not address deprivation on wards adjacent to North of Luton SSSA. Significance of effect: Same as Option 1.	as option 1, but it will not address deprivation on wards adjacent to East of	address deprivation on	Same general effect as option 1, but it will not address deprivation on wards adjacent to North of Luton and East of Leighton Linslade SSSAs. Significance of effect: Same as Option 1.	Outside the distributional benefit of SSSAs the effect on this objective would be mainly linked to Development Management policies and decisions on individual sites.

	Option 1 High level of development	Opti Medium-high lev		Optio Low level de		Reduction of urban capacity
SA objectives	North of Hougton Regis, North of Luton, West of Luton and East of Leighton Linslade	2a) North of Hougton Regis, West of Luton and East of Leighton Linslade	2b)) North of Hougton Regis, North of Luton and West of Luton	3a) North of Hougton Regis, North of Luton and East of Leighton Linslade	3b) North of Hougton Regis and West of Luton	urbair capacity
	+	+	+	+	+	0
SA objective 10 - Reduce both crime and fear of crime	Distribution of development to in and around existing centres and its focus on addressing lack of existing infrastructure in deprived areas maximises opportunities to address crime and fear of crime. However, it is through design policy CS8, a forthcoming design SPD and town centre master planning which the Core Strategy addresses this objective. Significance of effect: Although the effect of the locational approach of Option 1 contributes positively to this objective, the direct effect is contained in different policies and the effect of Option 1 is not significant.	Issues the same as for Option 1. Significance of effect: Same as Option 1.	Issues the same as for Option 1. Significance of		Issues the same as for Option 1. Significance of effect: Same as Option 1	The effect on this objective would be mainly linked to Development Management policies and decisions on individual sites.

	Option 1 High level of development		on 2 vel development	Option 3 Low level development		Reduction of urban capacity
SA objectives	North of Hougton Regis, North of Luton, West of Luton and East of Leighton Linslade	2a) North of Hougton Regis, West of Luton and East of Leighton Linslade	2b)) North of Hougton Regis, North of Luton and West of Luton	3a) North of Hougton Regis, North of Luton and East of Leighton Linslade	3b) North of Hougton Regis and West of Luton	игран сараску
SA objective	-?	+	+			0
SA objective SA objective 11 - To encourage healthier lifestyles and reduce adverse health impacts of new developments	Distribution of growth in option 1 and its focus on addressing lack of existing infrastructure in deprived areas maximises opportunities to encourage healthier lifestyles. However, lack of transport infrastructure to accommodate its level of growth is likely to have detrimental effect on this objective. However, it is through Design Policy CS8, Green Infrastructure Policy CS10 and Social and Community Infrastructure Policy CS7 that improved access to services and facilities is provided for. Significance of effect: Although the effect of the locational approach of Option 1 contributes positively to this objective, the direct effect is contained in different policies and the effect of Option 1 is not significant.	Distribution of growth in option 2a and its focus on addressing lack of existing infrastructure in deprived areas maximises opportunities to encourage healthier lifestyles. However, it is through Design Policy CS8, Green Infrastructure Policy CS10 and Social and Community Infrastructure Policy CS7 that improved access to services and facilities is provided for. Significance of effect: Although the effect of the locational approach of Option 1 contributes positively to this objective, the direct effect is contained in different policies and the effect of Option 1 is not significant.	Issues the same as for Option 2a. Significance of effect: Same as Option 1.	Issues the same as for Option 2a. Significance of effect: Same as Option 1.	Issues the same as for Option 2a. Significance of effect: Same as Option 1.	The effect on this objective would be mainly linked to Development Management policies and decisions on individual sites.

	Option 1 High level of development	Optic Medium-high lev		Optio Low level de		Reduction of
SA objectives	North of Hougton Regis, North of Luton, West of Luton and East of Leighton Linslade	2a) North of Hougton Regis, West of Luton and East of Leighton Linslade	2b)) North of Hougton Regis, North of Luton and West of Luton	3a) North of Hougton Regis, North of Luton and East of Leighton Linslade	3b) North of Hougton Regis and West of Luton	urban capacity
	++	++	++	++	++	+?
SA objective 12 - Provide decent, affordable and safe homes for all	The scale of development proposed is likely to result in a significant step change in the provision of affordable housing in the area. When preparing the master plans of SSSAs proposals should have regard to the tenure mix in the surrounding area to maximise opportunities to create sustainable mixed communities. Significance of effect: Due to the scale and long-term consequence of development the contribution to affordable housing will be significant.	Issues generally the same as for Option 1. Significance of effect: Due to the scale and long-term consequence of development the contribution to affordable housing will be significant although less so than under Option 1.	Issues the same as for Option 1. Significance of effect: Due to the scale and long-term consequence of development the contribution to affordable housing will be significant although less so than under Option 1.	Issues the same as for Option 1. Significance of effect: Due to the scale and long-term consequence of development the contribution to affordable housing will be significant although less so than under options 1 and 2.	Issues the same as for Option 1. Significance of effect: Due to the scale and long-term consequence of development the contribution to affordable housing will be significant although less so than under options 1 and 2.	A decrease in urban capacity is likely to increase certainty on the provision of affordable housing and minimise the reliance on urban capacity and the use of thresholds which could preclude smaller sites coming forward or being developed below the threshold.
SA objective	-?	-?	-?	+	-?	+?
13 - Revitalise town centres to promote a return to sustainable urban living and protect the identity of villages	Distribution of growth in and around existing centres and the strengthening of the existing town centre hierarchy is likely to have a long-term positive effect on town centres and reduce erosion of village identity through small piece meal development. However, the lack of transport infrastructure to support this	Distribution of growth in and around existing centres and the strengthening of the existing town centre hierarchy is likely to have a long-term positive effect on town centres and reduce erosion of village identity through small piece	Issues generally the same as for Option 2a. However, lack of SSSA at Leighton Lislade would result on a loss of opportunities for the revitalisation of East of Leighton Linslade. Significance of effect: The Overall impact of this Option	Distribution of growth in and around existing centres and the strengthening of the existing town centre hierarchy is likely to have a long-term positive effect on town centres and reduce erosion of village identity through small piece	Issues generally the same as for Option 2a. Significance of effect: The Overall impact of this Option is considered to be similar to Option 2a.	A decrease on urban capacity may lead to less pressure to use urban sites for housing purposes rather than other town centre or commercial uses.

	Option 1 High level of development	Option Medium-high lev		Option 3 Low level development		Reduction of urban capacity
SA objectives	North of Hougton Regis, North of Luton, West of Luton and East of Leighton Linslade	2a) North of Hougton Regis, West of Luton and East of Leighton Linslade	2b)) North of Hougton Regis, North of Luton and West of Luton	3a) North of Hougton Regis, North of Luton and East of Leighton Linslade	3b) North of Hougton Regis and West of Luton	urbari capacity
	level of growth is likely to have effects on congestion which could preclude the revitalisation of town centres and work against sustainable urban living. This Option is likely to have a long-term significant effect.	development. However, the development of West of Luton could result on the coalescence of Caddington and Slip End with Luton and the physical barrier of the M1 may difficult the integration of the site with Luton. This option is likely to have a long-term significant effect.	is considered to be similar to Option 2a.	development. This option is likely to have a long-term significant effect.		
		Significant effect.				
	-?	?	?	?	?	?
SA objective	The distribution of growth in	? There is no evidence	Issues are the same	Issues are the same as	Issues are the same	?
14 –	The distribution of growth in and around existing centres	? There is no evidence base testing this		Issues are the same as per option 2a).	-	?
14 – To provide	The distribution of growth in and around existing centres together with the scale and	? There is no evidence base testing this scenario. However, the	Issues are the same	Issues are the same as per option 2a). However, no	Issues are the same	?
14 – To provide and	The distribution of growth in and around existing centres together with the scale and location of SSSAs is likely to	There is no evidence base testing this scenario. However, the Halcrow 2009	Issues are the same	Issues are the same as per option 2a). However, no depending on West of	Issues are the same	?
14 – To provide	The distribution of growth in and around existing centres together with the scale and location of SSSAs is likely to contribute considerably to the	? There is no evidence base testing this scenario. However, the	Issues are the same	Issues are the same as per option 2a). However, no depending on West of Luton reduces	Issues are the same	?
14 – To provide and encourage the use of sustainable	The distribution of growth in and around existing centres together with the scale and location of SSSAs is likely to contribute considerably to the provision of sustainable integrated transport systems.	There is no evidence base testing this scenario. However, the Halcrow 2009 Transport Assessment indicates that the scenario of minimal	Issues are the same	Issues are the same as per option 2a). However, no depending on West of	Issues are the same	?
14 – To provide and encourage the use of sustainable integrated	The distribution of growth in and around existing centres together with the scale and location of SSSAs is likely to contribute considerably to the provision of sustainable integrated transport systems. On the other hand, lack of	? There is no evidence base testing this scenario. However, the Halcrow 2009 Transport Assessment indicates that the scenario of minimal uncommitted	Issues are the same	Issues are the same as per option 2a). However, no depending on West of Luton reduces concerns on impact on	Issues are the same	?
14 – To provide and encourage the use of sustainable integrated transport	The distribution of growth in and around existing centres together with the scale and location of SSSAs is likely to contribute considerably to the provision of sustainable integrated transport systems. On the other hand, lack of transport infrastructure is	? There is no evidence base testing this scenario. However, the Halcrow 2009 Transport Assessment indicates that the scenario of minimal uncommitted infrastructure would	Issues are the same	Issues are the same as per option 2a). However, no depending on West of Luton reduces concerns on impact on	Issues are the same	?
14 – To provide and encourage the use of sustainable integrated	The distribution of growth in and around existing centres together with the scale and location of SSSAs is likely to contribute considerably to the provision of sustainable integrated transport systems. On the other hand, lack of	? There is no evidence base testing this scenario. However, the Halcrow 2009 Transport Assessment indicates that the scenario of minimal uncommitted	Issues are the same	Issues are the same as per option 2a). However, no depending on West of Luton reduces concerns on impact on	Issues are the same	?
14 – To provide and encourage the use of sustainable integrated transport systems, improve access and	The distribution of growth in and around existing centres together with the scale and location of SSSAs is likely to contribute considerably to the provision of sustainable integrated transport systems. On the other hand, lack of transport infrastructure is likely to work against the aims of this objective. Significance of effect: Due	There is no evidence base testing this scenario. However, the Halcrow 2009 Transport Assessment indicates that the scenario of minimal uncommitted infrastructure would not have considerably worse effects on congestion and would	Issues are the same	Issues are the same as per option 2a). However, no depending on West of Luton reduces concerns on impact on	Issues are the same	?
14 – To provide and encourage the use of sustainable integrated transport systems, improve	The distribution of growth in and around existing centres together with the scale and location of SSSAs is likely to contribute considerably to the provision of sustainable integrated transport systems. On the other hand, lack of transport infrastructure is likely to work against the aims of this objective. Significance of effect: Due to the scale and long-term	There is no evidence base testing this scenario. However, the Halcrow 2009 Transport Assessment indicates that the scenario of minimal uncommitted infrastructure would not have considerably worse effects on congestion and would provide the greatest	Issues are the same	Issues are the same as per option 2a). However, no depending on West of Luton reduces concerns on impact on	Issues are the same	?
14 – To provide and encourage the use of sustainable integrated transport systems, improve access and	The distribution of growth in and around existing centres together with the scale and location of SSSAs is likely to contribute considerably to the provision of sustainable integrated transport systems. On the other hand, lack of transport infrastructure is likely to work against the aims of this objective. Significance of effect: Due to the scale and long-term consequence	There is no evidence base testing this scenario. However, the Halcrow 2009 Transport Assessment indicates that the scenario of minimal uncommitted infrastructure would not have considerably worse effects on congestion and would provide the greatest shift to public transport	Issues are the same	Issues are the same as per option 2a). However, no depending on West of Luton reduces concerns on impact on	Issues are the same	?
14 – To provide and encourage the use of sustainable integrated transport systems, improve access and	The distribution of growth in and around existing centres together with the scale and location of SSSAs is likely to contribute considerably to the provision of sustainable integrated transport systems. On the other hand, lack of transport infrastructure is likely to work against the aims of this objective. Significance of effect: Due to the scale and long-term consequence of development, the contribution	There is no evidence base testing this scenario. However, the Halcrow 2009 Transport Assessment indicates that the scenario of minimal uncommitted infrastructure would not have considerably worse effects on congestion and would provide the greatest shift to public transport when compared to not	Issues are the same	Issues are the same as per option 2a). However, no depending on West of Luton reduces concerns on impact on	Issues are the same	?
14 – To provide and encourage the use of sustainable integrated transport systems, improve access and	The distribution of growth in and around existing centres together with the scale and location of SSSAs is likely to contribute considerably to the provision of sustainable integrated transport systems. On the other hand, lack of transport infrastructure is likely to work against the aims of this objective. Significance of effect: Due to the scale and long-term consequence	There is no evidence base testing this scenario. However, the Halcrow 2009 Transport Assessment indicates that the scenario of minimal uncommitted infrastructure would not have considerably worse effects on congestion and would provide the greatest shift to public transport	Issues are the same	Issues are the same as per option 2a). However, no depending on West of Luton reduces concerns on impact on	Issues are the same	?
14 – To provide and encourage the use of sustainable integrated transport systems, improve access and	The distribution of growth in and around existing centres together with the scale and location of SSSAs is likely to contribute considerably to the provision of sustainable integrated transport systems. On the other hand, lack of transport infrastructure is likely to work against the aims of this objective. Significance of effect: Due to the scale and long-term consequence of development, the contribution to objective 14 will be	There is no evidence base testing this scenario. However, the Halcrow 2009 Transport Assessment indicates that the scenario of minimal uncommitted infrastructure would not have considerably worse effects on congestion and would provide the greatest shift to public transport when compared to not allocating land as part	Issues are the same	Issues are the same as per option 2a). However, no depending on West of Luton reduces concerns on impact on	Issues are the same	?

	Option 1 High level of development	Option 2 Medium-high level development		Optio Low level de	n 3 velopment	Reduction of
SA objectives	North of Hougton Regis, North of Luton, West of Luton and East of Leighton Linslade	2a) North of Hougton Regis, West of Luton and East of Leighton Linslade	2b)) North of Hougton Regis, North of Luton and West of Luton	3a) North of Hougton Regis, North of Luton and East of Leighton Linslade	3b) North of Hougton Regis and West of Luton	urban capacity
		It could be assumed that a scenario with lower development than those in the former RSS and a reduction on the transport infrastructure associated with it, would provide the greatest sustainable transport gain. The assessment did not provided evidence which would favour a site over another but there remain concerns with the impact of West of Luton on the transport Network showed in the transport modelling work See section on Major transport Infrastructure in the SA report. Significance of effect: Due to the scale and long-term consequence of development, the contribution to objective 14 will be significant.				

	Option 1 High level of development	Option 2 Iopment Medium-high level development		Optic Low level de		Reduction of urban capacity
SA objectives	North of Hougton Regis, North of Luton, West of Luton and East of Leighton Linslade	2a) North of Hougton Regis, West of Luton and East of Leighton Linslade	2b)) North of Hougton Regis, North of Luton and West of Luton	3a) North of Hougton Regis, North of Luton and East of Leighton Linslade	3b) North of Hougton Regis and West of Luton	arban capacity
on objectives	+?	+?	+?	+?	+?	+?
SA objective 15 – To promote employment, learning, skills and innovation	Distribution of growth in and around existing centres together with employment allocated in the SSSAs is likely to have a positive effect on employment, skills and innovation. Particularly if employment is to be located as part of mixed use sustainable urban extensions as this would take advantage of potential synergies between the different uses. However, it is through employment policy CS9 that the Core Strategy will meet this objective. Significance of effect: Although the effect of the locational approach of Option 1 contributes positively to this objective, the direct effect is contained in different policies and the effect of Option 1 is not significant.	Effects as per Option 1. Significance of effect: As per option 1	Effects as per Option 1. Significance of effect: As per option 1	Effects as per Option 1. Significance of effect: As per option 1	Effects as per Option 1. Significance of effect: As per option 1	Could reduce pressure on the release of employment and commercial uses in the urban areas.

Employment development options

Option 1: Provision of employment land based on long term aspirations for the area and its sub-region (Range of B1 to B8 uses across SSSAs and Increased proportion of non-B use employment).

Option 2: Provision of employment land based on current market views on likely demand and capacity (Range of employment led by the market).

Option 3: Distribution of employment on mixed use SSSAs and employment led SSSAs

Option 4: Distribution of employment mainly on employment led SSSAs

Summary of significant effects:

SA objective 1: Option 3 is likely to contribute to the enhancement of biodiversity through the large green infrastructure expected to accompany the mixed-use SSSAs

SA objectives 3, 5 and 6: Option 1 performs relatively well against the protection and management of resources while option 2 is likely to preclude opportunities to diversify the economy and its potential to balance the traffic and land use intensive logistic and manufacturing uses with other employment uses which may be less resource intensive. Option 3 is likely to generate more energy and resource efficiencies and respond more effectively to climate change than option 4 which would depend mainly on development management policy targets.

SA objective 7: Mixed use SSSAs are expected to be accompanied by substantial green infrastructure.

SA objective 9: All four options will have a significant positive contribution towards this objective. However, Option 3 allows synergies between different uses to build on skills and education. Providing homes and employment together may help reduce access inequalities.

SA objective 10: Only option 3 contributes to this objective. Mixed-use SSSAs are likely to create 24hour environments where surveillance occurs naturally by the transit of people.

SA objective 11: Option 3 is likely to encourage walking and cycling by brining housing and employment together which is likely to lead to healthy lifestyles.

SA objective 13: Only option 1 is likely to have a significant positive effect on objective 13. A wider range of employment uses and a greater proportion of non-B employment uses are likely to help revitalise town centres and the rural economy if adequate rural employment policies are developed. The Core Strategy could provide greater certainty to business if it developed policies regarding town centre boundaries, primary and secondary frontages and percentage of town centre and employment uses. Options 3 and 4 are both likely to affect positively this objective New employment sites can free space in the town centres for regeneration by providing new suitable employment spaces for those uses which do not need or are not suited to be in the town centre.

SA objective 14: Options 1, 2 and 4 have the potential to contribute positively to the achievement of this objective but only option 3 strongly contributes to this objective by minimising car travel, create opportunities for linked journeys, concentrate infrastructure provision of infrastructure and increase patronage for public transport.

SA objective 15: Although all options will help increase employment provision, option 1 and 2 will be likely to support the required environment to support learning, skills and innovation.

Key	Key for likely option effect														
++	Significant positive	+	Positive not significant	+?	Depends on implementation but if there is an impact is likely to be positive		Significant negative		Negative not significant	-?	Depends on implementation but if there is an impact is likely to be negative	0	Neutral effect	?	Uncertain effect

Table A4.5:Employment development options

SA objectives	Option 1 Provision of employment land based on long term aspirations for the area and its sub-region (Range of B1 to B8 uses across SSSAs and Increased proportion of non-B use employment).	Option 2 Provision of employment land based on current market views on likely demand and capacity (Range of employment led by the market).	Option 3 Distribution of employment on mixed use SSSAs and employment led SSSAs	Option 4 Distribution of employment mainly on employment led SSSAs
SA objective 1 – To maintain and enhance biodiversity	The amount and type of new employment land would not significantly affect this objective. See site mitigation measures.	The amount and type of new employment land would not significantly affect this objective. See site mitigation measures.	+? Mixed use SSSAs are accompanied by substantial green infrastructure which could link to enhancement of biodiversity.	The distribution of employment on either mixed us or single use sites would not significantly affect this
SA objective 2 - To conserve, restore and enhance landscape and townscape and local character particularly nationally protected assets such as the Chilterns AONB	The amount and type of new employment land would not significantly affect this objective. See site mitigation measures.	The amount and type of new employment land would not significantly affect this objective. See site mitigation measures.	The amount and type of new employment land would not significantly affect this objective. See site mitigation measures	The amount and type of new employment land would not significantly affect this objective. See site mitigation measures
SA objective 3 - Protect and enhance air, soil and water resources	Providing a wider range of employment should reduce the need for out commuting. Employment distribution in and around existing centres and major transport nodes together with the creation of mixed use SSSAs could maximise opportunities for employment uses to benefit from the provision of Integrated Sustainable Infrastructure. Significance of effect: The effect would affect the sub-region and last through the short, medium and long term. It would be significant.	Provision of employment land based on current markets views is likely to preclude opportunities to come forward to diversify the economy and its potential to balance the traffic and land use intensive logistic and manufacturing with other employment uses which may be less resource intensive. Significance of effect: The effect would affect the sub-region and last through the short, medium and long term. It would be significant.	through the short, medium and long term. It	The implementation of objective three in employment led sites is likely to be reduced to the application of development management policies on resource and energy efficiency. Significance of effect: Not significant as it will be implemented mainly through development management polices.
SA objective 4 -	0	0	0	0

SA objectives	Option 1 Provision of employment land based on long term aspirations for the area and its sub-region (Range of B1 to B8 uses across SSSAs and Increased proportion of non-B use employment).	Option 2 Provision of employment land based on current market views on likely demand and capacity (Range of employment led by the market).	Option 3 Distribution of employment on mixed use SSSAs and employment led SSSAs	Option 4 Distribution of employment mainly on employment led SSSAs
	0	0	+?	0
Ensure that new developments avoid areas which are at risk from flooding and where possible, reduces flood risk	The amount and type of new employment land would not significantly affect this objective.	The amount and type of new employment land would not significantly affect this objective.	Whether the development is mixed use of employment led would not significantly affect this objective	Whether the development is mixed use of employment led would not significantly affect this objective
	+	-	+?	0
SA objective 5 - Adapt to and mitigate against the impact of climate change	Providing a wider range of employment should reduce the need for out commuting. Employment distribution in and around existing centres and major transport nodes together with the creation of mixed use SSSAs could maximise opportunities for employment uses to benefit from the provision of Integrated Sustainable Infrastructure. Significance of effect: The effect would affect the sub-region and last through the short, medium and long term. It would be significant.	Provision of employment land based on current markets views is likely to preclude opportunities to come forward to diversify the economy and its potential to balance the traffic and land use intensive logistic and manufacturing with other employment uses which may be less resource intensive. Significance of effect: The effect would affect the sub region and last through the short, medium and long term. It would be significant.	A mix of different uses in a single site is likely to address climate change mitigation and adaptation more efficiently. Significance of effect: The effect would affect the sub region and last through the short, medium and long term. It would be significant.	The implementation of objective three in employment led sites is likely to be reduced to the application of development management policies . Significance of effect: Not significant as it will be implemented mainly through development management polices.
	+	-	+?	0
SA objective 6 - Increase resource efficiency and reduce resource use and waste	Providing a wider range of employment should reduce the need for out commuting. Employment distribution in and around existing centres and major transport nodes together with the creation of mixed use SSSAs could maximise opportunities for employment uses to benefit from the provision of Integrated Sustainable Infrastructure. Significance of effect: The effect	Provision of employment land based on current markets views is likely to preclude opportunities to come forward to diversify the economy and its potential to balance the traffic and land use intensive logistic and manufacturing with other employment uses which may be less resource intensive. Significance of effect: The	A mix of different uses in a single site is likely to address climate change mitigation and adaptation more efficiently. Significance of effect: The effect would affect the sub region and last through the short, medium and long term. It would be significant.	Significance of effect: Not significant as it will be implemented mainly

SA objectives	Option 1 Provision of employment land based on long term aspirations for the area and its sub-region (Range of B1 to B8 uses across SSSAs and Increased proportion of non-B use employment).	Option 2 Provision of employment land based on current market views on likely demand and capacity (Range of employment led by the market).	Option 3 Distribution of employment on mixed use SSSAs and employment led SSSAs	Option 4 Distribution of employment mainly on employment led SSSAs
	0	0	+?	0
	would affect the sub region and last through the short, medium and long term. It would be significant.	effect would affect the sub region and last through the short, medium and long term. It would be significant.		
	0	0	++	0
SA objective 7 - Maintain, enhance and deliver, new green infrastructure including green open space	The contribution of employment sites to green infrastructure is likely to be of minimum scale and affect mainly the site proposal. The effect is not significant.	The contribution of employment sites to green infrastructure is likely to be of minimum scale and affect mainly the site proposal. The effect is not significant.	Mixed use SSSAs are are expected to be accompanied by substantial green infrastructure.	The contribution of employment sites to green infrastructure is likely to be of minimum scale and affect mainly the site proposal. The effect is not significant.
	0	0	0	0
SA objective 8 - To identify, protect, maintain and enhance the historic environment and cultural assets and their setting	The amount and type of new employment land would not significantly affect this objective.	The amount and type of new employment land would not significantly affect this objective.	The implementation of objective three in employment led sites is likely to be reduced to the application of development management policies .	The implementation of objective three in employment led sites is likely to be reduced to the application of development management policies .
	+	+	++	+
SA objective 9 - Reduce poverty and inequality and promote social inclusion	Ensuring that a sufficient number of jobs are created in the plan area will help reduce poverty and help a greater number of people to remaining the area. Inequality and social inclusion although helped by the provision of sufficient employment need to be addressed through a wider range of policy measures. Significance of effect: The effect	Ensuring that a sufficient number of jobs are created in the plan area will help reduce poverty and help a greater number of people to remaining the area. Inequality and social inclusion although helped by the provision of sufficient employment need to be addressed through a wider range of policy measures.	This option would enhance the other three by allowing synergies between different uses to build on skills and education. Providing homes and employment together may help reduce access inequalities.	Ensuring that a sufficient number of jobs are created in the plan area will help reduce poverty and help a greater number of people to remaining the area. Inequality and social inclusion although helped by the provision of sufficient employment

SA objectives	Option 1 Provision of employment land based on long term aspirations for the area and its sub-region (Range of B1 to B8 uses across SSSAs and Increased proportion of non-B use employment).	Option 2 Provision of employment land based on current market views on likely demand and capacity (Range of employment led by the market).	Option 3 Distribution of employment on mixed use SSSAs and employment led SSSAs	Option 4 Distribution of employment mainly on employment led SSSAs
	0	0	+?	0
	would have sub regional consequences and be long lasting. Therefore, it is significant.	Significance of effect: The effect would have sub regional consequences and be long lasting. Therefore, it is significant.		need to be addressed through a wider range of policy measures.
				Significance of effect: The effect would have sub regional consequences and be long lasting. Therefore, it
	0	0	+	is significant.
SA objective 10 - Reduce both crime and fear of crime	Although sufficient employment would be positive, the amount and type of new employment land would not significantly affect this objective.	Although sufficient employment would be positive, the amount and type of new employment land would not significantly affect this objective.	Mixed-use SSSAs are likely to create 24hour environments where surveillance occurs naturally by the transit of people. Significance of effect: The effect would have sub regional consequences and be long lasting. Therefore, it is significant.	Although sufficient employment would be positive, the amount and type of new employment land would not significantly affect this objective.
	0	0	?	0
SA objective 11 - To encourage healthier lifestyles and reduce adverse health impacts of new developments	Although sufficient employment would be positive, the amount and type of new employment land would not significantly affect this objective.	Although sufficient employment would be positive, the amount and type of new employment land would not significantly affect this objective.	The option is likely to encourage walking and cycling by brining housing and employment together which is likely to lead to healthy lifestyles. Significance of effect: The effect would have sub regional consequences and be long lasting. Therefore, it is significant.	Although sufficient employment would be positive, the amount and type of new employment land would not significantly affect this objective.

SA objectives	Option 1 Provision of employment land based on long term aspirations for the area and its sub-region (Range of B1 to B8 uses across SSSAs and Increased proportion of non-B use employment).	Option 2 Provision of employment land based on current market views on likely demand and capacity (Range of employment led by the market).	Option 3 Distribution of employment on mixed use SSSAs and employment led SSSAs	Option 4 Distribution of employment mainly on employment led SSSAs
	0	0	+?	0
	0	0	0	0
SA objective 12 - Provide decent, affordable and safe homes for all	Although sufficient employment would be positive, the amount and type of new employment land would not significantly affect this objective.	Although sufficient employment would be positive, the amount and type of new employment land would not significantly affect this objective.	positive, the amount and	Although sufficient employment would be positive, the amount and type of new employment land would not significantly affect this objective.
	++	0	+?	+?
SA objective 13 - Revitalise town centres to promote a return to sustainable urban living and protect the identity of villages	A wider range of employment uses and a greater proportion of non-B employment uses is likely to help revitalise town centres and the rural economy if adequate rural employment policies are developed. The Local Development Framework could provide greater certainty to business if it its Development Plan Documents contained town centres policies regarding town centre boundaries, primary and secondary frontages and percentage of town centre and employment uses. Significance of effect: The effect has implications for the entire plan area and is likely to have long-term effects.	Although sufficient employment would be positive, Option 2 is unlikely to have a significant effect on town centres and rural economy.	New employment sites can free space in the town centres for regeneration by providing new suitable employment spaces for those uses which do not need or are not suited to be in the town centre. Significance of effect: The effect would have sub regional consequences and be long lasting. Therefore, it is significant.	New employment sites can free space in the town centres for regeneration by providing new suitable employment spaces for those uses which do not need or are not suited to be in the town centre. Significance of effect: The effect would have sub regional consequences and be long lasting. Therefore, it is significant.
SA objective 14 - To	+?	+?	++	+?

SA objectives	Option 1 Provision of employment land based on long term aspirations for the area and its sub-region (Range of B1 to B8 uses across SSSAs and Increased proportion of non-B use employment).	Option 2 Provision of employment land based on current market views on likely demand and capacity (Range of employment led by the market).	Option 3 Distribution of employment on mixed use SSSAs and employment led SSSAs	Option 4 Distribution of employment mainly on employment led SSSAs
provide and encourage the use of sustainable integrated transport systems, improve access and mobility	Providing sufficient jobs could help reduce out commuting and may lead to an increase on short journeys which with the right infrastructure could increase modal shift to public transport. It is unlikely that employment will contribute to the provision of this infrastructure but policies could be developed to ensure employers prepare travel plans aiming to minimise car use. Significance of effect: Although provision of jobs will be positive, the probability to deliver objective 14 through increasing employment figures alone is uncertain. The effect is not significant.	Providing sufficient jobs could help reduce out commuting and may lead to an increase on short journeys which with the right infrastructure could increase modal shift to public transport. It is unlikely that employment will contribute to the provision of this infrastructure but policies could be developed to ensure employers prepare travel plans aiming to minimise car use. Significance of effect: Although provision of jobs will be positive, the probability to deliver objective 14 through increasing employment figures alone is uncertain. The effect is not significant.	Mixed use SSSAs are likely to minimise car travel, create opportunities for linked journeys, concentrate infrastructure provision of infrastructure and increase patronage for public transport. Significance of effect: The effect has implications for the entire plan area and is likely to have long-term effects.	Providing sufficient jobs could help reduce out commuting and may lead to an increase on short journeys which with the right infrastructure could increase modal shift to public transport. It is unlikely that employment will contribute to the provision of this infrastructure but policies could be developed to ensure employers prepare travel plans aiming to minimise car use. Significance of effect: Although provision of jobs will be positive, the probability to deliver objective 14 through increasing employment figures alone is uncertain. The effect is not
SA objective 15 –	++	+	++	significant.

SA objectives	Option 1 Provision of employment land based on long term aspirations for the area and its sub-region (Range of B1 to B8 uses across SSSAs and Increased proportion of non-B use employment).	Option 2 Provision of employment land based on current market views on likely demand and capacity (Range of employment led by the market).	Option 3 Distribution of employment on mixed use SSSAs and employment led SSSAs	Option 4 Distribution of employment mainly on employment led SSSAs
	0	0	+?	0
promote employment, learning, skills and innovation	Provision of a wider range of employment is likely to support small firms with specialised skills and assist in the establishment of a knowledge/innovation based economy. Option 1 is more likely to help diversify the local economy making more resilient to economic downturns. The delivery of option 1 depends on a change of image and perceptions that will have to come through economic development initiatives rather than land-use ones. Although this is an aspiration, the Core Strategy looks at a long plan period to 2031 during which market conditions could change with sufficient partnership work. Significance of effect: The effect has implications for the entire plan area and is likely to have long-term effects.	Provision of sufficient employment will have a positive effect on Objective 14. However, it is unlikely that on its own this will help develop learning, skills and innovation. Significance of effect: The effect has implications for the entire plan area and is likely to have long-term effect.	Even if not combined with any of the other options Mixed use SSSAs are likely to create the right environment for interaction between different uses to create knowledge/skills hubs. Significance of effect: The effect has implications for the entire plan area and is likely to have long-term effect.	The performance of this option depends on whether it is combined with option 1 or option 2. Significance of effect: The effect has implications for the entire plan area and is likely to have long-term effect.

Development Options – Employment Led SSSAs

Sundon Quarry: Located north east of Luton

Junction 10A: Located south of the built up edge of Luton and the East Luton corridor at Junction 10A (J10A).

Butterfield Park expansion: Located to the north of Luton, the site is bounded to the north by the AONB, to the east by the

Butterfield Green Road and to the south by Stopsley Common

Century Park expansion: Located

Table A4.6: First sieve: Major constraints and contributions to the Core Strategy from development sites

SA Objectives	Site Criteria	Sundon Quarry	Junction 10A	Butterfield Park expansion	Century Park extension
2 & 7	1) Impact on important areas of landscape	-			0
1& 7	2) Impact on important areas of biodiversity		0	-?	0
2 &8	Impact on important areas of heritage/archaeological importance		-?	-?	0
2 & 7	4) Impact on important views	-?	-?		0
3, 4, 5 & 7	5) Potential to flood or impact on flood risk areas.	0	0	-?	0
Delivery	6) Presence of major infrastructure constraints	-?	-?	-?	?
3, 14& 15	11) Contribution to the delivery of major transport infrastructure	++	+?	0	+
3,13,14 &15	9) Contribution to the improvement and easing of congestion in known problem areas	+?	+?	?	?
3, 5, 6, 7, 8, 9, 10, 11, 13, 14 &15	18) Contribution to the regeneration of the town centres of Luton, Dunstable, Houghton Regis	++	++	++	++
3, 4, 5, 7 &11	12) Contribution to delivery of strategic Green Infrastructure provision	+	+?	+?	+?
6, 9, 10 & 15	15) Contribution to provision of strategic employment land and premises.	++	++	++	++

Sundon Quarry Commentary

The major impacts with regard to Sundon Quarry, relates to direct built development impact on a habitat complex of major importance including an SSSI within the Quarry, and linking up to the Sundon Hills SSSI. In addition, there are significant woodland and other wildlife features, the Chilterns AONB landscape and Green Belt, together with adjacent settlements with historic features.

Road transport access would significantly impact smaller adjacent settlements e.g. at Lower Sundon, unless strategic road improvements are provided i.e. planned major transport infrastructure including the A5-M1 Link Road and the proposed M1 junction 11a. There would be a significant beneficial contribution to major infrastructure and modal shift via rail freight facility.

Sundon Quarry would bring a unique opportunity for the allocation for a rail freight terminal and associated distribution development. It is well located to provide B8 uses, the largest employment growth sector in the Core Strategy area, and take advantage of the Midlands Mainland train line. No other rail linked distribution exists in Luton and southern Central Bedfordshire and the rail terminal could serve a wider area with economic and environmental benefits associated with transferring freight from road to rail.

The site may generate significant traffic (including HGVs) on the local network and so phasing of development with existing and planned transport capacity improvements will be critical to managing delivery.

The site is located within an area of G1 sensitivity for Landscape, biodiversity and Historic Buildings and areas. These constraints are of such significance that development is not considered appropriate.

There is potential to contribute to the regeneration of Sundon Chalk Pits (former industrial site) for green infrastructure purposes.

Significance of effect:

The scale and irreversibility of the effects are significant. Given the landscape and biodiversity constraints of this site any allocation in the Core Strategy would have to be 'in principle' and subject to further detailed work on either a Site Allocations DPD or a Masterplan for the site.

Some recommendations for further work and mitigation measures:

- 1. Detailed EIA of the impacts on statutory SSSI designations;
- 2. Landscape screening, visual
- 3. Containment of built development to Sundon Quarry;
- 4. Investigate, safeguard, enhance key habitat assets or relocate where impact unavoidable;
- 5. Limiting the scale, density and pattern of development to protect the setting of Lower Sundon and associated heritage assests;
- 6. Protect key habitat complex of major importance around Sundon quarry SSSI linking north-eastwards to Sundon hills SSSI.
- 7. Phasing of development with existing and planned transport capacity improvements.
- 8. Ensure the site contributes to the regeneration for Sundon Chalk Pits as part of the provision of Green Infrastructure

Junction 10A Commentary

The site has three distinct parcels:

- Triangular parcel to the east of the M1 and north of Airport Way
- Large parcel to the east of the M1 and south of the Airport Way
- Parcel to the west of the M1 and adjacent to Slip End.

There are significant landscape sensitivity issues associated with the development of this site (Woodland and hedgerows, Stockwood Park and Wildlife sites all feature in the proposed development footprint), whilst adjacent is the Historic Park and Garden of Luton Hoo with a conservation area and listed buildings.

With the exception of land to the north of Airport Way and east of the M1, the reminder of the site area falls within Landscape sensitivity area G1, at this level of sensitivity the constraints are such that development is not considered appropriate.

Land to the east of the M1 is within a locally designated AGLV.

The site is reliant on Junction 10A improvements for access but no other major new infrastructure is needed according to developers' proposals.

It is well located for aviation-related businesses and a B1/business park location with good transport accessibility and there is a potential significant contribution towards enhancement of Luton Town Centre Regeneration although it may have an impact on existing employment land at Capability Green.

Allocation of land would have to be considered against the provision of employment land as part of mixed-use SSSAs in similarly well connected locations such as Junction 11a.

Significance of effect:

Significant effect due to the scale of development and its irreversibility.

Some mitigation measures for sites recommended to be progressed:-

- 1. Detailed EIA of the impacts of the on the environment and wildlife designations;
- 2. Investigate, safeguard, enhance key habitat assets or relocation where impact unavoidable;
- 3. Increase access to the surrounding countryside, parks and recreational amenities;
- 4. Maintain spatial links with Stcokwood Park as part of green infrastructure development;
- 5. Limiting the scale, density and pattern of development to avoid adverse effects on Luton Hoo historic Park;
- 6. Significant investment in landscape screening, visual mitigation from the M1 corridor; and
- 7. Early delivery of J10A improvements.
- 8. Phasing of development with existing and planned transport capacity improvements.

Butterfield Expansion Commentary

The proposed development will intrude visibly, in any direction, north east or west from the existing Butterfield development envelop, into the sensitive Chilterns AONB, although the local landscape quality is variable, characterised by arable farming. There is a significant potential impact on local nature conservation designations to the north west (Upshot Wood) and to the north east (Oaket Wood) and potentially intrusion adjacent to heritage areas to the north and east. The sites falls within a grade 1 landscape sensitivity area where constraints are such that it is not appropriate for development. With regards to biodiversity, archaeology and historic landscape, some development maybe appropriate with adequate mitigation.

Significant expansion at Butterfield may impact severely on the local road network but there is insufficient information to assess this criteria given the uncertainties of transport infrastructure since the preparation of the Preferred Options Core Strategy.

There is a potential significant contribution towards diversification and restructuring the Luton economy with technology business, the regeneration of the town's employment base and the improvement and vitality of Luton Town Centre. This site with its university focus would have an important role in the diversification of the local economy.

Significance of effect:

The effect would be significant and irreversible. The site would support one of the key objectives of the Core Strategy by supporting the diversification of the local economy. However, the level of detail required to ascertain whether mitigation measures could overcome the environmental impact of the development and its effect on the transport network is not available. If allocated in the Core Strategy this should be done 'in principle' with further work done through a Site Allocations DPD or Masterplan.

Some mitigation measures if recommended to be progressed:-

- 1. To restrict mass, scale and extent of development footprint, to retain the open landscape character of the area and minimise any visual intrusive impact on local heritage areas;
- 2. Investigate, safeguard local designations, enhance key habitat assets, hedgerows and areas of boundary woodland or relocate where impact unavoidable;
- 3. Investigate archaeological importance and extent in advance of any development proposals followed potentially by rescue archaeology or in situ preservation;

Extension to Century Park

This landscape has a strong and distinctive character forming a rural context to the villages east of Luton, a strong wooded setting to the eastern edge of Luton and the setting of the Lilley Valley. No major constraints have been identified with regards to landscape, biodiversity, archaeology and historic environment. However, any development should relate to the rural character of the landscape.

Scale of site, reasonable proximity to M1 and Luton Airport and absence of incompatible uses suggest distribution and other industrial uses would be appropriate on this site if local road links to M1 can be improved. The potential for the site to contribute to knowledge base and skills industries with the allocation of a small office park would have to be supported by improved public transport.

Since the Core Strategy Preferred Options, the Local Plan employment allocation at Century Park has gained outline planning permission and although the access to the site still has to be formally agreed and will be the subject of further Section 106 agreements, involving the Airport Operator it seems that a viable access could be provided for the site. This would potentially remove uncertainties over the delivery and transport infrastructure reliance of an extension to this site. However, no details were available at the time of writing and it has been marked as an 'unknown'.

There is potential to increase green corridors to Wigmore Park County Wildlife Site (CWS) and Winch Hill Wood CWS if linked with current outline permission.

Site lies entirely within North Hertfordshire District and although a large mixed use SSSA at this location has been strongly opposed by the administration and the public, this should not in principle preclude an extension to Century Park to support Airport related industries subject to further joint working between authorities.

Some mitigation measures if recommended to be progressed:-

- Avoid tall or large scale developments which would impinge on the distinctive chalk valley landscape around the Lilley Bottom Valley.
- Ensure development is well related to the existing settlement edge and does not extend onto the steeper valley side slopes to the east;
- Repair and extension of hedgerows along field boundaries to contribute to screening and visual connection of areas of woodland;
- Provide additional screening of (any new) settlement edge to Luton through increased tree cover and creation of new or extended areas of woodland;
- Conserve the network of narrow sunken lanes and associated hedge banks, verges and hedges;
- Promote the creation of buffer zones between intensive arable farmland/new development and semi-natural wildlife habitats;
- Conserve rural settlement pattern around village green and road junctions.
- Early agreement required on alternative road access to Century Park,

Table A4.7: Second tier sieve-potential contribution of sites

All sites are out of centre employment-led potential allocations and although ancillary uses may be present as part of proposals these are not the main purpose for the selection of a particular site. Also different types of employment require locations which avoid conflict with other uses for their operations and therefore sites may not be comparable under some criteria.

All sites are located within the green belt and the test refers to how the site would retain Green Belt principles avoiding coalescence of settlements and providing robust and defensible boundaries for the future.

All sites will have the potential to reduce deprivation by increasing employment close to the urban area but it will mainly depend on development management policies and Council skills initiatives.

All sites will be expected to contribute to public transport provision and prepare travel plans.

Given to the limited uses (employment led) and smaller scale, the ability to contribute to the delivery of an integrated sustainable infrastructure systems is likely to be smaller than the mixed-use SSSAs but it is expected that all sites will make a contribution as per development management policies.

SA Objectives	Site Criteria	Option 1: Sundon Quarry	Option 2: Junction 10A	Option 3: Butterfield Park expansion	Option 4: Century Park
3, 5, 6 & 14	7) Proximity to neighbourhood centre or local centre	N/A	N/A	N/A	N/A
6 & 9	8) Proximity to core facilities	N/A	N/A	N/A	N/A
3, 5, 9 &14	10) Contribution to the improvement of existing public transport provision	+?	+?	+?	+?
9 &15	13) Contribution to meeting social and community infrastructure needs	N/A	++	N/A	N/A
7 &11	14) Contribution to meeting existing open space needs	+?	+?	+?	+?
9 & 12	16) Contribution to affordable and local housing needs of the area.	N/A	N/A	N/A	N/A
3, 5 & 6	17) Contribution to the delivery of an integrated sustainable infrastructure system	+?	+?	+?	+?
9, 10, 12, 13 & 15	19) Contribution to reinvigoration and rejuvenation of deprived wards	+?	+?	+?	+?
2, 7, 8, 9. 10, 14	20) Potential to contribute to place making.	-?		?	0
3 & 6	21) Contribution to retention Green Belt principles	- ?	-	?	0

Sundon Quarry Commentary

Although the contribution to place making of these sites is not comparable or considerable, the site may contribute towards place making objectives with enhancement of, and access to, local services through the integrated (modal transfer) road and rail transport infrastructure facilities. There may be also some opportunities to open up private land for open space.

The site will be developed in conjunction with major public transport infrastructure at the new M1 J11a and the freight rail interchange.

The development should be contained within existing physical and visual boundaries to avoid adverse effects on the wider landscape and without compromising the function of the green belt in preventing coalescence with Lower Sundon.

Over and above the benefits that contributing towards the strong demand for B8 uses and the creation of local employment, the contribution towards deprived wards will depend on skills and training dealt with in Development Management policies and other Council skill related priorities.

Significance of effect:

Given the scale and irreversibility of any proposal on this site the effect is significant.

Some mitigation measures for sites recommended to be progressed:-

- 1. Contain development within existing physical and visual boundaries to minimise adverse effects on the wider countryside;
- 2. Green Belt Review should be carried out in order to bring the site forward for development and ensure that development does not compromise the purposes of the green belt in this location;
- 3. Traffic modelling and scope for enhanced public transport access via surrounding villages into the urban centres of Luton should be investigated; and
- 4. An assessment should be made as to whether the attributes of the site offers particular opportunities for sustainable technologies and innovative sustainable design for renewable, energy conservation and passive energy.

Junction 10a commentary

As per current development proposals, the site would result on the coalescence of Luton, Harpenden and Slip End and would erode the robust boundary set by the M1. Electricity transmission pylons affect the tip of the northern site and extend south down the M1 corridor along the edge of the southern site. This is a place making constraint to be discussed with National Grid.

Development to provide relocated stadium for Luton FC in the parcel to the north of Airport Way as per the allocation in the Luton Local Plan.

Some Significance of effect:

Given the scale and irreversible effect on neighbouring villages and Green Belt boundaries the effect is significant.

Some mitigation measures for sites if recommended to be progressed:-

- 1. Contain development within existing physical and visual boundaries to minimise adverse effects on the wider countryside;
- 2. A Green Belt review would be needed to ensure that the function of the Green Belt in this location, in preventing coalescence of Luton, Harpenden or smaller adjacent settlements (e.g. Slip end) is not compromised;
- 3. Ensure early engagement with National Grid on the electricity transmission pylons to inform design solutions.
- 4. Traffic modelling and scope for enhanced public transport access via surrounding villages into the urban centres of Luton should be investigated.

Butterfield Park Expansion Commentary

Depending on the direction the development on this site may take it could result in risk of development in open countryside and coalescence with smaller settlements e.g. Lilley.

Significance of effect:

The full significance of the effect is uncertain until the boundaries of the site are defined. If allocated it should be done 'in principle' with further work developed through a Site Allocations DPD or masterplan.

Some mitigation measures for sites recommended to be progressed:

- 1. Contain development within existing physical and visual boundaries to minimise adverse effects on the wider countryside and integrate natural features with provision of enhanced open space facilities;
- 2. Traffic modelling and scope for enhanced public transport access via surrounding villages into the urban centres of Luton should be investigated; and

Extension to Century Park

Existing road bordering the site would contain the proposal and provide a robust Green Belt boundary. It would narrow the gap between Luton and Tea Green.

Significance of effect:

The effect will be long lasting and irreversible and therefore is significant.

Some mitigation measures for sites recommended to be progressed:

- 1. Traffic modelling and scope for enhanced public transport access via surrounding villages into the urban centre of Luton should be investigated; and
- 2. Conserve rural settlement pattern around village green and road junctions.

Table A4.8: Third sieve - Deliverability within the plan period

Significance of effect:

The impact of deliverability although significant and long lasting is not necessarily irreversible if a strategy is in place to ensure the most sustainable development options is in place to provide certainty to private investors and confidence to public funding providers when Government spending is finally decided. If such strategy is not in place the effects will be irreversible.

Mitigation measures and contingency arrangements should be developed with a Delivery Plan in place.

Site criteria	Option 1: Sundon Quarry	Option 2: Junction 10A	Option 3: Butterfield Park expansion	Option 4: Extension to Century Park
22)Availability of the land for development	++	++	?	++
23)Contamination of the land	-?	?	0	0
24)Availability of utilities infrastructure	?	+?	+?	?
25)Suitability of access arrangements	+?	+?	?	?
26)Physical Constraints addressed	?	?	?	0
27)Dependence on Major Transport Infrastructure	-?	-?	-?	

Sundon Quarry Commentary

The site is being actively promoted but the delivery and phasing of the development may be delayed due to required mitigation measures and phasing of transport infrastructure investment and need to consider flood risk management measures.

There is potential site contamination from previous mineral extraction operations.

Junction 10A Commentary

The northern site is being actively promoted to potentially provide an office park. The larger southern sites again, are actively being promoted for a proposed mixed use B1-B8 employment area and could accommodate aviation related uses.

The proposed sites are located in an area affected by visual and noise intrusion (M1 motorway and Luton airport). Electricity transmission pylons affect the tip of the northern site and extend south down the M1 corridor along the edge of the southern site.

Access to this proposed development is dependent on future Junction 10A improvements to access the land and support the development. The proposers do not consider additional transport measures will be necessary.

Some mitigation measures for sites if recommended to be progressed:

1. A landscape assessment and design brief would be needed to ensure that the proposed development would be contained within existing physical and visual boundaries and ensure to that design addresses noise and vibration issues; and

2. Phasing and traffic modelling is also critical to the southern sites to ensure market viability subject to airport growth, and careful phasing of development with Century Park and to ensure minimal traffic impact on existing roads and communities

Butterfield Commentary

The site is on the edge of the urban area and has, until recently, been used as agricultural land. There are no physical constraints identified as this is an extension of the existing Butterfield complex. No expansion direction has yet been identified.

The proposal is not actively promoted and so the exact extent of the proposed extensions are not yet known. However, the only feasible extensions to the existing Butterfield development envelope are to the west, north or east but all such extensions involve greenfield arable land with hedgerows and woodland features and farmsteads. There are no other physical constraints.

Access would be via the existing Butterfield link round and roundabout onto the A505. Extending the site may generate significant additional traffic (including HGVs) on the local network.

Significance of effect:

Given potential scale long term and irreversible consequences the effect is significant.

Some mitigation measures for sites recommended to be progressed:

- 1. Transport modelling and scope for public transport to identify necessary improvements which will ensure minimal traffic impact on existing roads and communities; and
- 2. Phasing of development with existing and planned orbital road transport capacity improvements (proposed Luton northern Bypass MI-A6, M1 J10A and J11A) including public transport access, will be essesntial to managing delivery

Extension to Century Park

The site is likely to be available for delivery early in the plan subject to access road arrangements for current planning permission.

APPENDIX 5

Appraisal of Thematic Policies

Table A5.1 – Summary of impact of Thematic Policies on Sustainability Objectives

SA Objective	CS5	CS6	CS7	CS8	CS9	CS10	CS11	CS12	CS22
1	0	?	0	+	-?	+	+?	+?	+?
2	0	?	0	++	-?	+	+	+?	-?
3	+?	-?	0	+?	-?	+?	++	+?	-?
4	0	?	0	+?	?	+?	+	++	+?
5	+?	?	+?	+?	-?	+?	++	+	-
6	0	-?	0	+	-?	0	++	+?	-
7	0	+?	0	++	?	++	0	+?	+?
8	0	?	0	+	?	+?	0	?	-?
9	+	+?	+	?	+	?	0	0	+?
10	0	?	0	++	+?	?	0	0	+?
11	+	?	0	++	?	+?	0	0	+?
12	0	++	0	++	0	0	+?	+?	+?
13	+	+?	?	++	+?	+?	0	+	?
14	++	?	+?	++	?	+?	0	0	+?
15	0	0	+?	0	+	0	0	0	0

SA objective 1	To maintain and enhance biodiversity
SA objective 2	To conserve, restore and enhance landscape and townscape and local
	character particularly nationally protected assets such as the Chilterns
	AONB
SA objective 3	Protect and enhance air, soil and water resources
SA objective 4	Ensure that new developments avoid areas which are at risk from
	flooding and where possible, reduces flood risk
SA objective 5	Adapt to and mitigate against the impact of climate change
SA objective 6	Increase resource efficiency and reduce resource use and waste
SA objective 7	Maintain, enhance and deliver, new green infrastructure including green
	open space
SA objective 8	To identify, protect, maintain and enhance the historic environment and
-	cultural assets and their setting
SA objective 9	Reduce poverty and inequality and promote social inclusion
SA objective 10	Reduce both crime and fear of crime
SA objective 11	To encourage healthier lifestyles and reduce adverse health impacts of
	new developments
SA objective 12	Provide decent, affordable and safe homes for all
SA objective 13	Revitalise town centres to promote a return to sustainable urban living
	and protect the identity of villages
SA objective 14	To provide and encourage the use of sustainable integrated transport
	systems, improve access and mobility
SA objective 15	To promote employment, learning, skills and innovation

Table A5.2: Linking Places CS5

Summary of significant effects: The policy will have a positive impact in terms of sustainability. In particular, the policy will have some positive impacts in terms of air quality and mitigating against climate change through encouraging a modal shift away from the private car. The policy also has the potential to reduce inequality through enhancing access to services and facilities, particularly in town centres. In addition, the policy encourages healthier lifestyles through the provision of new and enhanced cycling and walking routes. Finally, the policy should have a particularly positive impact in terms of providing a sustainable integrated transport strategy.

SA objective 1 – To maintain and enhance	0
biodiversity	Significance of effect: No direct impact
	Mitigation: None
SA objective 2 – To	0
conserve, restore and	Significance of effect: No direct impact
enhance landscape and townscape and local character particularly nationally protected assets such as the Chilterns AONB	Mitigation: None
	+?
SA objective 3 –	Significance of effect: Dependent on impact of policy
Protect and enhance air, soil and water resources	Mitigation : The policy encourages a modal shift in transportation from the private car to more sustainable forms such as bus, rail, walking and cycling. Should this modal shift be achieved, then it is likely that air quality would be improved due to an overall reduction in emissions.
SA objective 4 –	0
Ensure that new	Significance of effect: No direct impact.
developments avoid areas which are at risk of flooding and natural storage areas	Mitigation: None
	+?
SA objectives 5 –	Significance of effect: Dependent on impact of policy
Adapt to and mitigate against the impact of climate change	Mitigation : The policy encourages a modal shift in transportation from the private car to more sustainable forms such as bus, rail, walking and cycling. Should this modal shift be achieved, it would assist in the mitigation of climate change due to an overall reduction in emissions.
SA objective 6 –	0
Increase resource	Significance of effect: No direct impact
efficiency and reduce resource use and waste	Mitigation: None
SA objective 7 –	0
Maintain, enhance and	Significance of effect: No direct impact
deliver new green	Mitigation: None
infrastructure including	
green open space	
SA objective 8 – To	Cignificance of affact: No direct impact
identify, protect, maintain and enhance	Significance of effect: No direct impact
the historic	Mitigation: None
environment and	
CHAIRCHILICHT ALIC	l

cultural assets	
	+
SA objective 9 – Reduce poverty and inequality	Significance of effect: The policy advocates the creation of new and enhanced bus routes, including extensions to the guided busway, and a new railway station. This will help reduce inequality by improving access to facilities and services for those who do not own a private car. Mitigation: Successful implementation of policy.
SA objective 10 –	0
Reduce both crime	Significance of effect: No direct impact
and fear of crime	Mitigation: None
	+
SA objective 11 – To encourage healthier lifestyles and reduce adverse health impacts of new development	Significance of effect: Points 6 and 7 of the policy identify the need to improve walking and cycling routes and also walking and cycling links to public transport nodes. These new and improved routes should encourage healthier lifestyles. Mitigation: Walking and cycling routes need be well designed so that they are placeant to use and cofe.
CA objective 12	that they are pleasant to use and safe.
SA objective 12 – Provide decent,	Significance of effect: No direct impact
affordable and safe	Mitigation: None
homes for all	Wildgation: None
SA objective 13 –	+
Revitalise town centres to promote a return to sustainable urban living and protect the identity of	Significance of effect: Better public transport facilities should allow a greater number of people to access the services and facilities that exist in the town centres. An increase in visitors should help to revitalise the town centres. Mitigation: Successful implementation of policy.
villages	intigation. Subsessial implementation of policy.
	++
SA objective 14 – To provide and encourage the use of	Significance of effect : The purpose of the policy is to provide a sustainable integrated transport system with improved access and mobility.
sustainable integrated transport systems, improve access and mobility.	Mitigation : This will be achieved through a variety of initiatives such as park and rides, bus priority measures, and a new railway station in Luton. In addition, new cycling and walking routes will be provided. Railway stations will also be provided with multi-modal interchanges.
SA objective 15 – To	0
promote employment,	Significance of effect: No direct impact
learning, skills and innovation	Mitigation: None

Table A5.3: Housing for all needs CS6

Summary of significant effects:

Overall, this policy will have a positive impact on sustainability particularly in terms of social and economic factors. The impact of this policy, in particular for the environmental objectives, will be dependent on a range of factors, such as the scale and location of the housing development, provision of community services and facilities, use of sustainable design methods and construction techniques and access to sustainable integrated transport systems. It is considered that this policy will have a positive impact on the social objectives as it aims to ensure housing for all through the provision of a range of housing types and the provision of affordable housing. Improving access to housing will indirectly improve social mobility having a positive impact on social and economic issues, such as employment. The impacts on the economic objectives are more limited and will depend again on the scale and location of the housing development.

There are some aspects of this policy where the effects are unknown at this stage. These include:

- Housing mix size not overall housing mix is soght in the policy although the supporting text makes clear the priority to tackle overcrowding and provision of family housing. The policy opts for a flexible approach by addressing housing mix on a site by site basis. For such an approach to work the Council would have to put in place strong monitoring of housing mix provision against housing register needs and an overall annual monitoring target.
- Gypsy and Traveller this is only addressed as part of a generic commitment to meet housing for all needs. This on its own does not fulfil current national guidance requirements.

Significance of effect: It is not clear what the effect of this policy will have on biodiversity. This policy is for the development of new housing, which in itself implies building on either Greenfield or SA objective 1 - To Brownfield land. However, it will depend on how the development is maintain and enhance implemented in terms of location, design, layout and inclusion of biodiversity sustainability measures. Mitigation: New developments should be located in areas where there are no known areas of high biodiversity and the developments should incorporate green space and infrastructure to encourage greater biodiversity within the urban area. Significance of effect: It is not clear what the effect of this policy would have on landscape. This policy is for the development of SA objective 2 – To new housing, which in itself implies building on either Greenfield or conserve, restore and Brownfield land. Any development has the potential to impact upon enhance landscape landscape and townscape and it will depend on how the and townscape and development is implemented in terms of location, design, layout and local character inclusion of sustainability measures. particularly nationally Mitigation: New developments within the urban area should be protected assets such designed taking into account the local character to enhance the as the Chilterns AONB townscape and areas on Greenfield sites should pay respect to the local landscape in terms of character and natural features to enhance and conserve it. SA objective 3 -Protect and enhance Significance of effect: It is not clear what the effect of this policy air, soil and water will have on resources. This policy is for the development of new resources housing, which in itself implies building on either Greenfield or

Brownfield land and thus potentially more residents to utilise water resources. Any development has the potential to impact upon

resources and it will depend on how the development is implemented in terms of location, design, layout and inclusion of sustainability measures. Mitigation: New developments will need to ensure that they introduce mitigation measures to reduce the impact on air, soil and water resources. These would need to be included from the design process through construction and completion to ensure that the residents and the resulting development is designed to protect and enhance the resources where possible. Significance of effect: It is unclear what the effect of this policy will have on flood risk. Developments proposed in areas at risk of SA objective 4 – flooding will not be supported and all new developments will need to Ensure that new include appropriate flood prevention and SuDs to reduce the run-off developments avoid from the site. Policy CS12(Flood Risk) of the Core Strategy will aim areas which are at risk to ensure that developments reduce the risk of flooding. of flooding and natural **Mitigation**: To reduce flood risk, new housing development will not storage areas be encouraged to be developed on areas at risk of flooding and measures to reduce run off should be encouraged, inline with national guidance Significance of effect: It is unclear what the effect of this policy will have on climate change. New development, including housing, will have some impact on climate change but it will depend on how the SA objectives 5 development is built and what sustainability measures are included Adapt to and mitigate to reduce its impact on climate change. This policy does specify against the impact of that new housing will be required to meet the requirements of the climate change Code for Sustainable Homes and thus should include measures to reduce impact on climate change. Mitigation: New development, include housing development, will need to adhere to the Code for Sustainable Homes and other sustainability measures to reduce the impact of climate change. Significance of effect: New development, by its nature, will increase resource use and waste. This will begin from the construction phase when resources will be used to build the development through to when the development is occupied as residents will use consume resources through food and energy SA objective 6 consumption as will the increase in waste. Measures can be Increase resource introduced to increase resource efficiency and reduce resource use efficiency and reduce and waste but these will need to be implemented from the design resource use and phase to ensure that they are included at all phases of the development. There may be capacity on the urban extensions for waste the use of more sustainable and renewable forms of energy. **Mitigation**: Measures to increase resource efficiency and to reduce resource use and waste will need to be included in development from the outset. Policies in the Core Strategy do aim to ensure that new development include sustainable design and built methods in their design. +? Significance of effect: It is not clear at this stage whether new housing development will enhance and deliver new green SA objective 7 – infrastructure. Policy CS10(Green Infrastructure) does aim to Maintain, enhance and ensure that all new development maintain and enhance GI to deliver new green ensure a net gain in GI across the area. For the housing infrastructure including development to be sustainable and attractive and to meet the needs green open space of the residents, it will be important that GI is included in the design

and layout.

Mitigation: New housing developments will need to conform to Policy CS10 of the Core Strategy to ensure that there is a net gain

Г	
	in GI in the Strategy's area and for housing developments to meet the needs of a sustainable community.
SA objective 8 – To identify, protect, maintain and enhance the historic environment and cultural assets	Significance of effect: It is not clear what the impact of this policy will be on the historic environment and cultural assets. The impact will depend on the location of the development and its design and layout. Mitigation: To protect and maintain the historic environment it will be essential that new developments respect the local area in which they are developed. New developments will also need to adhere to the Guidelines in the Design Guides for Central Bedfordshire and
	Luton to protect and enhance the historic environment. +?
SA objective 9 – Reduce poverty and inequality	Significance of effect: It is anticipated that this policy will have a positive impact on reducing poverty and inequality due to its requirement for affordable housing. However, it will depend on the deliverability of affordable housing on all housing sites, although this will depend on the economic viability of the site. An increase of affordable housing will ensure that more people will have access to a decent home to live in reducing inequality and improving social mobility that is prevalent within Luton in particular. Mitigation: In order for this policy to have a positive impact on this SA objective, it will be essential that all housing developments
	include an affordable housing element to ensure that more people have access to a decent home. Where affordable housing provision on site is not possible, off site contributions should be sought to continue the provision of affordable housing within the Strategy's area.
	?
SA objective 10 – Reduce both crime and fear of crime	Significance of effect: It is unclear what the direct impacts of this policy will be on crime, as this will depend on the type of housing delivered, location and amount of affordable housing. Should there be the delivery of affordable housing and a range of housing types in line with the Policy and the findings of the SHMAA, it will enable more residents' access to a decent home and thus provide them with the opportunity and stability to gain employment or further education. This in turn will encourage less people to get involved in crime i.e. improving social mobility.
	Mitigation : To ensure a positive impact, even if a slight positive impact, it will be important that affordable housing is delivered in line with the Policy.
SA objective 11 – To encourage healthier lifestyles and reduce adverse health impacts of new development	Significance of effect: It is unclear what the impacts of this policy will be on health, as this will depend on the location of the new housing development, the layout and design and access to local services and open space. To encourage healthier lifestyles, new developments need to be designed to encourage movement by more sustainable forms of transport, such as walking and cycling, be connected to a bus network, and GI network to ensure a pleasant environment for walking and cycling. This will also have a positive impact on the natural environment. Mitigation: To make a positive impact, new developments will need to be designed to encourage more walking and cycling and large developments will need to contribute towards community facilities, such as local shops and services, so residents will not have to travel by car to access these.
SA objective 12 – Provide decent,	++ Significance of effect: This policy is aimed at providing housing to
affordable and safe	meet the needs of the population and will therefore have a
homes for all	

significant positive impact on this SA objective. Residential developments will be encouraged to provide a range of housing types and affordable housing in sustainable locations and to include sustainable design measures to ensure sustainable housing for all residents.

Mitigation: To ensure that this policy continues to have a positive impact on this SA objective, it will be important that all developments comprise a range of housing types and an element of affordable housing. In addition, developments should be of a high quality design incorporating sustainable design measures to make it more attractive to residents and less harmful to the natural environment.

+?

SA objective 13 – Revitalise town centres to promote a return to sustainable urban living and protect the identity of villages

Significance of effect: Additional housing should have a positive impact on town centre and village revitalisation due to the increase in population. This will however depend on the location of the new housing developments as those located within the town or village boundary and those on good access routes will have a positive impact whereas those that are located on the edge of settlements with poor access to local centres will have less of a positive impact.

Mitigation: To ensure a continuous positive impact, housing developments need to be located first on Brownfield sites within urban boundaries before Greenfield sites outside of the urban areas are developed. New developments will also need to ensure that they are accessible to the town centre by walking, cycling or other sustainable modes of transport to ensure that residents use the town centre as opposed to commuting to larger settlements by car.

?

SA objective 14 – To provide and encourage the use of sustainable integrated transport systems, improve access and mobility.

Significance of effect: It is uncertain what the impact of this policy will be on sustainable integrated transport systems. The impact will be dependent on the scale of the housing development, location and design and layout. A housing development located within the town centre with good access to sustainable modes of transport and within easy walking/cycling distance to shops and services will have a significant positive impact in comparison to a housing development on a Greenfield site on the edge of the urban settlement where there is a poor service in terms of public transport. Edge of town developments could potentially provide limited services and facilities within their site to not only benefit the new residents but those living within the area and ensure that they are located on the local bus network to allow residents to get to centres.

Mitigation: Where possible, housing should be located within access to sustainable integrated transport systems and within easy access to services and facilities. Where this is not possible, new development should contribute to improve existing sustainable transport and provide local facilities and services, depending on the scale, so that residents can walk/cycle to services and facilities.

0

SA objective 15 – To promote employment, learning, skills and innovation

Significance of effect: It is considered that this policy will have very little impact on employment and skills. There could be a potential positive impact from the construction of the new housing in terms of employment opportunities and possible learning of skills for apprentices in the construction field.

Mitigation: Developers and builders could be encouraged to recruit from local colleges to improve local employment and skills. However, this cannot be enforced due to Employment Laws.

Table A5.4: Increasing Access to Social and Community Infrastructure CS7

Summary of significant effects: The policy will have no direct impact upon many of the sustainability appraisal objectives. What impacts there are, are considered to be generally positive in nature. Nevertheless, the co-location of such facilities could help to mitigate against the effects of climate change by reducing private car use, while also making these facilities more accessible, particularly if they can be accessed using public transport. The impact on the town centres by providing such facilities will vary depending on location. However, there is potential to promote employment, learning and skills, particularly if facilities such as schools and libraries are provided.

SA objective 1 – To maintain and enhance biodiversity	Significance of effect: No direct impact
blodiversity	Mitigation: None
SA objective 2 – To	0
conserve, restore and	Significance of effect: No direct impact
enhance landscape	Mitigation: None
and townscape and	Willigation. None
local character	
particularly nationally	
protected assets such	
as the Chilterns AONB	0
SA objective 3 –	0
Protect and enhance	Significance of effect: No direct impact
air, soil and water	Mitigation: None
resources	
SA objective 4 –	
Ensure that new	Significance of effect: No direct impact
developments avoid	Mitigation: None
areas which are at risk	
of flooding and natural	
storage areas	
	+?
SA objectives 5 –	Significance of effect: The policy advocates co-location of social
SA objectives 5 – Adapt to and mitigate	and community infrastructure. This has the potential to reduce
	and community infrastructure. This has the potential to reduce carbon emissions through reduced car use.
Adapt to and mitigate	and community infrastructure. This has the potential to reduce carbon emissions through reduced car use. Mitigation: This can be supplemented by providing public transport
Adapt to and mitigate against the impact of	and community infrastructure. This has the potential to reduce carbon emissions through reduced car use. Mitigation: This can be supplemented by providing public transport services and new walking and cycling routes to the services and
Adapt to and mitigate against the impact of climate change	and community infrastructure. This has the potential to reduce carbon emissions through reduced car use. Mitigation: This can be supplemented by providing public transport services and new walking and cycling routes to the services and facilities.
Adapt to and mitigate against the impact of climate change SA objective 6 –	and community infrastructure. This has the potential to reduce carbon emissions through reduced car use. Mitigation: This can be supplemented by providing public transport services and new walking and cycling routes to the services and facilities. 0
Adapt to and mitigate against the impact of climate change SA objective 6 – Increase resource	and community infrastructure. This has the potential to reduce carbon emissions through reduced car use. Mitigation: This can be supplemented by providing public transport services and new walking and cycling routes to the services and facilities. O Significance of effect: No direct impact
Adapt to and mitigate against the impact of climate change SA objective 6 –	and community infrastructure. This has the potential to reduce carbon emissions through reduced car use. Mitigation: This can be supplemented by providing public transport services and new walking and cycling routes to the services and facilities. 0
Adapt to and mitigate against the impact of climate change SA objective 6 – Increase resource efficiency and reduce	and community infrastructure. This has the potential to reduce carbon emissions through reduced car use. Mitigation: This can be supplemented by providing public transport services and new walking and cycling routes to the services and facilities. O Significance of effect: No direct impact
Adapt to and mitigate against the impact of climate change SA objective 6 – Increase resource efficiency and reduce resource use and	and community infrastructure. This has the potential to reduce carbon emissions through reduced car use. Mitigation: This can be supplemented by providing public transport services and new walking and cycling routes to the services and facilities. O Significance of effect: No direct impact
Adapt to and mitigate against the impact of climate change SA objective 6 – Increase resource efficiency and reduce resource use and waste	and community infrastructure. This has the potential to reduce carbon emissions through reduced car use. Mitigation: This can be supplemented by providing public transport services and new walking and cycling routes to the services and facilities. 0 Significance of effect: No direct impact Mitigation: None
Adapt to and mitigate against the impact of climate change SA objective 6 – Increase resource efficiency and reduce resource use and waste SA objective 7 –	and community infrastructure. This has the potential to reduce carbon emissions through reduced car use. Mitigation: This can be supplemented by providing public transport services and new walking and cycling routes to the services and facilities. O Significance of effect: No direct impact Mitigation: None
Adapt to and mitigate against the impact of climate change SA objective 6 – Increase resource efficiency and reduce resource use and waste SA objective 7 – Maintain, enhance and	and community infrastructure. This has the potential to reduce carbon emissions through reduced car use. Mitigation: This can be supplemented by providing public transport services and new walking and cycling routes to the services and facilities. O Significance of effect: No direct impact Mitigation: None O Significance of effect: No direct impact
Adapt to and mitigate against the impact of climate change SA objective 6 – Increase resource efficiency and reduce resource use and waste SA objective 7 – Maintain, enhance and deliver new green	and community infrastructure. This has the potential to reduce carbon emissions through reduced car use. Mitigation: This can be supplemented by providing public transport services and new walking and cycling routes to the services and facilities. O Significance of effect: No direct impact Mitigation: None O Significance of effect: No direct impact
Adapt to and mitigate against the impact of climate change SA objective 6 – Increase resource efficiency and reduce resource use and waste SA objective 7 – Maintain, enhance and deliver new green infrastructure including	and community infrastructure. This has the potential to reduce carbon emissions through reduced car use. Mitigation: This can be supplemented by providing public transport services and new walking and cycling routes to the services and facilities. O Significance of effect: No direct impact Mitigation: None O Significance of effect: No direct impact
Adapt to and mitigate against the impact of climate change SA objective 6 – Increase resource efficiency and reduce resource use and waste SA objective 7 – Maintain, enhance and deliver new green infrastructure including green open space SA objective 8 – To identify, protect,	and community infrastructure. This has the potential to reduce carbon emissions through reduced car use. Mitigation: This can be supplemented by providing public transport services and new walking and cycling routes to the services and facilities. O Significance of effect: No direct impact Mitigation: None O Significance of effect: No direct impact Mitigation: None
Adapt to and mitigate against the impact of climate change SA objective 6 – Increase resource efficiency and reduce resource use and waste SA objective 7 – Maintain, enhance and deliver new green infrastructure including green open space SA objective 8 – To identify, protect, maintain and enhance	and community infrastructure. This has the potential to reduce carbon emissions through reduced car use. Mitigation: This can be supplemented by providing public transport services and new walking and cycling routes to the services and facilities. O Significance of effect: No direct impact Mitigation: None O Significance of effect: No direct impact Mitigation: None
Adapt to and mitigate against the impact of climate change SA objective 6 – Increase resource efficiency and reduce resource use and waste SA objective 7 – Maintain, enhance and deliver new green infrastructure including green open space SA objective 8 – To identify, protect, maintain and enhance the historic	and community infrastructure. This has the potential to reduce carbon emissions through reduced car use. Mitigation: This can be supplemented by providing public transport services and new walking and cycling routes to the services and facilities. O Significance of effect: No direct impact Mitigation: None O Significance of effect: No direct impact Mitigation: None O Significance of effect: No direct impact
Adapt to and mitigate against the impact of climate change SA objective 6 – Increase resource efficiency and reduce resource use and waste SA objective 7 – Maintain, enhance and deliver new green infrastructure including green open space SA objective 8 – To identify, protect, maintain and enhance	and community infrastructure. This has the potential to reduce carbon emissions through reduced car use. Mitigation: This can be supplemented by providing public transport services and new walking and cycling routes to the services and facilities. O Significance of effect: No direct impact Mitigation: None O Significance of effect: No direct impact Mitigation: None O Significance of effect: No direct impact

	+
SA objective 9 – Reduce poverty and inequality	Significance of effect : Inequality can be reduced through the provision of new social and community infrastructure by giving people access to facilities that they may not have been able to access before
	Mitigation : This can be enhanced through the design of the facilities themselves to allow wheelchair access and also by ensuring that the facilities can be accessed by public transport.
SA objective 10 – Reduce both crime	0
	Significance of effect: No direct impact
and fear of crime	Mitigation: None
SA objective 11 – To	0
encourage healthier	Significance of effect: No direct impact
lifestyles and reduce	Mitigation: None
adverse health	
impacts of new development	
SA objective 12 –	0
Provide decent,	Significance of effect: No direct impact
affordable and safe	Mitigation: None
homes for all	
	?
SA objective 13 – Revitalise town centres to promote a return to sustainable urban living and protect the identity of villages	Significance of effect: Dependent on implementation. Services
	and facilities in town centre locations could help top revitalise these areas by attracting more people. However, facilities provided as part
	of large-scale new developments outside of the town centres could
	impact upon their vibrancy and vitality. Nevertheless, providing such
	facilities in new developments such as the SSSAs will help to
	provide sustainable urban living by reducing the need to travel.
	Mitigation : When providing such facilities, the impact on the existing facilities in town centre locations should be considered. Facilities should be linked to the public transport network in order to promote sustainable urban living.
SA objective 14 – To provide and encourage the use of sustainable integrated	+?
	Significance of effect : The policy could impact positively through improved access to social and community infrastructure.
	Mitigation: This can be enhanced by linking such facilities to the
transport systems,	public transport network.
improve access and	
mobility.	+?
SA objective 15 – To promote employment, learning, skills and innovation	Significance of effect: Dependent on what facilities are provided.
	The provision of 'skills centres' whereby members of the public can
	learn computer skills etc have the potential to have a positive
	impact. In addition, provision of new facilities such as schools and
	libraries would increase learning and skills innovation and provide
	employment opportunities. Mitigation: Gaps in existing facilities and services of this nature
	should be identified at an early stage and incorporated into any masterplanning that takes place.
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Table A5.5: Quality of design CS8

Summary of significant effects: This policy will have a positive impact in terms of sustainability as good design is at the heart of adaption to and mitigation against climate change and flood risk, facilitating accessibility, designing out crime and fear of crime and using resources more efficiently. Well designed large developments can have a positive affect on the larger area by providing opportunities for more sustainable travel and green infrastructure, also resulting in healthier lifestyles for residents. High quality design will be used to regenerate and invigorate town centres and protect the identity and character of villages. The policy recognises the importance of historic, environment and architectural assets and aims to protect preserve and enhance their character, appearance and context. Good design will be used to create a 'sense of place' in urban extensions. All proposals will be required to incorporate sustainable design principles and meet recognised national industry design standards such as the Code for Sustainable Homes.

SA objective 1 – To maintain and enhance biodiversity

Significance of effect: Whilst any development, particularly those on green field and Green Belt land could result in a loss of biodiversity, well-designed developments can provide opportunities for integrating new and existing green spaces within the development with surrounding green spaces/infrastructure, which will protect and enhance biodiversity. Development on farmland could provide enhanced biodiversity through more varied planting and creation of higher quality green open spaces. Opportunities also exist for creating new green spaces and increasing biodiversity on previously degraded land (e.g. industrial sites) through good design. Developments that incorporate sustainable design features such as green roofs and sustainable drainage systems can enhance biodiversity in areas that might not otherwise be able to support any useful wildlife habitats such as in urban areas.

Mitigation: Identify and protect areas of biodiversity at the start of the design/master planning stage and integrate with new green spaces. Ensure all new development incorporates green spaces suitable for enhancing the biodiversity of the area. Use sustainable design features to increase biodiversity in urban areas.

SA objective 2 – To conserve, restore and enhance landscape and townscape and local character particularly nationally protected assets such as the Chilterns AONB

Significance of effect: New proposals will be required to recognise the importance of historic and architectural assets and protect and enhance their character, appearance and context. They will also be expected to enhance local character and distinctiveness and ensure the highest quality townscape, landscapes, public buildings and public spaces. All new proposals will need to respect and respond to the character of the site, its surroundings, its context and scale and demonstrate this through a Design and Access Statement. Developments in or close to the Chilterns AONB will need to demonstrate how they will enhance the landscape. For previously developed land, e.g. land with functional farm or storage buildings, this could be an opportunity to replace the buildings with ones that are more sensitive to the landscape, character and context of the

Mitigation: na

SA objective 3 – Protect and enhance air, soil and water resources +?

Significance of effect: Well-designed developments can incorporate features such as SuDS, which can help protect water resources and enhance the quality of water runoff. Other sustainable design measures such as re using grey water and rainwater harvesting and water metering can make a significant

	contribution to reducing water consumption, helping to protect water resources. Planting and soft landscaping in and around new developments will help protect air resources by absorbing carbon and releasing oxygen. Soil resources might be damaged by development initially due to building processes but if adequate green space and soft landscaping is provided, soil resources will eventually be restored and enhanced. Mitigation: Design of new development will need to incorporate green space and soft landscaping as well as sustainable design measures to reduce water consumption.
SA objective 4 – Ensure that new developments avoid areas which are at risk of flooding and natural storage areas	Figurificance of effect: New developments should not be sited in areas that are at risk of flooding and any development proposed in such an area will need to go through the Sequential Test as identified in PPS 25. The policy requires all new developments to incorporate sustainable design principles that meet recognised national industry design standards such as Code for Sustainable Homes. These standards encourage flood risk measures with points gained for building in low flood risk areas or design, which mitigates against flooding. Mitigation: Any development in areas at risk of flooding will need to incorporate SuDS and other flood risk mitigation measures in
SA objectives 5 – Adapt to and mitigate against the impact of climate change	their design. +? Significance of effect: Sustainable design should have a positive impact on mitigating against climate change. New developments will be expected to meet recognised national industry design standards such as Code for Sustainable Homes that includes minimum standards for energy efficiency leading to reduction in greenhouse gas emissions, better adaption to climate change through solar gain, water efficiency and better surface water run off management. Mitigation: Good sustainable design will ensure that new developments can adapt and mitigate against the impact of climate change.
SA objective 6 – Increase resource efficiency and reduce resource use and waste	Significance of effect: The policy requires well designed developments that will provide opportunities to use resources such as water and energy more efficiently through features such as dual flush WCs, grey water recycling, solar gain and wall insulation. Using locally sourced and recycled materials for building will also help to reduce resource use and waste. Mitigation: Ensure that new developments include design measures that reduce resource use and increase resource efficiency.
SA objective 7 – Maintain, enhance and deliver new green infrastructure including green open space	Significance of effect: The policy specifically states that new proposals will need to demonstrate how they will integrate open spaces and link with green infrastructure. A management plan for the upkeep and maintenance of green open spaces within new developments will be required for all planning proposals. Mitigation: All new developments, particularly the urban extensions will need to include green open space, link to and enhance existing green infrastructure.
SA objective 8 – To identify, protect, maintain and enhance the historic environment and cultural assets	Significance of effect: The policy requires new proposals to recognise the importance of historic, environment and architectural assets and protect, preserve and enhance their character, appearance and context. Mitigation: All planning applications will need to include a Design

	and Access Statement that demonstrates how the proposal will protect, preserve and enhance the character, appearance and context of any historic, environment and architectural assets.
SA objective 9 –	?
Reduce poverty and inequality	Significance of effect: Well-designed housing can help reduce poverty in many ways such as being more energy and water efficient thereby reducing bills. Well designed developments will also enable more sustainable forms of transport thereby reducing travel costs. Developments that are designed to 'Lifetime Homes' standards create homes and environments that are accessible and adaptable for disabled people and other disadvantaged people. Many large developments will include a percentage of affordable housing and have the opportunity to provide a mix of social and private housing that can reduce inequality. Mitigation: Poverty and inequality can be reduced by using design to reduce living expenses and provide a mix of housing in developments that are 'tenure blind' and accessible for all members of the community.
SA objective 10 –	++
Reduce both crime and fear of crime	Significance of effect: 'Secured by Design' and other similar design initiatives have been developed specifically to reduce both crime and fear of crime through better design. The policy explicitly advocates design that incorporates features to deter crime and fear of crime, ensuring that buildings and development layouts are designed to be safe for all users and reduce crime and fear of crime. Mitigation: All developments to adhere to 'Secured by Design' or similar 'designing out crime principles' and show how this will be achieved through the Design and Access Statement.
SA objective 11 – To	++
encourage healthier lifestyles and reduce	Significance of effect: The design and layout of new
adverse health impacts of new development	developments, particularly the urban extensions and good links with other areas will encourage people to walk and cycle rather than use cars. Provision of new green spaces within new developments with links to green infrastructure should encourage more outdoor activity and have a positive impact on health. Well designed play spaces for children and incorporating 'home zones' will encourage them to play outside and develop healthier lifestyle habits. More formal recreation areas such as football pitches will encourage the uptake of healthier lifestyles. Mitigation: Developments should be designed to maximise formal and informal play space and set aside areas specifically for outdoor recreational activity. Layouts should encourage people to walk and cycle more, particularly for shorter trips.
adverse health impacts of new development SA objective 12 –	other areas will encourage people to walk and cycle rather than use cars. Provision of new green spaces within new developments with links to green infrastructure should encourage more outdoor activity and have a positive impact on health. Well designed play spaces for children and incorporating 'home zones' will encourage them to play outside and develop healthier lifestyle habits. More formal recreation areas such as football pitches will encourage the uptake of healthier lifestyles. Mitigation: Developments should be designed to maximise formal and informal play space and set aside areas specifically for outdoor recreational activity. Layouts should encourage people to walk and cycle more, particularly for shorter trips.
adverse health impacts of new development	other areas will encourage people to walk and cycle rather than use cars. Provision of new green spaces within new developments with links to green infrastructure should encourage more outdoor activity and have a positive impact on health. Well designed play spaces for children and incorporating 'home zones' will encourage them to play outside and develop healthier lifestyle habits. More formal recreation areas such as football pitches will encourage the uptake of healthier lifestyles. Mitigation: Developments should be designed to maximise formal and informal play space and set aside areas specifically for outdoor recreational activity. Layouts should encourage people to walk and cycle more, particularly for shorter trips.

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Revitalise town centres to promote a return to sustainable urban living and protect the identity of villages	Significance of effect: Enriching and enhancing the quality of place through design will play a large role in revitalising town centres. Areas with a poor or degraded urban quality will use design to create a strong sense of place and vibrancy through excellent new and refurbished buildings, well-designed public spaces and inspired landscaping that builds on existing strengths and character. The design of development in villages will need to bring through local qualities, character and distinctiveness to foster integration and retain a strong sense of identity. Mitigation: Ensure that town centre regeneration uses the highest quality design for both buildings and public spaces, respects and responds positively to the urban fabric. Development in villages will need to be sensitive to the local qualities and character and foster a unique and strong sense of identity.
SA objective 14 To	++
SA objective 14 – To	
provide and encourage the use of sustainable integrated transport systems, improve access and mobility.	Significance of effect: Well-designed new developments, particularly the urban extensions, can improve access and mobility within the area. The layout of new residential areas will encourage walking and cycling and links with green infrastructure will help this. Mitigation: The Design and Access Statement will need to show how design and layout encourages sustainable travel and good access and mobility. Large developments will be required to
	produce a Green Travel Plan.
SA objective 15 – To	0
promote employment,	Significance of effect: No direct impact
learning, skills and innovation	Mitigation: None

Table A5.6: Delivering Economic Prosperity CS9

Summary of significant effects:

Overall, this policy is expected to have a positive impact on sustainability in particular social and economic factors. The impact of this policy will however be dependent on a range of factors, such as location and scale of the new employment areas, accessibility to residential areas and town centres, use of sustainable construction techniques and access to sustainable integrated transport systems.

This policy has the most positive impact on the economic objectives due to the ability of this policy to create employment and deliver economic prosperity. It will be important that this policy seeks to attract and deliver a range of businesses offering a variety of jobs to suit the skills available locally and which offer the potential to enhance local skills. Learning linkages between the schools, colleges and businesses could be explored to ensure that the skills required by businesses are taught at a local level. The economic benefits of this policy will lead to a positive impact on the social factors as by creating employment, people will be earning an income, which should lead people out of crime and reduce poverty in the area. This policy does not take advantage of airport, tourism related to the airport and the natural assets of the area. Strategic issues such as town centre boundaries, primary and secondary frontages and the Core Strategy approach to out of centre development is not indicated in the policy and will need to be addressed through the Development Management DPD or area/site-specific action plans or master plans and appraised accordingly. Sundon Quarry has been appraised in Appendix4.

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SA objective 1 – To maintain and enhance biodiversity

Significance of effect: It is not clear what the effect of this policy would have on biodiversity. However, new development, in particular Greenfield development, could potentially have a negative impact on biodiversity. It will depend on how the development is implemented in terms of location, design, layout and inclusion of sustainability measures. The proposal for a Rail Freight Interchange adjacent to Sundon quarry could also have the potential to negatively affect local biodiversity, as it will be located adjacent to a County wildlife Site.

Mitigation: New developments, in particular Sundon quarry and those that are located near areas of biodiversity value need to ensure that they incorporate appropriate measures to reduce to impact on biodiversity.

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SA objective 2 – To conserve, restore and enhance landscape and townscape and local character particularly nationally protected assets such as the Chilterns AONB

Significance of effect: No development is proposed in the Chilterns AONB. New development, in particular those proposed in the new urban extensions will be on Greenfield land and in the rural areas, have the potential to impact upon the landscape and townscape. New employment areas will likely comprise large buildings, such as warehouses, which will not enhance the landscape or townscape. The impact will depend on how the development is planned in terms of location, design, and layout.

Mitigation: New development on Greenfield land should be designed taking into account the local character to enhance the townscape and pay respect to the local landscape in terms of character and natural features. Those on Brownfield sites within the existing urban area should be designed to reduce its impact on adjoining uses and the townscape.

SA objective 3 – Protect and enhance air, soil and water resources -?

Significance of effect: New development, especially new employment development, will result in a high usage of resources especially water. The impact will depend on the type of employment use and technology used during the industrial processes. There will be a high usage of resources from the

construction through to the completion right through to the actual use of the site. It will be essential that new employment development incorporate measures to reduce resource use and new developments will be encouraged to adhere to BREEAM. Mitigation: New developments will need to ensure that mitigation measures to reduce the impact on air, soil and water resources. These would need to be included from the design process through construction and completion to ensure that the resulting development is designed to protect and enhance resources where possible. Significance of effect: Developments proposed in areas at risk of flooding will not be supported, in line with Policy CS12(Flooding). SA objective 4 -New development will need to include appropriate flood prevention Ensure that new and SuDs to reduce run off from the site. Policy CS12 will aim to developments avoid ensure that developments reduce the risk of flooding however, the areas which are at risk effects will not be known until the location and details of the of flooding and natural development are known. storage areas Mitigation: To reduce flood risk, new employment development will not be encouraged to be developed on areas at risk of flooding and measures to reduce run off should be encouraged, inline with national guidance. Significance of effect: It is considered that this policy will have a likely negative impact on climate change. This will however, be SA objectives 5 dependent on implementation. The degree of impact will depend on Adapt to and mitigate how the new development is built and what sustainability measures against the impact of are included in the design to reduce the impact. climate change To reduce the impact on climate change, new Mitigation: developments will be encouraged to be build according to BREEAM. Significance of effect: It is not clear what the impact of this policy will be on resource efficiency. Development, by its nature, will increase resource use and waste. This will begin from the construction phase when resources will be used to build the SA objective 6 development through to when the development is occupied, as Increase resource employment uses will utilise more energy and waste. Measures efficiency and reduce can be introduced to increase resource efficiency and reduce resource use and resource use and waste but these will need to be implemented from waste the design phase to ensure that they are included. There may be some capacity on the urban extensions for the use of more sustainable and renewable forms of energy. **Mitigation**: Measures to increase resource efficiency and to reduce resource use and waste will need to be included in the development from the outset. Significance of effect: GI Policy in the Core Strategy aims to ensure that new developments maintain, enhance and deliver GI to provide a net gain in GI across the Strategy's area. The provision of GI will be essential in areas where there are natural features that SA objective 7 – could be incorporated into a local GI network and could be used to Maintain, enhance and encourage more sustainable modes of transport both in the existing deliver new green areas and in urban extensions. The GI policy should apply to all infrastructure including developments and thus employment areas should also contribute to green open space the GI network however, this will depend on the location, design and layout of the proposed employment area. Mitigation: New development, in particular those in the proposed

urban extensions, need to incorporate GI into their design to contribute to the overall GI network in Luton and southern Central

	Bedfordshire.
SA objective 8 – To identify, protect, maintain and enhance the historic environment and cultural assets	Significance of effect: It is not clear at this stage what the impact of this policy will be on the historic environment and cultural assets. The impact will depend on the location and design of the new development. Mitigation: To protect and maintain the historic environment it will be essential that new developments respect the local area in which they are developed. New developments will also need to adhere to the Guidelines in the Design Guides for Central Bedfordshire and Luton to protect and enhance the historic environment.
SA objective 9 – Reduce poverty and inequality	Significance of effect: It is considered that this policy will promote economic prosperity in the area will have a positive impact on reducing poverty and inequality due to its ambition to create employment opportunities. The nature of impact will depend on the type of employment opportunities created in the area and the level of skill required and whether this will match the skills within the local workforce. It will be essential that a variety of employment businesses be encouraged to relocate to the area to offer a range of skills and employment opportunities. An increase in employment opportunities will ensure that more people have access to jobs, increasing their monthly income and thus leading to a reduction in poverty. Mitigation: It will be essential that a range of businesses are encouraged to relocate to the area to ensure that a range employment opportunities are on offer to cater for the skills level in the Strategy's area and to encourage potential new residents to the area.
SA objective 10 – Reduce both crime and fear of crime	Significance of effect: It is considered that this policy will have a positive impact on the reduction of crime and fear of crime due to the anticipated impacts this policy will have on job creation in the area. By encouraging a range of businesses to relocate to the area, employment opportunities will increase leading to more people in work and will thus encourage less people to get involved in crime i.e. improving social mobility. Mitigation: To ensure a positive impact, it will be essential that a range of businesses are encouraged to relocate to the area to ensure that a variety of employment opportunities are on offer to cater for the skills level in the Strategy's area.
SA objective 11 – To encourage healthier lifestyles and reduce adverse health impacts of new development	Significance of effect: It is unclear what the impacts of this policy will be on health, as this will depend on the location of the new employment land and the layout and design and access to local services and open space. To encourage healthier lifestyles, new developments need to be designed to encourage movement by more sustainable forms of transport, such as walking and cycling, be connected to a bus network and GI network to ensure a pleasant and safe environment for walking and cycling. This will also have a positive impact on the natural environment. Mitigation: To ensure a positive impact, new developments will need to be designed to encourage more walking and cycling, be designed to include limited local facilities and services so as not to impact on the town centres to employees who could walk to these before, during or after work and also design these areas to be connected to the local GI network.
SA objective 12 – Provide decent,	0 Significance of effect: It is considered that there is no direct

homes for all	impact between this policy and objective 12 as the provision of employment will not lead to the provision of more housing. Indirectly, it could lead to people who find employment with the new businesses that are encouraged to relocate to the area to save money for a deposit or renting for housing. Alternatively, land allocated for employment could be used for housing, thus having a potential negative impact. It is considered that through the Master Planning work, the best land suitable for housing and employment will be allocated and a balance of land uses is considered to create a sustainable community. Mitigation: To ensure that the provision of employment land does not negatively affect upon the provision of housing, there needs to be careful consideration in the Master Planning work to ensure a sustainable community and balance of land uses.
SA objective 13 – Revitalise town centres to promote a return to sustainable urban living and protect the identity of villages	Significance of effect: Town centre revitalisation – By encouraging more businesses to the area on new and redeveloped employment sites will lead to an increase in businesses relocating both on the allocated employment sites and within the town centre as these will service the needs of the businesses. As a knock-on effect due to the investment in the town centre, other retail and services will open in the town centres thus revitalising the town centre. Villages – Existing employment sites will be protected in the village locations as they provide vital employment opportunities for these areas. Policy CS22 (Rural Settlements) encourages proposals that provide new jobs in these areas. This will lead to the villages being able to sustain themselves thus protecting their identity. Mitigation: To revitalise the town centre, retail and other town centre uses should only be permitted within the town centres and not on employment sites where the focus should be on B class uses. Employment proposals in villages need to be in keeping with the village size to keep in character with the village.
SA objective 14 – To provide and encourage the use of sustainable integrated transport systems, improve access and mobility.	Significance of effect: It is uncertain what the impact of this policy will be on sustainable integrated transport systems. The impact will be dependent on the scale, design and layout of the employment areas. The location of the area in terms of distance from town centres and housing and access to a bus or rail network and connectedness to a local GI network will be particular important as these factors could either encourage and discourage employees to use more sustainable modes of transport depending on ease of access. Mitigation: Where possible, new employment areas should be incorporated into existing or new bus networks and through the proposed urban extensions to encourage people to use more sustainable modes of transport.
SA objective 15 – To promote employment, learning, skills and innovation	Significance of effect: It is anticipated that this policy will have a positive impact on the promotion of employment, learning and skills. Policy CS9 aims to delivery economic prosperity by creating an environment that will attract and support business investment and job creation. It is not clear what the impact will have on skills and learning as it is not known what types of businesses will move and what training and skills they would offer to prospective employees. It is considered that there will be some training for new businesses, which employees will be able to use to enhance their career prospects. Mitigation: Businesses should be encouraged to recruit locally to promote employment opportunities to local residents. The Colleges in the area could be linked with new businesses to find out what

skills they require and these in turn could be taught at the colleges.
This in turn would enhance the skills of the local residents and job
seekers and thus improve their chances are gaining meaningful
employment.

Table A5.7: Green Infrastructure CS10

Summary of significant effects:

It is considered that this policy has a positive impact in terms of sustainability. Through the provision of more GI assets that are connected and multi-functional will result in general positive impacts relating to health, wellbeing, environmental protection, historic environment protection, encourage the use of sustainable transport and protect biodiversity. The GI assets need to be carefully planned into the new development in particular the urban extensions in ensure that they are fully integrated into the development and community and making use of existing features and assets in the area. If not, it is feared that the GI assets will become separated from the community and not used to their potential thus attracting anti-social behaviour instead of being used as a feature to develop and foster the community. In addition, when the GI network ins planned, in particular, in the new urban extensions, it is vital that the management of these areas is also considered so that these areas continue to provide the benefits for the community.

7

SA objective 1 – To maintain and enhance biodiversity

Significance of effect: Through seeking a net gain in GI and encouraging the creation of multi-functional areas this would have a positive impact on biodiversity in the area. It is acknowledged that the development of the urban extensions on green field land will result in the loss of biodiversity however, if developments take into account GI and integrate this into developments and create connected multi-functional areas this would protect and enhance areas of biodiversity. The ongoing management of local green infrastructure will also ensure the biodiversity at the more local level can be protected and maintained, this is particularly relevant for the existing urban areas.

Mitigation: Areas of known biodiversity need to be identified before development commences and protected from development. The connected areas of GI also need to be planned in such a way so as to protect key features of the natural environment. This could be dealt with during the master planning stage for the urban extensions.

SA objective 2 – To conserve, restore and enhance landscape and townscape and local character particularly nationally protected assets such

as the Chilterns

AONB

Significance of effect: Through seeking a net gain in GI and encouraging the creation of multi-functional areas that promote and enhance the local landscape and historic assets such as the Chilterns AONB and villages, will have a positive impact on this SA objective. No urban extensions are planned for in the AONB. It is acknowledged that the development of the urban extensions on green field land will impact on the local landscape if not planned correctly from the outset. However, if developments take into account GI and integrate this into developments and create connected multi-functional areas this would protect and enhance landscape and townscape.

Mitigation: Areas of known landscape and townscape value need to be identified before development commences and protected from development. The connected areas of GI also need to be planned in such a way so as to protect areas of landscape and townscape value. This could be dealt with during the master planning stage for the urban extensions.

SA objective 3 – Protect and enhance air, soil and water resources +?

Significance of effect: Through the protection and enhancement of the GI asset and the policy requirement to seek a gain in the GI asset, air, soil and water resources should be protected. This is because the green spaces would not be developed on allowing for natural water run-off and provides soft landscaping to absorb carbon and release oxygen thereby protecting and enhancing the air, soil

and water resource. This will however depend on how the developments are planned. New development in particular the urban extensions will need to include adequate GI, as required by this policy. Mitigation: New development in particular the urban extension will need to be planned in such as way so as they provide a net gain in the GI asset. These areas will also need to be strategically located to include areas that have been identified to have a high natural/biodiversity importance and these areas need to be planned themselves to ensure less development on them and carefully planned soft landscaping. This could be dealt with during the master planning stage for the urban extensions. Significance of effect: This policy seeks to ensure that new GI SA objective 4 assets create connected multi-functional areas of green space that Ensure that new reduce the risk of flooding. GI can be located in areas at risk of developments avoid flooding and should therefore encourage developers to not develop areas which are at new housing in areas at risk of flooding. Mitigation: Through the master planning process it will be important risk of flooding and natural storage areas to ensure that new development is not located in areas at risk of flooding but that the strategic GI network is planned in such a way so as the reduce the risk of flooding. Significance of effect: The provision of new GI and the protection and enhancement of the existing GI asset should have a positive impact on climate change. This policy seeks to develop a connected multi-functional GI asset, which should encourage local residents to access local services and facilities either on foot or by bike using the SA objectives 5 -GI network reducing the use of the private car. The GI asset will Adapt to and mitigate include the protection of areas rich in biodiversity and the local landscape thus aiming to protect and enhance the natural against the impact of climate change environment. It is important to ensure that the impact is positive that all developments are planned in such a way to enhance and develop the GI asset of the area. Mitigation: Through the master planning process it will be important to ensure that new development strategically plan for the GI asset and ensure that it is connected and designed in such a way to encourage use. 0 Significance of effect: There are usually very few buildings within the GI asset and thus directly this policy will have little impact on this objective. This policy encourages the development of strategically located and connected multi- functional areas of GI that promote SA objective 6 recreation and tourism. GI should also be planned for at the local Increase resource level to improve access to open space therefore this policy should efficiency and reduce positively impact on this objective, as residents should be able to access open space and the countryside through the network of GI resource use and waste therefore relying less on the private motor vehicle. This would be an indirect benefit. Mitigation: To encourage greater use of more sustainable modes of transport in particular cycling and walking, GI assets need to be well connected and provide useable links to key facilities and services and the countryside to ensure greater access for local residents. SA objective 7 – Maintain, enhance Significance of effect: This policy seeks a net gain in GI assets and deliver new green thus directly benefitting this objective. infrastructure Mitigation: It will be essential that new developments, in particular including green open the urban extensions, plan for the GI asset during master planning. space SA objective 8 – To

identify, protect, maintain and enhance the historic environment and cultural assets	Significance of effect: This policy seeks to create a GI asset that enhance the local landscape and historic assets thus this policy should benefit this objective. It will how be dependent on how the urban extensions and other developments are implemented. New developments will need to be planned carefully to ensure that they are able to enhance and protect the local landscape and historic and cultural assets. Mitigation: It will be essential that new developments, in particular the urban extensions, are planned carefully during master planning to ensure that they do not negatively impact against the historic and cultural assets of the area.
SA objective 9 – Reduce poverty and inequality	Significance of effect: It is unknown what the impact of this policy will be on reducing poverty and inequality. It is considered however, that should the GI assets within urban areas be enhanced and the new GI asset in the urban extensions are accessible for both the existing and new residents, then this could ensure all green spaces are accessible by all residents regardless of where they live. Mitigation: The overall GI Plan and emerging Green Space Strategy need to ensure that there is equal access to the GI across the whole of Luton and Southern Central Bedfordshire so that all residents have access to it.
SA objective 10 – Reduce both crime and fear of crime	Significance of effect: It is not known what the impact of the provision of new GI will be on this objective. The impact will depend on where the GI is located in relation other facilities and services and how well the area is planned. It will be essential that new GI assets are designed to be integrated with the development and are not isolated from it. Facilities developed on GI assets such as recreational facilities could be developed as a focal point for communities to foster a sense of community. Mitigation: New green and open spaces will need to follow the principles of 'Secured by Design' to ensure that these areas do not encourage anti-social behaviour.
SA objective 11 – To encourage healthier lifestyles and reduce adverse health impacts of new development	+? Significance of effect: The provision of new open space should encourage healthier lifestyles and positive health impacts as under this policy new development, including the urban extension, new GI will be created that will have multi-functional purposes including recreational purposes. It is also proposed that new GI will be connected thus encouraging residents to use these corridors by cycling or foot instead of the private motor vehicle. Local level GI assets will need to be provided by new development and in the existing urban areas existing open spaces could be upgraded to encourage greater use. Mitigation: It will be important that new GI assets are planned to ensure that they provide enough space for both informal and formal recreation and specific areas are set aside for formal recreational uses, for example, football pitches. New developments will also need to ensure that new GI assets are connected to existing GI assets and a strategic approach to the provision of GI is taken. This will ensure a balanced approach to getting both local GI assets and the more strategic country parks.
SA objective 12 – Provide decent, affordable and safe homes for all	Significance of effect: Little direct impact on the provision of housing. Ensuring that all housing, including new homes, is accessible to GI assets could contribute to ensuring that new homes are located in sustainable locations. Mitigation: During the master planning work, it will be essential to ensure that new homes are accessible to GI.

	+?
SA objective 13 – Revitalise town centres to promote a return to sustainable urban living and protect the identity of	Significance of effect: by ensuring that a connected network of GI is created through the new urban extensions and within the existing area could contribute to revitalising town centres by giving local residents the opportunity to access the town centres by more sustainable modes of transport. Supporting the strategic GI networks identified in the GI Plans, will protect the identity of villages through the enhancement of green buffers and corridors. Under this policy, new GI assets will be sought that enhance the local landscape and historical assets that are usually found within town centres and villages.
villages	Mitigation : It will be essential that new development both in the urban extensions and within the urban area take into account the use of green corridors, which can be used to access the town centres to encourage more people to access the town centres. The urban extensions will need to contribute to the strategic GI networks as identified in the GI Plans.
	+?
SA objective 14 – To provide and encourage the use of sustainable integrated transport systems, improve access and mobility.	Significance of effect: This policy supports the creation of a connected network of GI assets. These corridors, if planned well, should encourage local residents to use more sustainable modes of transport such as cycling and walking to get to town centres and other key services and facilities. This would also have a beneficial impact on health and well-being and the environment through reducing carbon emissions. Through a balanced approach to providing for GI, the creation and maintenance of local GI assets should also encourage more people to access the GI asset. Mitigation: It will be essential that new development both in the urban extensions and within the urban area take into account the use of green corridors, which can be used to access the town centres to encourage more people to access the town centres. It will be essential for all development to contribute to the provision or maintenance of local GI to ensure most residents have equal access to GI assets.
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SA objective 15 – To promote employment, learning, skills and innovation	Significance of effect: It is not considered that there will be any impact on this objective. Opportunities could potentially arise from the development of educational centres within strategic GI assets such as the Country Parks. These centres could be used for employment and learning. The provision of formal recreational facilities in a strategic GI network could also potentially create employment opportunities through the management of these centres. Mitigation: Developments within the GI network should be encouraged to be multi-functional to encourage greater use of the building and to enable the community to benefit through employment and learning opportunities.

Table A5.8: Resource Efficiency CS11

Summary of significant effects: Overall, the policy should contribute positively to the SA objectives. The approach of implementing the Code for Sustainable Homes standards will most directly impact upon objectives 5 and 6 relating to adapting to climate change and resource efficiency. Whilst the policy primarily seeks to address new developments, the concept of an offset fund means that existing development should also benefit.

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SA objective 1 – To maintain and enhance biodiversity	Significance of effect: The policy is likely to assist in reducing the impact of climate change. It is recognised that climate change will impact upon different species. The policy should therefore assist in maintaining and enhancing biodiversity Mitigation: To ensure that the standards set out in the policy are
	met.
SA objective 2 – To conserve, restore and enhance landscape and townscape and local character particularly nationally protected assets such as the Chilterns AONB	Significance of effect: Climate change is likely to have an impact on the landscape over a period of time. The policy seeks to mitigate against climate change and so should help to protect, conserve and enhance these landscapes in the long term. Mitigation: To ensure that the standards set out in the policy are met.
	++
SA objective 3 – Protect and enhance air, soil and water resources	Significance of effect: The policy promotes the implementation of renewable energy schemes and water efficiency measures in order to protect and enhance existing natural resources. It also promotes sustainable building under the Code for Sustainable Homes initiative. Mitigation: The successful implementation of this policy will contribute greatly to this objective.
	+
SA objective 4 – Ensure that new developments avoid areas which are at risk of flooding and natural storage areas	Significance of effect: The Code for Sustainable Homes includes an assessment of surface water run off and associated flood risk for all new developments. Implementation of this policy should therefore ensure that new development avoids areas at risk from flooding Mitigation: Enforce the standards of the policy and use in conjunction with evidence studies such as the SFRA and Water Cycle Study.
	++
SA objectives 5 – Adapt to and mitigate against the impact of climate change	Significance of effect: The overall purpose of this policy is to adapt to and mitigate against the impact of climate change through the requirement to meet CfSH standards. Where these standards cannot be met, the policy advocates the implementation of a carbon offset fund. The money from this fund would be used to help adapt existing buildings. Mitigation: To ensure that the standards set out in the policy are met.
	++
SA objective 6 – Increase resource efficiency and reduce resource use and waste	Significance of effect: The policy requires new development to meet CfSH criteria, which will have a positive effect on increasing resource efficiency and reducing resource use and waste. Where these standards cannot be met, the policy advocates the implementation of a carbon offset fund. The money from this fund would be used to help adapt existing buildings. Mitigation: To ensure that the standards set out in the policy are met.

SA objective 7 – Maintain, enhance and deliver new green infrastructure including green open space SA objective 8 – To	Significance of effect: It is not anticipated that the policy would impact upon the delivery of green infrastructure. Mitigation: None
identify, protect, maintain and enhance the historic environment and cultural assets	Significance of effect: It is not anticipated that the policy would impact upon the protection of the historic environment. Mitigation: None
SA objective 9 – Reduce poverty and inequality	Significance of effect: It is not anticipated that the policy would impact upon poverty and inequality. Mitigation: None
SA objective 10 – Reduce both crime and fear of crime	Significance of effect: It is not anticipated that the policy would impact upon crime Mitigation: None
SA objective 11 – To encourage healthier lifestyles and reduce adverse health impacts of new development	Significance of effect: No direct impact Mitigation: None
SA objective 12 – Provide decent, affordable and safe homes for all	+? Significance of effect: Depending on how the policy is implemented, the standard of homes could be improved through better insulation etc Mitigation: To ensure that the standards set out in the policy are met.
SA objective 13 – Revitalise town centres to promote a return to sustainable urban living and protect the identity of villages	Significance of effect: No direct impact Mitigation: None
SA objective 14 – To provide and encourage the use of sustainable integrated transport systems, improve access and mobility.	Significance of effect: No direct impact Mitigation: None
SA objective 15 – To promote employment, learning, skills and innovation	Significance of effect: No direct impact Mitigation: None

Table A5.9: Adapting to and Mitigating Flood Risk CS12

Summary of significant effects:

Policy CS12 will have a positive impact on sustainability and the Strategy's area will benefit from the implementation of this policy. By avoiding development in areas of flooding, new development will be concentrated around the urban areas of Luton, Dunstable and Houghton Regis and Leighton Buzzard. This will aid the regeneration of these town centres protecting the countryside from inappropriate development. More development in and around the town centres will facilitate the use of more sustainable modes of transport thereby reducing the impact on the climate change.

The river restoration works proposed on the River Lea in Luton will also contribute to the regeneration of the town centre by making it a more attractive town centre. Opening up the river in parts will make an attractive focal point in the town centre encouraging more and longer visits to the town centre and improving the biodiversity and natural environment of this river and reducing the risk of flooding.

Linking Policy CS12 with Policy CS10 (Green Infrastructure) will also have a positive impact on the natural environment as areas at risk of flooding could be included within the GI network, enhancing this asset. Increasing the GI asset in the area will encourage healthier lifestyles due to the improved access to open space. The management of the GI network including the areas at risk of flooding will be important to ensure that they do not become areas attracting anti-social behaviour.

New developments, particularly the urban extensions, should be planned to include measures to reduce run-off and with sustainable measures to reduce the impact on the environment. Liaison with the Environment Agency for strategic developments and the urban extensions will be essential to ensure that there is a reduced risk of flooding across the Strategy's area.

	+?
SA objective 1 – To maintain and enhance biodiversity	Significance of effect: This policy should have a positive effect on biodiversity as areas rich in biodiversity are likely to be found along watercourses that are at risk of flooding. If development is not built on these areas, biodiversity will be enhanced. Along the River Lea the long-term ambition to explore river restoration works will also enhance the biodiversity along this river, however is dependent on the type of river restoration implemented. The river restoration and habitat creation programmes to manage flood risk will also aid the enhancement of biodiversity.
	Mitigation : Whilst areas at risk of flooding are not developed, it will be equally important that these areas are maintained through inclusion into the GI network to enhance the biodiversity.
	+?
SA objective 2 – To conserve, restore and enhance landscape and townscape and local character particularly nationally protected assets such	Significance of effect : The effect of this policy on Objective 2 should be positive but is dependent on how proposals are implemented. Proposals to restore the River Lea in Luton could potentially enhance the townscape of Luton town centre by opening the river channel up and utilising it for recreational/leisure purposes. An absence of development in areas at risk of flooding could also potentially be used to compliment the GI asset and in turn be used to enhance the landscape and nationally protected areas.
as the Chilterns AONB	Mitigation : Areas at risk of flooding need to be included into the GI network so that these areas can be used to enhance the landscape and local character of areas. This will need to be carried out at the Master Panning Stage.
SA objective 3 –	+?
Protect and enhance air, coil and water resources	Significance of effect : The effect of this policy on Objective 3 should be positive but is dependent on how proposals are implemented. An absence of development in areas at risk of flooding and along watercourses could be used to compliment the GI asset and in turn be used to enhance the air, soil and water

resources as they will be free of development. Mitigation: Areas at risk of flooding need to be included into the GI network so that these areas can be used to enhance the air, soil and water resources. This will need to be carried out at the Master Panning Stage. Significance of effect: The policy seeks to avoid development in SA objective 4 areas at risk of flooding thus direct impacts upon this objective. Ensure that new Mitigation: Decisions made regarding planning applications need to developments avoid accord with this policy and the recommendations of the Environment areas which are at Agency. It is advised that developers include the Environment risk of flooding and Agency during the pre-planning and planning of their development to natural storage areas ensure that the development will aim to reduce the risk of flooding on the site and elsewhere. Significance of effect: By avoiding development in areas at risk of flooding should help with mitigating against the impact of climate change which is anticipated to increase the risk of flooding. By not building in the areas at risk of flooding and for new development to SA objectives 5 ensure they conform to the policy on Resource Efficiency will help Adapt to and mitigate communities adapt to the impact of climate change. against the impact of Mitigation: Development should avoid being developed in areas at climate change risk of flooding at all costs. Liaison between the EA and developers is expected during the master planning stages to avoid all areas of flood risk and to ensure that development are built to take into account an increased risk of flooding and include measures to reduce run-off from the site. +? Significance of effect: By not building on areas at risk of flooding and by including appropriate flood mitigation and drainage measures for new developments will lead to an increased resource efficiency SA objective 6 as through improved building techniques new residents will be Increase resource encouraged to recycle and reuse run-off thus helping to reduce the efficiency and reduce overall run off from the site. This will however be dependent on the resource use and Resource Efficiency Policy as to how these measures are waste implemented. Mitigation: The Resource Efficiency Policy needs to forceful to ensure that all new developments must include measures to reduce run-off from the site thereby reducing the risk of flooding and increasing resource efficiency. +? Significance of effect: This policy has links with the Green Infrastructure policy to ensure that areas at risk of flooding which are likely not to be developed will be linked in with the GI network. This SA objective 7 will ensure that a well-connected GI is created to include a variety of Maintain, enhance areas with the additional benefit of reducing the risk of flooding. The and deliver new green effect of this policy on this objective will be dependent on how the infrastructure developments are planned and the inclusion of the areas at risk of including green open flooding with the GI network. space Mitigation: It will be important that in the planning of the urban extensions that areas at risk of flooding are identified and included within the planning for the GI network. Liaison with the EA will be important to gain their advice and recommendations for the master planning stage. SA objective 8 – To identify, protect, Significance of effect: It is unknown what the effect of this policy maintain and enhance on Objective 8 will be at this stage. More detailed will be required for the historic specific areas. In the case of Luton, the proposed river restoration environment and works might aid the identification and protection of historic and cultural assets cultural assets by 'opening' the river up reducing the built up nature

SA objective 9 – Reduce poverty and	of this town centre. In the case of the urban extensions the inclusion of the areas at risk of flooding into the GI network, the GI network can also include areas of historical or cultural importance and thus having a connected network could help identify and maintain these assets for recreational and leisure purposes. Mitigation: It will be important that historic and cultural assets are identified early on in the planning process to ensure that these can be protected and maintained from unnecessary development and can be included into a connected GI network that is well managed. Significance of effect: The will be very little impact of this policy on Objective 9. By avoiding development in areas at risk of flooding, will ensure that new homes will not be affected by the effects of flooding thus reducing the impacts of areas that could be blighted
inequality	and unmarketable. Mitigation: All development, especially housing, should not be developed in areas at risk of flooding to avoid the detrimental impacts of flooding on communities.
SA objective 10 – Reduce both crime and fear of crime	Significance of effect: There is no direct impact on this policy on Objective 10. Mitigation: The use of areas at risk of flooding for inclusion into the GI network can be used as green corridors. It is important that these areas are designed to reduce crime and anti-social behaviour and are integrated into the community to improve natural surveillance.
SA objective 11 – To encourage healthier lifestyles and reduce adverse health impacts of new development	Significance of effect: There is no direct impact on this policy on Objective 11. Mitigation: The use of areas at risk of flooding for inclusion into the GI network can be used as green corridors to encourage greater use of non-motorised forms of transport and a greater use of walking and cycling to get around the local area and thus encourage healthier lifestyles.
SA objective 12 – Provide decent, affordable and safe homes for all	+? Significance of effect: By not allowing development in areas at risk of flooding ensures that all new homes are safe from flooding and are able to serve the needs of the inhabitants for the long term. Mitigation: No homes should be built within areas at risk of flooding, conforming with PPS25.
SA objective 13 – Revitalise town centres to promote a return to sustainable urban living and protect the identity of villages	Significance of effect: It is considered that no development will take place in areas at risk of flooding which in the Strategy's area would mean concentrating the urban development around the urban conurbation. This would therefore aid the regeneration of the town centres of Luton, Dunstable and Leighton Linslade whilst protecting the identity of the villages in the countryside. The proposals to restore the River Lea in Luton will also have a positive impact on Luton town centre and it will enhance the townscape of this highly developed town centre. It will soften the townscape and enhance the natural environment in an urban environment through encouraging greater use of the river for recreation and leisure purposes. Mitigation: River restorations on the River Lea should be encouraged to enhance Luton town centre and no development should be allowed to be developed in areas at risk of flooding to encourage the urban extensions to be concentrated around the urban conurbation.
SA objective 14 – To provide and encourage the use of	Significance of effect: There is no direct impact of this policy on Objective 14.

sustainable integrated	Mitigation: The use of areas at risk of flooding for inclusion into the
transport systems,	GI network can be used as green corridors to encourage greater use
improve access and	of non-motorised forms of transport and a greater use of walking and
mobility.	cycling to get around the local area.
SA objective 15 – To	0
promote employment,	Significance of effect: There is no impact of this policy on Objective
learning, skills and	15.
innovation	Mitigation: NA

Table A5.10: Rural Settlements CS22

Summary of significant effects: The scale of growth in the rural areas will be limited so the impact on any of the sustainability objectives will be fairly limited. The main positive impact will be the potential to provide affordable housing in areas where homes are often unaffordable to many. Village identity should be a major consideration when identifying which sites to allocate for housing. Inevitably, new development will increase pressure on natural resources. It is therefore important for the requirements of the resource efficiency policy to be met to reduce the impact of the new development as far as possible.

SA objective 1 – To	+?
maintain and enhance biodiversity	Significance of effect: Dependent on location of growth. Mitigation: Avoid allocating sites for development in proximity to environmentally sensitive sites
SA objective 2 – To conserve, restore and enhance landscape and townscape and local character particularly nationally protected assets such as the Chilterns AONB	Significance of effect: Small scale Green Belt reviews around rural settlements are likely to impact upon landscape and character to some extent Mitigation: Allocate sites in areas of lower landscape value.
	-?
SA objective 3 – Protect and enhance air, soil and water resources	Significance of effect: Would depend on implementation. New development is likely to increase demand on natural resources although the scale of rural growth is limited. Also depends on layout and design of new development. Mitigation: Design and layout should be considered at an early stage. Development should adhere to requirements of policy on Resource Efficiency
SA objective 4 –	+?
Ensure that new developments avoid areas which are at risk of flooding and natural storage areas	Significance of effect : Dependent on location of new development. Mitigation : Utilisation of SFRA and Water Cycle Study to identify areas at risk from flooding. Limited nature of rural growth means that building in areas at risk from flooding should be avoided.
	-
SA objectives 5 – Adapt to and mitigate against the impact of climate change	Significance of effect: Although development is limited in scale, the construction of new houses is likely to lead to an increase in carbon emissions. Mitigation: New development should adhere to the requirements of the policy on resource efficiency.
SA objective 6 –	-
Increase resource efficiency and reduce resource use and waste	Significance of effect: Although development is limited in scale, the construction of new houses is likely to lead to an increase in resource use Mitigation: New development should adhere to the requirements of the policy on resource efficiency.
SA objective 7 –	+?
Maintain, enhance and deliver new green infrastructure including green open space	Significance of effect: Whilst the level of rural growth will be limited, there could be potential, on developments over a certain size, to require the provision of new green space. Mitigation: New development should adhere to the relevant planning obligations document.

SA objective 8 – To	-?
identify, protect,	Significance of effect: Dependent on location of development.
maintain and enhance	Mitigation: Avoid development in areas of historic and cultural
the historic	importance.
environment and	'
cultural assets	
	+?
	Significance of effect: Although scale of development will be
SA objective 9 –	limited, new housing, including an affordable element, will be
Reduce poverty and	provided in rural areas where houses prices are generally high and
inequality	unaffordable to many.
	Mitigation: Seek a suitable percentage of affordable housing in new
	developments.
	+?
SA objective 10 –	Significance of effect: Dependent on location, layout and design of
Reduce both crime	development
and fear of crime	Mitigation: Consider how location, layout and design could 'plan out
OA abiaativa 44. Ta	crime' from an early stage
SA objective 11 – To	+?
encourage healthier lifestyles and reduce	Significance of effect: Dependent on location, layout and design of
adverse health	development. Mitigation: Development can be designed to encourage sustainable
impacts of new	forms of movement such as walking and cycling. Development in
development	rural areas should also provide good access to the countryside.
астоюринен	+?
	Significance of effect: Although scale of development will be
SA objective 12 –	limited, new housing, including an affordable element, will be
Provide decent,	provided in rural areas where house prices are generally high and
affordable and safe homes for all	unaffordable to many.
Homes for all	Mitigation: Seek a suitable percentage of affordable housing in new
	developments.
SA objective 13 –	?
Revitalise town	Significance of effect: Dependent on design, location and layout of
centres to promote a	development
return to sustainable	Mitigation: Development in rural areas could enhance the identity of
urban living and	villages through sympathetic design and location, thereby matching
protect the identity of	the character of the village. However, a small village could have its
villages	identity irrevocably changed by too much development. These
SA objective 14 – To	issues therefore need to be considered at an early stage. +?
provide and	Significance of effect: Development of a certain scale could lead to
encourage the use of	greater provision of bus services etc
sustainable integrated	Mitigation : Discuss plans with stakeholders such as bus operators.
transport systems,	3
improve access and	
mobility.	
SA objective 15 – To	0
promote employment,	Significance of effect: No direct impact
learning, skills and	Mitigation: None
innovation	

APPENDIX 6 Appraisal of Development Options under RSS growth

Growth Scenarios SSSAs - Pre- RSS revocation

Scenario 1: Four urban extensions: East of Leighton Linslade, North of Houghton Regis, North of Luton and East of Luton (C&D, F&G, I and L).

Scenario 2: Three urban extensions: To the east of Leighton Linslade, north of Houghton Regis, north of Luton, increased urban capacity and smaller sites around the towns and villages (beyond the 1,500 allocated in the sub-regional strategy) (C&D, F&G, I increased urban capacity and identification of smaller sites).

Scenario 3: Four urban extensions: East of Leighton Linslade, North of Houghton Regis, North of Luton and West of Luton (C&D, F&G, I and M).

Summary of significant effects:

All three scenarios perform similarly against main environmental protection objectives (Objectives 1, 2 and 3) and require considerable mitigation to overcome potential negative impacts.

Given the scale and location in relation to existing centres, all three scenarios have the potential to contribute towards environmental and resource management objectives (4 to 7). However, it is uncertain how Scenario 2 could contribute towards these objectives at the same level as Scenarios 1 and 3. The ability of smaller urban and rural sites to contribute to integrated sustainable infrastructure is likely to be limited while their cumulative effect could be significant. Although Scenario 2 strengthens the Core Strategy commitment to develop previously developed land first, this may be undermined by the need to identify further smaller sites in the rural area and around towns.

The Core Strategy could make clearer identification of resilient Green Belt boundaries following the identification of development sites so that future Green Belt boundaries are defensible.

The same happens in relation to social objective 9 where the effect of increased urban capacity needs to be assessed so that the cumulative effect of small sites does not place undue pressure on existing facilities, nor does it result in unacceptable development densities.

Scenarios 1 and 3 are likely to provide the greatest contribution towards affordable housing (objective 12). Suitable thresholds and/or rural exception sites would be required to yield a similar level of contribution from Scenario 2.

Scenario 2 may also result in lost regeneration opportunities for Luton town centre (SA objective 13).

The SSSAs in all three scenarios are likely to positively contribute to objective 14 but given the greater reliance on smaller sites and greater dispersal of sites into the rural area Scenarios 1 and 3 perform better against this objective.

Neither of the scenarios contributes significantly to the promoting of employment and skills innovation (SA objective 15) but Scenarios 2 and 3 may reduce opportunities to build a knowledge-based economy related to Luton's airport and University.

K	Key for likely option effect														
++	Significant	+	Positive	+?	Depends on		Significant	-	Negative	- ?	Depends on	0	Neutral	?	Uncertain
	positive		not		implementation		negative		not		implementation		effect		effect
			singificant		but if there is an				significant		but if there is an				
					impact is likely						impact is likely to				
					to be positive						be negative				

SA objectives	Scenario 1	Scenario 2	Scenario 3
	-?	-?	-?
SA objective 1 – To maintain and enhance biodiversity	The level of growth required is likely to have a detrimental effect on biodiversity and mitigation measures should ensure that Green Infrastructure is used to provide habitat corridors and maintains and enhances biodiversity-sensitive areas. Require code level 6 (zero carbon) for SSSAs and introduce minimum level 4 by 2013 and level 6 by 2016 for any other sites. Significance of effect: Given the scale	Issues generally the same as for Scenario 1. Increasing urban capacity is likely to result on less pressure on biodiversity-sensitive areas to the east or west of Luton. However, pressure on urban capacity may diminish opportunities to enhance biodiversity within the urban areas. The location and number of rural sites is unknown. Their location and likely effect should be assessed against SA objectives.	Issues the same as for Scenario 1. Significance of effect: Same as Scenario 1.
	of growth and the long lasting and irreversible nature of the consequences, the effect would be significant.	Significance of effect: Same as Scenario 1.	
	-?	-?	-?
SA objective 2 - To conserve, restore and enhance landscape and townscape and local character particularly nationally protected assets such as the Chilterns AONB	The level of growth required is likely to have a detrimental effect on sensitive areas of landscape and local character. Given their location and scale, the SSAs in Scenario 1 could accommodate mitigation measures, which would minimise their effect on objective 2. See mitigation measures for each site. Significance of effect: Given the extent of landscape and environmental designations in the plan area, scale of growth and its location in non-previously developed land the consequences would be long lasting and irreversible. The effect would therefore be significant.	Issues generally the same as for Scenario 1. However, Scenario 2 will decrease pressure on landscape and townscape sensitive areas to the east of Luton. However, increased urban capacity may increase pressures on sensitive townscapes in the urban area. When identified, urban sites should be subjected to SA to assess their likely individual and cumulative effect. The location and number of rural sites is unknown. Their location and likely effect should be assessed against SA objectives. Significance of effect: Same as Scenario 1.	Issues the same as for Scenario 1. Significance of effect: Same as Scenario 1.

SA objective 3 -	The level of growth required will increase pressure on air, soil and water resources. The screening of possible SSSAs eliminated sites that could not accommodate measures to mitigate against this objective. Given their location and scale, the proposed areas in Scenario 1 (subject to C&D and F&G being developed together) could accommodate integrated sustainable infrastructure measures and renewable energy technology to minimise their effect on objective 3. Require code level 6	Issues generally the same as for Scenario 1. However, an increase in urban capacity will decrease pressure on soil resources but its cumulative effect on air and water would need to be assessed. The ability of smaller urban and rural sites to contribute to integrated sustainable infrastructure is likely to be limited while their cumulative effect could be significant. The location of sites in and around the urban areas and intensification of urban areas in Scenario 2 is likely to minimise	-? Issues the same as for Scenario 1. Significance of effect: Same as Scenario 1.
			Issues the same as for Scenario 1.
SA objective 3 - Protect and enhance air, soil and water resources	pressure on air, soil and water resources. The screening of possible SSSAs eliminated sites that could not accommodate measures to mitigate against this objective. Given their location and scale, the proposed areas in Scenario 1 (subject to C&D and F&G being developed together) could accommodate integrated sustainable infrastructure measures and renewable energy technology to minimise their effect	1. However, an increase in urban capacity will decrease pressure on soil resources but its cumulative effect on air and water would need to be assessed. The ability of smaller urban and rural sites to contribute to integrated sustainable infrastructure is likely to be limited while their cumulative effect could be significant. The location of sites in and around the urban areas and intensification of urban	
	would be long lasting and irreversible, the effect would be significant.		
SA objective 4 -	+?	+?	+?

Ensure that new developments	The screening of possible SSSAs eliminated sites in areas at risk of	Issues generally the same as for Scenario 1. However, the ability of smaller urban	Issues the same as for Scenario 1.
avoid areas which are at risk from flooding and where possible, reduces flood risk	flooding. Given their location and scale the proposed areas in Scenario 1(subject to C&D and F&G being developed together) could accommodate integrated sustainable infrastructure measures and renewable energy technology, which would minimise their effect on objective 3 and may be able to incorporate measures to help reduce flood risk in some areas. Require code level 6 (zero carbon) for SSSAs and introduce minimum level 4 by 2013 and level 6 by 2016 for any other sites. Given level of water stress in the area, the Core Strategy should introduce earlier code level 4 for water efficiency standards. Significance of effect: This scenario directs development away from high-risk areas and has a significant effect in the reduction of risk. Given the scale of growth and that the consequences would be long lasting.	and rural sites to contribute to integrated sustainable infrastructure is likely to be limited while their cumulative effect could be significant. Significance of effect: Same as Scenario 1.	Significance of effect: Same as Scenario 1.
SA objective 5 -	+?	+?	+?

Adapt to and mitigate against the impact of climate change	The location of development in and around urban areas and sites' capacity to contribute towards integrated sustainable infrastructure and renewable technology help address the causes of climate change. The rest of the climate change elements are addressed as part of environmental policies, CS10. Significance of effect: This growth scenario complements sustainable practices but the policy CS10 contains sustainable development proposals. The effect cannot be considered significant.	Issues generally the same as for Scenario 1. However, there is less capacity to incorporate integrated sustainable infrastructure as part of smaller urban and rural sites and therefore their cumulative effect should be assessed as part of the identification of sites. Significance of effect: Same as scenario 1	Issues the same as for Scenario 1. Significance of effect: Same as Scenario 1.
SA objective 6 - Increase resource efficiency and reduce resource use and waste	Same as objective 5. With regard to land efficiency, the Core Strategy sets clearly its preferred growth strategy and, considering the level of growth required, generally supports the preservation of the Green Belt's openness through its direction of growth. However, the Core Strategy could make clearer the identification of resilient Green Belt boundaries following the identification of development sites. Significance of effect: With regard to land efficiency, Scenario 1 proposes a distribution of growth that indirectly affects land efficiency but also proposes the integration of different uses, which will have a significant and long lasting effect.	Issues generally the same as for Scenario 1. However, increasing urban capacity will strengthen the strategy's commitment to prioritise the development of previously developed land, although there may be knock-on impacts of this approach. Significance of effect: Similar to Scenario 1 with regards to SSSAs. However, increasing urban capacity may place pressure on the release of necessary employment sites in the urban area and proposing smaller sites is unlikely to create as great land efficiency as Scenario 1. The significance of the effect is unknown.	Issues the same as for Scenario 1. Significance of effect: Same as Scenario 1.
SA objective 7 -	+	-?	+

Maintain, enhance	The location of development as per	While focusing development within the	Issues the same as for Scenario 1.
and deliver new	Scenario 1 maximises the opportunity to	urban area reduces the impact on the	
green	provide Green Infrastructure in areas of	surrounding countryside, it could lead to	l =
infrastructure	identified need. However, Policy CS9	increased development pressure for	Scenario 1.
including green	deals with green infrastructure provision.	urban green spaces which are important	
open space		features of local green infrastructure.	
	Significance of effect: Although the		
	effect of the locational approach of	Significance of effect: Depends on	
	Scenario 1 contributes positively to this	implementation but could be significant.	
	objective, the direct effect is contained in	The shortage or existing green space	
	a different policy and the effect of	within in the urban area would make any	
	Scenario 1 is not significant.	further loss significant.	
	0	0	0
	This is a site-specific issue relating to the		Issues the same as for Scenario 1.
	design of proposals. Master planning of	1. The effect of increased housing	
SA objective 8 - To	SSSAs to ensure that historic and	capacity in built up areas on conservation	Significance of effect: Same as
identify, protect,	architectural assists and their setting are	areas, listed buildings should be	Scenario 1.
maintain and	protected, preserved and enhanced. See	assessed as part of the identification of	
enhance the	site mitigation measures.	non-strategic sites.	
historic	Policy CS7 on quality of design provides		
environment and	the principles to guide development to	There is no significant effect .	
cultural assets and	respect local character while providing		
their setting	high quality of design. This will be		
uleii settilig	developed further through Development		
	Management policies and a Design SPD.		
	There is no significant effect .		
		+?	

and inequality and of grow	ore Strategy preferred distribution wth in and around existing centres	Issues generally the	e same as for So	nario	Issues generally the same as for Scenario
maximi social ii employ on	s focus on addressing lack of g infrastructure in deprived areas ises opportunities to address inequalities. However, it is through ment policy CS8 and policy CS6 cial and community infrastructure the Core Strategy addresses this	1. However, the urban capacity havensure incremental does not place un facilities nor resemployment land release to other use Significance of Scenario 1.	effects of income to be assest effect of develor due strain on each of the longer of the longer estimates.	reased sed to opment existing ess of	1. However, the location of the proposed urban extension west of Luton makes it closer to the most deprived wards in the area than the proposed eastern urban extension. Significance of effect: Although the effect of the locational approach of Scenario 1 contributes positively to this objective, the direct effect is contained in different policies and the effect of Scenario 1 is not significant.
333.13.1	+		+		+
SA objective 10 - Reduce both crime and fear of crime Signific effect	ore Strategy preferred distribution with to in and around existing and its focus on addressing lack ting infrastructure in deprived areas ises opportunities to address and fear of crime. However, it is a design policy CS7, a forthcoming SPD and town centre master and which the Core Strategy ses this objective. cance of effect: Although the of the locational approach of the locational approach of the contributes positively to this	Issues the same as Significance of Scenario 1.		e as	Issues the same as for Scenario 1. Significance of effect: Same as Scenario 1.
objectiv differen	ve, the direct effect is contained in not policies and the effect of rio 1 is not significant.				

To encourage healthier lifestyles and reduce adverse health impacts of new developments	The Core Strategy preferred distribution of growth in and around existing centres and its focus on addressing lack of existing infrastructure in deprived areas maximises opportunities to encourage healthier lifestyles. However, it is through Design Policy CS7, Green Infrastructure Policy CS9 and Social and Community Infrastructure Policy CS6 that improved access to services and facilities is provided for. Significance of effect: Although the effect of the locational approach of Scenario 1 contributes positively to this objective, the direct effect is contained in different policies and the effect of Scenario 1 is not significant.	Issues generally the same as for Scenario 1. However, the effects of increased urban capacity have to be assessed to ensure incremental effect of development does not place undue strain on existing facilities nor result in inappropriate development densities. Significance of effect: Same as Scenario 1.	Issues the same as for Scenario 1. Significance of effect: Same as Scenario 1.
SA objective 12 - Provide decent, affordable and safe homes for all	The scale of development proposed is likely to result in a significant step change in the provision of affordable housing in the area. When preparing the master plans of SSSAs proposals should have regard to the tenure mix in the surrounding area to maximise opportunities to create sustainable mixed communities. Significance of effect: Due to the scale and long-term consequence of development the contribution to affordable housing will be significant.	Issues generally the same as for Scenario 1. However, the provision of affordable housing through increased urban capacity and smaller sites relies on such capacity being available and needs suitable affordable housing policy thresholds and/or rural exemptions sites. Provision is less predictable than scenarios 1 and 3. Significance of effect: Due to the scale and long-term consequence of development the contribution to affordable housing will be significant although less so than under scenarios 1 and 3.	Issues the same as for Scenario 1. Significance of effect: Same as Scenario 1.
SA objective 13 -	++	+	++

Revitalise town centres to promote a return to sustainable urban living and protect the identity of villages	The Core Strategy preferred distribution of growth in and around existing centres and the strengthening of the existing town centre hierarchy is likely to have a long-term positive effect on town centres and reduce erosion of village identity through small piece meal development. This Scenario is likely to have a long-term significant effect.	Although this scenario increases opportunities to increase urban living to a greater extent than other Scenarios, it may also lead to greater pressure to use urban sites for housing purposes rather than other town centre or commercial uses. There is a need for a mix of development opportunities to create sustainable urban areas. Scenario 2 does not include large urban extensions east or west of Luton, which may reduce regeneration opportunities in Luton town centre. This Scenario is likely to have a long-term significant effect.	Issues generally the same as for Scenario 1. Although the SSSA west of Luton is closer to Luton Town centre than the SSSA east of Luton, this is counterbalanced by the separation caused by the M1 motorway, which could limit the positive impact for the town centre. Significance of effect: The Overall impact of this scenario is considered to be similar to scenario 1.
SA objective 14 - To provide and encourage the use of sustainable integrated transport systems, improve access and mobility	The Core Strategy preferred distribution of growth in and around existing centres together with the scale and location of SSSAs is likely to contribute considerably to the provision of sustainable integrated transport systems. Significance of effect: Due to the scale and long-term consequence of development, the contribution to objective 14 will be significant.	Scenario 2 disperses development with the allocation of smaller sites and while the three SSSAs will have a considerable contribution to SA objective 14, its contribution is likely to be smaller than scenario 1. Significance of effect: Due to the scale and long-term consequence of development, the contribution to objective 14 will be significant.	Issues generally the same as for Scenario 1. The SSSA west of Luton is closer to Luton Town centre than the SSSA east of Luton and hence may make sustainable travel to the centre easier. However, this scenario does not provide the same degree of relief of town centre congestion and may actually add to it. Significance of effect: Due to the scale and long-term consequence of development, the contribution to objective 14 will be significant.
SA objective 15 -	0	-?	-?

To promote
employment,
learning, skills and
innovation

The Core Strategy preferred distribution of growth in and around existing centres together with employment allocated in the SSSAs is likely to have a positive effect on employment, skills and innovation. However, it is through employment policy CS8, that the Core Strategy will meet this objective.

Significance of effect: Although the effect of the locational approach of Scenario 1 contributes positively to this objective, the direct effect is contained in different policies and the effect of Scenario 1 is not significant.

Issues generally the same as for Scenario 1. However, Scenario 2 excludes the SSSA to the east of Luton and may result in lost opportunities to develop a knowledge base economy related to the airport and University and employment provision through the expansion of Century Park.

Significance of effect: The location of the airport and university may mean that not allocating site L may have significant effects due to the economic importance of the airport and scale of development.

Issues generally the same as for Scenario 1. However, Scenario 3 excludes the SSSA to the east of Luton and may result in lost opportunities to develop a knowledge base economy related to the airport and University and employment provision through the expansion of Century Park. Employment provision would be made as part of any SSSA west of Luton but the lack of a direct link to the airport may reduce the opportunities for airport-related knowledge-based development.

Significance of effect: The location of the airport and university may mean that not allocating site L may have significant effects due to the economic importance of the airport and scale of development.

Employment growth options: Pre-RSS revocation

Option 1: Provision of employment land based on long term aspirations for the area and its sub-region (Range of B1 to B8 uses across SSSAs and Increased proportion of non-B use employment).

Option 2: Provision of employment land based on current market views on likely demand and capacity (Range of employment led by the market).

Summary of significant effects:

SA objectives 3, 5 and 6: Scenario 1 performs relatively well against the protection and management of resources while scenario 2 is likely to preclude opportunities to diversify the economy and its potential to balance the traffic and land use intensive logistic and manufacturing uses with other employment uses which may be less resource intensive.

SA objective 9: both scenarios will have a significant positive contribution towards this objective.

SA objective 13: Only scenario 1 is likely to have a significant positive effect on objective 13. A wider range of employment uses and a greater proportion of non-B employment uses are likely to help revitalise town centres and the rural economy if adequate rural employment policies are developed. The Core Strategy could provide greater certainty to business if it developed policies regarding town centre boundaries, primary and secondary frontages and percentage of town centre and employment uses.

SA objective 14: Both scenarios have the potential to contribute positively to the achievement of this objective.

SA objective 15: Although both scenarios will help increase employment provision, only scenario 1 will be likely to support the required environment to support learning, skills and innovation.

Key for likely option effect															
++	Significant positive	+	Positive not significant	+?	Depends on implementation but if there is an impact is likely to be positive	1	Significant negative	1	Negative not significant	-?	Depends on implementation but if there is an impact is likely to be negative	0	Neutral effect	?	Uncertain effect

SA objectives	Scenario 1	Scenario 2
	0	0
SA objective 1 – To maintain and enhance biodiversity	The amount and type of new employment land would not significantly affect this objective. See site mitigation measures.	, ,

	0	0
SA objective 2 - To conserve, restore and enhance landscape and townscape and local character particularly nationally protected assets such as the Chilterns AONB	The amount and type of new employment land would not significantly affect this objective. See site mitigation measures.	The amount and type of new employment land would not significantly affect this objective. See site mitigation measures.
	+	-
SA objective 3 - Protect and enhance air, soil and water resources	Providing a wider range of employment should reduce the need for out commuting. Employment distribution in and around existing centres and major transport nodes together with the creation of mixed use SSSAs could maximise opportunities for employment uses to benefit from the provision of Integrated Sustainable Infrastructure.	Provision of employment land based on current markets views is likely to preclude opportunities to come forward to diversify the economy and its potential to balance the traffic and land use intensive logistic and manufacturing with other employment uses which may be less resource intensive.
	Significance of effect: The effect would affect the subregion and last through the short, medium and long term. It would be significant.	Significance of effect: The effect would affect the subregion and last through the short, medium and long term. It would be significant.
	0	0
SA objective 4 - Ensure that new developments avoid areas which are at risk from flooding and where possible, reduces flood risk	The amount and type of new employment land would not significantly affect this objective.	The amount and type of new employment land would not significantly affect this objective.
SA objective 5 - Adapt to and	+	<u> </u>

mitigate against the impact of climate change	Providing a wider range of employment should reduce the need for out commuting. Employment distribution in and around existing centres and major transport nodes together with the creation of mixed use SSSAs could maximise opportunities for employment uses to benefit from the provision of Integrated Sustainable Infrastructure. Significance of effect: The effect would affect the subregion and last through the short, medium and long term. It would be significant.	Provision of employment land based on current markets views is likely to preclude opportunities to come forward to diversify the economy and its potential to balance the traffic and land use intensive logistic and manufacturing with other employment uses which may be less resource intensive. Significance of effect: The effect would affect the sub region and last through the short, medium and long term. It would be significant.
	+	•
SA objective 6 - Increase resource efficiency and reduce resource use and waste	Providing a wider range of employment should reduce the need for out commuting. Employment distribution in and around existing centres and major transport nodes together with the creation of mixed use SSSAs could maximise opportunities for employment uses to benefit from the provision of Integrated Sustainable Infrastructure.	Provision of employment land based on current markets views is likely to preclude opportunities to come forward to diversify the economy and its potential to balance the traffic and land use intensive logistic and manufacturing with other employment uses which may be less resource intensive.
	Significance of effect: The effect would affect the sub region and last through the short, medium and long term. It would be significant.	Significance of effect: The effect would affect the sub region and last through the short, medium and long term. It would be significant.
	0	0
SA objective 7 - Maintain, enhance and deliver, new green infrastructure including green open space	The contribution of employment sites to green infrastructure is likely to be of minimum scale and affect mainly the site proposal. The effect is not significant.	The contribution of employment sites to green infrastructure is likely to be of minimum scale and affect mainly the site proposal. The effect is not significant.
	0	0
SA objective 8 - To identify, protect, maintain and enhance the historic environment and cultural assets and their setting	The amount and type of new employment land would not significantly affect this objective.	The amount and type of new employment land would not significantly affect this objective.
SA objective 9 - Reduce poverty	++	++

and inequality and promote social inclusion	Ensuring that a sufficient number of jobs are created in the plan area will help reduce poverty and help a greater number of people to remaining the area. Inequality and social inclusion although helped by the provision of sufficient employment need to be addressed through a wider range of policy measures.	Ensuring that a sufficient number of jobs are created in the plan area will help reduce poverty and help a greater number of people to remaining the area. Inequality and social inclusion although helped by the provision of sufficient employment need to be addressed through a wider range of policy measures.
	Significance of effect: The effect would have sub regional consequences and be long lasting. Therefore, it is significant.	Significance of effect: The effect would have sub regional consequences and be long lasting. Therefore, it is significant.
	0	0
SA objective 10 - Reduce both crime and fear of crime	Although sufficient employment would be positive, the amount and type of new employment land would not significantly affect this objective.	Although sufficient employment would be positive, the amount and type of new employment land would not significantly affect this objective.
	0	0
SA objective 11 - To encourage healthier lifestyles and reduce adverse health impacts of new developments	Although sufficient employment would be positive, the amount and type of new employment land would not significantly affect this objective.	Although sufficient employment would be positive, the amount and type of new employment land would not significantly affect this objective.
	0	0
SA objective 12 - Provide decent, affordable and safe homes for all	Although sufficient employment would be positive, the amount and type of new employment land would not significantly affect this objective.	Although sufficient employment would be positive, the amount and type of new employment land would not significantly affect this objective.
	++	0
SA objective 13 - Revitalise town centres to promote a return to sustainable urban living and protect the identity of villages	A wider range of employment uses and a greater proportion of non-B employment uses is likely to help revitalise town centres and the rural economy if adequate rural employment policies are developed. The Core Strategy could provide greater certainty to business if it developed town centres policies regarding town centre boundaries, primary and secondary frontages and percentage of town centre and employment uses.	Although sufficient employment would be positive, Scenario 2 is unlikely to have a significant effect on town centres and rural economy.

	Significance of effect: The effect has implications for the entire plan area and is likely to have long-term effects.	
	+	+
SA objective 14 - To provide and encourage the use of sustainable integrated transport systems, improve access and mobility	Providing sufficient jobs could help reduce out commuting and may lead to an increase on short journeys which with the right infrastructure could increase modal shift to public transport. It is unlikely that employment will contribute to the provision of this infrastructure but policies could be developed to ensure employers prepare travel plans aiming to minimise car use. Significance of effect: Although provision of jobs will be positive, the probability to deliver objective 14 through increasing employment figures alone is uncertain. The effect is not significant.	Providing sufficient jobs could help reduce out commuting and may lead to an increase on short journeys which with the right infrastructure could increase modal shift to public transport. It is unlikely that employment will contribute to the provision of this infrastructure but policies could be developed to ensure employers prepare travel plans aiming to minimise car use. Significance of effect: Although provision of jobs will be positive, the probability to deliver objective 14 through increasing employment figures alone is
	++	uncertain. The effect is not significant.
SA objective 15 - To promote employment, learning, skills and innovation	Provision of a wider range of employment is likely to support small firms with specialised skills and assist in the establishment of a knowledge/innovation based economy. Scenario 1 is more likely to help diversify the local economy making more resilient to economic downturns. The delivery of scenario 1 depends on a change of image and perceptions that will have to come through economic development initiatives rather than land-use ones. Although this is an aspiration, the Core Strategy looks at a long plan period to 2031 during which market conditions could change with sufficient partnership work.	Provision of sufficient employment will have a positive effect on Objective 14. However, it is unlikely that on its own this will help develop learning, skills and innovation. Significance of effect: The effect has implications for the entire plan area and is likely to have long-term effect.
	Significance of effect: The effect has implications for the entire plan area and is likely to have long-term effects.	

SEA Directive Compliance Checklist

Table A7.1 – SEA Directive Requirements

Environmental Report requirements	Section of this report
(a) an outline of the contents, main objectives of the plan or programme and relationship with other relevant plans and programmes;	Section 1.12, 1.13 and 1.14 Section 2.3, 2.4, 2.5 and 2.6 Table 2 Table 5
(b) the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme;	Section 4.3, 4.4, 4.5 and 4.6 Table 2 Appendix 3
(c) the environmental characteristics of areas likely to be significantly affected;	Section 4.3, 4.4, 4.5 and 4.6 Table 2 Appendix 3
(d) any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Directives 79/409/EEC and 92/43/EEC;	Section 4.3, 4.4, 4.5 and 4.6 Table 2
(e) the environmental protection objectives, established at international, Community or Member State level, which are relevant to the plan or programme and the way those objectives and any environmental considerations have been taken into account during its preparation;	Section 4.5
(f) the likely significant effects on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors;	Section 4 Appendix 1 Appendix 2 Appendix 4 Appendix 5
(g) the measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan or programme;	Section 4 Appendix 1 Appendix 2 Appendix 4 Appendix 5 Appendix 6
(h) an outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information;	Section 4 Appendix 4

(i) a description of the measures envisaged concerning monitoring in accordance with Article 10;	Section 4 Table 6
(j) a non-technical summary of the information provided under the above headings.	