SOUTHEND ON SEA BOROUGH COUNCIL

Sustainability Appraisal for Southend on Sea Local Development Framework

Core Strategy Development Plan Document (Submission Version)

August 2006



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Non-Technical Summary

The purpose of this document

1. This Sustainability Appraisal Report outlines the process and results of a Sustainability Appraisal carried out of the submission version of the Core Strategy Development Plan Document of the Southend Local Development Framework (LDF).

The reasons for carrying out a sustainability appraisal

- 2. Sustainability appraisal of the constituent parts of all LDFs is required by the Government in order to ensure that these plans are fulfilling their role by helping to deliver sustainable development in terms of environmental, social and economic objectives.
- 3. European legislation under Directive (2001/42/EEC) also requires all LDFs to undergo assessment for their environmental impacts in a Strategic Environmental Assessment (SEA). This process requires the systematic assessment of the policies and proposals to ensure that significant environmental effects that might arise from them are identified, and that these effects are mitigated and monitored as appropriate.
- 4. The SA process being followed for the Southend LDF combines the sustainability appraisal and SEA requirements into one integrated appraisal/assessment, referred to by the single term sustainability appraisal, commonly abbreviated to SA.
- 5. The purpose of SA is therefore to identify the contribution the Core Strategy makes to achieving more sustainable development to meet legislative and good practice requirements, including identification of how changes could be made to the Core Strategy to improve its performance in terms of sustainability. The SA not only considers the coverage of sustainable development matters in the policies and objectives of the Core Strategy, but also seeks to ensure that the approach taken is in keeping with good practice in plan making and therefore will be effective in implementation to deliver more sustainability development.

Reporting the sustainability appraisal process

- So far the SA has been carried out at each successive stage of preparing the Core Strategy, with the purpose of identifying what impact the document could have on achieving more sustainable development in Southend, and has included several reporting stages.
- 7. The SA reporting makes recommendations on changes that could be made to the Core Strategy to improve sustainability performance as well as fulfilling the regulatory requirements of the SEA Directive. The three reporting stages of the SA so far have been:
 - **Scoping Report**: this set out details of the existing character of the Borough including identification of key sustainability impacts, as well as the sustainability framework that will be used in appraising the content of the LDF.
 - Final Draft Report Sustainability Appraisal of the Public Participation Core Strategy: this document considered the relative sustainability impacts of

implementing preferred strategic approaches to development as opposed to alternative ways of delivering development. This document was consulted on in summer 2005 at the same time as consultation on the public participation Core Strategy. Comments received on the SA have been incorporated into subsequent stages of the SA where appropriate.

• Sustainability Appraisal for Southend on Sea Local Development Framework – Core Strategy Development Plan Document (submission version): this is the current version of the SA, which this document summarises. This version of the SA shares much in common with the previous reporting stage, but updates findings to reflect the current draft of the Core Strategy. Changes include the identification of any potential implications of the Core Strategy that have arisen since the previous version, or amending original comments where changes have been made to the Core Strategy. This SA Report is open for comment alongside the submission version Core Strategy.

Defining sustainable development from the Southend LDF?

- 8. One of the key steps in carrying out the SA is ensuring that there is an understanding of what sustainable development means for the LDF and for Southend on Sea Borough. This is given in the sustainability framework that identifies sustainable development objectives specifically for the Borough.
- 9. The objectives for sustainable development are based on a review of the sustainability objectives of other plans and strategies covering the area, as well as an understanding of the main sustainability issues facing the Borough. They also reflect the 1999 UK Strategy for Sustainable Development, which although now superseded by the 2005 strategy were still applicable when the sustainability framework was drawn up. A draft version of the sustainability objectives was sent out to environmental consultation bodies for their comment, and where relevant the objective were amended to taken into account their responses.
- 10. The objectives for sustainability development identified in the framework are:

Accessibility: to enable people all to have similar and sufficient levels of access to

services, facilities and opportunities

Housing: to provide the opportunity for people to meet their housing needs

Education/skills: to assist people in gaining the skills to fulfil their potential and increase

their contribution to the community

Health/safety/risk: to improve overall levels of health, reduce the disparities between

different groups and different areas, and reduce crime and the fear of

crime

Community: to value and nurture a sense of belonging in a cohesive community,

whilst respecting diversity

Biodiversity: to maintain and enhance the diversity and abundance of species, and

safeguard those areas of significant nature conservation value

Landscape: to maintain and enhance the quality and character and cultural

significance of the landscape, including the setting and character of the

settlement

Built environment: to maintain and enhance the quality, safety and distinctiveness of the

built environment and the cultural heritage

Air: to reduce all forms of air pollution in the interests of local air quality and

the integrity of the atmosphere

Water: to maintain and improve the quantity and quality of ground, sea and river

waters, and minimise the risk of flooding

Land: to use land efficiently, retaining undeveloped land and bringing

contaminated land back into use

Soil: to maintain the resource of productive soil

Minerals: to maintain the stock of minerals and other raw materials

Energy: to increase the opportunities for energy generation from renewable

energy sources, maintain the stock of non renewable energy sources and make the best use of the materials, energy and effort embodied in

the product of previous activity

Local economy: to achieve a clear connection between effort and benefit, by making the

most of local strengths, seeking community regeneration, and fostering

economic activity

Employment: to maintain and enhance employment opportunities matched to the size

of the local labour force and its various skills, and to reduce the

disparities arising from unequal access to jobs

Wealth creation: to retain and enhance the factors which are conducive to wealth

creation, including personal creativity, infrastructure, accessibility and

the local strengths and qualities that are attractive to visitors and

investors

11. These sustainability objectives have been used as the basis against which the aim, objectives and policies of the LDF are appraised in the SA of the Core Strategy. The sustainability objectives are useful in providing a constant basis against which the policies of the Core Strategy can be appraised, and allowing a consistent approach to the assessment of potential effects. In the SA of other parts of the LDF these objectives will also form the basis of appraisal for proposals and allocations.

The identification of the potential sustainable development effects of the Core Strategy

- 12. Broadly the approach put forward in the Core Strategy is to focus the majority of new development on previously developed land within the existing built-up area of the Borough, rather than develop in peripheral locations. This approach is largely determined by the existing character of the Borough as it only contains very limited greenfield land and is predominantly urban. The SA is supportive of this approach as it should help to protect the environment and secure regeneration within the built-up area.
- 13. The approach put forward in the Core Strategy should also help to promote more sustainable travel patterns through the provision of new shops, homes and jobs in accessible locations in the Borough. This should help to reduce the length and number of trips people need to make to meet their daily needs. The approach is supported by a policy approach to improve accessibility through improved public transport provision, walking and cycling routes. However, there is a potential conflict with sustainability objectives as this policy also promotes the further development and upgrading of roads in the area. This should help to achieve some benefits to the local economy, although it is likely that they will also give rise to greater car use with associated negative implications for the natural environment and resource use in the longer term, particularly in terms of air quality and contribution to climate change.
- 14. The Core Strategy promotes an approach to development that should secure more self-containment of the area in terms of jobs, homes and services. This will include monitoring the implementation of employment, housing and infrastructure to ensure it is coming forward as expected and in balance. Where monitoring shows that development is not coming forward at the expected levels, a system will be put in place to allow review of the phasing of housing delivery. This approach should help prevent potential sustainability implications of development coming forward at mismatched levels of homes and jobs, which may otherwise lead to unsustainable travel patterns with increased commuting to meet employment needs, and associated problems of access to jobs and services for those without a car.
- 15. The SA does recognise that there is the potential for conflict between some aspects of the spatial strategy and the protection of biodiversity in and adjacent to the Borough boundaries. This arises because of the proximity of built development to high quality, internationally designated, nature conservation sites on the foreshore areas of the Borough. Possible impacts may arise through 'coastal squeeze', whereby the characteristics of the sand and mudflats that support the important habitats become altered through interruption to the natural physical processes, by a combination of built development on the shore coupled with sea level rise. In particular development in the Shoeburyness area may require improvements to sea flood defences which may contribute to this process of 'coastal squeeze'. This and other development in these sensitive areas must therefore be rigorously assessed on their potential impact on biodiversity before development can proceed, and the proposed policies of the Core Strategy do recognise the need to conserve biodiversity.
- 16. The SA also makes recommendations on how the Core Strategy may be improved to aid the implementation of more sustainable development. This includes the need for greater consideration of sustainable construction and operation of all new development. Although this matter is touched on in the Core Strategy policies, it may

be suitable to use set nationally recognised standards for the level of sustainability that new developments should achieve. In addition the SA questions the policy on affordable housing provision, and would ideally like to see a higher proportion of affordable homes particularly on smaller sites.

- 17. Overall therefore, from the point of view of this sustainability appraisal, the Core Strategy DPD has four main strengths:
 - it seeks to be positive in providing for the delivery of change to meet the needs of the Borough in the context of what is sought from the regional plan
 - it sets out a framework for the other parts of the LDF to take forward
 - it recognises the role that development can have in bringing about the type of change needed and seeks the best from development, including monitoring and phasing to ensure self-containment
 - it promotes a spatial strategy that makes efficient use of the land resource whilst avoiding high environmental impact, and which is intended to bring about regeneration and should lead to patterns of development and activity that are more sustainable.

Difference the sustainability appraisal has made to date

- 18. As is stated above, the role of the sustainability appraisal is to ensure the Core Strategy is helping to achieve more sustainable development in the Borough, and to make recommendations for any necessary changes to improve this.
- 19. The previous stage of the sustainability appraisal tested the options for development presented in the public participation version of the Core Strategy. In general the SA concurred that the preferred options in the public participation version of the Core Strategy were also the most sustainable. The SA Report also highlighted areas where the Core Strategy objectives or policy could be altered to secure greater sustainability benefits, and where appropriate these were taken into account in moving forward from the public participation version to the submission version of the Core Strategy.

Next stages

20. The SA of the Core Strategy is the first stage of the appraisal undertaken of the Southend LDF. Other DPDs that make up the LDF will also be subject to SA in line with legislative and good practice requirements. These may have a different approach to the SA, especially where the DPD contains details of specific allocations where sustainability impacts may be identified with a greater degree of certainty.

1 Introduction

- 1.1 This document reports on the sustainability appraisal (SA) of the Submission Core Strategy of the Southend on Sea Local Development Framework (LDF), and prepared at the request of the Southend on Sea Borough Council.
- 1.2 Sustainability appraisal is the process by which the influence that a land use or spatial plan (in this case the Local Development Framework) would have over development and change is assessed according to the likely contribution to the desirable environmental, economic and social objectives that are embraced by a concern to achieve greater sustainability.
- 1.3 A SA of the LDF is being carried out in order to fulfil the statutory requirement from the Planning and Compulsory Purchase Act 2004, including the requirement set out in paragraph 4.24 of Planning Policy Statement 12, stating that to meet the test of 'soundness' Development Plan Documents must have met the procedural requirement that: 'the plan and its policies have been subjected to sustainability appraisal.
- 1.4 The SA of the LDF is being carried out as the LDF is prepared, and the process is being applied to each of the constituent Local Development Documents. The process to be followed in order to meet the requirements of the SEA Directive is set out in the Environmental Assessment of Plans and Programmes Regulations 2004. The Regulations require the preparation of an environmental report on the LDF, and hence on each of its component Local Development Documents (LDDs), and this is required (at para. 12(2)) to:

'identify, describe and evaluate the likely significant effects on the environment of:

- (a) implementing the plan or programme
- (b) reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme.'
- 1.5 This document, referred to hereafter as the SA Report, is to accompany the Core Strategy submission version, which is the final version of this DPD prior to Independent Examination by the Planning Inspectorate. The Core Strategy has already been through production of a Preferred Options public participation stage, and consultation on the issues and options. The Preferred Options version underwent SA during preparation and prior to publication, and this SA Report builds on that earlier work. The SA Report produced at that stage was open to consultation and the responses received at that stage have been taken into account in moving forward with this stage of the SA. The comments and response to them are shown in Appendix 1.

2 Content of the SA Report

2.1 The SA report:

- provides further information on the approach that has been taken, including explanation of the relationship between what would be done as a SA and what is being done as part of the exercise to meet the requirements of the SEA Directive – section 3
- explains the role of the consultation bodies, as provided for in the Regulations section 4
- identifies other strategies and plans that the LDF has to have regard to and draws on the objectives of these documents – section 5
- describes some of the main environmental, economic and social characteristics
 of the Borough that should influence what types of change the LDF sets out to
 deliver (the baseline) section 6
- explains and presents the sustainability framework used in the SA section 7
- sets out the approach taken to the SA of the Core Strategy, including how alternatives were appraised – section 8
- sets out the sustainability appraisal of the objectives and policies of the submission version Core Strategy DPD – section 9
- considers the Core Strategy in the light of the recent European Court judgement identifying the need for the UK to consider the need for 'appropriate assessment' of LDFs under the Habitats Directive 2004, and the likely impacts of the plan on European designated nature conservation sites – section 10
- sets out some overall findings from the process section 11
- suggests how identified effects can be mitigated, and how the SA of the Core Strategy can be monitored, as set out in sections 12 and 13 respectively.
- 2.2 It is intended that the report be published to accompany the submission version of the Core Strategy, including the consultation procedures.

3 Overall Approach to the Sustainability Appraisal

- 3.1 The way that the SA of the LDF will be undertaken has to be applicable to each part of the LDF and throughout the process of its preparation. Some aspects of the LDF will require more detailed assessment than is possible for the types of material contained within the Core Strategy, but the basic approach has to be demonstrably common.
- 3.2 The approach being taken to the SA, is to carry out a sustainability appraisal in a way which addresses the requirements of the SEA Directive. The basic features of the approach are as follows:
 - to draw upon other plans, strategies and information documents to identify objectives that the LDF needs to relate to, to identify environmental and other sustainability characteristics and issues, and to identify useful environmental information as the baseline
 - to undertake a general SA including consideration of the likely effects on the environmental components of the sustainability agenda
 - to report on whether there could be different and better environmental and general sustainability implications if reasonable alternatives appropriate to the type of material dealt with by the particular LDD were pursued
 - identify the likely significant impacts of the LDF and identify the way these can be mitigated against.
- 3.3 An important part of the approach being followed is the use of a 'sustainability framework' to assist in the comprehensive and systematic consideration of the parts of the plan in relation to what it means to promote more sustainable development, and this is further explained in section 7 of the report.
- 3.4 A point to note is that work began on the SA of the Southend-on-Sea LDF prior to any guidance emerging from the ODPM on the approach that should be taken. Therefore earlier stages of the work will not necessarily be in keeping with the approach since put forward in the guidance document, 'Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents' (ODPM, November 2005). However, the approach taken is in line with the requirements of the SEA Regulations. Later stages of the SA do take the OPDM document as their guide, although the approach also takes into account the need to ensure the SA process is manageable, and appropriate to the task, keeping in mind the overall aim of producing a more sustainable LDF.

Stages of the SA so far

- 3.5 The SA of the emerging Core Strategy Development Plan Document (DPD) is intended to be an iterative process with feedback between successive stages of appraisal and the production of the DPD. This is so the potential sustainability implications of alternative decisions and options made in formulating the strategy can be made explicit, thereby allowing these to be taken into account in making choices.
- 3.6 **Scoping** The first stage of the SA was a scoping exercise to identify the main sustainability issues in the plan area, to set out the approach to SA and the

- sustainability framework. This initial stage was undertaken in autumn/winter 2004. This stage has a reporting requirement with the production of a scoping report.
- 3.7 The Scoping Report was sent out for comment to select groups of consultees including the four statutory consultees for SEA, these being the Environment Agency, English Nature, English Heritage and the Countryside Agency, and Government Office, with responses received being incorporated in the approach to the SA process.
- 3.8 **SA of the Public Participation Core Strategy (preferred options) -** This stage in the SA process considered alternatives for the spatial strategy in the Borough. The purpose of this stage was to give an indication of what the relative sustainability implications would be of implementing alternative strategic level spatial alternatives to that identified as the preferred option. This was to inform decision makers on the suitability of proceeding with their preferred choice in light of the potential sustainability implications.
- 3.9 Considering alternatives in this way is a requirement of the SA, and particularly the SEA process. PPS12: Local Development Frameworks states that:
 - "local planning authorities must undertake a sustainability appraisal of the issues and options" (para 3.18)
- 3.10 The appraisal of alternatives that appears in 'Final Report Sustainability Appraisal of the Public Participation Core Strategy of the Southend on Sea Local Development Framework' (July 2005) is an important companion document to this SA Report and forms part of the overall sustainability reporting to meet the requirements of the SEA Directive. This SA Report shares much in common with the SA Report at that stage, and this is in order to ensure that both can be read as stand alone documents.
- 3.11 Consultation responses on the SA Report at this stage are taken on board in moving forward with the appraisal process where relevant. Comments on these responses can be found in Appendix 1 of this document.
- 3.12 **SA of the submission version** This stage of the SA considers the sustainability performance of the Core Strategy as it stands now, with all alternatives removed from consideration and only a preferred approach included. However, in undertaking this appraisal, and as part of this report, it is necessary in some instances to reflect on the consideration of options that has already taken place where this has relevance to the strategy as currently shown.
- 3.13 The SA Report at this stage shares much in common with the Preferred Options SA, as many of the overall findings of that appraisal are still relevant in terms of sustainability to this version of the Core Strategy. The SA at this stage also shows policy appraisal matrices, shown in Appendix 2, which are an essential component of the appraisal at this stage and show the individual sustainability comment on each policy. The additional material in this version of the Core Strategy DPD means that in some instances the conclusions drawn in the appraisal of the previous SA Report have been altered, especially where additional background material has served to elucidate the justification for the approach taken, or to further describe what the policy approach would mean in practice. These changes have included both positive and potential negative impacts.

4 Consultation

- 4.1 The LDF is being prepared by a process involving widespread consultation at successive stages of the work. The Council's intention is that the consultation on the component DPDs should be assisted by the SA, with reports published alongside each LDF document explaining the performance of the parts of the LDF in relation to the overall objective of promoting sustainable development. It is the intention too that the SA itself should be something on which participants in the consultation process are able to comment.
- 4.2 Insofar as the SA is being undertaken in a way which addresses the requirements of the SEA Directive, there is material in the Regulations setting out specific tasks that the consultation process must include to conform to the SEA Directive. The SEA Regulations include the statement that 'when deciding on the scope and level of detail of the information that must be included in the report, the responsible authority shall consult the consultation bodies.' (Reg. 12 (5)).
- 4.3 In this case the 'responsible authority' is Southend-on-Sea Borough Council, and the 'consultation bodies' are identified in the Regulations as:
 - the Countryside Agency
 - English Heritage
 - English Nature
 - the Environment Agency.
- 4.4 Prior to the preparation of the Scoping Report being prepared, each of these bodies has been consulted by the Borough Council, with a consultation letter sent in November 2004. The consultation primarily sought views on the matters to be included in the sustainability framework. Responses were made by all four of the bodies.
- As a whole the responses received helped pinpoint various sources of information that would prove useful in signposting relevant documents and strategies that each body produced that may contain information of relevance to the SA. This information was taken into account in the SA, especially in the characterisation of the baseline of the Plan area. However, some of the reports referred to by the Consultation Bodies have yet to be produced, and although these appeared as if they may be of some use in the SA in the future, at the current time they are not. Both English Nature and the Environment Agency set out how they would like to be involved in the SA of the LDF from this stage onwards. At this stage responses were also received suggesting changes to the wording of the framework, these were taken into account where appropriate, in order to ensure that all relevant matters were covered in this sustainability framework.
- 4.6 Since the scoping stage the two versions of the SA have been out to consultation. Most recently the SA accompanying the Public Participation stage that detailed the Preferred Options and alternatives was available for public comment alongside that version of the Core Strategy. The comments received on the SA are found in Appendix 1 of this report, which also shows, where relevant, how these will be taken on board in this submission version of the SA.

4.7 This SA Report is open for consultation alongside the submission version Core Strategy, and comments can be made again. However, comments received at this stage will be considered at Independent Examination.

5 Other documents and objectives

Introduction

- 5.1 It is in the nature of local authority activity and the legislative and procedural requirements upon authorities, together with the requirements upon partner organisations, that there is a great deal of overlap and repetition between organisations, between plans and strategies that are drawn up, and between different visions and sets of objectives. Specifically for spatial planning, the development plan will in future (as a consequence of the Planning and Compulsory Purchase Act 2004) comprise the regional spatial strategy and the local development framework. For Southend on Sea the other part of the development plan (in addition to the LDF to which this SA refers) is the Regional Spatial Strategy RSS14, entitled the East of England Plan.
- 5.2 Many other documents prepared by the local authority and others provide context to the LDF in the form of objectives that the LDF needs to help to meet for instance or complementary material in the form of policies and programmes.

The East of England Plan

5.3 The RSS will provide the direct planning context for the preparation of the LDF, setting out for instance the role that Southend on Sea is expected to perform and its contribution to the region, the level of employment and housing development that the LDF is to make provision for, and various objectives that the LDF is expected to contribute to.

Regional and strategic planning context

5.4 Sub-regional policies

Southend-on-Sea is one of five authorities classified within the Thames Gateway/South Essex sub-region. The sub region is then split into two, in which, Southend-on-Sea is designated under Thames Gateway South Essex (TGSE).

- 5.5 TGSE is a regional and national priority for regeneration and growth with the potential to make a major contribution to the improvement of the Region's economy. The vision for the area is to improve opportunities and quality of life for local people through establishing the area as a focal point for economic regeneration and investment. The provision of new infrastructure and improved environment is also a priority.
- 5.6 The key objective for the sub-region is to achieve regeneration through jobs-led growth, higher levels of local economic performance and employment, and a more sustainable balance of local jobs and workers.
- 5.7 Policy TG/SE 1: Zones of change and influence, provides for Southend-on-Sea as a cultural and intellectual hub and a higher education centre of excellence, with a focus on:
 - Southend Town Centre regenerating the existing town centre, led by the
 development of the University campus, to secure a full range of quality subregional services and facilities providing 6,500 new jobs and 1,650 additional
 homes, with upgrading of strategic and local passenger transport accessibility,

- including development of Southend Central and Southend Victoria stations as strategic transport interchanges; and
- Shoeburyness development of a major mixed-use development, providing 3,000 new jobs consolidating R&D strengths on a 'high-tech' business park and 1,400 additional dwellings, linked to improved access.
- 5.8 The Local Development Documents will provide for 13,000 additional jobs in the Southend area between 2001 and 2021. 55,000 will be provided in the TGSE subregion as a whole over this period.
- 5.9 By 2011, the A13 Passenger Transport Corridor will be extended from Southend to Basildon and Canvey Island.
- 5.10 In total, Southend-on-Sea will provide 6,000 additional dwellings between 2001 and 2021.
- 5.11 Southend Renaissance will be an Urban Regeneration Company (URC) local delivery vehicle, creating a public/private partnership for the achievement of the employment and housing delivery targets.

Regional objectives and targets

- 5.12 The draft RSS contains fourteen overarching objectives that range from broad themes such as protect and enhance the natural environment, to specific ones about minimising the risk of flooding or recycling previously developed land. The Regional Sustainable Development Framework (RSDF) is a separate document containing a set of objectives for the region. These objectives have been used as the framework for the RSS, and are reflected in the list of objectives used to carry out the SEA/SA into RSS. Whilst presented in a slightly different format, it is confirmed that the set of objectives used for the appraisal of policies in the RSS is consistent with those proposed for the SEA/SA of the Southend-on-Sea LDF.
- 5.13 Appendix D to the draft RSS contains targets and indicators, covering environmental, social and economic concerns. Most of the targets are expressed as directions of change, although some targets, for example, the recycling of land and buildings, waste recycling and modal shift, amongst others, are quantified. These targets have been used in commenting on the performance of the direction of change of the LDF policies.

Community Strategies

- 5.14 Under the new provision for making development plans as explained in PPS12: Local Development Frameworks, 'the local development framework should be a key component in the delivery of the community strategy setting out its spatial aspects where appropriate and providing a long term spatial vision. Local development documents should express those elements of the community strategy that relate to the development and use of land.'
- 5.15 The community plan for Southend produced by the Southend Strategic Partnership and called 'Southend setting the standard' (March 2003) sets the vision for Southend on Sea as 'a vibrant coastal town and prosperous regional centre where

people enjoy living, working and visiting'. This vision is to be achieved through interlinked themes detailed in the plan, and which are summarised as:

- prosperous community a prosperous local economy
- learning community opportunities for learning for all and a highly skilled workforce
- safer community crime, disorder and offending reduced
- healthy community improved health and well-being
- environmentally aware community improved transport infrastructure and a quality environment
- supportive community better life chances for vulnerable people
- cultural community a cultural capital.
- 5.16 It is for the LDF to pick up those aspects of these themes towards which it can achieve a contribution through its influence over the use of land, though there is much that is common between these themes and the content of the sustainability framework too. In relation to the SEA, the themes are relatively light on environmental issues, though this is not a concern given the scope and role of the community strategy.
- 5.17 The community strategy does provide other useful information on the social and economic issues in particular faced by the Borough.

Local Transport Plan

5.18 A further important document where a reciprocal relationship with the LDF will be important to achieve is the Local Transport Plan (LTP). Southend on Sea's LTP for 20001/2 to 2005/6 (appropriately called 'Moving forward together') sets out its vision as:

'reduce congestion in Southend and its hinterland to stimulate regeneration, economic improvement, environmental enhancement and community well being in a sustainable manner'.

- 5.19 The vision is accompanied by objectives:
 - improve the economy of Southend and support sustainable economic growth in appropriate locations
 - protect and enhance the environment and quality of life
 - improve safety for all travellers
 - promote the integration of all forms of transport and land use planning, leading to a better more efficient transport system
 - promote accessibility to everyday facilities for all, especially those without a car

- raise community awareness of the effects of continuing traffic growth.
- Insofar as it is evident what it means, this 'vision' might be interpreted as being rather narrow in relation to the agenda of sustainability, and whilst certainly transferable to the LDF as one of the objectives of the Council and its partners, it could not be a sufficient basis for all that the LDF has to address. The objectives do extend the scope of the vision, without really seeming to be particularly consistent with what it says, and so reflect a fuller interpretation of sustainability.
- 5.21 It is important however that the Council, as all transport authorities, has had to produce its next LTP under new government guidelines by July 2005, and these documents (LTP2) are expected to take a longer view than the previous round of LTPs. It will be for the LTP and the LDF to be developed on a reciprocal basis, and for the LTP itself to be subject to the process of SA.

Thames Gateway Strategic Partnership

- 5.22 Another document that is important in determining the task and scope for the LDF is that prepared by the Thames Gateway Strategic Partnership specifically for South Essex. With its 'vision for the future' set out in this document, the initiative is seen as an 'opportunity for driving forward regeneration and achieving growth and prosperity in South Essex as a key part of Thames Gateway. The material in this document has been reflected in the East of England Plan, discussed above.
- 5.23 Some of these documents are also important to the SA and SEA because they are sources of information.

6 Character of the Borough of Southend-on-Sea

Introduction

- 6.1 This section of the report is a summary of the key sustainability issues facing the Borough of Southend-on-Sea. This information is drawn from a review of the baseline characteristics of the plan area as part of the Sustainability Appraisal (SA) as required by the SEA Directive.
- 6.2 The full text of the baseline characterisation is shown in Appendix 3 of this SA Report, and this includes consideration of how the LDF could have an influence over the existing characteristics of the area.

Summary of issues

- 6.3 The SEA Directive is concerned with the assessment of 'the likely significant effects on the environment of implementing the plan', and this requires where possible some understanding of the 'baseline' situation so that the change that might arise from the influence of the plan can be considered.
- 6.4 From the particular nature of the area to which the LDF relates, and to the matters over which the LDF has influence, the environmental assessment of the material included in the core strategy and site specific allocations LDDs in particular, is likely to be most concerned with the implications of the location of development.
- 6.5 Overall the gathering of data on the environmental baseline has served to identify a few key issues in the Plan area:
 - the area is under quite high risk of flood, although direct tidal inundation is largely
 mitigated for through sea flood defences. However tidal effects on the rivers in
 the Borough is a larger risk, and effects of climate change will only serve to
 increase this risk
 - habitats of international significance are located within the Borough, although outside the built development boundary. These must be protected from development that would threaten their integrity, such as increased pollution, however the key threat is beyond the control of the LDF and is caused by built development limiting the natural movement of the coastal mudflats inland. These effects of 'coastal squeeze' will be exacerbated by climate change and sea level rise
 - the constrained boundaries of the Borough and the need for new housing is putting pressure on open space within the built up area for development, as well as on the high quality agricultural land on the built up area boundary
 - nature conservation and biodiversity resources within the built up area are limited, and every attempt should be made to conserve and enhance existing resources, and create new ones, as well as the protection and enhancement of wildlife corridors
 - there are increasing traffic levels in the Borough, with consequences for air quality, and new development must help to limit any increase in this, by

endeavouring to suggest change to travel patterns (number, length and mode), through the spatial strategy

- studies have identified limits to the availability and accessibility of open space of different types and standard, especially in central Southend-on-Sea
- the East of England, and south Essex in particular has, and will be, experiencing a shortage of potable water supply, therefore this must be taken into account in new development, and every attempt made to include water efficient design into new development
- the quality of the built environment is important, not only with the effect of new building in 'mending the fabric', but also in affecting existing areas of identifiable character.
- 6.6 The key social and economic impacts are the:
 - current high levels of out commuting to London, due to relatively low house prices in Southend compared to the other local authority areas around London, and lack of appropriate employment opportunities in the Borough
 - · an identified need for affordable housing
 - if there is not diversification of the economy this could lead to economic downturn in the area as the traditional employment base of the Borough is in decline
 - relatively high levels of deprivation in some parts of the Borough, according to the Indices of Deprivation 2004, which identifies that some wards contain areas of significant deprivation. For example, most of the Kursaal ward and parts of the Milton and Southchurch wards are in the 10% most deprived nationally.

7 Sustainability framework and SA of the Core Strategy

- 7.1 The SA is being undertaken to assess the influence that the LDF is likely to have over development and change according to the likely contribution to the desirable environmental, economic and social objectives that are embraced by a concern to achieve greater sustainability.
- 7.2 A meeting with a wide group of officers from the Council was spent in discussing a way of testing whether what is proposed in the LDF will make the Borough and beyond more or less sustainable.
- 7.3 From the discussion a 'sustainability framework' was drawn up, and the views of the consultation bodies were sought on this material before modifying it for inclusion and use in this report. The sustainability framework is intended to identify as concerns (or as 'environmental, economic and social capital') the basic things that we want at least as much of in the future as we have now if our occupation of the planet is to be sustainable. These concerns are arranged under headings that use the four themes of sustainable development set out by the government in its 1999 UK Strategy (since this sustainability framework has been prepared this strategy has been updated). The framework also contains alongside each concern, a statement intended to explain what it is that is important and the direction of change that would be regarded as a desirable.
- 7.4 The sustainability indicator 'Flood Risk' has been included within the 'Prudent use of natural resources' section, under the 'Water' Heading. This objective reflects comments received informally from the Environment Agency.
- 7.5 It is vital to note that whilst there may appear to be conflicts between some of the concerns, the promotion of sustainable development means trying to find ways forward that advance each of the concerns together.
- 7.6 The sustainability framework identifies the way in which the implications of the LDF for the particular concerns contained in the sustainability framework are likely to be addressed. This will be by a combination of quantifying change where possible essentially where development would change the nature of land with specified environmental significance and identifying the likely 'direction of change' in other cases.
- 7.7 The sustainability framework applied in this report is set out in Figure 7.1.

Figure 7.1: Sustainability appraisal framework for the SA of Southend on Sea LDF Concern Explanation and desirable direction of Means of identifying and			
Oonoon	change reporting impact and		
		contribution of the proposals	
		and policies in the LDF	
Social progress whi	ch recognises the needs of everyone		
Accessibility	to enable people all to have similar and	doc – likelihood of increase in	
7.0000000000000000000000000000000000000	sufficient levels of access to services,	facilities and mix of uses	
	facilities and opportunities	Tabilities and mix of asso	
Housing	to provide the opportunity for people to	quan – no of dws created	
riodollig	meet their housing needs	 quan – no of affordable dws (by 	
	Interview floating floods	different types) likely to arise -	
		regional target is for a minimum	
		of 30% of all housing to be	
		affordable	
Education & Skills	to assist people in gaining the skills to	doc – but little reliability of	
	fulfil their potential and increase their	prediction	
	contribution to the community	F. C. W. C	
Health, safety and	to improve overall levels of health,	quan – area and population	
security	reduce the disparities between different		
,	groups and different areas, and reduce	decreased risk of flooding	
	crime and the fear of crime	doc – likelihood of increased or	
		decreased health standards	
		(but little reliability of prediction)	
Community	to value and nurture a sense of	doc – but little reliability of	
,	belonging in a cohesive community,	prediction	
	whilst respecting diversity	F	
Effective protection			
Biodiversity	to maintain and enhance the diversity	• quan – area of significant habitat	
,	and abundance of species, and	affected	
	safeguard these areas of significant	 quan – potential area of 	
	nature conservation value	significant habitat created / better	
		managed	
		 doc – likelihood of increase in 	
		biodiversity from creation of	
		opportunities	
Landscape	to maintain and enhance the quality	 quan – area of open land affected 	
character	and character and cultural significance	 quan – area of designated 	
	of the landscape, including the setting	landscape affected	
	and character of the settlement	 doc – likelihood of harmful 	
		change to character of landscape	
	1	creating setting of the urban area	

Built environment	to maintain and enhance the quality, safety and distinctiveness of the built environment and the cultural heritage	 quan – area of useable and amenity open space affected quan – potential area of useable and amenity open space created quan – area of valued townscape harmed by change doc – likelihood of increase in urban quality through new provision and investment doc – likelihood of increase in urban quality through emphasis on quality
Prudent use of natu		a doe likelihaad af izamaaa
Air	to reduce all forms of air pollution in the interests of local air quality and the integrity of the atmosphere	decrease in emissions. Regional target is for stabilising car traffic levels in Southend at 1999 levels and to increase the proportion of freight carried to and from ports by rail to 30% by 2020. Regional target to increase the proportion of energy met from renewable sources (on-shore + off-shore) to 44% by 2020.
Water	to maintain and improve the quantity	doc – likelihood of increase or
	and quality of ground, sea and river waters, and minimise the risk of flooding	decrease in emissions quan – number of planning
	waters, and minimise the risk of hooding	applications granted contrary to Environment Agency advice on flood risk.
Land	 to use land efficiently, retaining 	 quan – area of open land affected
	undeveloped land and bringing	irreversibly by development.
	contaminated land back into use	 quan – area of damaged land likely to be brought back into use national and regional previously developed land target is 60% and minimum dwelling densities at 30 dwellings per hectare.
Soil	 to maintain the resource of productive soil 	 quan – area of productive land affected
Minerals and other raw materials	to maintain the stock of minerals and other raw materials	 quan – area of potential minerals extraction put beyond viable exploitation by development doc – efficiency of the use of primary and secondary materials doc – likely affect on reuse and recycling of materials - regional target to recover 70% of household waste by 2015

Energy sources	to increase the opportunities for energy generation from renewable energy sources, maintain the stock of non renewable energy sources and make the best use of the materials, energy and effort embodied in the product of previous activity	 quan – contribution likely from energy generation from renewable source schemes quan – contribution likely from energy generation within new buildings doc – likelihood of increase in efficiency of energy use in new development 		
Maintenance of high and stable levels of economic growth and employment				
Local economy	 to achieve a clear connection between effort and benefit, by making the most of local strengths, seeking community regeneration, and fostering economic activity 	doc – likelihood of increase in desirable economic characteristics		
Employment	 to maintain and enhance employment opportunities matched to the size of the local labour force and its various skills, and to reduce the disparities arising from unequal access to jobs 	quan – potential number of new jobs in different sectors and match to predicted needs of workforce		
Wealth creation	 to retain and enhance the factors which are conducive to wealth creation, including personal creativity, infrastructure, accessibility and the local strengths and qualities that are attractive to visitors and investors 	doc – likelihood of increase in desirable economic characteristics		

Notes: **doc** – matter where prediction of outcome likely to be presented in terms of 'likely direction of change'

quan - matter where prediction of outcome likely to be presented in quantified terms

7.8 The appraisal has been carried out in part by the systematic consideration of each of the suggested approaches in the public participation draft Core Strategy LDD against each concern in the sustainability framework. For this LDD, given the strategic nature of the material that it contains, all that can be identified by this process is whether the implementation of the strategy – in its parts and as a whole – would be likely to be beneficial to that aspect of the sustainability framework. This is recorded as a combination of a commentary and a simple symbolic representation of the findings. The framework is used in both the appraisal of spatial objectives and the policy appraisal shown in Appendices 4 and 2 respectively.

8 The approach to sustainability appraisal of the Core Strategy

- 8.1 In this section of the SA Report consideration is given to identifying the likely sustainability impacts of implementing the policies of the proposed Core Strategy, as they appear in the submission version. This appraisal of implications follows earlier appraisal work at the Public Participation stage.
- 8.2 The appraisal in section 9 is a commentary on the policies and the general approach taken in the Core Strategy, and potential sustainability implications. This is further backed up by individual policy appraisal matrices shown in Appendix 2.

Consideration of alternatives

- 8.3 The Public Participation stages Core Strategy included, for each policy, a preferred option that appeared as a largely completed policy, plus one or more rejected alternative approaches giving reasons for rejection. This consideration of options and alternatives is a new addition to the planning system since the introduction of the Planning and Compulsory Purchase Act 2004. The consideration of alternatives is also a requirement of the SEA Directive, which stipulates the need to assess the relative sustainability implications of alternative approaches to implementation of the plan under consideration.
- 8.4 The 'good' reason for the consideration of options and alternatives is in order to be satisfied that there is not a better of way of proceeding with the spatial strategy, mindful of all of the relevant circumstances, and by reference to the overarching objective of 'contributing to the achievement of sustainable development'. This approach serves to demonstrate whether the plan is 'sound', which is the test that has to be met when the plan is subject to Independent Examination.
- 8.5 The requirement from the SEA Regulations is that the environmental implications of alternatives are reported, specifically 'reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme' (Regulation 12, 2(b)). As the intention is for alternatives to be realistic choices they must be:
 - reasonable, in that they are plausible alternatives which could be adopted, be
 able to be implemented, and they are realistic and have regard to national policy
 and, particularly in this case, to regional policy, as this is a limiting qualification.
 The level of growth for instance is not something on which alternatives need to
 be set out
 - related to the objectives of the plan
 - related to the **geographical scope** of the plan as they relate to the distribution of development specific to NN.
- 8.6 Given the type of material that makes up a LDF, the alternatives to what comes to be proposed in the different parts of the LDF could be in terms of:
 - the overall scale of development to be provided for
 - the location of development, essentially through the use of different permutations of available land and development opportunities

- the mix of uses in any location and also the density of development (and hence the amount of land taken for development).
- 8.7 However, in the context of national and regional guidance and with the predominantly urban situation as exists in Southend, the extent of real options available for the spatial strategy may appear to be very limited.
- 8.8 There is some consideration of what might be looked at as alternatives in respect of the overall spatial strategy, employment generating development, retail provision, sport and recreation and dwellings. Although the Public Participation version of the Core Strategy only fully explained the preferred approach, with the preparation of almost a fully developed policy for this option, and simply described rejected alternatives and the reason for rejection, the preferred policy approach was not yet 'set in stone' at that stage, and there remained the opportunity to take on board suggestions as to how that approach could be reinforced/made more effective. Moving forward from that version of the Core Strategy to the one considered here it can clearly be seen that the approaches set out previously have remained fundamentally the same, with some wording amendments and the addition of criteria to reflect consultation responses, the findings of the SA and other background information.
- 8.9 Southend Borough Council has produced a background schedule on how the SA has influenced the Core Strategy, included as Appendix 9 to its 'Statement of Compliance' accompanying the submission document.

Policy appraisal

- 8.10 This SA report considers each section of the submission version Core Strategy document in turn and considers what may be the likely effects of implementing the approach put forward. This is supplemented by the SA matrices in Appendix 2. These matrices are an essential component of the appraisal, and should be read in conjunction with the relevant text.
- 8.11 These appraisal matrices include a symbol summary of the likely impact of the policy on each of the sustainability objectives. However due to the very strategic nature of the decisions being made, the high level of uncertainty this entails, this results in many impacts being identified as 'uncertain' and marked with a question mark. Therefore this appraisal is supplemented by text to indicate the process and thinking involved in deciding on the impact. These comments may therefore be more useful in understanding impacts than the summary alone. Each matrix also contains a comment box that allows the various types of impact to be discussed, and issues that go beyond matters that can be summarised as effects against individual sustainability objectives including recommendations for change. The final box in each appraisal considers the significance of the identified impacts. This is a key aspect of SEA that requires identification of where the key impacts are likely to arise.
- 8.12 It is also evident for the appraisal that several sustainability objectives are closely related, so effects against one will result in effects against the other. For example objectives of air quality and energy use are all closely related particularly in terms of policies relating to the need to travel and therefore are often appraised similarly.

9 Sustainability Appraisal of the Core Strategy

9.1 This section of the SA Report considers the likely sustainability implications of implementing the spatial strategy and policies of the submission version Core Strategy DPD. This considers general comments on the approach to the Core Strategy, whether the strategy objectives and aim are compatible with sustainable development, and an appraisal of the Key Spatial Policies and Core Policies of the Southend Core Strategy.

General comments

- 9.2 The introductory sections of the Core Strategy provide a useful context to the chosen approach taken in setting the strategy. The identification of key sustainability issues for the Borough, including those matters that must be accommodated taking into account regional and sub-regional policy, allows an understanding of the policy approach adopted for the Core Strategy and the limitations in options for the strategic approach.
- 9.3 Paragraph 0.15 refers to this sustainability appraisal process. It is important for clarity, to meet requirements of the SEA Directive and for good practice purposes, to give more detail on how the appraisal has influenced the plan preparation process. The Borough Council has prepared a summary schedule of the main issues raised by the public participation draft SA report, and how these have been addressed in the submission Core Strategy. This schedule is set out as Appendix 9 to the Council's Statement of Compliance accompanying the submission documents.
- 9.4 A general point that can be noted from reviewing the policy sections of the Core Strategy is that it is important that the number of policies in the LDF is kept to those that are essential, and add value to existing national and regional policies. There is a need to consider the approach taken in setting strategic and development control policies. At present the supporting text for many of the proposed policies states which policies will be retained from the existing local plan. However, in order to create a succinct and useful LDF that will help effectively deliver sustainable development it must be ensured that these take into account advice in Planning Policy Statement 12: Local Development Frameworks (PPS12). In paragraphs 2.38 to 2.30 of PPS12 the approach to writing generic development control policies is given. This identifies the need to keep these to a 'limited suite' of policies, and ensure that they are not repetitive of national policy. This highlights a potential future conflict, or duplication, in the role of the 'CP' policies in this document and any future development control policies, as many of the CP policies already cover development control related issues.

Appraisal of the aims and objectives

- 9.5 The aims and objectives for the Southend LDF are based on the Community Plan for the Borough produced by the Southend Local Strategic Partnership. The aim sets out an approach for development of the Borough in quite a generic way. Although this is generally in line with sustainable development it could give more detail on the spatial approach to development in the Borough, and specifics on the way development will be distributed to meet identified needs.
- 9.6 The objectives are appraised in Appendix 4. This suggests that for the most part these should help meet the objectives of sustainable development of the SA. There

are some instances where re-wording or more detail could be given to improve understanding of the objective, such as SO9 on the 'step change' of transport provision to clarify if this is public transport, roads or both. In addition objective SO11 is unlikely to have very positive benefits in terms of wider sustainability, although it may benefit the economy. As with the aims the objectives could have also been more detailed to reflect individual elements of the spatial distribution strategy. It is also identified that there are some matters that are not fully addressed by the objectives, including a matter of great significance to Southend, that of flooding. A new objective may be necessary and suggested wording is: 'Secure effective and efficient sustainable development, to minimise the impact of climate change, such as promoting sustainable construction and minimising flood risk'.

Spatial strategy

- 9.7 Setting the level of growth in the area is beyond the control of the LDF, as it is dictated by RSS. The Core Strategy does, however, have a key role to play in distributing this growth. Due to the constrained nature of the Borough and limited remaining greenfield land, the approach taken needs to take into account a variety of sustainability impacts, but most significantly the implications of developing on land at risk of flood, or developing on the areas of limited open space within the Borough not at risk of flood.
- 9.8 The policy approach at Policy KP1 concentrates growth within the urban area around key activity nodes such as the town centre and other identified priority areas for development, performs well against transport related objectives, the built environment and the efficient use of land. Negative impacts may come as a result of pressure on the already limited open space resource in the town centre areas. The economy of the town is also expected to benefit from the focused regeneration of high profile areas such as the seafront and town centre.
- 9.9 Following this approach would require some development in areas at risk of flooding. This may have sustainability impacts, including risk to future residents of these areas, but potentially more significantly the building of sea defences to protect these areas may adversely affect biodiversity of the European protected nature conservation sites, as commented upon in the appraisal table for this policy. Intensification of development in the seafront area also needs to ensure that impacts on biodiversity are taken into account, where necessary, and this is highlighted in the policy itself.
- 9.10 At Public Participation stage a second alternative was proposed with located growth as an extension to the town to the north. The main impact here would be the loss of greenfield and potentially of high quality agricultural land. Negative effects would also arise as development in this location would be further from the town centre and therefore less likely to support new trips by more sustainable travel modes and public transport. There may have been some benefits with this option though, as the economy may perform well from the development of a greenfield, high quality business park with good access to the strategic road network, but this is not necessarily better than the selected option, comprising the provision of high quality employment land on previously developed land at Shoeburyness. The appraisal of the Public Participation draft found that the 'Policy KP1' approach is likely to be more sustainable than the alternatives presented.
- 9.11 In addition there are some general points regarding the structure of this section, and in particular the introductory text and supporting text to KP1. Paragraphs 2.2 and 2.5

of the Core Strategy are repetitive in places, and it is key to creating a plan that sets out a more sustainable approach to development that the approach to be taken is expressed unambiguously, and therefore duplication of justification should be avoided. It may be suitable to combine the content of 2.2 and 2.5 in order to make the approach clearer, especially in terms of approach to development in flood risk areas.

- 9.12 This section of the Core Strategy also contains two further policies, KP2 Development Principles and KP3 Implementation and Resources. KP2 establishes principles to which all new development in the Borough must have regard. In general these principles are in line with the objectives of sustainable development, and therefore should help to promote greater sustainability in the Borough. For instance the policy requires a sequential approach to the location of new development, supporting the overall strategic approach in the Core Strategy by making the town centre the focus for new development, with positive sustainability implications of improving accessibility, helping to achieve regeneration and reducing the need to travel. The policy also contains criteria seeking to ensure new development respects, conserves and enhances the natural environment. However the SA does identify some potential conflicts of this policy on sustainable development objectives particularly in relation to flooding and the need for improvements to flood defences with potential adverse impacts on biodiversity and risk to residents.
- 9.13 Policy KP3 sets out a statement of intent for the Council in moving forward with the LDF. The policy briefly details the role and approach that will be put forward in the suite of documents that together will make up the LDF, and therefore the policy is relatively benign in terms of sustainability implications.

Employment Generating Development

- 9.14 The distribution of employment, and resulting employment land requirement, is one of the key impacts the Core Strategy can have in influencing a more sustainable pattern of development. This section of the Core Strategy sets out the approach for the Borough.
- 9.15 The supporting text refers to national policy on supporting economic growth, and quotes the approach advocated in the 1999 UK sustainable development strategy, that has the expectation of 'high and stable levels of economic growth'. However this was replaced in March 2005 by the new UK strategy for sustainable development 'Securing the Future'. This was produced in conjunction with the UK shared strategy framework 'One future different paths' (March 2005). This redefines the approach to economic development, looking for more integration with the overall aims of sustainable development stating that it,
 - "...will be pursued in an integrated way through a sustainable, innovative and productive economy that delivers high levels of employment, and a just society that promotes social inclusion, sustainable communities and personal well-being. This will be done in ways that protect and enhance the physical and natural environment, and use resources and energy as efficiently as possible".
- 9.16 The new guiding principles in 'Securing the Future' also state that the economic objective has changed to simply 'achieving a sustainable economy'. These changes should be reflected in the supporting text to policy CP1, as the approach advocated is

- not entirely in keeping with the current UK-wide approach to delivering sustainable development and a sustainable economy, and this should be clarified.
- 9.17 Policy CP1 employment generating development identifies areas for providing employment and specifies the provision required in each of these areas up to 2021. The policy promotes the protection of existing employment sites as well as setting out the number of new jobs that would have to be provided to meet employment growth targets. The approach should help to improve economic growth in the Borough, although the level of land take required to meet these jobs needs is not given. This means that it is not really possible to assess the likely impact of this growth on the environment, as quantification of land requirements is not yet available for comment. The Core Strategy provides little information on how job need will be calculated to achieve land requirements, including to what extent these jobs can be provided in existing employment sites. Therefore many of the potential impacts of this policy will not be identifiable until site allocations for delivering this level of growth are put forward. These impacts may be more pronounced where there are greenfield land requirements, and the selection of appropriate sites and appropriate protection through policy should help mitigate against potential impacts.

Town centre and retail development

9.18 Policy CP2 - town centre and retail development, takes a sequential approach to retail development in the town centre, which could in effect lead to a range of locations being developed for retail. The approach is spatially specific and identifies locations where certain types (including scale) of retail development are appropriate. In planning terms, the approach put forward follows the recommendations of the 2003 Southend-on-Sea Retail Study, and hopes to put these into action through the policy. It appears the approach is in line with sustainable development, particularly supporting and encouraging retail growth in the town centre, as a key driver to the regeneration of this area. If successfully implemented, it should also help in reducing the distance and need to travel to meet comparison shopping needs, clawing-back expenditure that is currently lost from the Borough. However, there are possible adverse impacts relating to the development of new bulky goods and food stores where these must be sited in edge of town locations, due to impacts on nearby businesses and local and district centres.

Transport and Accessibility

9.19 Policy CP3: Transport and accessibility sets out the approach to travel in the Borough. The proposed approach does put an emphasis on the need to encourage travel by more sustainable modes, such as public transport, walking and cycling. This is welcomed by the SA in aiming to reduce travel impacts. However, the policy does appear to be rooted in the view that increased road capacity is key to encouraging investment in the area and realising the economic growth objectives. This view is likely to be correct in the short term, with the approach being beneficial for the economy. However in the longer term it is very likely that car use will increase to fill this capacity negating the positive effects, and leaving a legacy of environmental impact. Therefore there will need to be a substantial shift to decrease car use and encourage travel by alternative modes, and the LDF can not achieve this alone.

The Environment and Urban Renaissance

9.20 Policy CP4 covers matters relating to protection and enhancement of the natural and built environment. The policy covers a range of issues and criteria to ensure new development is appropriately located and designed so as not to harm these assets in the Borough. The policy does touch on issues relating to the greater environmental sustainability of new buildings in the Borough, and in the opinion of the SA this could be improved to require certain defined standards to be met. For example the Buildings Research Establishment (BRE) environmental assessment methodology (EAM) has standards for environmental performance of new development, and the LDF could require that all new buildings achieve the 'very good' standard or above. Using this approach would be particularly beneficial in terms of sustainable development as it appraises a variety of performance matters in new buildings, including biodiversity, accessibility to services, internal environment, as well as water and energy efficiency.

Minerals and soils resources

9.21 Policy CP5 seeks to preserve the minerals and soils resources in the Borough, these are already limited in the area partly due to the mainly built-up character of Southend. Preventing inappropriate development in these areas is suitable for the long-term management of these resources. The policy therefore seeks their protection, subject to other sustainability considerations. Development will be allowed to occur on the limited brickearth resources as it is not financially viable, at the current time, to exploit the resource. However, it is vital to ensure that this development is only permitted when all policy criteria are met, and there is a proven case for development at that site, as there is the possibility in the long-term that this type of resource may be worth more, therefore making abstraction viable again.

Community infrastructure

9.22 The policy here is a companion to parts of the policy KP3, that policy seeks improvements to the utilities infrastructure amongst other matters in order to accommodate the level of expected development, and this policy seeks to see community infrastructure implemented to support development. There is some overlap between these two policies, and exactly what their differing roles are is not clear. There is also some overlap with policy CP7 on open space which also covers community facility provision under planning obligations. The overall impacts of this policy should be positive, although the extent to which these obligations will be through commuted payments or will be expected as part of development is not clear.

Sport, recreation and green space

9.23 Policy CP7 - sport, recreation and green space, seeks to safeguard all existing and proposed sport, recreation and greenspace facilities from loss or displacement, and to enhance that provision in accordance with the level of new housing and population development, with specific types of additional provision proposed. In addition, the quality of existing sport, recreation and open space provision will be improved where possible. Overall, the impact of the policy on meeting sustainability objectives should be positive, and in particular a strong positive relationship with health, and accessibility. The relationship with biodiversity could be either positive or negative depending on how the policy is implemented. The reasons being that although biodiversity considerations make part of the policy provision this could be enhanced

to ensure that all new open and green space provision requires enhancement of biodiversity. In addition the wording of the third paragraph should be improved to remove the misleading wording that sites of importance for biodiversity and recreation can be displaced if alternative spaces are found for the recreational use. This approach as it is currently written is not in line with sustainability objectives as the nature conservation interest of sites of importance for biodiversity takes precedence over the recreation resource, particularly where these are of national significance.

9.24 This policy is also very detailed in its approach and this differs from all other polices that are part of the Core Strategy as it gives specific detail on the need for new development in the Borough. This differing approach may be difficult to justify in this part of the LDF, and may be more appropriately located in the planning obligations DPD.

Dwelling Provision

- 9.25 Policy CP8 dwelling provision, identifies areas for providing housing and specifies the provision required in each of these areas up to 2021. The policy requires proposals to contribute to local housing needs, which includes affordable housing thresholds. These thresholds are quite low in relation to those of the RSS of 30%, as targets for small sites in Southend require only 8% of the total yield (2 homes on a site of 24), this is also below the suggested threshold of draft Planning Policy Statement 3. Given the need for affordable housing in the Southend area it is not clear why this level of affordable provision has been chosen, and may have negative impacts against housing sustainable development objectives. The way the proportions are expressed also appears punitive to the smaller sites, with a site of 10 homes required to deliver as many affordable homes as one of 24 homes.
- 9.26 It is suggested by the sustainability appraisal that the proportion of affordable homes be increased on all sites, and particularly on smaller sites. The policy is also not very clearly expressed, as although it appears from the note in brackets (criteria 3) that sites under 10 homes would be required to consider the need for affordable housing, no details are given on the proportion. This raises the possibility that it may be suitable for the policy to clarify its approach and make adjustments to the site size ranges given in the policy (criteria 3a-c), including a requirement for sites under 10 homes. The ranges of site size could be shifted down, so sites requiring the lowest proportion of affordable homes have a new top threshold as low as 15, and sites delivering more than this fall into the next category. Lowering the threshold for affordable home provision is particularly important as a large proportion of new homes in Southend are to be delivered as intensification. Many of these sites will be small and therefore there is the need to secure affordable housing provision from these sites, beyond a commuted sum.
- 9.27 The policy also specifies the provision of not less than 80% of residential development on previously developed land, which supports national policy, and should help achieve the efficient use of land. However, care will have to be taken to respect any ecological significance of these sites that may have become established since the site became redundant.
- 9.28 The final paragraph of the policy deals with the need to monitor implementation of the housing, employment and transport policies to ensure that they are coming forward as expected. If it is found that levels of housing, employment and infrastructure are not being delivered as expected then the phased release of housing land will be

altered to avoid unsustainable implications. This is welcomed in terms of the SA as it seeks an approach where levels of provision are matched to support more self-containment of jobs, homes and services within the Borough. Without this approach to monitoring and review it may mean that development levels of homes and jobs becomes mismatched which is likely to lead to unsustainable travel patterns with increased commuting to meet employment needs, and associated problems of access to jobs and services for those without a car.

9.29 The approach to distribution of development is covered in the comments made on Policy KP1 that sets the strategic spatial approach to development, paragraphs 9.7-9.11. The chosen approach of focusing on the town centre, Shoeburyness and seafront areas should be most beneficial in terms of achieving more sustainable travel patters, subject to implementation of new transport infrastructure and biodiversity protection. The alternative approach, which has been rejected, was to put more development in the urban fringe areas and although this may have had some benefit on enhancing these areas it is less likely that development in these locations would lead to sustainable travel patterns, and more compact urban form. However, the preferred approach may have some impact in relation to the need for improved flood defences, with possible biodiversity impact.

Monitoring and review

- 9.30 This section of the Core Strategy sets out the approach that will be taken to monitoring the impact of the LDF. As with comments in paragraph 9.28 monitoring systems put in place will seek to ensure that development levels of homes, jobs and infrastructure are matched to ensure that Southend continues to grow in a sustainable way maintaining and enhancing levels of self-containment.
- 9.31 It may also be suitable to refer in this section of the LDF to the relationship between the SA and LDF monitoring. Monitoring for the SA is covered in section 13 of this SA Report.

10 Determining the need for 'appropriate assessment'

Introduction

10.1 The Habitats Directive (92/43/EEC) requires 'appropriate assessment' of plans and projects that are likely to have a significant impact on Natura 2000 sites (Special Protection Areas and Special Areas of Conservation). This Directive was passed into UK law under The Conservation (Natural Habitats, &c.) Regulations 1994, which proposed that appropriate assessment did not apply to land use plans. However, a recent judgement from the European Court of Justice found that this interpretation was incorrect and failed to properly transpose the European provisions into UK law, and that appropriate assessment does apply to land use plans. Therefore an amendment to the 1994 Regulations is being prepared and appropriate assessment will be required of all land use plans where a significant effect on a Natura 2000 site is likely.

Natura 2000 sites in and adjoining Southend on Sea Borough

- 10.2 The need to consider appropriate assessment therefore applies to the Southend Core Strategy. There are three sites designated as Natura 2000 sites in and adjacent to the Borough, these are the 'Benfleet and Southend Marshes' and 'Foulness' Special Protection Areas (SPA) and the 'Essex Estuaries' Special Area of Conservation (SAC), that coincides with the Foulness SPA at Southend.
- 10.3 The completed 'Standards Data Forms' for the three sites give details of the reasons for designation and the habitat and species characteristics of each site. These are:
 - Benfleet and Southend Marshes SPA, lies to the south of the main urban area
 of Southend on Sea from Shoeburyness to Benfleet Creek by Canvey Island.
 The area is characterised by mud flats, sand flats and estuary characteristics.
 The site is important for the following bird species Brent Goose, Dunlin, Knot,
 Ringed and Grey Plovers. Over winter the site can support over 34,000
 waterfowl.
 - Foulness Marshes SPA, lies to the east of the Benfleet and Southend Marshes
 and along the coastline to Foulness Island and beyond. This is also an area of
 mud flats and sand flats. In the breeding season the marshes support, amongst
 others, Avocet, Little, Common and Sandwich Terns, and Ringed Plover. Many
 bird species also over winter at the sites including over 10% of the UK
 population of Dunlin, and over 14% of the UK population of Bar-Tailed Godwit.
 Other species include Northern Harrier, Oystercatcher and Brent Goose.
 - The Essex Estuary SAC extends from the start of the Foulness Marshes up the Essex Coast. It is predominantly estuarine habitats with mud and sandflats and is identified as being one of the most important representations of this type of area in the UK. The SAC is also an important UK representation of a variety of types of saltmarsh habitat including Spartina grassland and glasswort species.

Determining the need for appropriate assessment

10.4 Guidance on appropriate assessments states that plans should be 'screened' to determine whether appropriate assessment would be necessary. This is undertaken

- by assessing whether the LDF is likely to have significant effects on a Natura 2000 site through the policies and proposals contained within it.
- 10.5 This screening determination should take into account the qualities of the Natura 2000 sites in the area, as well as the vulnerabilities. Identifying the reasons for designation can help determine the extent to which it would be affected by the impacts of development. The 'vulnerability' section on the Standard Data Forms give an indication of each sites vulnerability and sensitivity to change, including examples of the type of activity that may harm the sites. Using this as a source it is therefore possible to identify which LDF related activities may have an impact, these are:
 - Benfleet and Southend Marshes SPA, are vulnerable to changes in the physical environment and changes in the natural coastal process. Therefore 'coastal squeeze' affects the sites, as this is where built development on the shore and seafront prevent the natural sediment movements of the habitat through barriers of built development, this could include sea defences and also is a characteristic of sea level rise. In addition, although recreation itself does not harm the habitat, infrastructure to support visitor attractions is leading to piecemeal development which may also contribute to change in the habitat.
 - The Foulness Marshes SPA Data Form does not identify any vulnerabilities that can be directly related to the implementation of a development plan, however the Essex Estuaries SAC, which covers the same area at Southend, does have some identified vulnerabilities. These include 'coastal squeeze' as for the Benfleet and Southend Marshes, and this is particularly from sea defences preventing the landward migration of the estuary habitats inland as a result of sea-level rise.
- 10.11 Matters put forward by the submission version of the Core Strategy DPD that have the greatest potential to impact the Natura 2000 sites are:
 - the need to accommodate 6000 new homes and 13,000 new jobs in the Borough between 2001 and 2021
 - development focused in areas that may require new flood defences to reduce the risk of sea flooding, particularly at Shoeburyness
 - new development in the seafront area, which although not on the foreshore may require new infrastructure that may have an impact on the nature conservation sites
 - the greater use of the Thames for sustainable transport, including access to Leigh Port and the provision of hovercraft services, which may need new built infrastructure with potential to impact on the Benfleet and Southend Marshes SPA
- 10.12 The impacts of the types of development listed in 10.11 are most likely to be from new built development impacting on the natural coastal processes and sediment movement at these three Natura 2000 sites, coupled with sea level rise causing coastal squeeze. Also for some of these developments, particularly related to greater use of the foreshore there may be impacts of direct disturbance during the construction and operation of the development. It may also be suitable to consider in assessing any future impacts on these sites operations proceeding outside the

Borough, such as new port construction and dredging, that may have an impact on the management of the Natura 2000 sites in and adjacent to Southend. However at this stage there is very little detail on how development of any of these matters will proceed, due to the strategic nature of the Core Strategy DPD.

10.13 Therefore the screening concludes that there is the possibility of some of the proposals in the Proposed Strategy having a negative effect on existing and proposed Natura 2000 sites, particularly the level of development and road building, whilst others will help in the protection of these sites. However at this stage, before any detailed proposals or policies have been drawn up, identifying these impacts is not possible.

Determination

10.14 At this stage it is determined that an appropriate assessment is not necessary as the Core Strategy, as it stands, is too high level a document to be able to determine significance of impacts on Natura 2000 sites. However, analysis of proposed policy has revealed some instances where impacts may be possible. These potential impacts should be monitored through emerging policy and proposed allocations to ensure that appropriate assessment is carried out if required at a later stage of the LDF, and the preparation of site specific development plan documents particularly in relation to development at Shoeburyness and other proposals in a coastal location.

11 Findings of the SA

- 11.1 This section of the SA Report considers the key findings of the appraisal process. It does not report on the minor recommendations and amendments that have been identified in section 9 and Appendix 2 of the report, and seeks to concentrate only on those matters of greatest importance.
- 11.2 The task of the Core Strategy DPD is to set the LDF underway by interpreting the national and regional policy context to the particular circumstances of Southend on Sea, and by establishing a framework and a set of tasks to be carried through in other parts of the LDF. This appraisal considers that what the Core Strategy DPD does in particular is to take on the role of setting out a strategy for making a positive contribution to desired change in the Borough, and in a way that will enable many partners to be part of carrying the strategy forward. This inclusiveness is an intended characteristic of spatial planning.
- 11.3 One of the ways in which the Core Strategy DPD does this is by setting out a set of objectives that are particular to the future of the Borough and specific in quantifying the provision made for development for instance. However, it is the recommendation of this Sustainability Report that an additional objective be developed in relation to climate change and related effects, such as flood risk. The objective could read, 'Secure effective and efficient sustainable development, to minimise the impact of climate change, such as promoting sustainable construction and minimising flood risk.'
- 11.4 The key policies in section 2 deal with the way that the development should be distributed according to the main areas of change in the Borough, and set out the principles that should be met by all development taking place, and these generally accord with the principles of sustainable development. The third policy in this section describes the role of the planning system in delivering the changes sought by the Core Strategy and the material that the Council is going to use under the new planning arrangements.
- 11.5 The content and level of detail of these policies is appropriate for the Core Strategy. The emphasis is on consolidation of the overall form of the Borough with reinforcement of the different functional areas, and on the reuse of land and improvement of the physical form whilst achieving economic and social benefits. The policies set out how the proposed development is intended to assist in bringing about change in these locations, and what is sought appears sound from the view point of this appraisal.
- 11.6 The appraisal of policy KP1, and subsequent policies on the distribution of development in CP1 and CP8, identifies the potential for a conflict of the approach and the protection of biodiversity. This is the direction of a significant proportion of future development to the Shoeburyness area, and that this may require new or enhanced flood defence. Therefore, not only does this mean that there is a possible increase in flood risk to future residents, but depending on the location and type of flood defence improvements this may result in 'coastal squeeze' which could affect the nature conservation value of European designated sites for biodiversity importance.
- 11.7 This issue of 'coastal squeeze', whereby the natural coastal processes are prevented by new 'hard' development, is a possible implication of any new development in

currently undeveloped sections of the seashore. Therefore the SA identifies that this issue needs to be carefully considered in all policies of the LDF to ensure that new development in these locations, including flood defences, marinas, landing facilities and roads, does not cause harm to these habitats directly or indirectly. This is identified also through the screening for appropriate assessment.

- 11.8 At this stage there are few specifics on the exact locations of new development, and in the case of policy CP1 there is also lack of any detail of employment land requirements. This makes identification of likely sustainability impacts of the approach advocated largely unpredictable. The employment needs are expressed as job numbers and this gives very little indication of the land requirements, particularly as differing employment sectors have very large differences in land requirements. There is also a lack of detail on the capacity of existing employment sites, and the extent to which job growth can be accommodated in existing premises. Therefore at this stage in appraisal the true impact of employment on factors such as biodiversity, landscape and efficient use of land is not possible and will need to be identified in the SA of other parts of the LDF.
- 11.9 Policy CP3: the increased road capacity is likely to be beneficial to the economy of Southend, but is also likely to lead to increased car use with negative impacts in relation to climate change and air pollution.
- 11.10 Policy CP4 covers matters relating to the protection of the environment and natural resources. The SA identifies that the approach in the Core Strategy could be improved to deliver greater sustainability in new development, through a more comprehensive approach to securing this type of development, such as requiring that new development meets standards set by existing assessment methodologies or benchmarking schemes like those prepared by the Buildings Research Establishment. The policy may also consider setting targets for a proportion of energy requirements in large new development sites to be provided from renewable resources, in line with current good practice approaches.
- 11.11 The baseline characterisation for the SA identified that there is a scarcity of areas of biodiversity importance identified in the built-up area of the Borough. Therefore any existing areas of nature conservation importance should be protected and enhanced where possible. For this reason it may be suitable for relevant policies of the Core Strategy to highlight the importance of identifying the nature conservation importance of sites prior to development, and to seek to protect the asset, not forgetting that this could be on derelict or redundant previously developed land that has experienced wildlife regeneration.
- 11.12 The SA also identifies that the policy on affordable housing may lead to the underprovision of affordable housing in the LDF area over the plan period. This is particularly in relation to the low proportion of affordable homes required on sites up to 24 dwellings. This is of particular significance in Southend due to the character of the area that means much new development will come forward as small scale piecemeal development, and if affordable homes are not required of these sites then overall there could be problems with provision.

- 11.13 Overall therefore, from the point of view of this sustainability appraisal, the Core Strategy DPD has four strengths:
 - it seeks to be positive in providing for the delivery of change to meet the needs of the Borough in the context of what is sought from the regional plan
 - it sets out a framework for the other parts of the LDF to take forward
 - it recognises the role that development can have in bringing about the type of change needed and seeks the best from development, including monitoring and phasing to ensure self-containment
 - it promotes a spatial strategy that makes efficient use of the land resource whilst avoiding high environmental impact, and which is intended to bring about regeneration and should lead to patterns of development and activity that are more sustainable.

12 Identification of effects and mitigation

- 12.1 The SEA Directive requires that consideration is given to how any significant impacts identified during the SA process could be mitigated against. For any LDF part of reducing any likely impacts that have been identified through the appraisal will be by putting in place suitable policies, and criteria, in the Core Strategy, and other DPDs, to mitigate against them, as well as choosing suitable allocated development sites, where it has been found development could be accommodated to minimise any negative sustainability impacts. Ensuring there are appropriate contributions from development will also be part of the way in which some impacts may be mitigated, although financial compensation for harm may not always be suitable or achievable.
- 12.2 However, at this stage it is not possible, or appropriate, to detail how effects can be mitigated for, as the strategic nature of the decisions being made do not allow for individual impacts in need of mitigation to be identified. The policy appraisal in Appendix 2 gives an indication for each policy of the likely significance of the impacts identified. As can be seen in this appendix there is little that can be determined from the Core Strategy that could properly be identified as having a significant negative effect.
- Likely effects identified include the impacts of flooding and the construction of new flood defences, which have the potential for adverse impacts on the environment and nature conservation. There are also potential impacts relating to new transport infrastructure, and in particular road building, with the potential for negative impacts relating to air quality and national objectives of reducing emissions of climate change related gases. This type of impact is partially mitigated against in the Core Strategy through measures to be implemented to reduce demand, including new and improved public transport routes, and improving rail accessibility. The location of new development will also be essential in reducing demand for travel, including a better balance of homes and jobs to reduce commuting and create a more self-contained area. Other direct impacts of road building will have to be mitigated against through appropriate protection policies, and the preparation of Environmental Impact Statements to identify and mitigate against the site specific impacts of road proposals.
- 12.4 There are likely to be some impacts on sustainability through the level of development proposed in the Borough, particularly in terms of housing and employment. Impacts of this type of development can be best mitigated against through appropriately sited allocations in the site specific Development Plan Documents, and relevant policies to protect natural resources and ensure new buildings are built to sustainable construction principles. Although the focus on previously developed land should limit the likelihood of impacts, to mitigate possible impacts on regenerated biodiversity on these sites appropriate policy should be in place. Policies ensuring appropriate infrastructure, particularly in terms of water use and sewerage facilities are also essential to ensure this level of development does not harm water quality.
- 12.5 The mitigation of many potential effects of the Core Strategy is therefore likely to occur through ensuring the delivery of the growth levels through appropriate allocated sites, including the urban extensions. Policies developed at a national, regional, and local level will also play a key role in reducing the impact on development, and increasing the sustainability benefits. This will be in terms of reducing impact on the

natural environment, making more efficient use of natural resources and securing social benefits in new development.

13 Monitoring

- 13.1 The SA guidance from ODPM on the Sustainability Appraisal of Regional Spatial Strategies and Local Development Frameworks, on which this SA process has been partly based, highlights the need for monitoring the implementation of the LDF through its component DPDs, with the sustainability framework representing a good starting point for development of targets and indicators for monitoring. It will be important for the LDF and the Core Strategy DPD to recognise that monitoring for the SA should be part of the wider monitoring process for the LDF, using a subset of the overall monitoring objectives. The SEA Regulations specifically state that monitoring for SEA need not be for the express purpose of SEA and can be incorporated into other monitoring arrangements (Regulation 17(2)), and therefore it is appropriate to combine with the Annual Monitoring Report for the LDF.
- 13.2 The specific requirements of the SEA Regulations on monitoring are to: "monitor the significant environmental effects of the implementation...with the purpose of identifying unforeseen adverse effects at an early stage" (Regulation 17(1))
- 13.3 Monitoring for the SA aims to identify the effects (environmental, economic and social) of the plan against the baseline and those predicted so as to identity any unforeseen adverse effects and to enable remedial action to be taken, whereas the LDF monitoring programme has been designed to monitor the effectiveness of policies and delivery of proposals in the plan.
- 13.4 The inference is that monitoring should only take place after the LDF has been adopted and implementation begun, therefore monitoring of the spatial strategy alone, in terms of sustainability implications will be difficult. The Core Strategy sets out a list of indicators and targets for monitoring LDF implementation. For these indicators and targets to be useful it must be ensured that they are fit for purpose. Indicators must be directly related to the policy or objective of the LDF that is being monitored, so that changes in the indicators can be directly attributed to the implementation of the LDF, and are not more influenced by other processes beyond the control of the development plan. It is also important that there is an appropriate mechanism in place to make changes to the LDF if it is found that adverse sustainability effects are arising, and data shows that implementation is causing undesirable change. This is vital to ensure monitoring is not only a data collection exercise, but also a real tool for effecting a better LDF. For this reason it may be most suitable to have a core set of indicators where meeting targets (or at least moving towards targets) is critical. The Core Strategy achieves this by including, for each Core Policy (Policies CP1- CP9), a monitoring and implementation framework with indicators, targets/directions and delivery body identification. In addition, the Core Strategy identifies the need for careful monitoring of housing, employment and infrastructure implementation, and the balance between them, to ensure targets are being met. Where levels of development are not coming forward as expected phased release of housing land will be reviewed to ensure that housing growth levels are matching economic and infrastructure growth and ensure development proceeds at matched sustainable levels.

Appendix 1: Responses to the SA Report to accompany the Public Participation version of the Southend on Sea Borough Council Core Strategy DPD

The public were consulted on a the Sustainability Appraisal Report of the public participation version of the Core Strategy at the same time as that version of the Core Strategy. Consultation responses were received from 20 respondents, as shown below. A questionnaire accompanying the consultation posed the following questions on the SA Report:

- SA1a: Does the Draft Sustainability Appraisal report deal with the right tissues in 'testing' the Core Strategy?
- SA1b: In particular, do you think that the Sustainability Framework set out as Appendix 1 to the SA report adequately and correctly identifies the various concerns that need to be considered in the appraisal, and the 'direction of change' that is desirable to achieve?
- SA2: Do you think that the Draft Sustainability Appraisal report is generally correct in its interpretation of the likely effects of implementing the Core Strategy as set out in the Public Participation Draft document?

This table show the comments received, and the response column shows how the SA has taken these comments into account. These responses reflect the views of Baker Associates who have undertaken the SA, and do not reflect any formal response of Southend-on-Sea Borough Council.

Respondent	SA	SA	SA	Comment	Response
-	1a	1b	2		-
Rochford Parish Council CS/26/004	-	-	-	SA 3: No mention is made of provision for waste disposal i.e. refuse and commercial waste no mention of sewage disposal provision	Policies KP2 and CP6 cover these matters. Infrastructure requirements are also covered by the Core Strategy, although the SA also highlights the need for these considerations as part of delivering development – Appendix 2 CP6.
Rev RH Williams CS/26/009	N	N	Υ	Complacent about the possible impact on the foreshore, assuming proposed development will not affect the foreshore and that marinas are not a real option. Currently foreshore developments at Westcliff Casino area is a hot topic, with marina consideration as part of proposals for the seafront. The appraisal also fails to adequately address social sustainability. Particular concern is that the Casino could have a massive social sustainability impact, and nothing mentions these or provides any means of monitoring them. Need some serious, unbiased appraisal of the likely social impact of Casino	The Core Strategy makes clear the difference between the foreshore and the Seafront. The SA identifies the need to protected the foreshore, particularly through consideration of the need for 'appropriate assessment' – section 10.

				resort status for Southend.	
CPRE Essex CS/26/022	Υ	Υ	Y	We support the suggestion of an additional objective as set out in para 9.2 of the SA, that the Core Strategy should contain an objective in relation to climate change and flooding.	Climate change was added to the objectives, and the SA still highlights the need for an objective relating to flood.
Countryside Agency CS/26/027	Υ	Υ	Υ	A helpful commentary on the draft Core Strategy. We hope the outstanding issues it has raised will be addressed as the Strategy is developed.	The SA of the Core Strategy is an iterative process, a background paper has been produced to indicate the influence of the SA on the Core Strategy.
English Nature CS/26/030	Y	Y	N	Question SA1a: The draft sustainability appraisal report generally deals with the right issues in 'testing' the core strategy at a generic level. English Nature has focused on providing a consultation response to the Core Strategy, based on the information as presented in this document. As a consequence, we have highlighted all issues for further consideration within our response to the Core Strategy. In practice, we recognise these may have either been previously overlooked by your council or actually regarded as implicit within Council thinking (eg. geographical constraint of development within 'seafront' area). Question SA2: No, there are a number of specific instances within the appraisal where English Nature questions the conclusions of the assessment. These are dealt with sequentially below:	Noted.
	Perf spec main coas futur Dire with	orma cifical ntena stal so re ma ction in the	ly Q.1 nce a queez nageo of cha		The issue of coastal squeeze has now been added to the text of the SA, including in the screening for 'appropriate assessment', and is mentioned as a potential key impact of the proposed Core Strategy.

KP1- Option 2 Performance: The issues raised in our consultation response to Question 1 and specifically Q.1(b) are relevant. Direction of change: English Nature agrees with the uncertainty at this current time and believes that targeted ecological survey is necessary to inform the spatial planning process. Large-scale developments have the potential to be consistent with sustainability principles and contribute to biodiversity objectives, subject to an informed and innovative approach to planning and project development.	Noted. KP1 Option 2 is no longer a consideration in the submission version Core Strategy.
KP1- Option 3 Performance: The issues raised in our consultation response to Question 1 and specifically Q.1(c) are relevant. Direction of change: English Nature agrees with the uncertainty at this current time and believes that targeted ecological survey is necessary to inform the spatial planning process.	Noted. KP1 Option 3 is no longer a consideration in the submission version Core Strategy.
Performance: The issues raised in our consultation response to Question 2 are relevant. English Nature agrees with the appraisal and the intentions to substitute with 'result in no net loss of environmental assets'. An alternative amendment would be to change the wording of this objective to 'conserve and enhance' consistent with our consultation response to question 2. Direction of change: English Nature agrees with the current assessment, but believes that developments have the potential to contribute to biodiversity and open space objectives, subject to an informed and innovative approach to planning and project development, that incorporates sustainable construction techniques (eg. sustainable drainage systems, eco-landscaping, greening development etc.). Consequently, the direction and context provided by suitable supplementary planning guidelines has the capacity to promote economic, social and environmental progress through encouraging creative design and implementation. In pursuit of these objectives, English Nature would welcome consultation during the development of relevant supplementary guidelines.	The wording has been altered in the submission version Core Strategy, this is reflected in the comments of the SA. Enhancing biodiversity in new development is referred to in the appraisal of Policy CP4, and in related paragraphs of the SA Report.

Performance: The issues raised in our consultation response to Question 3 are relevant. Direction of change: If the spatial regeneration strategy promotes development within the foreshore then we regard the Direction of change to be X – 'conflict between the approach and the sustainability concern'. If not, then subject to amendments suggested within our proposed consultation response to Question 3, English Nature agrees with the proposed direction of change, for reasons stated in our response to paragraph KP2 above.	The submission version of the Core Strategy has better defined the distinction between foreshore and Seafront. The SA does identify that the foreshore should be protected from development.
CP1 – Option 1 Performance: The issues raised in our consultation response to Question 4, specifically Q.4a, are relevant. Direction of change: If the spatial regeneration strategy promotes development within the foreshore then we regard the Direction of change for biodiversity to be X – 'conflict between the approach and the sustainability concern'. If the spatial regeneration strategy geographically restricts development to the area landward of the seafront flood defence wall, then English Nature is happy to agree with the current assessment for biodiversity, but believes that developments have the potential to contribute to biodiversity and also open space objectives, subject to an informed and innovative approach to planning and project development, that incorporates sustainable construction techniques (eg. sustainable drainage systems, eco-landscaping, greening development etc.). English Nature questions whether the assessment for Direction of change for Air Quality has adequately accounted for the potential growth aspirations of London Southend Airport. To ensure that airport growth does not adversely impact on Air Quality targets we believe that current policy wording could be enhanced consistent with our consultation response to Question 4a.	The submission version of the Core Strategy has better defined the distinction between foreshore and Seafront. The SA does identify that the foreshore should be protected from development, and that biodiversity needs to be consideration of all new development. Matters related to the impact of the airport are covered in comments on Policy CP3 where it has been added to the policy.
CP1 - Option 2 Performance & Direction of change: The issues raised in our consultation response to Question 4, specifically Q.4b, are relevant.	Noted. CP1 Option 2 is no longer a consideration in the submission version Core Strategy.
CP1 – Option 3 Performance & Direction of change: The issues raised in our consultation response to Question 4, specifically Q.4c, are relevant.	Noted. CP1 Option 3 is no longer a consideration in the submission version Core Strategy.
CP2 Performance: The issues raised in our consultation response to Question 5, specifically Q.5a, are relevant. Direction of change: English Nature disagrees with the assessment that there is	This policy is unlikely to have any direct impact on biodiversity. The consideration of biodiversity remains as consideration of all new development in the Borough, as

no relationship between the policy and biodiversity. English Nature believes that there may be uncertainty at this current time about the nature conservation interest of these town centres, but as indicated within the biodiversity section of the sustainability appraisal urban areas can support significant wildlife interest. English Nature believes the assessment should be scored (?) – 'likely relationship but cannot be identified at this level'. To address this, we believe it is appropriate to include appropriate environmental considerations within the criteria-based decision making process to inform the spatial planning process. CP3 Performance: The issues raised in our consultation response to Question 6, specifically Q.6a, are relevant. Direction of change: English Nature disagrees with the assessment that there is no relationship between the policy and biodiversity. As identified within our response to question 6a, the proposed improvements to transport and accessibility have the capacity to adversely impact on the nature conservation interest of the Borough. Without due consideration of these issues within the planning process the Direction of change is likely to be X – 'conflict between the approach and the sustainability concern'. Consistent with the aspirations of SEA and sustainable development principles it would make most sense to make changes to the current policy and supporting text to address the issues raised in our consultation response to Question 6a. We have suggested wording that may be appropriate. English Nature agrees with the assessment for Direction of change for Air Quality and refers your council to our consultation response to Question 6a with respect to London Southend Airport. As a generic point, the value of wild open space to act as pollution filters for air & water, and functional buffer areas should not be overlooked in spatial planning.	The SA has been altered to show there is likely to be an ambiguous impact, rather than no relationship. The policy is not specific enough to indicate they severity of the impact on biodiversity. The issue of potential impact of more use of the Thames for transport is highlighted in the SA Report, including in the screening decision for 'appropriate assessment'.
CP4 Performance: The issues raised in our consultation response to Question 7, specifically Q.7a, are relevant. Direction of change: English Nature generally agrees with the proposed Direction	Noted.
of change, but refers your council to our consultation response to Question 7a. CP5 Performance: The issues raised in our consultation response to Question 8 are relevant. Direction of change: English Nature agrees with the proposed Direction of change, but refers your council to our consultation response to Question 8.	Noted.

Performance: The issues raised in our consultation response to Question 9 are relevant. Direction of change: English Nature disagrees with the assessment that there is no relationship between this policy and biodiversity for the reasons stated within our consultation response to Question 9. Opportunities exist for new and existing recreational facilities to positively contribute to biodiversity and the sustainability concern, consistent with the provisions of PPG17.	The SA recognises that there is a relationship between open space and biodiversity and this is covered in comments on Policy CP7 of in the SA Report.
Performance: The issues raised in our consultation response to Question 10 are relevant.	The SA comments that this policy could be improved to secure biodiversity benefits in new open space, and ensure that it is a consideration in new and existing provision.
CP8 – Option 1 Performance: The issues raised in our consultation response to Question 11, specifically Q.11a, are relevant. Direction of change: If the spatial regeneration strategy promotes development within the foreshore then we regard the Direction of change for biodiversity to be X – 'conflict between the approach and the sustainability concern'. If the spatial regeneration strategy geographically restricts development to the area landward of the seafront flood defence wall, then English Nature believes that the most	The SA Report and appraisal shown the relevant policy appraisal matrix indicates the likely impact the policy could have on biodiversity, particularly due to 'coastal squeeze' issues. Better distinction has been made between the Seafront and foreshore in the submission version Core Strategy, and indicates there are unlikely to be impacts on biodiversity.
CP8 – Option 2 Performance & Direction of change: The issues raised in our consultation	Noted. CP2 Option 2 is no longer a consideration in the submission version Core Strategy.
Performance & Direction of change: The issues raised in our consultation	Noted. CP2 Option 3 is no longer a consideration in the submission version Core Strategy.
Sustainability Appraisal Within the Sustainability appraisal (which seeks to meet the requirements of SEA directive) English Nature notes the following. 'The expectation will be for the SEA to show that in making the development	Noted.

	of the with ben enviolent	ne de the efit. ironn bas	eveloruse of The Standard	ne LDF, the Council has identified the environmental consequences of the sites and identified whether the provision could be made of other sites with less environmental harm or greater environmental SEA Directive requires the LDF-making body to report on the all implications of the LDF however, not to make decisions for the those environmental implications' A directive does not 'make decisions for the LDF based on the	
	env	ironn	nenta	Il implications', it is important that your council uses the up-to-date	
				mation from the SEA to develop plans that contribute to sustainable	
				objectives, mindful of the national guidance provided within PPS9,	
Save Our Seashore	PPS	517 a	and P	PG3 etc	Additional material has been added at
CS/26/045	ı	1	-	This document is vital to a consideration of the Core Strategy yet its importance has not be publicised and we have found it difficult to obtain a copy. The environmental aspect of the Council's proposals is obviously of major importance to us. It is unclear what the responses of the consultation bodies were, as they are simply described as generic. The report recognises that much background information is lacking.	paragraph 4.5, and this table shows how consultation responses received at the previous consultation stage will be taken into account.
Essex Wildlife Trust CS/26/053	Υ	Υ	N	Made some suggested changes on our differing interpretation of the links between biodiversity and the individual Policies. Biodiversity should be given higher status in the LDF, ranking alongside economic and social issues.	The importance of protection of biodiversity is referred to throughout the report. Section 10 on screening for 'appropriate assessment' concentrates solely on biodiversity related issues.
				ost important targets is to ensure that the baseline data is robust	Noted.
			o-dat		
	the defi	Core nitior	Stra of th	rally satisfied that the SA deals with the correct issues in 'testing' tegy. Our main concern with the Core Strategy is the lack of ne 'seafront' in relation to Option 1, and potential impacts on designated nature conservation interests.	The submission version of the Core Strategy clarifies the definition of Seafront.
	We	broa	dly a	gree the sustainability framework achieves its goals.	Noted.
				T agrees on a number of issues, there are a number of comments	
				s set out in Appendix 1. 1 (Policy KP1) there is likely to be a negative direction of change	Coastal squazzo is highlighted as an issue
				y if development of the 'seafront' impacts adversely on the	Coastal squeeze is highlighted as an issue, and the appraisal has been altered to
				designated foreshore. Coastal squeeze is also likely to be a	reflect possible negative impacts.
				With therefore disagree with the '?' in our view it should be an 'x'.	
				2 (Policy KP1) we agree that there is likely to be an unknown	Noted. KP1 Option 2 is no longer a

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impact at present. A full and timely ecological survey should be conducted to	consideration in the submission version
inform the spatial planning process. We agree with the '?'.	Core Strategy.
Under Option 3 (Policy KP1) we agree that there is likely to be an unknown	Noted. KP1 Option 2 is no longer a
impact at present. A full and timely ecological survey should be conducted to	consideration in the submission version
inform the spatial planning process. We agree with the '?'.	Core Strategy.
Under policy KP2, agree with the appraisal and intentions of substitute with	The wording has been altered in the
'result in no net loss of environmental assets'. We also support the opinion that	submission version Core Strategy, this is
the phrase 'respect the natural environment' is fairly weak. Suggested a change	reflected in the comments of the SA.
of wording as an alternative that the Council may wish to consider. With	Enhancing biodiversity in new development
stronger commitment to biodiversity, the link with KP2 has the potential to	is referred to in the appraisal of Policy CP4,
provide a positive outcome for wildlife.	and in related paragraphs of the SA Report.
Under policy KP3 we reiterate our concerns about the undefined 'foreshore'.	The policy appraisal against biodiversity
Until this matter is satisfactorily resolved we believe the direction of change	has been altered to a '?' to reflect the
should be 'x' for biodiversity. Better to say: "Biodiversity enhancement could	ambiguous nature policy implementation.
should form part of general environmental enhancements to be sought in	
planning obligations.'	
Under policy CP1, we reiterate our concerns about the undefined 'foreshore'.	The submission version of the Core
Until this matter is satisfactorily resolved we believe the direction of change	Strategy has better defined the distinction
should be 'x' for biodiversity.	between foreshore and Seafront. The SA
	does identify that the foreshore should be
	protected from development, and that
	biodiversity needs to be consideration of all
	new development.
Under policy CP2, since urban areas can support significant wildlife interest	This policy is unlikely to have any direct
there is clearly a link between this policy and biodiversity. We therefore disagree	impact on biodiversity. The consideration
with the '-', and it should be '?' pending ecological investigation.	of biodiversity remains as consideration of
	all new development in the Borough, as
	noted in the SA Report.
Under Policy CP3, there are identified potential conflicts between biodiversity	The SA has been altered to show there is
and changes/improvements to transport links (e.g. hovercraft service on the	likely to be an ambiguous impact, rather
Thames, expansion to London Southend Airport). There are also opportunities	than no relationship. The issue of potential
in the LTP to promote multi-functional Greenways, which could have a positive	impact of more use of the Thames for
effect upon biodiversity.	transport is highlighted in the SA Report,
	including in the screening decision for
	'appropriate assessment'.
Under Policy CP4, we are in broad agreement that there is a strong and positive	Noted.
link with biodiversity. We agree with the DOC indicated.	
Under Policy CP5, clearly there is a beneficial link between sustainable soil and	Noted.

mineral resources and biodiversity. We agree with the DOC indicated.	
Under Policy CP6, we disagree with the statement that there is no link between	The SA does not conclude that there is no
biodiversity and the health and well being of the community at large. There are	link between health and biodiversity. Open
very positive health benefits for the population from access to quality	space is better covered in Policy CP7.
greenspace. In our view the DOC should be changed to '●'.	
Under Policy CP7, we disagree with the assertion that there is no link to the	The SA comments that this policy could be
policy. Dependant upon the type of Open Space in question, there could be a	improved to secure biodiversity benefits in
beneficial spin-off for biodiversity where POS is protected (particularly where it	new open space, and ensure that it is a
links habitats). In our view it should be changed to a '•'.	consideration in new and existing provision.
Under Policy CP8, there are a number of scenarios. If the foreshore is	The Seafront has been better defined in the
potentially adversely affected by housing development, then we would assert	submission version Core Strategy, and
that the relationship between biodiversity and the Policy be recorded as 'X'. if,	biodiversity is not likely to be impacted on
on he other hand, the foreshore remains unaffected, the Policy may be assessed	here by housing development.
as '?'.	
SA 3: We welcome the inclusion of NGOs, such as environmental groups (of	Noted.
which EWT is one), into those bodies who may be consulted (SA 4.6). As an	
interested party we wish to continue to be involved with evolving LDF process.	
The strategic or spatially based biodiversity baseline information correctly	Noted. The SA Report does highlight the
identifies statutory nature conservation sites, LNRs and local BAP species and	need to consider biodiversity at every site.
habitats (SA 6.10 onwards). However, we consider it a major omission not to	
include (county) Wildlife Sites in the baseline assessment. This information is	
already lodged with the Council. Using the full ecological baseline data it should	
be possible for SoSBC to identify potential problems/landuse conflicts and	
opportunities to provide improved green infrastructure. Should you need further	
information please contact us.	
Typographical errors: 6.11 of SA Report it is potentially misleading to refer to	This has been corrected.
Benfleet and Southend Marshes as a 'grassland and woodland', as it is mainly	
mudflat and saltmarsh in Southend-on-Sea.	

In addition positive responses to all three questions were received from:

Ethnic Minority Forum (CS/26/007) Avro Viking (CS/26/010) Greenkeeper (CS/26/014) Arriva Southern Counties (CS/26/016) M.J. Power (CS/26/017) Onerailway (CS/26/018) Mr and Mrs Peters (CS/26/019) Rayleigh Town Council (CS/26/025) Anonymous (CS/26/026) EERA (CS/26/029) (response to question 1a only) Bidwells (CS/26/047) Peacock and Smith (CA/26/055) Renaissance Southend (CS/26/057)

Appendix 2 – Sustainability Appraisal Matrices

Key to appraisal symbols

These matrices show an appraisal of the policies of the Core Strategy DPD against the full set of sustainability objectives developed for the SA process, as shown in the SA Report, Section 7.

The appraisal of policies shows a simple symbol summary of the each policy's performance against the sustainability objectives. Further details of the process can be found in paragraphs 8.10 to 8.12 of the main report.

The supplication of the su	
Likely to contribute to the achievement of greater sustainability according to the identified objective	•
Likely to detract from the achievement of greater sustainability according to the identified objective	x
Likely effect but too unpredictable to specify, or multiple impacts potentially both positive and negative	?
No identifiable relationship between the topic covered in the policy and the sustainability concern	_

Spatial Strategy Policy KP1 – Spatial Strategy

The spatial strategy concentrates all development within or adjacent to existing urban areas including the town centre, the Seafront, Shoeburyness and identified Priority Urban Areas. It is likely that development in some of these locations, and particularly around Shoeburyness will require development of the floodplain, and in these circumstances risk assessment and appropriate mitigation will be required.

Concern	Performance	Direction of change
Social progress wh	ich recognises the needs of everyone	
Accessibility	Concentrating new development in the central area and district centres of Southend, will continue to promote the provision of services, facilities and jobs in locations accessible by public transport. The policy expects that new development will make a positive contribution towards improving the effectiveness of public transport or take advantage of accessible locations. Positive future impact on providing for equitable levels of accessibility including for those without access to a car.	•
Housing	Housing needs are to be met on a range of locations.	•
Education & Skills	The spatial strategy makes provision for a university campus. Whilst this is likely to draw people into the town for education, it will also provide opportunities for the existing population to take advantage of training and education opportunities associated with a university.	•
Health, safety and security	Redevelopment of large central areas and around local centres could provide the opportunity to improve areas susceptible to crime. Impacts on heath and safety difficult to predict. Development in areas of high flood risk has the potential for significant impact on health and safety of both new and existing residents. Development at North Shoebury and much of the sea front is at risk of flooding. All new development in these areas at risk of flood will have to be designed to minimise risks to safety.	•/x
Community	Likely but unpredictable relationship.	?
	of the environment	
Biodiversity	The spatial strategy to a large extent avoids previously undeveloped land, thus protecting greenfield habitats. However, previously developed sites, that have been undisturbed for many years may have reverted to locally important habitats, as well as sites of more local or unidentified importance for nature conservation eg back gardens. The impact of urban intensification and redevelopment of brownfield sites would need to be examined at the detailed site development stage. Development of sea defences could have an impact on the biodiversity of the foreshore areas, through 'coastal squeeze'.	?/x
Landscape character	There are no urban extensions proposed. Positive impact on the landscape character, through improved urban design.	•
Built environment	The urban focus of the spatial strategy will concentrate investment opportunities in existing urban areas enabling the regeneration of the built environment. Intensification and redevelopment could put pressure on historic assets, particularly where they comprise an inefficient use of urban	•

	land. However, there are other policies in the LDF to protect	
	heritage assets.	
Prudent use of nat	· · · ·	
Air	Locating development around accessible locations is most likely to create opportunities for trips to be made by walking and cycling and also by public transport, minimising the likely future impact of activity associated with new development on air quality. Increasing the population density in the urban area may lead to increased levels of support for public transport with the potential to improve the quality of bus and train services for the existing population.	•
Water	Water supply is already constrained in the East of England. An increase in the population will create additional demands for water supply. Potential negative future impact on water quality and quantity. Development in these areas, and in particular North Shoebury, could cause significant increase in flood risk. Development must be designed in such a way as to minimise the effect of flooding, and help prevent causing increased flooding elsewhere. Development in some parts of the Borough may also prevent future managed realignment options for flood protection, although as sites have not yet been allocated for development the extent of this is not possible to assess at present.	X
Land	The policy does not stipulate what percentage of development will be on previously developed land, although this is likely to be high given the largely developed nature of the area, and the presence of Green Belt. Development of previously developed land should promote the retention of undeveloped land and promoting reclamation of contaminated land.	•
Soil	No areas of high quality agricultural land are affected by the policy proposal.	•
Minerals and other raw materials	Tenuous relationship with this objective.	-
Energy sources	Tenuous relationship with this objective	-
Maintenance of hig	gh and stable levels of economic growth and employment	
Local economy	The spatial strategy promotes the regeneration of the town centre and Seafront, priority urban areas, and the development of a university and a hi-tech business park. This has the potential to secure improvements to the local economy. Whether new economic activity will be realised will depend on the success of the town in attracting new employment.	•
Employment	A considerable amount of new employment opportunities are expected to arise from the provision of high quality employment land in the town centre and at Shoeburyness hi-tech business park.	•
Wealth creation	Improvements to the environmental quality and image associated with a revitalised town centre and Seafront are expected to have positive consequences for the local economy and subsequent wealth creation.	•

Overall this policy will have a positive impact in regard to the concentration of development in existing urban areas. This approach should support travel by public transport, walking and cycling, with increased urban population potentially being able to support better services.

The level of development required in Southend, as part of the Thames Gateway South Essex may have an impact on water supplies in the region, where water is already identified as a potential limiter to development. However, the level of development has been handed-down from regional and sub-regional planning and therefore there is little the LDF can do beyond seek to ensure appropriate infrastructure is in place.

The level of development also raises the potential for some negative effects relating to the need to build in a flood risk area. This could increase the likelihood of flooding with impacts on human health, or where new flood defences are built this could exacerbate 'coastal squeeze' with an impact on the high quality biodiversity assets.

Significant effects

There is the potential for negative effects on biodiversity through the impact of this policy, particularly in relation to coastal squeeze from the development of 'hard' infrastructure adjacent to the coast. Most significantly in this case through the development of flood defences, but this could also include other infrastructure such as roads.

Policy KP2: Development Principles

This approach and suggested policy KP2 establishes a number of development principles that will apply to all development proposals in the Borough.

apply to all development proposals in the Borough.		
Concern	Performance	Direction of change
	ich recognises the needs of everyone	
Accessibility	The policy seeks improvements to the transport network, including sustainable modes of travel. Positive relationship with equitable levels of accessibility.	•
Housing	No relationship	-
Education & Skills	No relationship	-
Health, safety and security	The policy refers to the need for development to design out crime, with positive benefits for safety and security. The need to develop in flood risk areas does raise the possibility of risks to health, although this should be mitigated against through the policy.	?/ •
Community	No relationship	-
Effective protection	of the environment	
Biodiversity	The policy seeks that development should 'respect, conserve and enhance' the natural and historic environment, which should support this objective overall in the area. However, impacts of increased flood defences may have an unavoidable undesirable impact on this objective.	?/x
Landscape character	Promotes the recycling of previously developed land, thus protecting the loss of open land on the edge of the settlement. However, the policy is quiet on the positive enhancement of the environment, such as landscape. It is noted that policy CP4 provides the more detailed policy framework on environmental matters. Whilst this mentions the management of the urban fringe, it is not explicit in setting out the desire to secure the <i>enhancement</i> of the landscape.	?
Built environment	The policy seeks quality design in new developments.	•
Prudent use of natu		
Air	Policy seeks the provision of sustainable transport improvements and energy efficient design - potential to minimise the effects of air pollution associated with new development.	•
Water	Sustainable drainage, thereby helping to reduce the risk of flood, is promoted. However this is not the only way flood will be avoided and the policy promotes the construction of new flood defences to mitigate impacts. The policy under criteria 3 also gives the same level of importance to the need to avoid or mitigate flood risk, and this may not be the most appropriate approach, and 'avoid' should be the priority.	х
Land	Promotes the recycling of previously developed land, although does not detail what proportion should be on previously developed land.	•
Soil	Promotes the recycling of previously developed land, thus protecting soil resources.	•
Minerals and other raw materials	The reuse of resources is promoted in new developments. Criteria 11(a) stipulates that provision needs to be made for waste recycling in new development, as well as in the construction of new development. Although this is welcomed in	•

Energy sources Energy efficient design is sought in new developments. The policy could be clarified on this topic as currently the wording is a little confusing, such as the need for 'recycled energy'. It may also be suitable for targets to be set at a strategic level on the proportion of energy expected from renewable resources. Maintenance of high and stable levels of economic growth and employment Local economy The policy generally seeks high quality new developments - potential to improve the overall image and perception of the town as a place to live, work and visit. Employment No relationship The policy generally seeks high quality new developments - potential to improve the overall image and perception of the town as a place to live, work and visit.		order to preserve raw materials, the way it is covered in the policy could be improved as these two aims despite having similar goals will require very difference approaches in their implementation.	
Local economy The policy generally seeks high quality new developments - potential to improve the overall image and perception of the town as a place to live, work and visit. Employment No relationship - Wealth creation The policy generally seeks high quality new developments - potential to improve the overall image and perception of the	Energy sources	policy could be clarified on this topic as currently the wording is a little confusing, such as the need for 'recycled energy'. It may also be suitable for targets to be set at a strategic level on the	•
potential to improve the overall image and perception of the town as a place to live, work and visit. Employment No relationship Wealth creation The policy generally seeks high quality new developments - potential to improve the overall image and perception of the	Maintenance of hig	h and stable levels of economic growth and employment	
Wealth creation The policy generally seeks high quality new developments - potential to improve the overall image and perception of the	Local economy	potential to improve the overall image and perception of the	•
potential to improve the overall image and perception of the	Employment	No relationship	-
	Wealth creation		•

Overall the policy should have a positive effect on achieving more sustainable development. However, it is not very clear how the policy will be implemented in its current form, and the weight that will be attached to new development complying with these criteria, such as criteria 5. Other criteria cover a range of issues and therefore potentially confusing their intent, such as 11(a).

Criteria 3 states that a sequential test will be needed to the location of new development, amongst other matters this should have regard to the need to 'avoid or appropriately mitigate flood risk', it may be more suitable for preference to be given to 'avoid' over 'mitigate' subject to other considerations, in order to achieve the more sustainable outcome.

Significant effects

The impacts of the creation of new flood defences, where these go beyond simply raising existing defences, is most likely to have an adverse sustainability impact. Other criteria of the policy are likely to have positive effects, subject to them being properly implemented.

Policy KP3: Implementation and Resources

This approach and suggested policy KP3 sets out what the Council intends as part of its suite of planning documents, and something on the process it will follow in dealing with applications. It is more of a 'mission statement' than development plan policy, and it may be suitable to refine the policy and only cover those matters that are policy, such as what is likely to be sought from developer contributions which is useful to set out in the plan. The coverage of non policy matter makes it difficult to appraise in this exercise as a consequence.

Concern	Performance	Direction of change
Social progress wh	ich recognises the needs of everyone	
Accessibility	Contributions towards public transport and walking and cycling facilities are to be sought. And travel plans will be required in some cases. The policy provides the opportunity to improve accessibility by non-car modes	•
Housing	Planning agreements with developers to deliver affordable housing will assist in meeting this particular need and improve access to housing	•
Education & Skills	Policy could state the intention to negotiate training provision as part of new employment developments	?
Health, safety and security	There is no particular relationship	-
Community	Community facilities will be sought from developer contribution and this is a positive approach	•
Effective protection	of the environment	
Biodiversity	Biodiversity enhancement could form part of general environmental enhancements to be sought in planning obligations.	?
Landscape character	Landscape enhancement could form part of general environmental enhancements to be sought in planning obligations.	?
Built environment	Public art and 'design excellence' required of new development will help improve the built environment	•
Prudent use of natu		
Air	Contributions towards sustainable transport are to be sought - opportunity to limit the effects of new development on air quality.	•
Water	Contributions towards flood protection and sustainable drainage schemes.	?
Land	No relationship	-
Soil	No relationship	-
Minerals and other raw materials	No relationship	-
Energy sources	No relationship	-
	h and stable levels of economic growth and employment	
Local economy	The intention of dealing expeditiously with planning applications concerned with economic development is a positive one	•
Employment	The general approach in the policy should bring positive benefits for retaining and attracting employment	•
Wealth creation	The policy indicates the Council's willingness to work with partners to facilitate development, through the approach to its own land and with the use of compulsory purchase orders, and these will be beneficial to this aspect	•

This policy contains certain matters that are not necessarily strategy planning policy related. However the overall approach should be mainly beneficial in seeking more sustainable development.

Significant effects

There are unlikely to be any significant sustainability impacts of implementing this policy.

Policy CP1: Employment Generating Development

Policy CP1 identifies the number of jobs for which 'provision is made' in the plan period and their distribution across the plan area, and seeks to ensure that new employment generating activity contributes to the overall strategy, concentrating on accessible locations and in particular the town centre. The policy also seeks to protect existing employment land, and economic growth based on the existing strengths of the area and particularly tourism.

Concern	Performance	Direction of change
Social progress wh	ich recognises the needs of everyone	
Accessibility	The core policy seeks to focus development in the central area but also provides for new employment in association with new residential development and in both respects seeks to increase the accessibility of employment opportunities. Phasing of housing and employment land should help ensure access to employment for all.	•
Housing	The need to reinforce a close relationship between residential development and employment opportunities is recognised positively in the policy.	•
Education & Skills	The policy emphasises the links between skills development and employment opportunities as well as promoting the more direct growth in the educational sector as a source of employment.	•
Health, safety and security	No direct link is identified, though improving the availability and distribution of rewarding job opportunities is likely to bring indirect benefits in these areas.	-
Community	There is much in the policy that seeks to use investment in employment generating activity to strengthen distinctive parts of the area and reinforce local community linkages.	•
	of the environment	
Biodiversity	The policy includes a footnote to safeguard biodiversity importance in delivering development at the seafront, but does not include any wider provision for biodiversity protection as this is covered by other policy. Particular care may be required for tourism related development that may have an impact on the foreshore, such as proposals for marine based development. In addition the lack of detail on land requirements at this stage, and proposed sites, means it is not possible to identify impacts with any degree of certainty.	?
Landscape character	The land use implications of the policy cannot be identified other than the general support for the patterns of development promoted through the key spatial strategy policies, therefore meaning it is not possible to identify impacts with any degree of certainty.	-
Built environment	If properly directed, and designed, investment in employment generating activity can be used to improve the urban fabric, and this is recognised in the policy as well as there being specific provision for improvement to the environment providing for possible exception to the general intention of retaining existing employment sites	•
Prudent use of natu		
Air	Achieving a better mix of activity ought to reduce travel demand and with it some emissions to the air, polluting emission for employment development will be controlled through other	•

	measures, although identification of suitable locations for new businesses must take into account the sensitivity of the receiving environment.	
Water	There will be a water requirement from this level of new development, and it must be ensured that there is appropriate infrastructure in place to deal with these needs.	?
Land	The policy is consistent with the intention of the key spatial strategy policies that land be used well, including by the recycling of previously developed land, and encouraging intensification.	•
Soil	There is no direct link between the policy and stewardship of this resource.	-
Minerals and other raw materials	There is no direct link between the policy and the management of minerals though construction associated with new employment generating development is bound to take such materials.	-
Energy sources	If reduced travel demand can be achieved through the management of the mix of activity this will have beneficial implications for energy use.	•
Maintenance of hig	h and stable levels of economic growth and employment	
Local economy	The policy is specifically about strengthening the local economy as well as ensuring that Southend makes an appropriate contribution to regional development	•
Employment	The policy is specifically about making provision for employment	•
Wealth creation	There is much in the policy about improving the conditions for wealth creation, through investment in various forms of infrastructure for instance	•

This policy seeks the economic growth of the area in keeping with the expectations of Southend's role in the Thames Gateway South Essex sub-region. Overall the approach put forward should help meet these expectations, although the lack of specifics about actual land requirements does make it difficult to accurately judge the impacts of this policy.

Significant effects

Due to the lack of specific detail about the proposed employment sites and land needs, as this is not the role of this policy, it is difficult to assess the significance of impacts. There is the potential for some employment related development to adversely affect the environment through the land needs for this type of development and this will need to be assessed through appraisal of allocations.

Policy CP2 - Town Centre and Retail Development

Policy CP2 emphasises the role of the town centre as the focus for retail investment and for uses attracting large numbers of people, and goes on to make specific quantitative and locational provision. This is based on the findings of a 2003 retail study of the Borough, and the policy seeks to implement its findings and recommendations.

Concern	Performance	Direction of change
	ich recognises the needs of everyone	
Accessibility	Emphasises the town centre as the focus for retail investment	•
	and for uses attracting large numbers of people is consistent	
	with seeking greater accessibility for the greater number of	
	people, though there will be a need to provide for	
	complementary development to help achieve this aim.	
Housing	Residential development is potentially a competing use for town	?
	centre development opportunities, and whilst a good mix of	
	activities is essential to a sustainable community, care must be	
	taken that town centre activities, such as retail, are not	
	displaced.	
Education & Skills	There is no direct link between the policy and these matters.	-
Health, safety	Increased activity and a good mix of activity throughout the day	•
and security	is consistent with safety and security.	
Community	Reinforcing the town centre, and supporting district and local	•
	centres is consistent with increasing the distinctiveness of	
	Southend and hence with community identity. Although for this	
	reason it is important that any new edge-of-centre large stores	
	do not harm the provision of local stores serving local needs.	
	of the environment	
Biodiversity	There is no direct link between the policy and biodiversity.	-
Landscape	There should be no adverse effects to landscape character from	-
character	the policy.	
Built environment	Investment in the town centre with good standards of design	•
	and build quality should bring continued and valued	
	improvements to the urban fabric.	
Prudent use of natu	T	
Air	Focussing activities that attract large numbers of people in the	•
	town centre is consistent with efficient use of transport and	
	hence with endeavours to reduce emissions from transport, as	
	should the other policies that aim to claw-back expenditure lost	
347.4	to other nearby shopping areas.	
Water	There is no direct link between the policy and the management	-
	of the water environment.	
Land	The policy is consistent with the intention of the key spatial	?
	strategy policies that land be used well, including by the	
	recycling of previously developed land. Although some new	
	development may have to occur in greenfield locations,	
Cail	particularly the larger bulking good stores.	
Soil	There is no direct link between the policy and stewardship of this resource.	-
Minerals and	There is no direct link between the policy and the management	-
other raw	of minerals though construction associated with new retail	
materials	development will use minerals and other materials.	
Energy sources	Increasing the critical mass of town centre uses in Southend is	•
	consistent with decreasing the amount of energy taken by	

	satisfying travel demand.	
Maintenance of hig	h and stable levels of economic growth and employment	
Local economy	Improving the town centre should increase the proportion of	•
	disposable income spent locally.	
Employment	Increasing the ability of people to obtain what they want from	•
	shops in Southend should add to the employment associated	
	with retail and other town centre uses.	
Wealth creation	An attractive town centre with good retail, cultural and leisure	•
	facilities will assist in attracting and retaining business activity.	

This policy should help in the regeneration and redevelopment of Southend town centre, and improve the retail provision here in order to claw back expenditure lost to other nearby centres. This should have a variety of sustainability benefits, from improving the built environment quality to helping to reduce the need to travel, as well as improving accessibility to retail needs as the town centre is the most accessible location in the Borough for all public transport. It will be important that new retail development for bulky goods and food stores does not harm the vitality of existing centres, as this could have impacts for the community as well as decreasing accessibility for those without access to a car.

Significant effects

There are likely to be positive benefits of this policy for sustainability, particularly related to improving the quality of Southend town centre. There are the potential for negative impacts if new large stores can only be located on the edge of town through increasing the need to travel, and also potentially impacting on the viability of existing stores, although if the policy is fully implemented these should not be significant.

Policy CP3: Transport and Accessibility

Policy CP3 makes clear links between development activity and the need to improve transport and accessibility, and between the LDF and the objectives of the Thames Gateway South Essex transport plans and the London to Southend Movements Study. This includes public transport and road improvements.

Concern	Performance	Direction of change
Social progress wh	ich recognises the needs of everyone	
Accessibility	There are strong intentions within the policy to see an integrated	•
	approach to the improvement of all forms of transport to bring	
	about greater accessibility for more people. Although care	
	should be taken to ensure transport does come forward in an	
	integrated way and does not favour those with access to a car.	
Housing	There is no direct relationship.	-
Education & Skills	There is no direct relationship other than through improving the	-
	means people have to get to the source of education and	
	training.	
Health, safety	Safety is an explicit criterion by which any transport proposals	?
and security	will be assessed, and generally making it easier for people to	
	get to about improves security, whilst reducing car dependency	
	is consistent with better health.	
Community	Greater accessibility is a prerequisite for more cohesive	•/?
	communities, although conversely the creation of new or	
	upgraded roads can split communities apart by creating a	
	barrier between residents, or between residents and local	
	services.	
Effective protection	of the environment	
Biodiversity	There are possible impacts of this policy on landscape through	?
-	the requirement for new built transport infrastructure, and the	
	possibility this will require use of land with biodiversity	
	significance. This may particularly the case the larger, regional	
	routes, being developed to link Southend to the national road	
	system. Other proposals such as increased use of hovercraft	
	may also impact biodiversity, either directly or through	
	associated built infrastructure needs at the seashore.	
Landscape	There are possible impacts of this policy on landscape through	?
character	the requirement for new built transport infrastructure, and the	
	possibility this will affect areas of landscape character.	
Built environment	Reducing the impact of cars – whether moving or parked – is	?
	consistent with an improvement in the quality of urban spaces.	
	Impact may also be felt through the increase of road capacity	
	leading to changes in the built environment, including	
	demolitions and severance.	
Prudent use of natu	ural resources	
Air	Reducing travel demand and achieving a shift to public transport	•/x
	and to cycling and walking for more trips would reduce	
	emissions to the air, although this policy is also firmly rooted in	
	the need for new road infrastructure. Increasing road capacity	
	is very likely to lead to increased road use with negative impacts	
	on air quality. This will also contribute to climate change.	
Water	There is no direct link between the policy and the management	-
	of the water environment	
Land	There may need to be land take for new road infrastructure.	?

Soil	There is no direct link between the policy and the productivity of	-
	soil.	
Minerals and	Transport infrastructure has been a major user of minerals and	?
other raw	other materials, and any change away from increasing road	
materials	capacity as a means of dealing with transport demand will be	
	valuable, though the policy may lead to some additional	
	provision, through its support for London Southend Airport for	
	instance, and some road building will be associated with	
	development provided for in the plan.	
Energy sources	Reducing travel demand and achieving a shift to public transport	?
	and to cycling and walking would have beneficial implications for	
	energy use. Although the emphasis on road building is very	
	likely to lead to increased car use and increased demand for	
	fossil fuels.	
Maintenance of hig	h and stable levels of economic growth and employment	
Local economy	General improvements to accessibility can only be good of the	•
	local economy.	
Employment	There is no direct link with the policy	-
Wealth creation	Quite complex issues arise here: the concern to appeal to	?
	business investors with shorter term views on road capacity and	
	the effect on business leads to a commitment to road building to	
	achieve economic growth, although in the long-term these	
	benefits may not remain. Therefore the approach to supporting	
	public transport is welcomed.	

This policy supports the increased provision of public transport, and sustainable modes of transport. This includes new bus services, and rail improvements as well as better transport interchange facilities. These proposals should have a positive effect on providing alternatives to car use, particularly given the number of rail stations in the Borough. However, this is undermined by a remaining emphasis on road travel as the way to secure economic investment in the area. Although this is likely to bring economic investment in the short-term, in the longer-term increased road capacity is likely to be filled leading to congestion at current levels and the loss of economic gains but environmental impacts will have already occurred and will remain. Increasing air travel will also have negative effects relating to air quality and climate change.

Significant effects

This policy may have negative effects through the provision of increased road capacity and the likelihood this will lead to increase car use with adverse environmental impacts on air quality. The significance of these effects will therefore be determined by the level of increased car travel that is created.

Concern	protect and enhance natural and built environmental assets. Performance	Direction of
		change
	ich recognises the needs of everyone	
Accessibility	The policy promotes the permeability of new build development	•
Housing	to ensure accessibility to all. The approach should help provide high quality new	?
Housing	development, including housing.	f
Education & Skills	No relationship	_
Health, safety	The policy makes no reference to the need for new	?
and security	development to be designed so as to limit the opportunities for	-
·	criminal activity, although this is covered elsewhere in the	
	strategy.	
Community	New development that is distinctive can strengthen local identity	•
	associated with a place. The policy seeks distinctive new	
	developments that achieve a sense of place.	
•	of the environment	I
Biodiversity	The policy protects and seeks the enhancement of biodiversity resources. The supporting text also cites the opportunity to	•
	enhance biodiversity assets on the green grid routes, and	
	'Environmental Rooms'. Positive performance, especially as	
	consideration is being taken of those nature conservation assets	
	that are not statutorily protected.	
Landscape	The effective management of the urban fringe is something the	•
character	Core Strategy seeks to achieve, including the general	
	enhancement of landscape quality.	
Built environment	The policy seeks high quality design in new developments. This	•
Developed to a set of a set	will also be supported by SPD.	
Prudent use of natu Air		?
All	Could state more explicitly the requirement for sustainable layouts of development and encourages efficiency in use of	f
	resources. This policy could go further in this respect and	
	require all new development to be energy efficient and thereby	
	help improve air quality, and reduce gas emission relating to	
	climate change.	
Water	This policy includes a provision for increasing the water	?
	efficiency of new development, although this could be improved	
	by requiring new development to meet defined sustainable	
l and	construction standards.	
Land	Promotes the recycling of previously developed land.	•
Soil	Soil is a 'natural resource' which is to be protected in bullet 14.	•
Minerals and	This policy does not cover issues relating to the need to design	?
other raw materials	in space to new development for the storage and sorting of	
IIIaltiais	waste, although this issue is covered by policy KP2. However it may be more suitable to cover it here.	
Energy sources	Energy efficient design and renewable energy technologies are	?
Lilorgy courses	sought in new developments. However, as with the water	
	objective this could be improved by reference to the need to	
	meet certain defined sustainable construction standards.	

Maintenance of high and stable levels of economic growth and employment		
Local economy	The policy seeks to protect and enhance environmental quality and promote high quality, distinctive new developments - potential to improve the overall image and perception of the town as a place to live, work and visit.	•
Employment	No relationship	-
Wealth creation	As with the local economy improving the natural and built environment assets of the Borough may help improve the attractiveness of the area for inward investment.	•

This policy has very broad coverage of issues, from protection of natural resources such as energy and water, and the protection of biodiversity and landscape, to the importance of maintaining and enhancing built environment and design character of the urban area. Overall the effects on sustainable development should be beneficial, particularly as built environment matters are covered in greater detail in the Design and Townscape Supplementary Planning Document. Improvements could be made to the policy, particularly through setting a standard for the more sustainable construction of new buildings, such as the methods on environmental assessment established by BRE.

Significant effects

There are unlikely to be any significant negative effects of the policy.

Policy CP5: Mineral and Soil Resources
Policy CP5 sets out an approach intended to make the exploitation and use of mineral and soil resources more sustainable.

Concern	Performance	Direction of change
Social progress wh	ich recognises the needs of everyone	
Accessibility	There is no direct link with the policy	-
Housing	There is no direct link with the policy	1
Education & Skills	This policy may mean that some areas of brickearth are allowed	?
	to be redeveloped where they meet community needs and this	
	could include freeing land for education and skills training.	
Health, safety	This policy may mean that some areas of brickearth are allowed	?
and security	to be redeveloped where they meet community needs and this	
	could include freeing land for health services if necessary.	
Community	This policy may mean that some areas of brickearth are allowed	?
	to be redeveloped where they meet community needs.	
	of the environment	
Biodiversity	The protection of biodiversity is incorporated into the policy in	•
	several places, and the approach should ensure that soil is not	
	protected at the expense of biodiversity. Also that biodiversity is	
	incorporated into plans for new development and redundant	
	mineral workings.	
Landscape	The policy does state that landscape character should be	•
character	protected in any proposals for new brickearth abstraction.	
Built environment	There is no direct link with the policy	-
Prudent use of natu		
Air	Avoiding pollution to the air is part of the requirements for new	•
	brickearth abstraction sites.	
Water	Avoiding pollution to the water environment is part of the	•
	requirements for new brickearth abstraction sites.	
Land	A comprehensive approach to the restoration of land is integral	•
	to the approach provided for in the policy	
Soil	The protection of soil resources is part of the purpose of the	•
	policy and the maintenance of high quality agricultural land	
	would be an important consideration in meeting the requirement	
.	for minerals	
Minerals and	Meeting the requirement for minerals is part of the purpose of	•/x
other raw	the policy, though the concern is the appropriate use of minerals	
materials	and there is a specific requirement to maintain the stock of	
	minerals in a form suitable for future use. The policy does allow	
	development on these deposits if they are not financially viable,	
	although this will only be in particular circumstances. These	
	circumstances could be better defined in the policy, as at	
	present development for the 'community or infrastructure' could	
	cover almost all types of development.	
Energy sources	Transporting materials by energy efficient methods is identified	•
Mainte	as a desirable aim wherever this is possible	
	h and stable levels of economic growth and employment	
Local economy	Minerals extraction and transportation can continue to contribute	?
	to the local economy, although it seem unlikely there will be any	
	contribution in the short-term. Protection of agricultural land	
	should also help to maintain agricultural employment in the	
	area.	

Employment	There is employment associated with the exploitation and use of mineral and soil resources, and this will not be harmed by the policy	•
Wealth creation	Due to the limited resources, and financial barriers to abstracting the remaining deposits, it is unlikely that this policy will have any impact on future wealth creation.	•

This policy should help protect agricultural soil resources without any adverse environmental impacts. Mineral deposits will also be preserved except where land can be better used for 'community or other infrastructure' projects. What exactly this type of development entails could be better defined, as it covers a broad spectrum of development types, not all with beneficial sustainability implications. It will be vital to consider the long-term needs of the brick-earth deposits as the value may change as national resources diminish, and abstraction could become viable again. However, the policy does allow for the efficient use of land and ensures that land is not saved where this is not necessary.

Significant effects

There are unlikely to be any significant negative effects of the policy.

Policy CP6: Community Infrastructure

Policy CP6 requires development proposals to contribute to improving the education attainment, health and well being of local residents and visitors. This is in terms of financial agreements and other obligations, that can mitigate against the impact of new development. The policy provides a list of those matters to which contributions will be sought, provided the (different) tests established through national policy and legal precedent are met.

through national policy and legal precedent are met.			
Concern	Performance	Direction of change	
Social progress which recognises the needs of everyone			
Accessibility	Improving provision and therefore accessibility to services and facilities is a central theme in the construction of the approach set out.	•	
Housing	There is no specific mention of housing issues, nor any particular effect on the delivery of housing except perhaps through the increased cost or reduced market viability of residential development (contributions towards the affordable housing need are addressed in policy CP8).	-	
Education & Skills	The enhancement of education facilities in the town is expressly sought as a community benefit to be provided from development.	•	
Health, safety and security	Additional health facilities are expressly sought as a community benefit to be provided from development.	?	
Community	The policy is specifically concerned to ensure that development proposals add to rather than detract from the community.	•	
	of the environment		
Biodiversity	There is no direct link with the policy.	-	
Landscape character	There is no direct link with the policy.	-	
Built environment	Some of the community provision to which contributions are sought from development would improve the built environment, The policy also seeks to enhance the historic and cultural built environment for leisure, culture and recreational purposes.	•	
Prudent use of natu			
Air	There is no direct link with the policy.	-	
Water	There is no direct link between the policy and the management of the water environment.	-	
Land	There is no direct link with the policy.	-	
Soil	There is no direct link between the policy and the productivity of soil.	-	
Minerals and other raw materials	There is no direct link with the policy.	-	
Energy sources	There is no direct link with the policy.	-	
9	h and stable levels of economic growth and employment	_	
Local economy	There may be some positive benefits of improvements to community facilities through the creation of local employment, and encouraging visitors to Southend.	•	
Employment	There is no direct link with the policy.	-	
Wealth creation	By seeking a strengthening of community facilities and the features that make the town distinctive the policy will assist in enhancing the ability to attract and retain business activities,	•	

providing the expectation of developer contributions does not discourage investment

Comment

This policy should help ensure that new development does not mean that capacity is exceeded for community infrastructure as new provision will be made. The policy does not cover matters relating to other types of infrastructure, such as water treatment and supply and telecommunications for example, and it would be assumed that these matters will also be part of the expectations for planning obligations. These other issues are set out separately in KP3 to some extent, although there is some element of duplication and some matters are absent. Therefore the differentiation between the purpose of this policy, as opposed to the strategic policy is not clear. The policy also goes into greater specifics than other policies, giving detailed needs for tourism and leisure improvements.

Significant effects

Overall the effects of the policy should be beneficial in achieving the social aspects of sustainable development, and benefits relating to cultural heritage and the built environment, although confusion over the role and purpose of the policy may hamper successful implementation.

Policy CP7: Sport, Recreation and Green Space
Policy CP7 provides for the protection of existing open space and sports facilities and sets out

detailed quantified requirements for further provision as part of new development.

Concern	Performance	Direction of change
Social progress wh	ich recognises the needs of everyone	
Accessibility	The policy is specifically concerned with improving access for all of the population to open space and to recreation and sports facilities	•
Housing	The policy is intended to produce better overall forms of housing development with the appropriate open space and other facilities considered as part of the scheme	•
Education & Skills	There is no direct relationship with the policy	-
Health, safety and security	The policy should help to produce an environment which encourages healthy activity, and high quality open space provision should help create safe open space for all.	•
Community	The types of new development that would flow from the application of this policy would improve the sense of community	•
-	of the environment	_
Biodiversity	The policy includes reference to areas of nature conservation and biodiversity importance being used as a recreational resource. However the wording in the third paragraph may need to be adjusted to clarify that these areas cannot be treated like other recreational resources and replaced by alternative facilities as their biodiversity interest outweighs their recreational importance. The policy also recognises the importance of preserving areas of allotments that have become biodiverse and worthy of retention. It may be suitable for the policy to include the need to ensure habitat creation and biodiversity support is a feature of all new open space development, which despite being open often supports only a very limited range of species.	•/x
Landscape character	There may be some link between this policy and the protection of landscape character, and this will depend on the location and form of any new and existing areas.	?
Built environment	This policy would help to improve the built environment, by retaining the open patchwork of open space within the built-up area.	•
Prudent use of natu		
Air	There is no direct link with the policy	-
Water Land	There is no direct link with the policy There is no direct link with the policy	-
Soil		_
Minerals and other raw materials	There is no direct link with the policy There is no direct link with the policy	-
Energy sources	There is no direct link with the policy	-
	h and stable levels of economic growth and employment	
Local economy	There is no direct link with the policy	-
Employment	There is no direct link with the policy	-
Wealth creation	By seeking a strengthening of community facilities and the features that make the town distinctive, the policy will assist in enhancing the ability to attract and retain business activities.	•

Comment

This policy should help to protect and enhance green space and recreational provision in the LDF area. This should have a positive impact in relation to improving the health of residents, and help promote accessible space for all. There will also be benefits for the built-environment by seeking to protect existing open space in these areas, including allotments, that can be integral to the character of the urban area. The impact of this policy on biodiversity is mainly positive, although the policy could be enhanced to require that biodiversity enhancement be a feature of all new and improved open space. In addition some wording adjustments may be necessary, as currently part of the policy (paragraph 3) reads as if nature conservation sites, including the foreshore, can be lost or displaced if alternative recreational locations are found, which is clearly not the case.

Significant effects

The policy is unlikely to have any negative sustainability impact, although positive effects could be improved particularly for biodiversity.

Policy CP8: Dwelling Provision
Policy CP8 sets out detailed targets for the overall provision of housing according to different parts of the plan area, and detailed targets for the performance required from development taking place.

	nd detailed targets for the performance required from development	
Concern	Performance	Direction of
0	'share and a star the second of suremone	change
	ich recognises the needs of everyone	
Accessibility	The approach to housing distribution, coupled with the provision	?
	of new public transport infrastructure, should help to ensure new	
	housing is located so as to ensure accessible services.	_
Housing	The policy is specifically about the provision of housing to meet	?
	different types of need, and its contribution is potentially	
	positive, although provision of a greater proportion of affordable	
	homes may have been suitable.	
Education & Skills	There is no direct relationship between the policy as stated and	-
	these matters.	
Health, safety	There is no direct relationship between the policy as stated and	-
and security	these matters.	
Community	There is much in the policy that seeks to achieve positive	•
•	benefits for the community, in terms of the mix of uses and of	
	housing types and tenure for instance. Although additional	
	affordable homes may be suitable to meet the specific housing	
	needs of some existing communities of Southend.	
Effective protection	of the environment	<u>'</u>
Biodiversity	There will be a land requirement to deliver this quantity of new	?
2.000.0,	homes, which may impact on biodiversity. Although the majority	-
	will be delivered on previously developed sites it is important	
	that any established biodiversity importance on these sites is	
	taken into consideration prior to redevelopment. With greenfield	
	development existing areas of biodiversity should also be	
	protected. Matters relating to the choice of sites and flood	
	defence requirements are covered under policy appraisal of	
	KP1.	
Landscape	The chosen approach to the spatial distribution of development	?
character	may have some impact on landscape character in the area. It is	•
Characie	not possible to identify what the exact impact may be at this	
	l :	
	stage, but the development could have a positive benefit to improving the urban fringe of the area.	
Built environment	Investment in new development, properly guided by good	
Duilt environment		•
	principles of location and form, will enhance the urban	
Duveloust was of most	environment.	
Prudent use of natu		
Air	The spatial distribution of new housing development focuses	?
	development in the town centre area and intensification of	
	existing built up areas. This should help to achieve a compact	
	urban form, and therefore may help reduce the need and	
	distance travelled to meet day to day needs. This may have	
	therefore have positive benefits for air quality objectives, and	
	reducing emissions of climate change related pollutants.	
Water	There is scope for new residential development to perform	?
	better than has been the case previously in terms of water	
	conservation, and this is a matter that needs to be addressed in	
	subsequent more detailed policies and through supporting	
	guidance	

Land	This policy is concerned with the greatest user of land but both the key spatial strategy policies and parts of this policy promote the recycling of previously developed land.	•
Soil	There is no direct link with the policy, although this may depend on the exact location of allocations on greenfield sites.	-
Minerals and other raw materials	Minerals and other raw materials will be used in the creation of the development provided for in this policy, although other policies of the LDF should help promote the use of recycled construction materials and reduction in construction waste.	?
Energy sources	There is scope for new residential development to perform better than has been the case previously in terms of energy conservation and generation, and these are matters that need to be addressed in subsequent more detailed policies and through supporting guidance, though energy efficient design and renewable energy technologies are sought in new developments by policy CP4. Also as with the air quality objective this policy will help provide accessible development by public transport and may help reduce the need to travel by car.	•
Maintenance of hig	h and stable levels of economic growth and employment	
Local economy	Investment in housing will bring benefits to the local economy, from construction through to the increased spending on local services by new residents	•
Employment	Further employment will arise from new investment and additional expenditure in the local economy	•
Wealth creation	The right quantity and mix of housing is essential to help stimulate business investment and accommodate additional workers, and there can be indirect benefits from greater confidence in the area	•

Comment

To some extent the matters covered by this policy are also covered in policy KP1 that sets the overall spatial distribution of development, therefore the comments made at that stage are applicable here also. In addition this policy covers matters relating to affordable housing provision and the proportion of housing that should be on previously developed land. The policy could include more stringent requirements for affordable housing provision, as at present sites of up to 24 houses would only need to provide 2 affordable dwellings (8%), which is below targets set in draft national guidance and the RSS. In order to ensure that all can meet their housing needs it may be suitable to raise the proportion of affordable homes to be delivered in all size of sites, which is particularly relevant as much development in Southend will be through infill and intensification sites that may only deliver a few new homes at a time. Previously developed land objectives of 80% new homes are welcomed by the appraisal in ensuring the efficient use of land. However, this is in part a result of very limited greenfield land being available in the Borough. It will be important to ensure that the biodiversity importance of all previously developed sites is considered prior to redevelopment so as not to harm any ecological significance that should be retained.

Significant effects

Prior to the allocation of sites for development the significance of impacts is difficult to judge, and it will be vital that all site allocations are properly sited, and developed, to avoid and mitigate against negative environmental impact – particularly for biodiversity. There is the possibility that this policy will not allow all to meet their housing needs through under provision of affordable homes.

Policy CP9: Monitoring and Review

The policy covers matters relating to the purpose and approach that will be taken to monitoring the implementation of the LDF, and its effectiveness at achieving the plan objectives.

Concern	Performance	Direction of change
	ich recognises the needs of everyone	
Accessibility	The policy will help monitor the effectiveness of infrastructure policies and may help to ensure public transport related developments are coming forward as expected, and that job and housing provision is matched, this should help accessibility for all.	•
Housing	Monitoring should help ensure the phasing of homes is coming forward as expected.	?
Education & Skills	Monitoring should help ensure education infrastructure is coming forward for development as expected.	?
Health, safety and security	Monitoring should help ensure health related infrastructure and open space provision is coming forward for development as expected.	?
Community	Monitoring should help ensure community infrastructure is coming forward for development as expected.	?
	of the environment	
Biodiversity	There is no direct relationship between the policy as stated and these matters.	-
Landscape character	There is no direct relationship between the policy as stated and these matters.	-
Built environment	There is no direct relationship between the policy as stated and these matters.	-
Prudent use of natu	ural resources	
Air	The approach put forward to monitoring should help a match of housing and employment and may help greater self-containment in the Borough, reducing the need for and distance of travel.	?
Water	There is no direct relationship between the policy as stated and these matters.	-
Land	The approach put forward to monitoring should help the more sustainable release of land, ensuring that development is meeting identified needs of the Borough.	?
Soil	There is no direct relationship between the policy as stated and these matters.	-
Minerals and other raw materials	There is no direct relationship between the policy as stated and these matters.	1
Energy sources	There is no direct relationship between the policy as stated and these matters.	-
	h and stable levels of economic growth and employment	
Local economy	One of the aims of this policy is to ensure that economic growth is occurring as expected, and may help ensure provision of local jobs and employment.	?
Employment	One of the aims of this policy is to ensure that housing and job growth is matched and therefore is suitable in securing employment for all.	•
Wealth creation	There is no direct relationship between the policy as stated and these matters.	-

Comment

Monitoring is a vital part of verifying the successful implementation of an LDF. Monitoring for its own sake serves no purpose, and therefore an appropriate plan of action needs to be put in place so changes can be made if development is not coming forward as expected. The monitoring and implementation frameworks incorporated in the Core Strategy seek to do this, and to allow housing, economic and infrastructure growth levels to be matched, to ensure none outstrip the other. This approach is welcomed by the SA as it should support more sustainable development patterns, including a greater level of self-containment. Without this approach there is the possibility that development could become mismatched leading to greater levels of commuting and lower levels of accessibility.

Significant effects

The approach put forward in this policy is likely to be positive in achieving sustainable growth patterns in Southend.

Appendix 3: Baseline Characteristics of the Southend on Sea Borough

- A.1 This section of the report is a collation of information relating to the Borough of Southend-on-Sea. This information is intended to inform the Sustainability Appraisal (SA) incorporating the Strategic Environmental Assessment (SEA) of the emerging LDF for the Borough, by describing the existing environmental (and to a limited extent social and economic) baseline in the LDF area.
- A.2 The information presented here is based on a desktop review of the area, as no primary research has been undertaken specifically for the SA. Various sources of information have been used, included reports provided by Southend-on-Sea Borough Council relating to the local authority area and the county, including the environmental report produced for the SA for the East of England Plan (November 2004). In addition to report based information much of the spatial data comes from online Geographical Information Systems (GIS), primarily www.magic.gov.uk and www.environment-agency.gov.uk. A list of information sources can be found at the end.
- A.3 This report is only intended as a brief outline of the situation in the Borough. The SEA Regulations require that only information as can 'reasonably be required' is included in the environmental report. Therefore at this strategic stage of the LDF the information collected is not to site specific detail, and is more strategic or spatially based to get an understanding of the wider plan area.
- A.4 The intention of gathering baseline information is to help to identify issues in the plan area that the LDF may impact upon, and in line with the SEA Regulations particular attention is paid to environmental issues. However the majority of sources of information available in this collation exercise were not able to provide detailed information on specific areas of land that might be used in development. At future and more site specific stages of plan making, the Council will have to consider more site specific environmental implications for development. For potential development sites, that are consistent with the overall strategy proposed for the LDF, additional baseline environmental information could be used to assess environmental concerns such as:
 - the present or previous use of land and its condition
 - sites with nature conservation value
 - areas of sensitive local character and amenity
 - areas where development could increase the risk of flooding.
- A.5 The expectation will be for the SEA to show that in making the development provision in the LDF, the Council has identified the environmental consequences of the development of sites and identified whether the provision could be made with the use of other sites with less environmental harm or greater environmental benefit. The SEA Directive requires the LDF-making body to report on the environmental implications of the LDF however, not to make decisions for the LDF based on those environmental implications.

- A.6 In comment on what appears to be available for the 'baseline', the likely areas of difficulty are:
 - the possible lack of sufficiently detailed information at the site level, for example on the biodiversity of sites outside designated areas
 - the difficulty of making links between the proposals and policy aspirations of the spatial plan and change in matters such as health and general well being.
- A.7 A limitation to compiling this report is the level and detail of information that is available at this time for the purposes of SEA and other environmental reporting. Different environmental topic areas have vastly different amounts of data available, and this is often presented in different ways. A balanced and thorough spread of information on the Borough is not possible at this time. Gradually as practice becomes better established on SEA, the way that data is made available may become better tailored and accessible to those carrying out SEA. This is especially in relation to the consultation bodies that are referred to in the SEA Regulations, as bodies with specific environmental responsibilities. At present although there often is much raw data and monitoring of various aspects of the environment available, the effects of new development on the environment are less well known, especially in relation to indirect or secondary impacts.
- A.8 As part of the sustainability appraisal a form of 'scoping report' was sent out to the four consultation bodies as referred to above. Their responses included details of documents and reports that could be useful in the compilation of this report.
- A.9 The report is arranged around topic areas, covering (although in some cases combining) the list of topics found in Schedule 2 of the SEA Regulations. Although the topics are presented separately there is a high proportion of overlap and integration between them, for example biodiversity and landscape, flooding and climate change. At the end of each section there is a paragraph on the 'implications for development', which is necessary as the baseline information presented must be viewed with the intention of identifying how the LDF could impact upon the environmental feature through specific policies and proposals.

Biodiversity

- A.10 The estuary environment to the south of Southend-on-Sea is characterised by extensive mudflats and areas of saltmarsh, all of which are internationally important areas for nature conservation and biodiversity.
- A.11 To the south of the town are the Benfleet and Southend Marshes. This is an internationally important protected wetland site under the Ramsar convention, a Special Protection Area (SPA), and a nationally important Site of Special Scientific Interest (SSSI). The SSSI is made up of various habitat types but predominantly mudflat and saltmarsh, particularly within and adjacent to the Borough. SSSI evaluation has shown that overall the condition of the SSSI is unfavourable and declining, table 1. The habitat units show that the worst habitat type is the littoral sediment, which is unfavourable and declining, as a result of coastal squeeze and the action of storms. The other habitat types, although in unfavourable condition, are recovering. The area also has the

non statutory designation of an 'Important Bird Area', by Birdlife International, as it supports good populations of several types of bird including, Brent Goose, Grey Plover, Redshank, Knot and Dunlin. Pressures on this area have been identified by Birdlife International, as being predominantly from natural events rather than current human activities, although aquaculture and fishing may have a minor impact.

- A.12 The other area of international importance for nature conservation is Foulness along the coast east of Shoeburyness. This consists of various types of habitat including the grassland of Shoebury Common, and an area of improved and unimproved grazing marsh on Foulness and Potton Islands. The largest habitat type is the littoral sediment that is an important feeding ground for Brent Geese, and the cockleshell spits supporting one of the largest colonies of Little Terns in Britain. This area is also designated a Ramsar site, a SPA and a SSSI, and in addition is a Special Area of Conservation (SAC). As can be seen in table 1, as a whole Foulness SSSI is in a favourable condition. However there is also a large area that is in unfavourable condition and declining in quality, and as with Benfleet and Southend Marshes this is predominantly the littoral sediment habitat. This decline is also being caused by coastal squeeze, as a result of the landward progress of the tidal flats being restricted by the sea wall, and the seaward side undergoing erosion.
- A.13 The Foulness area also falls within the Mid-Essex Coast 'Important Bird Area' and this large area is important for 18 named bird species. There are many pressures on this area listed by Birdlife International, however it is not clear which impacts are relevant for the Southend-on-Sea area due to the size of the designated area. Threats/pressures may include agricultural intensification/extension; bird disturbance; industrialisation/urbanisation; recreation/tourism but the main pressure is through natural events, that is, weather.
- A.14 Immediately adjacent to the western side of the urban boundary, in the adjacent local authority area of Castle Point, are two further SSSIs. These are Great Wood and Dodd's Grove, which are a broadleaved, mixed and yew woodland in favourable condition, and part of a larger area of ancient and semi-natural woodland. The other is an area of natural grassland with over half in unfavourable or declining condition, due to poor management. However it is unlikely either of these will be impacted upon by the Southendon-Sea LDF.

Table 1: Condition of the SSSIs in and adjacent to the Southend-on-Sea local authority area.

	%	%	%	%	%	%
	Meeting	Favourab	Unfavour	Unfavour	Unfavour	Destroye
	PSA	le	able	able no	able	d
	target		recoverin	change	declining	
			g			
Benfleet						
and	5.43	0	5.43	0	94.57	0
Southend	0.40		0.40	O	54.57	O
Marshes						
Foulness	77.36	77.07	0.29	0.18	22.46	0
Great Wood						
and Dodd's	100	89.25	10.75	0	0	0
Grove						
Garrold's	43.32	0	43.32	16.40	40.28	0
Meadow	70.0Z		+0.0Z	10.40	70.20	0

PSA (Public Service Agreement) target is to have 95% of SSSIs to be in favourable condition or recovering by 2010

- A.15 In addition an area of the Leigh Flats is designated a National Nature Reserve, and this largely coincides with part of the Benfleet and Southend Marshes. There are areas identified as (county) Wildlife Sites in the LDF area, and these will also be an important consideration in determining the location of new development. These areas despite being of more local importance only still provide an important local asset, as well as significance for wildlife in providing links between habitats of other designated importance.
- A.16 The Local Biodiversity Action Plan (LBAP) for Southend-on-Sea details the habitats in need of conservation and enhancement in the authority area. The LBAP gives details of the habitats and the pressures they may be under, in Essex as a whole and specifically in this area. Habitats include Brackish Lagoons, on Two Tree Island and Leigh Marshes, with potential pressures including human coastal activities including infilling of lagoons, sea level rise and recreation pressures particular on the boundary of lagoons, and intertidal mudflat communities, that support internationally and nationally important populations of migratory bird species. The LBAP specifically mentions the Foreshore at Southend-on-Sea and part of the Benfleet and Southend Marshes. Here pressures include coastal squeeze as previously mentioned, land claim, pollution runoff forming algal mats. There are also significant saltmarsh habitats, particularly at Two Tree Island, which are also suffering from coastal squeeze.
- A.17 Fresh water habitats in Southend-on-Sea include ponds and lakes, of which there are many examples throughout the Borough, including at Friars Park, Priory Park, Shoebury Park, and Churchill Gardens. Factors threatening the habitats here are loss and fragmentation from urban development, water abstraction, pollution, recreation use, and tipping.
- A.18 Terrestrial habitats mentioned in the LBAP include ancient and veteran trees, although no good information for these exists for Southend-on-Sea. There are 'ancient' hedgerows in the Borough, with examples along the green lane north of Fossetts Camp, and running parallel to Eastwood Boulevard and in

- the boundaries of Edwards Hall Park. There are several woodland areas of importance in the Borough at Hadleigh Great Wood (in Belfairs NR), Belfairs Wood, Oakwood and Owl Wood.
- A.19 Several areas of natural grassland exist in the Borough, including at Belton Hills LNR, in the grounds of Shoebury Coastguard Station, Shoebury Common, Shoebury Old Ranges Nature Reserve, former MOD land at Shoebury, and at Shoebury East Beach on the clifftop.
- A.20 Other more 'urban' habitats of importance are the allotment sites, with a total of 51.2ha of these sites in Southend-on-Sea, churchyards, private gardens, public parks and railway embankments. Essex Wildlife Trust note that many native species of Britain, such as the fox, are becoming increasingly adapted to urban conditions. Features such as balancing ponds, backgarden ponds offering areas of open water, and parks and gardens provide semi-woodland habitats that support species including woodpeckers, a range of plants, fungi and invertebrates. Similarly there is a wide range of plants and animals that depend on the grass and scrubland habitat that survive on verges and railway embankments found throughout the town. However, development often supports less wildlife than it should through efficient use of land leaving little outside space, and inappropriate landscaping, and there is often poor management of habitats for nature conservation purposes even where they do exist.
- A.21 The LBAP also identified species of importance that are found in the Borough of Southend-on-Sea. These include various birds, especially those found on the mud flats such as Dark Bellied Brent Geese (2% of the worlds population overwinter here). Other important birds include the skylark and various garden birds. Invertebrates include heath fritillary butterfly (showing a steady increase since reintroduction on Belfairs NR) and the very rare Shrill Carder Bee. Mammals include, bats, the dormouse, water voles, and in the coastal waters off Southend-on-Sea there are whales and dolphins. Other vertebrates of importance are the Great Crested Newt, Adders, Grass Snakes and Slowworms. Flora of importance are the Black Popular, with 9 mature trees in the Borough (although only 1 female) and the Deptford Pink, found in the Belton Hills LNR.
- A.22 Implications for development. The majority of the sites identified of importance for nature conservation and biodiversity, especially those that are of international importance, are unlikely to be severely harmed by direct disturbance by new development. This is because most of these areas are mudflats and saltmarshes, and are therefore unsuitable for new built development. However, any proposed coastal development will have to take into account the importance of these areas for nature conservation, with development such as ports and marinas likely to have detrimental impacts on the quality of these sites.
- A.23 There are no terrestrial SSSIs within the Borough, although there are two on the western boundary in Castle Point local authority area. Therefore it is vital that these are respected by any development that takes place within Southend-on-Sea adjacent to these sites.
- A.24 Other forms of urban wildlife that are not covered by designation, such as hedgerows, back gardens and railway embankments must also be taken into account in all development proposals in the Plan area, as should Wildlife

Sites identified as having a county wide importance. These sites are important to the survival of many species of flora and fauna in the Borough, as they provide 'wildlife corridors' linking wildlife sites within the urban area, and to the open countryside. Species identified through the LBAP must also be given special protection as it is unlikely that they will only be found on designated sites, and ecological survey of sites prior to development is essential to ensure these species are not harmed.

A.25 New development in Southend-on-Sea should place a greater emphasis on including wildlife features and open green space as part of the design, in order to maximise the nature conservation value of the urban area.

Agricultural Land

- A.26 The Borough only contains a very limited amount of undeveloped land on the northern edge, some of which is used for agriculture. Studies have shown that over half of this agricultural land is soil of Grades I or 2, the highest quality, and therefore of national importance.
- A.27 *Implications for development:* This nationally important high quality agricultural soil resource should be protected from irreversible development that would sterilise the resource.

Flood Risk

- A.28 One of the main risks to human health in the Borough comes from the likelihood of flooding in the area. Environment Agency flood maps show that an area from Leigh-on-Sea round the coast to the boom has a low chance of flood (1 in 200 years). For the most part this flooding only stretches around 100m inland from the sea. However at Southchurch Park to Thorpe Hall golf course, at Shoebury Common and Cambridge Town, and south of the boom at Pig's Bay, the area susceptible to flood comes more than 400m inland, and although much of this area is open space it also includes built development.
- A.29 However, the entire length of the coast in the Borough has coastal defences, under various ownerships, that help protect the area from tidal flood.

 Associated impacts of these defences include the 'coastal squeeze' problem that is adversely affecting the important nature conservation and biodiversity habitats of the Thames Estuary.
- A.30 There is also a risk of flooding along the river through the centre of the built up area of Southend-on-Sea. The flood risk along much of this stretch is moderate to significant, with a 1 in 75 year risk of flooding. However the area which is predicted to flood is never more that a few metres wider than the river, as it flows from Hadleigh to Prittlewell.
- A.31 Implications for development: Flood represents a significant risk to human health and property in the existing built up area of Southend-on-Sea. Much of this risk is from direct tidal inundation, although at present coastal defences keep this to a minimum. It is therefore important, in terms of human health, to ensure that these defences are maintained to prevent increased flood risk. The river that flows through central Southend-on-Sea also has a higher flood risk related to it, although the land area at risk is limited, to a few metres either side of the river.

A.32 New development, in line with PPG25: *Development and Flood Risk* must ensure that it is protected from flooding, and not located so as to exacerbate flood risk to others.

Water Quality

- A.33 The Environment Agency website contains details of water quality monitoring around Southend-on-Sea, however there are no monitoring points (with data) within the urban boundary.
- A.34 The South Essex Catchment Abstraction Management Strategy (June 2004) states that in rivers in this area urban runoff is causing a particular problem with water quality, by introducing untreated polluting matter directly into rivers and streams. In addition river bank habitats are being adversely affected by the urban nature of the catchment and built embankments to help alleviate flooding.
- A.35 There are eight bathing water quality monitoring points along the seafront within the Borough. These are at Leigh Bell Wharf, Southend Chalkwell, Southend Westcliff Bay, Southend Jubilee, Three Shells, Thorpe Bay, and Shoeburyness. All of which showed 'good' or 'excellent' quality in the last 2004 monitoring, although all these monitoring points show good quality water dating back to 1997.
- A.36 *Implications for development:* The water quality within the Borough, and the sea, should be maintained and improved. However, without monitoring of the rivers within the Borough it is difficult to say what level of improvement is needed.
- A.37 New development should be built only when it ensures that there is sufficient sewerage capacity available. In addition other forms of water quality protection should be included in new development, such as the design of roads to ensure there is no direct runoff into surface water.

Air Quality

- A.38 Data on air quality supplied by Southend-on-Sea Borough Council shows that within the urban area the average measurement of particulates (PM10) and Nitrogen Dioxide falls below the 40 microg/m³ objective set in the National Air Quality Strategy. Therefore air quality in the Borough is on track to meet the national quality targets, with a predicted year on year improvement in quality.
- A.39 There is no Air Quality Management Area declared in the Borough.
- A.40 There is only one site listed in the Environment Agency pollution inventory that produces air borne pollution. This is the QinetiQ site in Shoeburyness that has recorded release of many substances to the air, including dioxins, cadmium, mercury, VOCs and ammonia.
- A.41 *Implications for development:* Pollution from vehicles is the biggest contributor to the lowering of air quality in the Borough, and it is important that development takes place within the Borough so as not to cause large

increases in road transport and hence detriment to air quality. The *East of England Annual Monitoring Report (2003)* shows traffic levels in the region up 5% in 2002/3 from 1999/00. Other polluting sources will be controlled by means other than the LDF, such as consent licences, but it must be ensured in the LDF that there are suitable sites for this type of development, where needed, away from residential or other sensitive areas.

Climate Change

- Work undertaken by the Environment Agency for the East of England predicts that by 2080, if greenhouse gas emission to the atmosphere continues at high levels:
 - temperatures will rise by between 3 and 5 degrees Celsius
 - winter rainfall will increase by up to 30%
 - summer rainfall will decrease by 45-60% compared with current patterns
 - sea levels will rise by between 22 to 82 cm, the level depending on a number of factors: ice melt in the Arctic; the amount of green house gases we emit into the atmosphere from now on; thermal expansion of the oceans; the amount of down tilting of the land surface in eastern England (up to approximately 2mm per year)
 - weather patterns could become more extreme (for instance high temperatures recorded occasionally today could become more normal by 2080)
 - agricultural practices will change significantly in order to cope with the longer growing season and the reduced soil moisture in summer.
- A.43 Implications for development: It is clear that there are direct links from this topic to flood risk, and change in natural systems, such as water resources and habitat structure. The impacts from this type of development will be gradual, and all new development will have to take into account the potential impact of climate change. This will include protection from flood (especially tidal inundation), and ensuring that migratory routes for species are maintained and where possible enhanced in order for all species to move with changing climate. In addition every attempt must be made in reducing green house gas emissions within the Borough, this could be achieved by reducing car transport and the use of fossil fuels, and increasing energy efficiency in all new development.

Water Resources

A.44 The East of England is the driest region in the country, yet it is the fastest growing. Water resources are limited and there are already supply-demand issues in parts of the region. Agriculture is a major consumer of water for irrigation and farming processes. The expected climate changes will require new approaches to conserve water and, by implication, to protect soils that may be vulnerable to drought.

- A.45 The Environment Agency has produced a Water Resources Strategy for the East of England looking forward 25 years. A key prediction is that drought conditions are to be more frequent (due to longer, warmer and drier summers).
- A.46 The SEA of the draft East of England Plan shows that the area in and around the Borough of Southend-on-Sea has a low water availability, and summer water resources are shown as being over licensed/over abstracted. Overall there is an unsustainable abstraction regime.
- A.47 Implications for development: This means all future development needs to include water management strategies, to ensure that demand can be met for potable water, and that usage is efficient and minimised where possible. Demand management is advised, by installing water efficient fittings and appliances in new developments, as well as updating existing development.

Landscape Character

- A.48 A landscape character assessment was undertaken of Essex and Southendon-Sea for the Structure Plan review (July 2002). This identified the characteristics of the area and susceptibility to change. The Borough of Southend-on-Sea falls in two character areas, the Thames Estuary and South Essex Coastal Towns.
- A.49 Characteristics of the Thames Estuary are identified as:
 - very wide estuary mouth extending to the open sea
 - extensive tidal mudflats/sands and fringing saltmarsh
 - large scale landscape with strong sense of exposure
 - expansive views in which water and sky dominate, with outline of the Kent coast sometimes visible in the distance
 - man-made development restricted to northern boundary, except distinctive landmark of the exceptionally long Southend Pier
 - dynamic landscape due to tide and weather's influence
 - rough low grazing marsh, rich wildlife
 - with an overall character being undeveloped.
- A.50 The artificial landscape features are:
 - Southend Pier which is 2km long is a major landmark
 - river traffic tankers and container ships and smaller boats
 - concrete seawalls/promenades
 - jetties and groynes
 - some poor quality urban development just outside the character area is visually intrusive, such as the tower blocks of Southend.
- A.51 Past, present and future trends for change are identified as:
 - natural coastal process coastal squeeze
 - demand for marinas and port development are possible pressures in the future which would be very difficult to absorb into the landscape.
- A.52 Overall the landscape is identified as having a high level of sensitivity to change.

- A.53 Southend-on-Sea urban area is identified as the characterisation in the category of 'South Essex Coastal towns'. Specifically it states that Southend on Sea and its associated neighbourhoods is the largest urban area on the South Essex coast, with a dominant grid pattern of streets running parallel and at right angles to the contours. It has a dense urban form, but with some large parks and open spaces.
- A.54 The landscape condition is mixed, with poor quality commercial 'shed' development being common within the area. Several areas of the fringes of the town have been identified as 'landscape improvement areas' through the previous Local Plan, and therefore there is an opportunity for these areas to be significantly enhanced upon through appropriate schemes (which could in part include built development).
- A.55 The identified pressure and likely future trends for change are:
 - urban development pressure likely to be a significant ongoing trend
 - areas where traditional landscape character survives will need particular attention
 - recreational pressures are also likely to be considerable
- A.56 Implications for development: The Thames Estuary part of the landscape, although very susceptible to harm, is unlikely to be affected by the LDF. Development that may affect it is port and marina development. However this is unlikely to occur in the Borough within the plan period.
- A.57 Development with the urban area of the Borough will not harm the overall character of the town, and there should also be the opportunity to bring about improvements to some aspects of the urban environment, as well as improvements to the identified landscape improvement areas on the urban fringe.

Transport

- A.58 Southend-on-Sea is only around 40 miles from the centre of London, with road links via the dual carriageway A127 and A130 roads. The Borough is also well served by rail with two railway lines, and a total of nine stations within the town. One line goes from Shoeburyness, via Southend-on-Sea Central Station, and Basildon to London (Fenchurch Street), the other is from Southend Victoria Station via Billericay and Romford to London (Liverpool Street). Both journeys to London take under an hour. There are also many bus services serving Southend-on-Sea and linking to surrounding areas.
- A.59 The roads in the area are relatively busy with 66,000 vehicles using the A127 daily (highest in Essex and Southend-on-Sea Area), and 30,000 and 32,000 on the A1159 and A13 respectively.
- A.60 Just north of the Borough boundary is the London Southend Regional Airport, with a licence to increase passenger numbers from 7,000 per annum to 300,000 per annum.
- A.61 Southend-on-Sea has been identified through the RSS as a Regional Interchange Centre (RIC), in the East of England, and a defined transport hub for the region as it meets the criteria of:

- access to key mainline railways (north/south routes and east/west routes)
- served by strategic inter-urban bus/coach links
- major bus hubs with strong sub-regional bus networks
- waterway connections within them or nearby.
- A.62 However, in Southend-on-Sea congestion and under investment in local transport infrastructure is a major problem, affecting the economic viability of the town. Therefore the transport system in the town needs to be modernised and upgraded.
- A.63 *Implications for development:* In order for the transport system to be improved in the Borough all new development must ensure that it takes proper consideration of the transport needs of the new development. Reducing trips by car is essential to reduce the congestion within the town, in order to bring improvements, both environmental and economic, to the area.

Open Space

- A.64 A Study of Open Space and Recreation was undertaken in August 2004 to determine the level of provision, and need, within the Borough.
- A.65 The various parks and recreational resources were assessed with the aim of setting standards for new provision. The study revealed an expected correlation between the density of development and the availability of open space, with greater the density the less open space available. The most central urban wards, such as Kursaal, Victoria and Westborough Wards, have 0.31 hectares or less per 1000 population of Park space. Therefore this means that large areas in the central part of the Borough do not have easy access by foot to a park of any kind.
- A.66 *Implications for development:* The low level of open space in the central area does mean that any intensification of residential development in this location will result in a drop in the availability of park space per person.

Cultural Heritage

- A.67 There are five Scheduled Monuments in, or adjacent to, the boundary of Southend-on-Sea Borough. These sites are:
 - Prittlewell Priory, these priory remains date from the 10th century
 - a univallate hill fort 'Prittlewell Camp' found 500m east of Sutton Crematorium, dating back to the prehistoric Bronze Age
 - Southchurch Hall moated site, 1.1km east of Central Southend-on-Sea Station, dating from the 13th century, the associated buildings now house a museum and remains in a generally good condition
 - Defended prehistoric settlement at Shoeburyness, known as the Danish Camp, dating from the Iron Age, a rare example in south east England
 - Cold War Defence boom, this is within the local authority boundary, but stretches out into the Thames Estuary, the boom was built in the 1950s during the Cold War and is the only example of this type of structure of this date in Britain.

- A.68 Other notable features include the Southend-on-Sea pier, at over 2km long making it the longest pleasure pier in the world. The pier dates from 1889, when work was started, and was completed in its current form by 1929. Fire damage in October 2005 damaged buildings at the pierhead, however it remains open and a tourist attraction for the area.
- A.69 There are also around 75 listed buildings and churches in the Borough, two of which are Grade II* and three Grade I. In addition there are many Buildings of Local Architectural or Historic Interest and Frontages of Townscape Merit. There are also fourteen designated Conservation Areas within the Borough.
- A.70 *Implications for development:* Any development in the area will need to take into account the quality of the historic environment, to ensure neither the fabric nor setting of historically or architecturally important buildings, or monuments is harmed.

Social and economic background

A.71 The SEA guidelines only require that an environmental baseline is set out for the Plan area, there is no such requirement for SA. For this SA however, and in the light of the importance of economic and social considerations to the sustainability of the Southend community, a brief characterisation of the social and economic situation has been undertaken in order to set a proper context for the SA as a whole.

Population

- A.72 The population has grown rapidly over the last few decades in Southend, driven by inward migration from the rest of the UK, principally London. The 2001 census put the population in the Borough at 160,257. The age profile of Southend in 2001 was; 0-15 years: 20%; 16-59 years: 56.1%, and; 60+ years: 23.8%.
- A.73 Southend is a contributor to the London economy by having 11,000 residents commute daily to work. People move to the area for job opportunities in Southend-on-Sea but more so for its proximity to London, because there are relatively low house prices to increase the viability of commuting, the quality of the environment and to retire. With this type of demand taking up accommodation there will need to be further capacity if economic growth is to be accommodated.

Housing needs

- A.74 Southend is the fifth largest urban area in South East England outside London. At 42 dwellings per hectare (2001), the Borough has by far the highest population density in Essex and the second highest in the East of England. Its population has grown rapidly over the last 20 years and will continue to do so.
- A.75 The age profile has become younger and the increasing needs for housing, leisure facilities, employment, education opportunities, and health care facilities for local residents in a sustainable, focussed way, will be a real challenge for the future.

- A.76 Southend has approximately 75,000 dwellings (2001). Due to limited land resources and environmental constraints, for the first time Southend will find it difficult to meet the housing needs of its own population. Housing needs and homelessness are becoming increasingly prominent issues in this area, particularly as pressure is put on the housing stock through the in-migration of people from the London Boroughs.
- A.77 In response to this need, the draft Regional Spatial Strategy (RSS) (December 2004) has set out its distribution of dwelling provision 2001-2021 in policy H1. This requires the delivery in Southend of an average of 300 dwellings per year and a total of 6,000 dwellings over the 20 year period. In total, the East of England will have 478,000 dwellings developed over this period, equating to 23,900 dwellings per annum.
- A.78 Southend-on-Sea Borough Council Housing Needs Survey, May 2003, Final Report:
 In this study, affordable housing is taken to be "relets (excluding transfers) available from Registered Social Landlords". It assumes, after taking several calculations into consideration that the future supply of affordable housing will be 701 units per annum.
- A.79 The study then estimates that there will be an annual need over the next 5 years for 2,188 affordable homes. The supply to meet this need is estimated at 701 per annum. Therefore, there is an estimated shortfall of 1,487 affordable homes per annum. The shortfalls are for two (748 units p.a) and three bedroom properties (429 units p.a). A 2004 update of this study reduced this estimated annual shortfall, or affordable housing requirement, to 1,363 units.
- A.80 The 2003 Housing Needs Survey also highlighted that over the next 5 years there will be a shortage of 3,819 owner-occupied homes most notably in the 1-2 bed sector. Overall, there is an estimated shortfall of 11,254 dwellings over the next 5 years to 2007 if the market and affordable needs are to be met. The affordable housing requirement accounts for 66.1% of this shortfall.
- A.81 In 2003, 100% of Southend's housing completions were on previously developed land.
- A.82 The pressures faced by the Borough as a result of the inevitable population increases are great, and the limited land resources and necessary amenity and infrastructure, means that there will need to be very good planning to accommodate the inevitable growth.

Employment position & economic potential

- A.83 The 2001 census shows that:
 - there were approximately 74,500 economically active people within the Borough in 2001 (74,000 in 1991)
 - of these about 26,700 out commute daily for work (10,500 of these to London) (26,000 and 11,000 in 1991),
 - however there are 19,700 people daily in commuting to the Borough for work (19,000 in 1991).

- A.84 Overall the level of unemployment at 3.6.% (2001 census), is just above the UK average of 3.4%, although the % unemployed rises to 6.29% in Kursaal Ward, 5.84% in Milton Ward, and 5.47 % in Victoria Ward. Later NOMIS/ONS unemployment rates for these areas (May 2005) are 2.6%, 6.7%, 4.8% and 5.1% respectively.
- A.85 An AEA 1998/NOMIS survey showed 5,500 companies operating in Southend-on-Sea, and around 57,000 jobs, with Southend-on-Sea having 69% self containment of work based employees.
- A.86 Jobs by sector in Southend-on-Sea (1998 statistics), are:

•	Public sector:	27%
	(administration, education and health)	
•	Distribution, hotels & catering	25%
•	Financial services	23%
•	Manufacturing	10%
•	Other services	15%
	(agriculture, construction,	
	transport & communications)	

(AES 1998 / NOMIS)

- A.87 Independent employment forecasts indicate that, if the market is left to its own devices, the Borough of Southend will lose an additional 3,500 jobs by 2011. This is due to structural problems including declining local employment sectors and difficulties in attracting inward investment. There is a continuing trend for business start-ups and closures. Without appropriate intervention, a vicious cycle of decline will become established.
- A.88 The draft RSS states that: strategic employment sites should be allocated to support Southend-on-Sea in its role as a strategic cultural and intellectual centre, to strengthen the development of the Thames Gateway. Policy E4 of the draft RSS states that the Local Development Documents will provide the strategic employment sites required in a number of places including Southend-on-Sea.
- A.89 Southend is undergoing continuing regeneration and enhancement of the Seafront, High Street and the Pier. The Pier's new developments cost £1.9 million from the European funded Southend Seafront High Street and Pier Enhancement ('Sshape') programme.
- A.90 Southend-on-Sea is ranked at 130 (rank of average rank) in the Indices of Deprivation (ID2004 local authority level) out of 354 English districts. Some wards contain areas that are in the worst 10% of super output areas (SOA) nationally, these wards being Kursaal (majority of the ward), Milton and Southchurch.

Information sources

Internet Resources

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Appendix 4

Overview appraisal of the proposed LDP objectives against the sustainability objectives developed for the sustainability appraisal

This Appendix considers the sustainability implications of the proposed LDP objectives, in order to ensure the matters covered are consistent with the objectives for more sustainable development. The matrix based approach provides a useful visual overview of the compatibility of the two sets of objectives, allowing for the identification of potential areas of conflict and omissions in the LDP objectives. This appraisal method is intended to be quite simplistic in its approach, and therefore the appraisal primarily considers if the objectives are compatible based on direct impacts.

- SO1 Deliver employment led regeneration, wealth creation and growth across the Thames Gateway South Essex sub-region
 SO2 Secure the regeneration of Southend as a cultural and intellectual hub and a centre of education excellence
 SO3 Create and maintain a balance between employment and housing growth in the future
 SO4 Secure sustainable regeneration and growth focused on the urban area
 SO5 Provide for not less than 13,000 net additional jobs in the period 2001 to 2021 within Southend
- SO6 Provide for 6,000 net additional dwellings in the period 2001 to 2021 within Southend
- SO7 Target future dwelling provision to meet the needs of local people including the provision of affordable housing
- SO8 Secure a thriving, vibrant and attractive town centre and network of district and local centres
- SO9 Secure a 'step change' in the provision of transport infrastructure and accessibility as a precondition for additional development

- SO10 Maximise the effectiveness and integration of key transport corridors and interchanges as a principal focus for development in the urban area
- SO11 Secure the regeneration of London Southend Airport to enable it to reach its potential to function as a local regional airport, subject to environmental safeguards
- SO12 Secure the sustainable use of the River Thames and its Estuary as an asset for transport, leisure and business
- SO13 Secure the social and physical infrastructure related to improving the health, education, lifelong learning and well-being of all sectors of the community
- SO14 Deliver high quality, well designed and attractive urban and natural environments which are safe, people friendly and distinctive, and which respect and enhance existing character and local amenity
- SO15 Secure the application of sustainable construction and operation in all development, in particular through the prudent use of natural resources, energy efficiency, and the maximum use of renewable and recycled resources, in order to prevent or minimise local contributions to climate change and its associated risks, and the depletion of non-renewable resources
- SO16 Protect, conserve and enhance—the town's historic and natural environment and assets, including both its biodiversity resources, species and habitats, and its heritage conservation resources
- SO17 Regenerate and bring back into productive and beneficial long-term use, including where appropriate use for biodiversity or other natural resource value, land which is contaminated or otherwise degraded
- SO18 Contribute to the creation of a 'Green Grid' of high quality, linked and publicly accessible open spaces and landscapes across the sub-region
- SO19 Secure delivery of strategic objectives through all relevant delivery bodies, and their strategies

	Accessibility	Housing	Education and skills	Health and safety	Community	Biodiversity	Landscape	Built environment	Air	Water	Land	Soil	Minerals	Energy	Local economy	Employment	Wealth	Comments
1	?	?	?	?	?	?	?	?	?	?	?	?	?	?	•	•	•	The level of housing growth promoted by for the Thames Gateway represents a 'step-change' in development for this area. Therefore there is the potential for positive impacts relating to the economy, and regeneration of neglected areas. Although there is also potential for negative effects, particularly relating to the natural environment through land take, impact may include the impacts on biodiversity, the need to build in areas at risk of flood, and issues associated with water supply.
2	-	-	•	?	•	-	-	?	-	-	-	-	-	-	?	?	•	The regeneration and focus of Southend as a 'cultural and intellectual hub' should bring social benefits to the area, as well as creating an attractive place for business investment.
3	•	•	-	-	?	-	1	-	?	1	1	1	1	?	?	•	•	The housing and employment supply must be balanced to ensure access to homes and jobs for all, in addition the goal should be more self-containment of the Borough for these needs, so as to support sustainable travel patterns.
4	?	-	-	-	?	-	-	-	•	-	•	1	1	?	-	-	-	This approach is likely to support more sustainable travel patterns, with benefits for accessibility and air quality, and the efficient use of land for development, in particular the use of previously developed land for new development. Care will need to be taken to protect existing open spaces in town.

	Accessibility	Housing	Education and skills	Health and safety	Community	Biodiversity	Landscape	Built environment	Air	Water	Land	Soil	Minerals	Energy	Local	Employment	Wealth	Comments
5	?	?	?	?	?	?	?	?	?	?	?	?	?	?	•	•	•	As with the appraisal of objective SO1 the level of development proposed in the area may have an impact on environmental sustainability through the level of development proposed. However, there are likely to be clear economic benefits.
6	?	•	?	?	?	?	?	?	?	?	?	?	?	?	•	?	?	As with the level of economic development and overall development in the South Essex Thames Gateway (objectives SO1 and SO5) the level of development is likely to have some impacts on all of the sustainability matters, particularly relating to the natural environment. This objective will also help all meet their housing needs, and provide a workforce for economic growth.
7	?	•	-	-	-	-	ı	-	-	-	-	-	-	-	?	-	-	This objective will encourage the provision of a home for all.
8	•	-	-	-	•	-	1	•	?	1	1	-	1	?	?	1	?	By supporting the town centre this may help community cohesion and provide more services in an accessible locations, with positive impacts related to reducing car use. A lively central area will also support jobs and create a more attractive location for inward investment.
9	•	-	-	-	-	-	ı	-	•/x	-	1	-	-	•/x	?	-	•	It is not clear to what extent this applies to road building or to public transport provision. New road building will not have positive benefits for sustainable development in the long-term, even if there are short term economic benefits, and therefore does not score well in the sustainability appraisal. If public transport is improved above road travel this should have positive benefits in reducing demand for car use.

	Accessibility	Housing	Education and skills	Health and safety	Community	Biodiversity	Landscape	Built environment	Air	Water	Land	Soil	Minerals	Energy	Local	Employment	Wealth creation	Comments
10	•	-	-	-	-	-	1	-	?	-	ı	1	1	?	-	-		Transport interchanges make more sustainable locations for the focus of development, and should help support more sustainable travel modes.
11	-	-	-	-	-	-	-	-	?/x	-	-	-	-	?/x	-	-	?	In terms of sustainability increasing capacity and the number of flights from the UK can not be environmentally sustainable due to the fuel use of air travel compared to other modes. The policy may, however, have benefits for the economy and wealth creation in the area.
12	?	-	-	1	-	•/?	1	1	?	·	1	1	1	?	,	-	-	Greater use of the river for transport, particularly of bulky good, is welcomed as this can be a sustainable mode of transport. Care will need to be taken to ensure any new port and docking facilities are built without harm to the biodiversity importance of the area.
13	?	-	•	•	•	-	1	1	-	1	ı	1	1	-	ı	-	-	Provision of community related facilities is essential, particularly given the increased demand due to the level of development over the plan period.
14	-	-	-	?	-	?	?	•	-	-	-	-	-	-	-	-	?	This approach may help to improve the quality of the natural and built environment in the area. Although the inclusion of the 'natural environment' in this objective does not fit easily, as it is a different type of asset than the built environment and should be protected and enhanced for its own sake.
15	-	-	-	-	-	?	?	?	•	•	-	-	•	•	1	-	-	This objective is welcomed by the appraisal, although it is not clear if it is fully backed up by policy.
16	-	-	-	-	?	•	•	•	?	?	?	-	-	-	-	-	-	This objective should help protect and enhance various environmental assets in the area.

	Accessibility	Housing	Education and skills	Health and safety	Community	Biodiversity	Landscape	Built	Air	Water	Land	Soil	Minerals	Energy	Local	Employment	Wealth creation	Comments
17	-	-	-	•	1	-	-	-	-	-	•	1	1	-	-	-	-	This objective is vital for the Borough, which is has many disused industrial sites in need of land remediation.
18	•	ı	-	•	?	•	•	?	-	-	ı	1	1	-	-	-	?	The use of a 'green grid' could have a wide range of benefits including accessibility for all to open space, with associated benefits for biodiversity and landscape quality, there may also be benefits for wealth creation.
19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	There is no real relationship between this objective and the sustainable development objectives.