

Knowsley Core Strategy: Green Belt Broad Locations for Development

Sustainability Appraisal Report

June 2012



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KNOWSLEY CORE STRATEGY: GREEN BELT BROAD LOCATIONS FOR DEVELOPMENT SUSTAINABILITY APPRAISAL REPORT

1. NON TECHNICAL SUMMARY

1.1 Introduction

- 1.1.1 This Report outlines the findings of the Sustainability Appraisal (SA) of the broad locations in the Green Belt being considered for development by Knowsley Metropolitan Borough Council (MBC) in its emerging Local Plan Core Strategy.
- 1.1.2 SA is a systematic process used to assess the extent to which a plan or strategy will help to achieve relevant social, environmental and economic objectives. It also suggests ways of avoiding or reducing negative impacts.
- 1.1.3 This SA assesses the Tier One locations, Tier Two locations and the safeguarded locations for development identified by the Core Strategy Preferred Options report against available baseline data and sustainability objectives. The Tier One and Tier Two locations were identified by the Preferred Options report as 'reserve' locations where development may take place within the period to 2027, whereas the "safeguarded locations" were identified by the Preferred Options report as locations where development will take place after 2027 unless in exceptional circumstances it is necessary for development to take place before this date. It is however recognised that this phasing for the release of Green Belt locations may be reconsidered in the Council's emerging Core Strategy in light of emerging evidence, including this SA Report.
- 1.1.4 In order to ensure consideration has been given to suitable alternatives, the SA also includes an appraisal of the locations discounted by the draft Knowsley Green Belt Study¹ at the final stage of the study and the alternative Green Belt locations proposed by landowners/developers during the Core Strategy Preferred Options and draft Knowsley Green Belt Study consultations². The findings of this SA report should support the Council's approach to the release of particular broad locations within the Green Belt as discussed in the 'Technical Report – Green Belts (Knowsley Council, 2012) and should also be taken into account in the publication version of the Core

¹ Draft Knowsley and Sefton Green Belt Study – Knowsley Report (Knowsley Council, 2011)

² The Knowsley Core Strategy Preferred Options Report and Draft Knowsley and Sefton Green Belt Study – Knowsley Report were subject to a period of consultation from 27 June 2011 to 5 September 2011.

Strategy to help ensure that it maximises its contribution to future sustainability.

1.2 Requirement to Undertake a Sustainability Appraisal

- 1.2.1 Sustainable development is the core principle underpinning the planning system. In order to ensure that new plans and strategies contribute towards sustainable development, the Planning and Compulsory Purchase Act 2004 introduced the requirement for a SA to be carried out on all new or revised Local Plans (formerly known as Local Development Frameworks). Whilst the Localism Act 2011 and the recent publication of the National Planning Policy Framework (NPPF) have resulted in a number of significant changes to the planning system, there is a continued requirement for Local Plan documents to be subject to SA throughout their preparation.
- 1.2.2 In addition, local planning authorities must comply with European Union Directive 2001/42/EC, which requires a formal Strategic Environmental Assessment (SEA) of plans and programmes that are likely to have a significant effect on the environment.
- 1.2.3 While SA and SEA are distinct processes many of their requirements overlap. This report has been produced to meet the requirements of both. Throughout this report, all references to SA should be taken to include the requirements of European Directive 2001/42/EC.

1.3 Sustainability Objectives

- 1.3.1 The SA considers the potential implications of the broad locations in the Green Belt being considered for development by the emerging Knowsley Metropolitan Borough Council's Core Strategy and sites identified by landowners for consideration. This has been achieved by assessing these locations against a series of social, environmental and economic objectives. Accordingly, the establishment of these objectives is central to the SA process.
- 1.3.2 Drawing upon the sustainability issues identified through analysis of baseline data and the review of other relevant plans and strategies, twenty-two objectives that reflect Knowsley's priorities for achieving a sustainable borough have been identified in the SA Scoping Report³. These cover a range of issues, for example relating to housing, social deprivation, health, crime, climate change, biodiversity, air quality, water quality, landscape, cultural heritage, business competitiveness, educational attainment and unemployment. In addition, thirty-seven sub-objectives have been identified to assist with the assessment

³ Core Strategy Sustainability Appraisal Scoping Report (Knowsley Council, 2009)

against the sustainability objectives. Notwithstanding the changes that have taken place to the planning system since the publication of the SA Scoping Report, it is considered that the SA objectives and sub-objectives identified in the Scoping Report are still relevant to Knowsley and provide a suitable framework for this SA.

1.4 Baseline Characteristics and Key Sustainability Issues

1.4.1 The review of plans, programmes and strategies, the analysis of the baseline data, and consultation with the public and statutory bodies enabled the following key sustainability issues to be identified for the borough:

- Over the past 25 years the population of Knowsley has decreased markedly;
- Knowsley is among the most deprived districts in England;
- There is a need to increase the proportion of households that are owner-occupied and reduce the number of homes that do not have access to modern amenities;
- Over half of persons in Knowsley aged 16 to 74 have no qualifications;
- Binge drinking, smoking and obesity are particular problems in Knowsley;
- There is a need to reduce the need to travel by car and increase the use of more sustainable forms of transport;
- Economic activity rates and incomes are lower than the North West average;
- There is a need to retain a greater proportion of retail expenditure within Knowsley to enhance the vitality and viability of the Borough's town centres;
- 2 of the 15 conservation areas in Knowsley are included on the latest Heritage at Risk register;
- Access to areas of natural and semi-natural open space is poor in parts of the Borough;
- There is a need to conserve and enhance the natural environment recognising the importance of biodiversity;
- There is a need to secure and promote increased energy efficiency and renewable energy sources;
- There is a need to promote and secure more sustainable waste management;
- There is a need to consider the impacts of flooding and flood risk;
- The biological and chemical condition of rivers needs to be improved; and
- The re-use of land should be promoted to minimise the take-up of greenfield land.

Source: Sustainability issues were derived from the baseline data gathered in 2008 – 2009 to inform the SA Scoping Report (May 2009).

1.5 Appraisal Results: Positive and Negative Effects

- 1.5.1 The SA process concluded that development in each of the locations appraised has the potential to bring a number of benefits. Each of the locations would however also have the potential to have some negative impacts on the objectives and a number of recommendations have been made to improve the performance of individual locations against the sustainability objectives.
- 1.5.2 Whilst the impact of each of the proposals varied from site to site, there were a number of common themes. For instance, many of the locations for which the anticipated development would incorporate a residential element are likely to have a positive impact on the objective of providing good quality, affordable and resource efficient housing. Some locations would however have a greater impact on this objective due to their scale and their proximity to regeneration priority areas and/or areas of housing need/deprivation. In addition, it was considered that many of the locations, particularly those that are larger in scale, have the potential to generate additional employment opportunities and stimulate investment in the surrounding area. It was therefore considered that these locations had the potential to have some positive impact on the objectives relating to reducing poverty and social deprivation; business growth; and reducing unemployment.
- 1.5.3 In terms of negative impacts, as the majority of the locations comprised predominantly of greenfield land, and a significant proportion contained Best and Most Versatile agricultural land, the potential development of many of these locations would be considered to have a negative impact on the objective relating to protecting land and soil and its sub-objective of directing housing to previously developed land. Several of these locations also contained areas of priority habitat and contained or were adjacent to Local Wildlife Sites. As a result, several locations would have the potential to have an adverse impact on the objective relating to protecting biodiversity, the viability of protected and endangered species, and habitats. The potential development of many of these locations would also have some negative impact on the objectives relating to conserving green infrastructure and protecting local landscape character.

1.6 Difference the Sustainability Appraisal Process has Made

1.6.1 The SA process concluded that the potential development of each of the locations could have a positive impact on a range of objectives. However, it also identified several instances where locations have the potential to have a negative impact on sustainability objectives, a number of uncertain impacts and a range of opportunities for further enhancements to improve the sustainability of the any potential development of these locations.

1.6.2 A range of recommendations have been made by the SA to improve the performance of a number of locations in relation to the sustainability objectives. Many of these are applicable to several different locations. These include:

- Undertaking appropriate ecological surveys, protecting priority habitat and/or Local Wildlife Sites and incorporating on-site habitats in order to reduce the impact of the potential development of certain locations on biodiversity;
- Undertaking more detailed flood risk assessments and applying appropriate measures to mitigate flood risk such as the use of Sustainable Drainage Systems to reduce the impact of certain locations on the objective of adapting to climate change;
- Ensuring development is built to an appropriate density to minimise the need to release further greenfield sites; and
- Securing improvements to the public transport network and ensuring that the development is accessible by a choice of means of transport in order to mitigate some impact on the objectives relating to air quality; mitigating climate change; and the use of sustainable modes of transport.

1.6.3 A number of other recommendations have been made which are more unique to individual locations. These include:

- Protecting the setting of the remnants of the former Halshead Estate to reduce any negative impact from the potential development of Land to the south of Whiston (KGB14 and KGB16) on the objective of protecting local landscape character;
- Providing consideration to the prior extraction of clay from part of the Cronton Colliery (KGB18) site in order to prevent development at this location from sterilising this resource;
- Ensuring the any potential development at the Land to the East of Knowsley Industrial Park (KGB 4) incorporates linkages to the existing Industrial Park to ensure it does not have an adverse impact on efforts to secure the regeneration of this area; and
- Ensuring that any potential development at Land at Knowsley Lane (KGB7) and Land at Carr Lane (KGB10) incorporates

effective linkages to neighbouring Principal Regeneration Areas to maximise the contribution of development in these locations to the regeneration of the wider area.

1.7 Next Steps

- 1.7.1 This report is being published for consultation alongside the Publication Version Core Strategy and a number of other supporting studies / assessments including the final report of Knowsley's Green Belt Study, the Green Belt Technical Report and the final report of the Core Strategy Sustainability Appraisal. The consultation provides the public, statutory consultees and other stakeholders with an opportunity to express opinions on this report and also to use it as a reference point whilst commenting on other documents included in this stage of consultation.
- 1.7.2 Any significant changes made to the Proposed Submission version of the Core Strategy will be subjected to further SA. It is envisaged that the Submission version of the Core Strategy will be submitted to the Secretary of State in early 2013.

1.8 How to Comment

- 1.8.1 This SA Report will be subject to a consultation period alongside the Publication Version Core Strategy and supporting documents. Comments are invited on the contents of the report, in terms of the appraisal methodology, the accuracy of the assessment of the likely significant effects of the plan and the opportunities for additional mitigation to ensure that the Core Strategy is as 'sustainable' as possible. All comments submitted during this period will be considered and, where appropriate, amendments may be made to the SA scoring to reflect the comments received.
- 1.8.2 Comments can be submitted using the following methods:

- By email, to localplan@knowsley.gov.uk;
- By fax to 0151 443 2326;
- By post, to:
Places and Neighbourhoods Manager
Policy, Impact and Intelligence Division
Chief Executive's Directorate,
Knowsley Council,
Archway Road
Huyton
Knowsley
Merseyside
L36 9YU.

1.8.3 Further details regarding the consultation, including the deadline for receipt of comments, can be found on the Council's website.

2. INTRODUCTION

2.1 Background

- 2.1.1 In September 2004, the Planning and Compulsory Purchase Act came into effect and introduced the requirement for Knowsley Council to replace its existing land use development plan – the Knowsley Replacement Unitary Development Plan (UDP)⁴ – with a Local Development Framework (LDF). Whilst the Localism Act and the recent publication of the National Planning Policy Framework have resulted in a number of significant changes to the planning system, there is a continued requirement for Knowsley Council to produce a local spatial plan to replace its existing UDP. However, due to the aforementioned changes to the planning system, this replacement plan will now be referred to as a Local Plan rather than a LDF.
- 2.1.2 Knowsley’s Local Plan will comprise of a series of individual documents that collectively deal with the spatial issues that will affect the people who will live, learn, work and relax in the Borough. The overarching document of the Knowsley Local Plan will be the “Local Plan: Core Strategy”.
- 2.1.3 The Core Strategy will outline the Council’s vision for Knowsley up to the year 2028, and will set out the strategic framework to promote, guide and manage future growth and development in the Borough. Accordingly, it will make important choices about how and where new development will take place and establish an appropriate balance between growth, regeneration and environmental protection / improvement. It should be noted that previous consultation on the emerging Core Strategy made provision for development up to 2027. It is now envisaged that the Core Strategy will be adopted in 2013. Therefore the plan period for the publication version of the Core Strategy has been extended to 2028 to account for a 15 year timeframe recommended by national guidance.
- 2.1.4 A key element of the Core Strategy will be to identify the scale of new development to be accommodated in Knowsley. The housing and employment development requirements are set out in the Technical Reports entitled Planning for Housing Growth in Knowsley⁵ and Planning for Employment Growth in Knowsley⁶ and the other supporting evidence including the Strategic Housing Land Availability Assessment (SHLAA)⁷ and the Joint Employment Land and Premises

⁴ Knowsley Replacement Unitary Development Plan (Knowsley Council, 2006)

⁵ Technical Report: Planning for Housing Growth in Knowsley (Knowsley Council, 2012)

⁶ Technical Report: Planning for Employment Growth in Knowsley (Knowsley Council, 2012)

⁷ Knowsley Strategic Housing Land Availability Assessment – 2012 Update (Knowsley Council, 2012)

Study (JELPS)⁸. Drawing upon the evidence presented in these documents, together with a variety of other information sources, the Core Strategy Preferred Options Report (2011) identified the need to deliver a total of 7650 new dwellings and 65 hectares of employment land during the plan period.

- 2.1.5 As part of the SHLAA and JELPS studies landowners and other stakeholders were given the opportunity to submit details of sites that they considered suitable for development via a “Call for Sites” process. Nevertheless, despite these consultation activities, both the SHLAA and the JELPS concluded that there is insufficient suitable land for housing and employment development within the existing urban area of Knowsley to meet these requirements.
- 2.1.6 The Council has therefore explored a number of options for increasing the amount of development that could be delivered within the existing urban area, including the release of urban greenspace for development; building at higher densities; transferring some of the Borough’s development requirements to neighbouring districts; and remodelling and/or intensified development within Principal Regeneration Areas. A number of evidence base studies have been produced to examine these options in more detail, these include an audit of urban greenspaces⁹ to examine the potential to release such areas for development, the completion of a Liverpool City Region-wide study of land supply and requirements for new development¹⁰, and the production of a study¹¹ which explored the potential to meet part of the borough’s development needs through the remodelling of land in Knowsley Industrial and Business Parks. Nevertheless, the Council considers that these options would fail to deliver the required amount of development to meet the Borough’s needs. Consequently, the Council have considered it to be appropriate to plan for the release of some land that is presently within the Green Belt in order to meet the long term development needs of the Borough.
- 2.1.7 Working collaboratively with Sefton Metropolitan Borough Council and West Lancashire Borough Council, Knowsley Council developed a common methodology for a review of their respective Green Belts. In order to ensure the study was robust and undertaken consistently, Knowsley and Sefton Councils commissioned independent consultants, “Envision” to work with Council officers and validate the studies. West Lancashire Council worked in a similar way, with Lancashire County Council adopting a similar validation role.

⁸ Joint Employment Land and Premises Study (BE Group, 2010)

⁹ Greenspace Audit (Knowsley Council, 2012)

¹⁰ Liverpool City Region Housing and Economic Development Evidence Base Overview Study (2011)

¹¹ Delivering a New Future for Knowsley Industrial Park – Strategic Framework (DTZ, Arup and Taylor Young, 2011)

- 2.1.8 The consultation draft study¹² identified land in the Green Belt that has the potential to be developed in order to meet future housing and employment needs. This study adopted a staged approach to rule out parts (known as parcels) of land in the Green Belt that either must be kept open in order to maintain the integrity of the Green Belt, or which were considered to be unsuitable for development. The Green Belt Study process therefore resulted in several locations around the Borough being identified as the most appropriate for new development taking account of the five purposes of including land in the Green Belt contained in Planning Policy Guidance Note 2 (PPG2): Green Belts. The key elements of this guidance, including the five purposes of including land in the Green Belt, have now been drawn into the NPPF.
- 2.1.9 Drawing upon the findings of the this study, the Core Strategy Preferred Options Report included a series of broad locations that it was proposed to remove from the Green Belt in order to meet Knowsley's longer term development needs. These locations were divided into "reserve" locations, where development may take place within the period to 2027, and "safeguarded locations", where development will take place after 2027 unless in exceptional circumstances it is necessary for development to take place before this date.

2.2 Purpose of the Report

- 2.2.1 Sustainable development is the core principle underpinning the planning system and, as a consequence, sustainability will be at the heart of the Core Strategy. In order to ensure that new plans and strategies contribute towards sustainable development, the Planning and Compulsory Purchase Act 2004 requires a Sustainability Appraisal (SA) to be carried out on all new or revised Core Strategies. SA seeks to promote sustainable development through the integration of sustainability considerations into the preparation, adoption and implementation of plans and strategies. It involves the identification and evaluation of the social, environmental and economic impacts of a plan, offers an opportunity to consider ways in which a plan can make an effective contribution to sustainable development and provides a means of avoiding or reducing any adverse effects that the plan might have.
- 2.2.2 This report outlines the findings of the SA of the broad locations in the Green Belt being considered for development by the emerging Knowsley Core Strategy. This includes an appraisal of those identified as Tier One and Tier Two "reserve locations" as well as those identified

¹² Draft Knowsley and Sefton Green Belt Study – Knowsley Report (Knowsley Council, 2011)
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as “safeguarded locations”. In order to ensure that there has been a suitable appraisal of all reasonable options, this SA also provides an appraisal of those locations that were discounted at the final stage of the draft Knowsley Green Belt Study. A number of alternative locations have also been proposed by landowners/developers during the consultation on the draft Knowsley Green Belt Study and the Core Strategy Preferred Options report. This report also outlines the findings of the SA of these alternative locations. A borough-wide map showing the distribution of these locations is provided in Appendix 1.

2.2.3 This report is being published for consultation alongside the Publication Version Core Strategy, and supporting studies / assessments including the final report of Knowsley’s Green Belt Study, the Green Belt Technical Report and the final report of the Core Strategy Sustainability Appraisal. The consultation provides the public, statutory consultees and other stakeholders with an opportunity to express opinions on this report and also to use it as a reference point whilst commenting on other documents included in this stage of consultation. It should be read together with the previous interim SA reports issued alongside the Core Strategy for consultation.

2.3 Requirement for SA / SEA

2.3.1 Under Section 19(5) of the Planning and Compulsory Purchase Act 2004, where a Local Planning Authority is preparing a Core Strategy it is mandatory for the plan to be subject to SA throughout its production, to ensure that it is fully consistent with, and helps to implement, the principles of sustainable development. The SA performs a key role in providing a sound evidence base for the Core Strategy and provides a means of demonstrating to decision makers, and the public, that the plan is the most appropriate given reasonable alternatives.

2.3.2 In parallel with this, the European Directive 2001/42/EC “on the assessment of the effects of certain plans and programmes on the environment” (the Strategic Environmental Assessment or ‘SEA Directive’), which is transposed into United Kingdom law by the Environmental Assessment of Plans and Programmes Regulations 2004 (the ‘SEA Regulations’), introduced a statutory obligation to conduct an environmental assessment of certain plans. The Regulations apply to a range of UK plans and programmes prepared by public bodies, including Knowsley’s Core Strategy which meets the relevant criteria in that:

- It is “prepared by an authority for adoption, through a legislative procedure by Parliament or Government, and is required by legislative, regulatory or administrative provisions” (Article 2(b)); and

- It concerns “town and country planning or land use... which sets the framework for future development consent of projects” (Article 5.2(a)).

2.3.3 While SA and SEA are distinct processes, many of their requirements overlap. As a consequence, the Government has prepared guidance¹³ which advises that an integrated approach to SA and SEA should be pursued, so that the SA process also meets the requirements of the SEA Directive and Regulations. This involves extending the breadth of (predominantly environmental) issues required to be considered under SEA to cover the full range of aspects (including social and economic) for sustainability.

2.3.4 In accordance with this guidance, this SA Report meets the SEA requirements, and acts as the ‘environmental report’ for the purposes of Regulation 12 of the Environmental Assessment of Plans and Programmes Regulations 2004. Throughout this report, all references to SA must therefore be taken to include the requirements of European Directive 2001/42/EC.

2.4 Compliance with these Requirements

2.4.1 As outlined above, the intention of this SA is to adopt an approach to appraisal which also meets the requirements of the SEA Directive and Regulations. The following table shows how this report meets the requirements of the SEA Directive.

¹³ CLG Plan Making Manual (CLG, 2008).

Table 1: Compliance with the SEA Directive

Information to be included in an Environmental Report under the SEA Regulations	Relevant sections in the SA Report
An outline of the contents, main objectives of the plan and its relationship with other relevant plans and programmes.	3.2 3.4 – 3.6
The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan.	3.3
The environmental characteristics of areas likely to be significantly affected.	3.3
Any existing environmental problems which are relevant to the plan, including in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Directives 79/409/EEC and 92/43/EEC.	3.3 3.8
The environmental protection objectives, established at international, Community or national level, which are relevant to the plan and the way those objectives and any environmental considerations have been taken into account during its preparation.	3.3 3.5
The likely significant effects on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soils, water, air, climatic factors, material assets, cultural heritage, landscape, and the interrelationship between the above factors.	4.1 – 4.6 Appendix Report
The measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan.	4.7 Section 6 Appendix Report
An outline of the reasons for selecting the alternatives dealt with and a description of how the assessment was undertaken including any difficulties.	3.1 3.7
A description of measures envisaged concerning monitoring.	5
A non-technical summary of the information provided above.	1

2.5 History of the SA in Relation to the Core Strategy

Scoping Report

- 2.5.1 In May 2009 an SA Scoping Report was produced to define the scope of the SA with regard to the Core Strategy, and to define the important features of the baseline that will inform the plan. The aim was to ensure that the SA was comprehensive and would address all relevant issues

and objectives, by enabling input from key stakeholders and consultation bodies at an early stage in the process.

2.5.2 In particular, the Scoping Report provides an initial assessment of:

- The relationship between the Core Strategy and other relevant plans and programmes;
- The current environmental, social and economic baseline and any trends; and
- The likely key sustainability issues.

2.5.3 The Report also set out the proposed methodology for the SA, giving details of its level of detail and scope.

2.5.4 Consultation on the SA Scoping Report took place between May and June 2009. Comments were invited from the consultation bodies required by the SEA Regulations – the Environment Agency, English Heritage and Natural England¹⁴. The main comments from consultation on the SA Scoping Report were the need to:

- Review additional relevant plans, policies and programmes to identify their implications for the Core Strategy;
- Incorporate additional baseline information on the historic environment, landscape, geodiversity, recreation, rural green space and green infrastructure;
- Identify any sustainability issues for the historic environment and cultural heritage, conservation and enhancement of biodiversity, geodiversity and geological conservation, local landscape and townscape quality and character, public enjoyment of the countryside and green infrastructure; and
- Incorporate additional references to the Biodiversity Duty and the North Merseyside Biodiversity Action Plan.

2.5.6 The SA Scoping report has been updated to address these comments.

Issues and Options Report

2.5.7 The SA of the Core Strategy Issues and Options Report¹⁵ was consulted upon between November 2009 and January 2010.

2.5.8 As part of the consultation, the Issues and Options Report presented three distinct Strategic Spatial Options for the development of

¹⁴ The SEA Regulations require the Environment Agency, English Heritage, Natural England and the Countryside Agency to be consulted on the scope of sustainability appraisals. However, the Natural Environment and Rural Communities (NERC) Act merged the Countryside Agency and English Nature to form a new agency - Natural England.

¹⁵ Knowsley Core Strategy Issues and Options Report (Knowsley Council, 2009)

Knowsley, together with a range of thematic options. The three Strategic Spatial Options were:

- **Option A – "Urban Concentration"** – this option would focus investment in commercial, economic and housing development, services and infrastructure within Knowsley's existing urban areas with no urban expansion into Green Belt areas. It was however recognised that the limited availability of sites for new development within the urban area could however result in the borough's housing and employment lands not being met or alternatively could lead to a reliance on neighbouring districts to meet these development needs.
- **Option B – "Focused Urban Regeneration"** – this option would also focus development primarily into the current urban area. Compared to Option A, it would, however, place greater emphasis on focusing new development into locations which are either within or easily accessible from the Borough's most deprived neighbourhoods, or which require regeneration. There would be a more active approach to remodelling and redeveloping key regeneration areas than is the case with Option A. In common with Option A, there would be no urban expansion into Green Belt areas. However, as with Option A, this option is likely to result in the borough's development requirements either not being met or being transferred to neighbouring authorities.
- **Option C – "Sustainable Urban Extensions"** – this option would initially also focus development within the current urban areas. For the later years of the plan period however (unlike Options A and B) it acknowledged that there may be a need to enlarge the urban area into areas currently defined as Green Belt to meet the Borough's development needs. No locations for expansion into Green Belt areas were identified at this stage as further work was needed to identify these. The Issues and Options Report did however list a number of criteria that would be considered to identify broad locations for release of Green Belt.

2.5.9 Further information about each of these options, including their advantages and disadvantages, is provided in Chapter 6 of the Issues and Options Report.

2.5.10 The Core Strategy Issues and Options Interim SA Report found that each of the three Strategic Spatial Options had the potential to deliver a range of social, environmental and economic benefits, but also that each would have a range of negative effects. In particular, it concluded that Option A would protect the character of the rural landscape and countryside, restore land quality and have a positive impact, albeit a short term one, on the vitality and viability of Knowsley's town centres,

reducing the need to travel, economic exclusion and access to goods and services. The interim SA Report however concluded that Option A was likely to result in the loss of urban greenspaces and could thereby have an adverse effect on Green Infrastructure; adaptation to climate change; health; air quality; and also potentially biodiversity and water quality. It was also considered that the option could have a long-term negative impact on reducing the need to travel, air quality and mitigating climate change.

2.5.11 The interim SA Report considered that Option B would have a major positive impact on educational attainment and, by focusing development on areas of greatest need, would also have a positive effect on economic exclusion and access to goods and services. It however concluded that this option would have similar negative effects to those identified for Option A.

2.5.12 In relation to Option C, the Interim SA considered that this option would have an especially strong impact on the supply of high quality housing and on exploiting the growth potential of business sectors and increasing the number of new businesses. Nevertheless, the SA also identified that this option could have a major negative impact on protecting the local character of the landscape and countryside and also have an adverse effect on air quality; climate change and the vitality and viability of Knowsley's town centres.

2.5.13 Comments were received on the Issues and Options Interim SA Report from Natural England. The main comments were:

- Overall, the SA report was considered to be clearly presented and easy to use. The inclusion of a concise non-technical summary at the beginning of the report was commended and the report was considered to be well structured throughout;
- The confirmation that the Habitats Regulations Assessment will be undertaken separately from the SA/SEA process was welcomed;
- The inclusion of a SA objective concerning local character and accessibility of the landscape was welcomed – however it was commented that consideration of the local townscape could be incorporated into this objective;
- The inclusion of objectives regarding biodiversity, habitats and geodiversity and green infrastructure was also welcomed;
- Generally the findings of the SA were supported but it was considered that more references to the baseline information and specific sensitive receptors that may be affected by particular options (e.g. particular communities, nature conservation sites, heritage assets, etc) could be included. Although it was recognised that this may not be possible until subsequent stages in the SA; and

- The range of indicators for monitoring the objectives relating to the natural environment was supported. However, it was suggested that the list of indicators for objective E2¹⁶ be amended to focus more on monitoring the quality of habitats and designated sites, rather than simply their presence.

2.5.14 These comments were taken into account when undertaking subsequent SA of the emerging Core Strategy. In particular, additional references to the baseline information and specific sensitive receptors have been incorporated into the appraisals.

2.5.15 In addition, to the Issues and Options Interim SA Report produced by Urban Vision, an in-house sustainability appraisal of the thematic policies contained within the Issues and Options report was undertaken by the Council.

Preferred Options Report

2.5.16 The SA of the Core Strategy Preferred Options report was consulted upon between June and September 2011.

2.5.17 The Preferred Options report set out a Preferred Spatial Strategy for Knowsley which was a combination of Option B "Focused Urban Regeneration" and (for longer term needs) Option C "Sustainable Urban Extensions". The selection of this Preferred Spatial Strategy was based upon the conclusions of the Issues and Options Interim SA Report, the comments received during the consultation on the Issues and Options Paper and the findings of available evidence, particularly on the capacity of the existing urban area to accommodate Knowsley's development requirements during the entire plan period. In particular, the Issues and Options Interim SA Report highlighted that both Option B and Option A would have a positive impact on a range of sustainability objectives. Specifically, it highlighted that Option B would have a major positive impact on educational attainment and, by focusing development on areas of greatest need, would also have a positive effect on economic exclusion and access to goods and services. The Issues and Options Interim SA Report identified that Option C would have an especially strong impact on the supply of high quality housing and on exploiting the growth potential of business sectors and increasing the number of new businesses.

2.5.18 The preferred option report sets out that this preferred Spatial Strategy is considered to represent the best approach to reconcile competing priorities for development of the Borough, whilst ensuring that the

¹⁶ Objective E2 seeks to protect, enhance and manage biodiversity, the viability of protected and endangered species, habitats, geodiversity and sites of geological importance. All of the SA objectives and their sub-objectives are presented in section 3.4 of this report.



vision for Knowsley can be delivered up to 2027. The approach is also considered to support the delivery of the Sustainable Community Strategy (SCS) and reflects priorities set by national policy, including planning for housing and employment growth, supporting urban regeneration, maintaining a hierarchy of centres and promoting environmental sustainability. The Core Strategy Preferred Options report provides detail of the range of 'alternatives' that were considered by the Council but subsequently discounted during the process of identifying a preferred Spatial Strategy.

2.5.19 The SA of the preferred Spatial Strategy for Knowsley considered that it would have a largely positive impact on the sustainability objectives. In particular, it was considered that the preferred Spatial Strategy has the potential to have a positive impact on the objectives relating to poverty and social deprivation; improving access to goods, services and amenities; improving health and reducing health inequalities; and improving educational attainment. The emphasis placed upon re-balancing the housing stock by providing a wide choice of new market sector and affordable housing should ensure that the Spatial Strategy has a positive impact on the objective relating to the provision of good quality housing. The SA did however identify a number of mitigation measures to increase the level of certainty that the preferred Spatial Strategy would have a positive impact on a range of environmental objectives. These mitigation measures included:

- Incorporating 'the managing and enhancing of Knowsley's heritage assets' as a Spatial Development Priority in preferred option CS1;
- Specifying the need to improve linkages between housing and employment areas by public transport, walking and cycling in preferred option CS4;
- Strengthening the wording of preferred option CS4 to require proposals for town centre uses in out of centre locations to demonstrate that there are no sites in a town centre or edge of centre location that are suitable, available and viable;
- Ensuring new development is built to an appropriate density to minimise the need to release additional Green Belt sites; and
- Incorporating a direct reference to protected and endangered species in preferred option CS8.

2.5.20 Comments were received on the Preferred Options SA Report from the Environment Agency. The main comments were:

- The Interim Sustainability Appraisal refers to key sustainability issues to be identified, including the biological and chemical condition of rivers needing to be improved.

- There are very few references to rivers in context of their potential value to Knowsley e.g. green infrastructure, recreation and wildlife.
- Important waters (that are also Water Framework Directive water bodies) in this area include the River Alt, Croxteth/Knowsley Brook and Simonswood Brook, Ditton Brook, Dog Clog Brook, Mill Brook and Prescott (Logwood) Brook. No mention is made of the need to improve any of these waters. However, Local Authorities have a duty to “have regard” to the Water Framework Directive. All of the surface waters currently fail the Water Framework Directive and they are some of the worst quality waters in the North West (and the country). However, this makes it even more important that opportunities are sought wherever possible to improve the water environment.

2.5.21 These comments were taken into account when undertaking the SA of the broad locations in the Green Belt being considered for development by the emerging Core Strategy. However, there is only limited specific information available on the likely impacts of development in these broad locations on water quality and, as a result, many of impacts on this are uncertain.

Green Belt Locations Appraisal

2.5.22 Preferred Options CS5: Green Belts in the Core Strategy Preferred Options document identified a number of ‘reserve’ and ‘safeguarded’ locations that were proposed to be removed from the Green Belt to meet the Borough’s longer term development needs. This policy was subject to SA as part of the appraisal of Preferred Options document. Nevertheless, as this appraisal took place prior to the finalisation of the Draft Knowsley and Sefton Green Belt Study – Knowsley Report, there was little available information on each of these locations. As a result, the appraisal of CS5 concluded that it would have an uncertain impact on many of these objectives and identified the need for additional information to be provided on the reserved and safeguarded locations in order to make a comprehensive assessment of the policy.

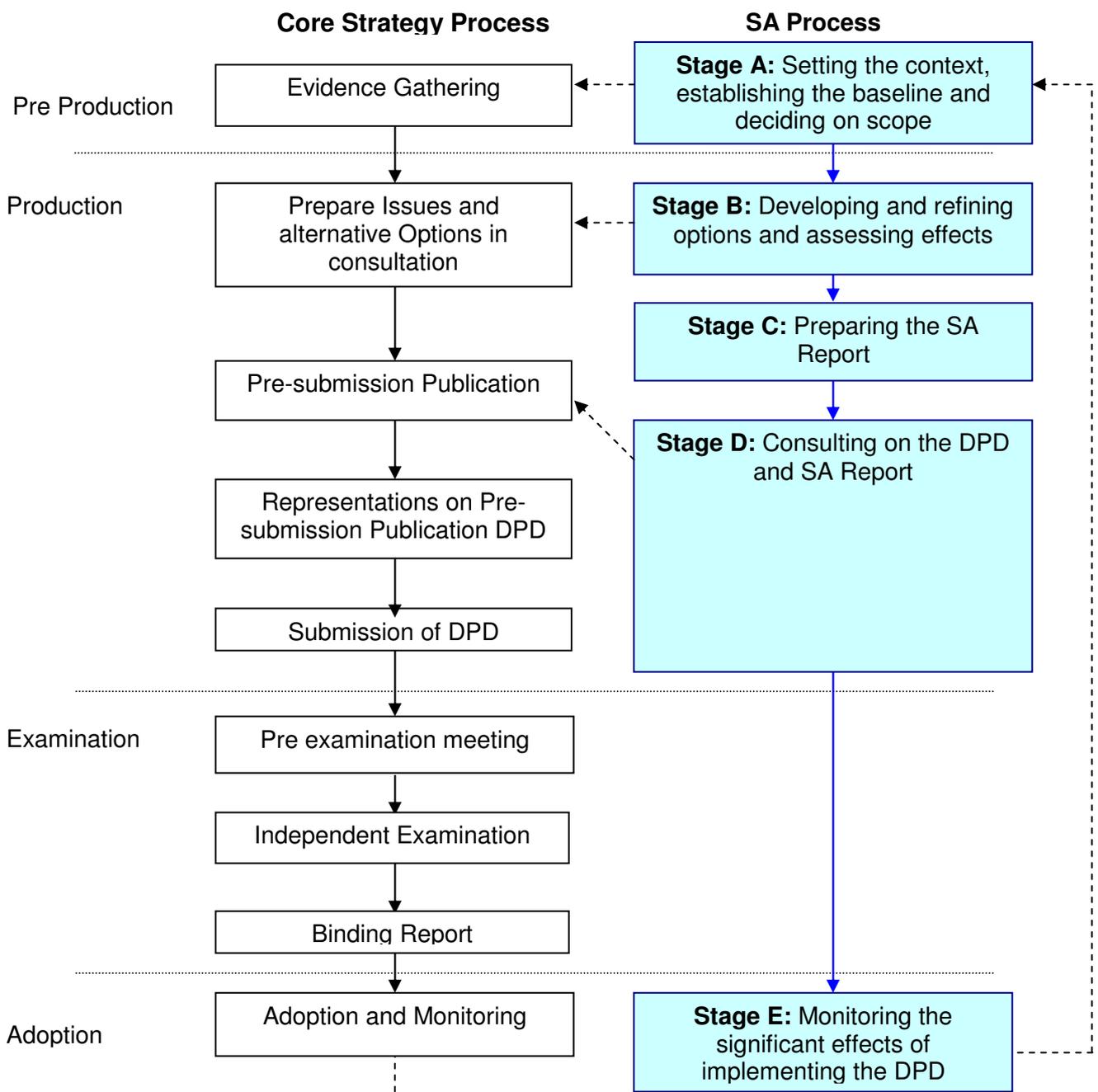
2.5.23 This report outlines the findings of a more detailed SA of the Tier One and Tier Two “reserve locations” as well as those identified as “safeguarded locations”. In order to ensure that there has been a suitable appraisal of all reasonable options, this SA also provides an appraisal of those locations that were discounted at the final stage of the draft Knowsley Green Belt Study. A number of alternative locations have also been proposed by landowners/developers during the consultation on the draft Knowsley Green Belt Study and the Core Strategy Preferred Options report. This report also outlines the findings of the SA of these alternative locations.

3. METHODOLOGY

3.1 Overall Approach

3.1.1 The approach adopted to undertake the SA was based on the process set out in the Office of the Deputy Prime Minister (ODPM) Guidance Paper “Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents” November 2005 and its successor guidance provided by the CLG Plan Making Manual. This guidance advocates the following process to undertaking SA:

Figure 1: Core Strategy and SA preparation process



- 3.1.2 There are five stages in the SA process. Knowsley Council undertook the first stage (Stage A), identifying the initial scope of the SA, in May 2009. In conjunction with key stakeholders, the Council identified and reviewed other relevant plans, policies and programmes that will affect and influence the Core Strategy; set out relevant social, environmental and economic baseline information; identified the key sustainability issues for the SA to address; established an SA Framework consisting of sustainability objectives, indicators and targets; and produced a Scoping Report for consultation on the scope of the appraisal.
- 3.1.3 As part of Stage A of the SA process, twenty-two sustainable development objectives were established for appraising the Core Strategy. The establishment of SA objectives and criteria is central to the SA process. The SA framework, based on these objectives provides a way in which sustainability effects are described, assessed and compared. Sustainability objectives are distinct from those of the Core Strategy.
- 3.1.4 The sustainability objectives used for the appraisal of the locations in the Green Belt being considered for development by the emerging Knowsley Local Plan were drawn from the sustainability issues identified through the analysis of the baseline data and review of other plans and strategies set out in the SA Scoping Report. These objectives reflect Knowsley's priorities for achieving a sustainable borough and cover a range of issues, for example relating to housing, social deprivation, health, crime, climate change, biodiversity, air quality, water quality, landscape, cultural heritage, business growth, educational attainment and unemployment. In addition, thirty-seven sub-objectives have been identified to assist with the assessment against the sustainability objectives.
- 3.1.5 The appraisal of each of the Green Belt locations against the SA framework has drawn upon a review of a wide range of evidence base documents. These include:
- Strategic Housing Land Availability Assessment (SHLAA);
 - Joint Employment Land and Premises Study (JELPS)
 - Strategic Housing Market Assessment (SHMA);
 - Preliminary Flood Risk Assessment;
 - Green Space Audit;
 - Strategic Flood Risk Assessment (Level 1);
 - Knowsley Sustainable Community Strategy;
 - Knowsley and Sefton Green Belt Study – Draft Knowsley Report;
 - Knowsley Landscape Character Assessment;
 - Liverpool City Region Ecological Framework;
 - Liverpool City Region Renewable Energy Capacity Study;
 - Knowsley Renewable and Low Carbon Energy Options Study;

- Knowsley Town Centre and Shopping Study;
- Delivering a new future for Knowsley Industrial Park – Strategic Framework;
- Conservation Area Appraisals;
- The Evidence Base for Minerals Planning in Merseyside;
- Knowsley Industrial Park Energy Network Feasibility Study;
- Knowsley Core Evidence Base Study;
- Knowsley Draft Economic Regeneration Strategy;
- Playing Pitch Assessment and Strategy;
- Local Transport Plan (LTP) 3;
- Knowsley Open Space, Recreation and Sport Strategy;
- Knowsley Climate Change Strategy; and
- Submission version of the Joint Merseyside and Halton Waste Local Plan.

3.1.6 The appraisal of the locations has also drawn upon an analysis of GIS data and a review of the site-specific representations received in response to the consultation on the Core Strategy Preferred Options report and the draft Knowsley and Sefton Green Belt Study. Site visits to each of the locations have also been undertaken.

3.1.7 The SA Framework can be found in the accompanying Sustainability Appraisal Appendices report, which is available on the Council's website.

3.2 Links to Other Plans, Programmes and Strategies

3.2.1 Stage A of the SA process involves establishing the context in which the Core Strategy is being prepared, namely the other plans, programmes and strategies that influence its content (and vice-versa) and the opportunities and challenges they present. The SEA Directive specifically requires environmental objectives established at international, European Community or national levels to be taken into account in developing the Core Strategy. However, in order to facilitate a comprehensive approach and maximise its sustainability, guidance on SA recommends that this should be widened to consider how the Core Strategy can support the full range of other plans, policies and programmes that already exist, including at the regional, sub-regional and local levels, taking into account their economic and social as well as environmental objectives.

3.2.2 In reviewing these plans, policies and programmes the aim is to identify their implications for the Core Strategy to ensure that the relationship between these documents and the Core Strategy has been fully explored. This will in turn ensure that Knowsley Metropolitan Borough Council is able to exploit potential synergies and address any identified

inconsistencies between international, national, regional and local objectives.

3.2.3 Table 2 below shows a list of the plans, policies and programmes that were reviewed as part of the SA. The full review is provided in the SA Scoping Report for the Core Strategy (2009), which is available on the Council's website.

Table 3: List of all Plans, Programmes and Strategies reviewed as part of the SA Scope

INTERNATIONAL
<ul style="list-style-type: none"> • European Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora, 1992 • Environment 2010: Our Future, Our Choice: The Sixth Environment Action Programme of the European Community, 2002 • Sustainable Development Strategy EU, May 2001 • European Council Directive 2000/60/EC- Integrated river basin management for Europe • European Council Directive 75/442/EEC on waste • Water Framework Directive 2000/60/EC • European Landscape Convention • European Spatial Development Perspective
NATIONAL ¹⁷
<ul style="list-style-type: none"> • Wildlife and Countryside Act (as amended) 1981 • Countryside and Rights of Way Act 2000 (CRoW) • Natural Environment and Rural Communities (NERC) Act 2006 • The Conservation (Natural Habitats & C.) Regulations, 2004 • Planning (Listed Buildings and Conservation Areas) Act 1990 • Ancient Monuments and Archaeological Areas Act 1979 • The Historic Environment: A Force for Our Future, 2001 • Heritage Protection for the 21st Century, a joint England and Wales White Paper • Accessible Natural Green Space Standards in Towns and Cities: A Review and Toolkit for their Implementation, 2003 • By All Reasonable Means: Inclusive access to the outdoors for disabled people, 2005. • Circular 01/06 Planning for Gypsy and Traveller Caravan Sites • Sustainable Communities Plan, building for the Future, 2003 • Biodiversity Strategy for England, 2002 • Guidance for Local Authorities on Implementing the Biodiversity Duty, 2007 • Biodiversity by Design, 2004 • The Code for Sustainable Homes • Green Infrastructure Guidance, 2009 • Climate Change and Biodiversity Adaptation: the role of the spatial planning system, 2009 • Heritage Works: The use of historic buildings in regeneration • Securing The Future: delivering UK Sustainable Development Strategy 2005. • The Countryside in and around Towns – a Vision for Connecting Town and Country in Pursuit of Sustainable Development • PPS 1 Delivering Sustainable Communities • PPS 1 (Supplement) Planning and Climate Change • PPG 2 Green Belts • PPS 3 Housing • Draft PPS 4: Planning for Sustainable Economic Development • PPS 6 Planning for Town Centres • PPS 7 Sustainable Development in Rural Areas

¹⁷ It is recognised that there have been a number of significant changes to the national Plans, Programmes and Strategies since the original review of these was undertaken. In particular, the publication of the National Planning Policy Framework has resulted in the withdrawal of the majority of Planning Policy Statements and Planning Policy Guidance notes. It is however considered that these changes are unlikely to result in changes to the SA Framework.

<ul style="list-style-type: none"> • PPS 9 Biodiversity and Geological Conservation • Planning for Biodiversity and Geological Conservation: A Guide to Good Practice • PPS 10 Planning for Sustainable Waste Management • PPS 12 Local Spatial Planning • PPG 13 Transport • PPG 15 Planning and the Historic Environment • PPG 16 Archaeology and Planning • PPG 17 Planning for Open Space, Sport and Recreation • PPS 22 Renewable Energy • PPS 23 Planning and Pollution Control • PPG 24 Planning and Noise • PPS 25 Development and Flood Risk
REGIONAL
<ul style="list-style-type: none"> • North West of England Plan Regional Spatial Strategy to 2021 • North West Plan Regional Spatial Strategy Partial Review 2008 - 2009 • North West Regional Housing Strategy, 2005 • Action for Sustainability – The Regional Sustainable Development Framework for the North West, 2004 • Investment for Health - Action plan for the North West. • The North West Plan for Sport and Physical Activity, 2004-2008. • The Green Infrastructure Guide for the North West • Rising to the Challenge – A Climate Change Action Plan for England's North West • Countryside Character Volume 2: North West • North West Regional Biodiversity Targets • Streets for All
MERSEYSIDE
<ul style="list-style-type: none"> • Second Local Transport Plan for Merseyside 2006 – 2011, 2006 • Merseyside "New Heartlands" Housing Market Renewal Initiative 2003 • North Merseyside Biodiversity Action Plan • Merseyside Joint Municipal Waste Management Strategy, MWDA, 2005 • Merseyside Joint Waste Development Plan Document • Action Plan for the City Region 2002-2005, Mersey Partnership, 2001 • Liverpool City Region Housing Strategy, The Mersey Partnership, 2007 • Merseyside Heritage Investment Strategy, Culture North West, 2005 • Towards a Green Infrastructure Framework for the Liverpool City Region: Draft Discussion Document, 2009
LOCAL
<ul style="list-style-type: none"> • Knowsley the Borough of Choice: sustainable Community Strategy 2008-2023 • Knowsley Replacement Unitary Development Plan 2006 • Ensuring Choice of Travel SPD (Draft) • Greenspace Standards and New Development SPD • Householder Development SPD • North Huyton SPD • Tower Hill (Kirkby) SPD • Knowsley Annual Monitoring Reports • Knowsley MBC Corporate Plan • Knowsley MBC Housing Strategy • Knowsley MBC Economic Development Plan • Knowsley Economic Regeneration Strategy (currently being prepared) • Knowsley MBC Crime and Disorder Reduction Strategy 2005-2008 • Knowsley MBC Building Schools for the Future programme • Knowsley Guide to Development • Conservation Area Character Appraisal for each of the 15 conservation areas. • An Environmental Policy for Knowsley Council • Knowsley Council's Climate Change Strategy 2008 - 2009

3.3 Baseline Characteristics and Key Sustainability Issues

3.3.1 The collection and analysis of baseline information is a key component of the SA process and a legal requirement under the SEA Directive. It facilitates the identification of the key sustainability issues that need to be taken into account when developing a plan and assists in the formation of objectives, indicators and targets for the plan. Baseline data also provides the information necessary to assist in predicting and monitoring the effects of a plan.

3.3.2 For the Core Strategy, baseline data was obtained from a number of different sources. The analysis of the key baseline characteristics for Knowsley, together with an assessment of other relevant plans, policies and programmes, has facilitated the identification of the key sustainability issues that need to be taken into account when developing the Core Strategy.

3.3.3 From this analysis it is evident that Knowsley is one of the most deprived districts in England, with significant problems in parts of the Borough in relation to unemployment, health, educational attainment and fear of crime. Nevertheless, it is recognised that Knowsley also contains a number of valuable assets that must be protected and enhanced. The major social, environmental and economic issues for Knowsley are identified below:

- Over the past 25 years the population of Knowsley has decreased markedly;
- Knowsley is among the most deprived districts in England;
- Knowsley currently has an unbalanced mix of housing. There is a need to increase the proportion of households that are owner-occupied and reduce the number of homes that do not have access to modern amenities;
- Over half of persons in Knowsley aged 16 to 74 have no qualifications. Accordingly, there is a need to improve educational attainment and increase access to training and opportunities for lifelong learning;
- A significant proportion of Knowsley's population experience serious health issues, with binge drinking, smoking and obesity being particular problems;
- Fear of crime is a significant issue;
- There is a need to reduce the need to travel by car and increase the use of more sustainable forms of transport;
- Economic activity rates and incomes are lower than the North West average and need to be improved;
- There is a need to retain a greater proportion of expenditure within Knowsley to enhance the vitality and viability of the Borough's town and local centres;

- 2 of the 15 conservation areas in Knowsley are included on the latest Heritage at Risk register;
- Access to areas of natural and semi-natural open space is often poor;
- The quality of the built environment in parts of the Borough is poor;
- There is a need to conserve and enhance the natural environment recognising the importance of biodiversity;
- There is a need to secure and promote increased energy efficiency and renewable energy sources;
- There is a need to promote and secure more sustainable waste management;
- There is a need to consider the impacts of flooding and flood risk;
- The biological and chemical condition of rivers in the Borough need to be improved; and
- The re-use of land should be promoted to minimise the take-up of greenfield land.

Source: Sustainability issues were derived from the baseline data gathered in 2008 – 2009 to inform the SA Scoping Report (May 2009).

3.4 Sustainability Appraisal Objectives

- 3.4.1 The SA appraises the potential implications of the broad locations in the Green Belt being considered for development by the emerging Knowsley Metropolitan Borough Council's Core Strategy from a social, environmental and economic perspective. The SA is fundamentally based on an objectives-led approach whereby the potential impacts of a plan are gauged in relation to a series of objectives for sustainable development. The establishment of these objectives is therefore central to the SA process as it provides the methodological yardstick against which the sustainability effects of the Core Strategy can be described, assessed and compared.
- 3.4.2 Drawing upon the sustainability issues identified through analysis of baseline data and the review of other relevant plans and strategies, the SA Scoping Report for the Core Strategy identifies twenty-two objectives that reflect Knowsley's priorities for achieving a sustainable borough. In addition, a number of sub-objectives have been identified for each objective to assist with the assessment against them. These objectives and their sub-objectives are listed below.
- 3.4.3 The objectives have been designed to be fully comprehensive, whilst minimising any overlap between individual objectives that could potentially cause confusion and skew the results of any appraisal. Each

objective is inevitably broad in its scope given the wide-ranging nature of the Core Strategy and its potential sustainability implications.

SOCIAL

S1 To reduce poverty and social deprivation and secure economic inclusion.

- Improve the overall Index of Multiple Deprivation rating of the Borough.
- Reduce the proportion of children living in poverty.
- Reduce the percentage of lower level Super Output Areas that are in the top 10% most deprived in England.
- Improve health and reduce long-term limiting illness.
- Improve rates of economic activity.

S2 To improve local accessibility of goods, services and amenities and reduce community severance.

- Improve community facilities.

S3 To improve safety and reduce crime, disorder and fear of crime.

- Improve road safety.
- To reduce crime and fear of crime.

S4 To support voluntary and community networks, assist social inclusion and ensure community involvement in decision making.

S5 To improve health and reduce health inequalities.

- Increase life expectancy.
- Reduce mortality rates.
- Reduce levels of obesity.

S6 To provide good quality, affordable and resource efficient housing.

- Provide a wider choice of accommodation to create a greater tenure mix.
- Increase the quality of housing by improving housing amenities.
- Minimise resource and energy use when developing housing and the energy efficiency of housing.

S7 To improve educational attainment, training and opportunities for lifelong learning and employability.

- Increase educational achievement.

S8 To preserve, enhance and manage Knowsley's rich diversity of cultural, historic and archaeological buildings, areas, sites and features.

ENVIRONMENTAL

- E1 To protect, enhance and manage the local character and accessibility of the landscape and countryside across Knowsley.**
- Provide the required amount of open space.
 - Provide open space in accessible locations.
 - Improve the quality of open space.
 - Improve the cleanliness of open areas.
 - Increase number of parks with green flag award.
- E2 To protect, enhance and manage biodiversity, the viability of protected and endangered species, habitats, geodiversity and sites of geological importance.**
- To conserve and enhance the natural environment, including species and habitat diversity.
- E3 To adapt to climate change including flood risk.**
- Reduce flood risk
- E4 To mitigate climate change including using energy prudently and efficiently and increasing energy generated from renewable sources.**
- Reduce CO2 emissions.
- E5 To provide, conserve, maintain and enhance green infrastructure.**
- To improve the size and quality of the green infrastructure network.
 - To improve the size and quality of the Ecological Framework.
- E6 To protect, manage and restore land and soil quality.**
- Reduce the amount of derelict land.
 - Direct new housing to previously developed land.
 - Reduce the amount of contaminated land.
- E7 To protect, improve and where necessary, restore the quality of inland, and estuarine waters.**
- Increase the length of rivers in 'Good' or 'Fair' biological condition.
 - Increase the length of rivers in 'Good' or 'Fair' chemical condition.
- E8 To protect, and where necessary, improve local air quality.**
- E9 To use water and mineral resources prudently and efficiently.**
- E10 To reduce the need to travel and improve choice and use of more sustainable transport modes.**
- Encourage sustainable transport use.
- E11 To minimise the production of waste and increase reuse, recycling and recovery rates.**

ECONOMIC

EC1 To improve the competitiveness and productivity of business, exploit the growth potential of business sectors and increase the number of new businesses.

- Increase number of local and new businesses.
- Increase industrial / commercial floorspace.

EC2 To enhance the vitality and viability of town and local centres.

- Increase the vitality of shopping areas.
- Improve community facilities.

EC3 Maintain high and stable levels of employment and reduce long-term unemployment.

- Reduce unemployment

3.5 Strategic Objectives of the Core Strategy

3.5.1 The proposed spatial vision contained within the Core Strategy Preferred Options Report seeks to achieve the following Strategic Objectives by 2027:

Table 4: Core Strategy Preferred Options Report Strategic Objectives

STRATEGIC OBJECTIVE NO.	STRATEGIC OBJECTIVE
1	To encourage and maintain sustainable economic and employment growth in Knowsley, complementary to that within the wider Liverpool City Region, by accommodating employment related development, improving skills within the workforce, and promoting enterprise, entrepreneurship and innovation.
2	To promote a well-balanced housing market throughout Knowsley by providing a sufficient quantity and mix of high quality sustainable housing in appropriate locations to meet needs and demand (including for market, affordable and supported housing).
3	To regenerate and transform areas of social and economic deprivation so they become more sustainable, safer, healthier and more cohesive communities, hence narrowing the gap between the richest and poorest communities in Knowsley.
4	To promote distinctive, viable and sustainable town centres in Huyton, Kirkby and Prescot, by improving choice, variety and quality in their range of retail, leisure and other town centre uses, with renewed and thriving district centres for Halewood and Stockbridge Village and a more sustainable pattern of local centres.
5	To promote the quality of place within Knowsley by protecting historically important features and enhancing the character, quality and diversity of Knowsley's built environment, including town centres, key employment areas, residential neighbourhoods, conservation areas, rural areas and villages, key gateways and transport routes.

STRATEGIC OBJECTIVE NO.	STRATEGIC OBJECTIVE
6	To ensure new development in Knowsley encourages a reduction in the overall need to travel, and prioritises sustainable transport such as walking, cycling and public transport. This will help to ensure accessibility and linkage between housing areas and employment locations, shopping, leisure, culture, health care, education, community and sporting facilities, green spaces and other services.
7	To manage environmental resources in Knowsley prudently by focusing on sustainable development, recycling and renewable technologies, reducing carbon emissions and responding to the impacts of climate change.
8	To support and strengthen the role of Knowsley's Green Infrastructure (in rural and urban areas), promote biodiversity, and maintain the character of rural settlements including Cronton, Tarbock and Knowsley Village.

3.5.2 The Core Strategy Preferred Options report also identifies the need to tackle health problems and inequalities as one of the highest priorities in Knowsley. Accordingly, it asserts that there is a the need for new development to aim to have a positive impact on the health and wellbeing of both individuals and population groups, by providing a healthy environment and opportunities for healthy lifestyle options for those living and working in the Borough. Rather than identifying this as a Strategic Objective, it is instead listed in the Preferred Options report as a cross cutting theme to which all of the other objectives will contribute.

3.6 Testing the Core Strategy Objectives against the Sustainability Appraisal Framework

3.6.1 In order to ensure that the Strategic Objectives of the Core Strategy are consistent with the principles of sustainable development they must be tested against the SA framework. This enables conflicts and tensions between the objectives to be identified and recommendations made for their amendment.

3.6.2 Table 5 'tests' the Core Strategies objectives against each of the SA objectives.

Summary SA Objective	Reduce poverty	Improve local access to goods & services	Improve safety & reduce crime	Support voluntary & community networks	Improve health	Good housing	Education & training opportunities	Preserve built heritage	Protect & enhance countryside & landscape	Protect & enhance biodiversity	Adapt to climate change	Mitigate climate change	Preserve green infrastructure	Restore land & soil; quality	Protect & improve water quality	Protect & improve air quality	Use resources efficiently	Reduce need to travel & use more sustainable modes	Minimise waste & increase recycling	Business growth	Vitality & viability of town centres	High & stable levels of employment
SA Objective	S1	S2	S3	S4	S5	S6	S7	S8	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11	EC1	EC2	EC3
Summary Core Strategy Objective																						
Encourage sustainable economic and employment growth	+	0	+	0	0	0	+	0	0	0	0	?	0	0	0	0	0	?	0	+	+	+
To create a well-balanced housing market	+	+	0	0	0	+	0	0	?	?	0	?	0	?	0	0	0	?	0	+	+	0
Regenerate and transform areas of social and economic deprivation	+	+	+	+	+	+	+	0	0	0	0	0	0	+	+	+	0	+	0	+	+	+
Promote distinctive, viable and sustainable town centres	+	+	+	0	0	0	0	+	0	0	0	+	0	0	0	+	0	+	0	+	+	+
Promote the quality of place within Knowsley	0	0	0	0	0	0	0	+	+	+	0	0	+	+	+	?	0	?	0	+	+	0
Ensure new development reduces the need to travel and prioritises sustainable transport links	+	+	0	0	+	0	0	0	0	0	0	+	0	0	0	+	0	+	0	0	+	+

Summary SA Objective	Reduce poverty	Improve local access to goods & services	Improve safety & reduce crime	Support voluntary & community networks	Improve health	Good housing	Education & training opportunities	Preserve built heritage	Protect & enhance countryside & landscape	Protect & enhance biodiversity	Adapt to climate change	Mitigate climate change	Preserve green infrastructure	Restore land & soil; quality	Protect & improve water quality	Protect & improve air quality	Use resources efficiently	Reduce need to travel & use more sustainable modes	Minimise waste & increase recycling	Business growth	Vitality & viability of town centres	High & stable levels of employment
SA Objective	S1	S2	S3	S4	S5	S6	S7	S8	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11	EC1	EC2	EC3
Summary Core Strategy Objective																						
Manage environmental resources prudently and respond to the impacts of climate change	0	0	0	0	0	+	0	+	+	+	+	+	+	+	+	+	+	+	+	?	+	0
Support and strengthen the role of Knowsley's Green Infrastructure	0	0	0	0	+	0	0	0	+	+	+	0	+	+	0	0	0	0	0	0	0	0



Objectives are compatible



Objectives are not compatible



Uncertain relationship



No direct relationship

3.6.3 Overall the Strategic Objectives of the Core Strategy are considered to be compatible with the SA objectives. In particular, the objectives concerning the regeneration of areas of social and economic deprivation; promoting distinctive, viable and sustainable town centres; managing environmental resources prudently; ensuring new development reduces the need to travel and prioritises sustainable transport links, are especially consistent with the principles of sustainable development.

3.6.4 There were no instances where the Strategic Objectives of the Core Strategy were incompatible with a SA objective. Nevertheless, there were some uncertain relationships between the two sets of objectives.

3.7 Data Limitations/Technical Difficulties

3.7.1 The SEA Directive requires the identification of any difficulties encountered; these may include technical deficiencies or lack of knowledge. There were no significant technical difficulties encountered during the SA of the broad locations in the Green Belt being considered for development by the emerging Core Strategy. However, there were some areas of uncertainty that resulted from the limited detail of some of the locations (partly resulting from the strategic nature of the document) and evidence constraints particularly in terms of quantifying impacts. It was also necessary to make a number of assumptions in order to carry out the assessment. It is recognised that the on-going production of evidence base studies may eliminate some of these data limitations but it is also acknowledged that it would not be reasonable to expect all of this information to be available at this stage in the planning process.

3.7.2 Some of the key limitations/difficulties at the time of undertaking the assessment included:

- The Preliminary Flood Risk Assessment identifies wider areas of the borough that may be at risk from groundwater flooding but there is a lack of available local-level information in relation to this risk;
- Limited information is available to assess the impact of the broad locations on carbon dioxide emissions;
- The absence of any detailed ecological surveys meant there was only a limited level of certainty about the impact of the broad locations on the objective relating to protecting, enhancing and managing biodiversity, the viability of protected and endangered species and habitats;
- The limited information available on Archaeological Sites resulted in only low level of certainty about the impact of the development of many of the locations on these assets;

- Limited information is available on the viability of affordable housing in different parts of the Borough;
- Difficulty in determining the quantum of development that would need to be delivered in a particular location for it to result in a significant impact on air quality;
- Although the national Agricultural Land Classification maps provide an indication of the quality of land and soil quality they are only provide strategic guidance and are not a substitute for more detailed site-specific tests;
- There is limited certainty over existing levels of ground contamination at each of the broad locations; and
- Limited information is provided on the scope for locations to incorporate on-site facilities and contribute towards enhancements in public transport provision.

3.7.3 As documented above, the appraisal of the locations drew upon GIS data. However, GIS data was only available for within the Knowsley Borough area. It is recognised that a number of the locations could be located in close proximity to features and facilities in neighbouring districts which would affect their performance against the sustainability framework. Consequently, in order to try to overcome this data limitation, the surrounding area of the location was surveyed during site visits and the UDP Proposals Maps and other appropriate plans of neighbouring authorities were interrogated.

3.8 Screening for Habitats Regulation Assessment

3.8.1 Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Flora and Fauna – the ‘Habitats Directive’ – provides legal protection for habitats and species of European importance. Article 6 of this Directive introduced the requirement to undertake a ‘Habitats Regulations Assessment’ of the implications of proposed land use plans for the integrity of nature conservation sites of European importance. Such sites are known as Natura 2000 sites, and include Special Areas of Conservation (SACs), candidate Special Areas of Conservation (cSACs), Special Areas of Protection (SPAs), potential Special Areas of Protection (pSPAs), Ramsar sites and Offshore Marine Sites (OMSs).

3.8.2 The purpose of a Habitats Regulations Assessment is to determine whether or not significant effects on European sites are likely and to suggest ways in which they could be avoided. Under the provisions of the Habitats Directive, consent can only be granted for such a plan if, as a result of the Habitats Regulations Assessment, it can be demonstrated that the integrity of the sites will not be adversely affected or, where adverse impacts are anticipated, there is shown to

be no alternative solutions and imperative reasons of overriding public interest for the plan to go ahead.

- 3.8.3 Consultants URS has been appointed by Knowsley Borough Council to assist in undertaking a Habitat Regulations Assessment of the potential effects of the Core Strategy on the Natura 2000 network and Ramsar sites. This Habitats Regulations Assessment will investigate the potential impacts of the plan – in combination with other plans and projects – on relevant European sites (including sites beyond the Knowsley area). This Habitats Regulation Assessment is being conducted alongside, but separate from, the SA.

4. GREEN BELT LOCATIONS APPRAISAL

- 4.0.1 This section provides a summary of the results of the sustainability appraisal of the potential locations for release from the Green Belt considered within the Core Strategy. The Tier One reserve locations, Tier Two reserve locations, safeguarded locations, locations discounted by the draft Knowsley Green Belt Study and alternative locations proposed by landowners/developers were each appraised against the twenty-two sustainability objectives and their associated sub-objectives. A borough-wide map showing the distribution of these locations is provided in Appendix 1.
- 4.0.2 This appraisal considered the degree and type of impact, split by short term (0-5 years), medium term (5-10 years), and long-term (10+ years). It also predicted the certainty of impact (in terms of high, medium and low); the scale of impact (which ranged from local to national); the permanence of the impact; any key secondary, cumulative and/or synergistic impacts; and options for mitigation.
- 4.0.3 When undertaking this appraisal the default level of certainty was considered to be medium. When it was considered that the impact of the potential development of a Green Belt location on a particular objective was uncertain it was attributed a low level of certainty. It is recognised that the emerging Core Strategy indicates that the 'safeguarded locations' are unlikely to come forward before 2028. However, in order to facilitate comparison between the locations, the impact of each location was appraised from the date at which development may come forward. Where the appraisal considered that the potential development of a location could have a negative impact on a sustainability objective it sought to identify potential measures that could help mitigate its impact. Measures were also suggested if it was considered that there were potential ways of enhancing an already positive impact. The scoring attributed to a location reflected its impact on the objective in the absence of the identified mitigation measures being applied.
- 4.0.4 A summary of the SA of each of the locations considered is presented below. The full sustainability appraisal matrices are available in the Sustainability Appraisal Report Appendices which accompany this report and which are available on the Council's website.

4.1 Summary of the Significant Effects of the 'Tier 1' Locations

- 4.1.1 A series of "reserve" locations within the Green Belt where development may take place within the period to 2027 have been identified by the Council. Six of these 'reserve' locations are identified as Tier One locations because it is considered that their comparatively

smaller scale will allow the Council to respond in a timely manner to emerging deficits against the 5-year housing land supply. The following section gives a brief summary of the outcomes of the SA of each of these Tier One “reserve” locations. Maps showing the location of each of these Tier One locations are provided in Appendix 2 and the full matrices for the SA of these locations are provided in Appendix 3.

Land at Bank Lane, to the north west of Kirkby (KGB 1)

- 4.1.2 The Core Strategy Preferred Options report identified Land at Bank Lane, to the north west of Kirkby, as a ‘reserve’ location for residential development with an indicative capacity of 190 dwellings.
- 4.1.3 The SA concluded that the potential development of this location would have a positive impact on a wide range of objectives. In particular, the provision of housing in this location would make a contribution to the housing needs identified in the Strategic Housing Market Assessment (2010) and have a positive impact on the objective of providing good quality housing. The location is within reasonably close proximity of both Kirkby town centre and a local centre on Loweswater Way. The potential development of this location could increase expenditure in both these centres and thereby have a positive impact on the objective of enhancing the vitality and viability of town and local centres. By resulting in the provision of housing in a location that is relatively well served by public transport and within convenient walking distance of a number of community facilities, it is also considered that the potential development in this location could have some positive impact on the objectives relating to the accessibility of goods and services; and reducing the need to travel.
- 4.1.4 The location is well-related to areas of deprivation and it is envisaged that the investment in the area together with the jobs created during the construction of the development could result in some positive impact on the objectives of reducing poverty and social deprivation; and reducing unemployment. In addition, it is considered that development in this location would offer the opportunity to have some positive impact on the objectives relating to the local character and accessibility of the landscape; providing green infrastructure; and protecting land and soil.
- 4.1.5 The SA did however consider that development in this location could have a negative impact on some objectives. In particular, the possible impact on the Simonswood Brook Local Wildlife Site (LWS) that bounds the site and the possible loss of priority habitats means that the potential development in this location could have a negative impact on the objective relating to biodiversity unless appropriate mitigation measures are implemented. However, given that the LWS and area of woodland occupy the northern fringe of the site, it may be possible to mitigate any adverse impact on these features through undertaking

ecological surveys, protecting areas of woodland and creating an appropriate buffer around the LWS.

4.1.6 Similarly, without appropriate mitigation it is considered that the potential development could have a negative impact on the objective relating to adapting to climate change due largely to northern part of the site being within Flood Zones 2 and 3 as identified by the Council's Strategic Flood Risk Assessment. Key mitigation measures to reduce the level of adverse impact on this objective is likely to include applying appropriate measures to mitigate flood risk such as the use of Sustainable Drainage Systems, the application of the sequential and exceptions tests and, if necessary, excluding the northern part of the site from the developable area.

4.1.7 It is considered that development in this location would not have a negative impact on any of the other objectives. The impact of the potential development on the objective relating to mitigating climate change is however considered to be uncertain.

Land at Edenhurst Avenue, to the west of Huyton (KGB 17)

4.1.8 The Core Strategy Preferred Options report identified Land at Edenhurst Avenue as a 'reserve' location for residential development with an indicative capacity of 90 dwellings.

4.1.9 The SA concluded that the potential development at Land at Edenhurst Avenue would have a relatively mixed impact on the sustainability objectives. The proposals have the potential to deliver a range of housing types and tenures and could thereby contribute to housing needs identified in the Strategic Housing Market Assessment (2010) and have a positive impact on the objective of providing good quality housing and its sub-objective of providing a wider choice of accommodation to create a greater tenure mix. The potential development would also lead to the provision of housing in a location which would provide the future occupants of the location with easy access to existing services and facilities by a choice of means of transport and would also make a contribution to the continued viability of these services and facilities. It is therefore envisaged that development in this location could have some positive impact on the objectives relating to improving the local accessibility of goods, services and amenities and reducing the need to travel.

4.1.10 The location is well-related to areas of deprivation in neighbouring Liverpool district and it is considered that the investment in the area together with the jobs created during the construction of the development could have some positive impact on the objectives of reducing poverty and social deprivation; and reducing unemployment. In addition, development in this location could have a positive impact

on the objective of supporting the vitality and viability of local centres by leading to additional expenditure in the nearby local centre on Rimmer Avenue.

- 4.1.11 It is however considered that development in this location would have an adverse impact on a number of objectives, particularly those related to environmental issues. Part of the location is identified as a Local Wildlife Site and the site also contains significant areas of grassland which is an identified Priority Habitat. It is therefore considered that the potential development in this location could have a significant negative impact on the objective relating to biodiversity unless appropriate mitigation measures are implemented. In particular, it is recognised that the impact on the LWS could be reduced through the exclusion of this asset from the developable area and the provision of an appropriate buffer around this LWS. Other mitigation measures that could be implemented to reduce the degree of impact on this objective are likely to include undertaking ecological studies and retaining areas of woodland. It is however recognised that it may not be possible to mitigate the impact of the potential development on the grassland within the location, which is identified as a priority habitat, without significantly reducing the developable area.
- 4.1.12 It is considered that development in this location could also have a significant negative impact on the objective relating to adaptation to climate change due, in part, to sections of the site being within Flood Zones 2 and 3 as defined by the Strategic Flood Risk Assessment and also due to the proposals resulting in development taking place in a location that has been identified by the Preliminary Flood Risk Assessments (2011) as being susceptible to groundwater flooding. Key mitigation measures are likely to include undertaking more detailed site-specific flood risk assessments, applying the sequential test and exception tests, implementing appropriate measures to mitigate flood risk such as the use of Sustainable Drainage Systems and, if necessary, excluding parts of the site from the developable area.
- 4.1.13 Development in this location could also have some negative impact on the objectives relating to landscape character; green infrastructure; and protecting land and soil. It is envisaged that the potential development would not have a negative impact on any other objectives but the presence of Childwall Brook within the site means that their impact on the objective relating to water quality is considered to be uncertain. The impact of the potential development on the objective relating to mitigating climate change is also considered to be uncertain.

Land at Greenbridge Lane, to the east of Halewood (KGB 20)

- 4.1.14 The Core Strategy Preferred Options report identifies Land at Greenbridge Lane as a 'reserve' location for residential development with an indicative capacity of 270 dwellings.
- 4.1.15 The SA concluded that the potential development at this location would have a mixed impact on the sustainability objectives. The delivery of the scale of housing proposed would have a major positive impact on the objective of providing good quality, affordable and resource efficient housing and could contribute to the housing needs identified by the 2010 Strategic Housing Market Needs Assessment which established that the proportion of two- and three-bed properties in Halewood is below the borough average and that the area has average house prices above the Borough average. In addition, the creation of employment opportunities during the construction of the development would support the objectives of reducing unemployment; and reducing poverty and social deprivation. Development in this location could have a positive impact on the objective relating to improving accessibility to goods and facilities by resulting in the provision of housing in a location which would provide the future occupants of the development with easy access to existing services and facilities by a choice of means of transport. In addition, given the residential capacity of the location, the potential development could support the Ravenscourt redevelopment, which is scheduled to be completed by the end of 2012, and also have a positive impact on the vitality and viability of the local shopping centre on Bailey's Lane. It is therefore considered that development in this location could have a positive impact on the objective of enhancing the vitality and viability of town and local centres.
- 4.1.16 The Strategic Flood Risk Assessment does however identify that the eastern half of the site is within Flood Zones 2 and 3 and it is considered that development in this location could therefore have a major negative impact on the objective of adapting to climate change and its sub-objective of reducing flood risk unless appropriate mitigation measures are implemented. These mitigation measures may include the completion of more detailed site-specific flood risk assessments, the application of the sequential and exception tests, applying other appropriate measures to mitigate flood risk such as the use of Sustainable Drainage Systems and, if necessary, excluding the eastern part of the site from the developable area.
- 4.1.17 Development in this location would result in the loss of a significant area of greenfield land which is predominantly classified as Grade 2 and Grade 3 Best and Most Versatile agricultural land. It is therefore considered that the potential development would have a negative impact on the objective relating to protecting land and soil. Whilst the impact on this objective cannot in itself be wholly mitigated as any development in this location would inevitably lead to the loss of

greenfield land and Best and Most Versatile agricultural land, ensuring that any development in this location is built to an appropriate density could help minimise the need to release further greenfield sites and Best and Most Versatile agricultural land in order to meet future development needs.

4.1.18 Other objectives which it is considered that development in this location is likely to have a negative impact on include those which relate to landscape character; biodiversity; and green infrastructure. In order to reduce the potential impact on these objectives a number of mitigation measures are recommended. In particular, given that the Ditton Brook Local Wildlife Site is located on the eastern fringe of the site it may be possible to mitigate some of the impact on the objective relating to biodiversity by undertaking appropriate ecological surveys and by providing an appropriate buffer around this LWS. Other measures which may help mitigate some of the impact on the objective relating to biodiversity and also on the objective relating to landscape character include seeking to retain existing areas of woodland and securing appropriate on-site landscaping.

4.1.19 It is envisaged that development in this location would not have a negative impact on any other objectives but the proximity of the site to Ditton Brook means that its impact on the objective relating to water quality is considered to be uncertain. The impact of the potential development in this location on the objective relating to mitigating climate change and the use of sustainable transport modes are also considered to be uncertain.

Land bound by A58, to the north of Prescott (KGB 8)

4.1.20 The Core Strategy Preferred Options report identifies the land bound by the A58 to the north of Prescott as a 'reserve' location for residential development with an indicative capacity of 330 dwellings.

4.1.21 Given the substantial capacity of the location, it is considered that the potential development of the Land bound by the A58 to the north of Prescott could make an important contribution to the housing needs identified in the Strategic Housing Market Assessment (2010) and have a positive impact on the objective of providing good quality housing. The location is also within close proximity of Prescott town centre which, according to the Knowsley Town Centre and Shopping Study (2009), has suffered a loss of vitality and viability in recent years. Given the notional capacity of the location and its proximity to the town centre, it is considered that the potential development in this location could have a positive impact on the vitality and viability of this centre by increasing levels of expenditure within it and it is therefore considered that they would have a major positive impact on this objective. It is considered that development in this location would also have the potential to have

a positive impact on a number of other objectives, including those relating to reducing poverty and social deprivation; reducing the need to travel; and reducing long term unemployment.

4.1.22 Development in this location would however result in housing being built on a predominantly greenfield site and, unless appropriate mitigation measures are implemented, could also lead to the loss of areas of priority habitat and a number of sports pitches. As a result, it is envisaged that the potential development in this location could have a negative impact on the objectives relating to local landscape character; biodiversity; green infrastructure; health; and protecting land and soil. The exclusion of the sports pitches from the developable area or the provision of suitable replacement facilities could however mitigate the impact on the objective relating to health. In addition, the impact on the objectives relating to landscape character and biodiversity could potentially be reduced through securing appropriate landscaping and on-site open space provision, undertaking ecological surveys and protecting areas of woodland. Whilst it is recognised that it would not be possible to completely mitigate the impact on the objective relating to protecting land and soil, due to development in this location inevitably resulting in the loss greenfield land, it is recommended that ensuring the development is built to an appropriate density could help minimise the need to release further greenfield sites.

4.1.23 Development in this location could also have a negative impact on the objective relating to adaptation to climate change due, in part, to the proposals resulting in development taking place in a location that has been identified by the Preliminary Flood Risk Assessments (2011) as being susceptible to groundwater flooding. Key mitigation measures to reduce the level of impact on this objective are likely to include applying appropriate measures to mitigate flood risk such as the use of Sustainable Drainage Systems.

4.1.24 The site is also in close proximity to a number of historic assets, including Prescott town centre which is included on English Heritage's Heritage at Risk Register. However, whilst development in this location could potentially affect the setting of the north western part of the conservation area, the scale of development could generate additional investment in the area and thereby help contribute to the conservation and enhancement of this historic asset. Consequently, it is considered that the impact of development in this location on the objective relating to preserving and enhancing Knowsley's built heritage is uncertain. The impact of the potential development on the objective relating to mitigating climate change is also considered to be uncertain.

Land to the south of Whiston (Phase 1), Windy Arbor Road (KGB 16)

4.1.25 The Core Strategy Preferred Options report identifies the land to the south of Whiston (Phase 1) as a 'reserve' location for residential development with an indicative capacity of 450 dwellings.

4.1.26 As with the other proposals for land to the south of Whiston, the potential development of the location at Windy Arbor Road would have a positive impact on a significant number of objectives. In particular, given the scale of the potential development in this location, it is considered that it could make an important contribution to housing needs identified in the Strategic Housing Market Assessment (2010) and have a significant positive impact on the objective relating to providing good quality, affordable and resource efficient housing; and its sub-objective or providing a wider choice of accommodation to create a greater tenure mix.

4.1.27 The quantum of development that could be delivered in this location is considered to be of a scale which could generate a number of employment and training opportunities during the construction of the development. It is therefore considered that potential development in this location would have some positive impact on the objectives relating to reducing poverty and social deprivation; improving training and opportunities for lifelong learning; and reducing unemployment. Furthermore, the potential development in this location may encourage further investment in the area, helping to sustain existing local employment and facilities and resulting in a positive impact on the objectives that are concerned with business growth; and the vitality and viability of town and local centres. The potential development could also have some positive impact on the objectives relating to health; and improving access to goods, services and amenities.

4.1.28 The appraisal of this location did however identify a number of potential negative impacts on the sustainability objectives. In particular, the significant area of greenfield land that would be lost, together with the potential impact on priority habitat and Local Wildlife Sites that are within and adjacent to the location, resulted in the potential development being considered to have a negative impact on the objectives relating to protecting land and soil; biodiversity, species and habitats; mitigating climate change; and conserving green infrastructure. It may not be possible to entirely mitigate the impact of development in this location on some of these objectives, for instance due to the amount of greenfield land that would be lost it is considered that development in this location would inevitably have a negative impact on the objective relating to protecting land and soil and its sub-objective of directing new housing to previously developed land. However, it may be possible to mitigate negative impacts of development in this location on other objectives, such as the objective relating to biodiversity through for example undertaking appropriate

ecological surveys, protecting areas of woodland and securing appropriate buffers around the Local Wildlife Sites that are within/adjoin this location.

4.1.29 The possible impact of development in this location on a listed building within the location result in the proposals having the potential to have a negative impact on the objective that seeks to preserve, enhance and manage built heritage. It is however acknowledged that due to this feature being located on the edge of what is a very large site there may be some scope to provide adequate buffers around this heritage asset in order to protect its setting and ensure that any development that takes place in this location does not have a negative impact on this objective. As a result, there is only a limited level of certainty that development in this location would have a negative impact on this objective. Given the landscape value of parts of the site and the area of greenfield land that would be lost as part of the development, it is considered that the potential development of this location could have a negative impact on the objective relating to protecting local landscape character. Whilst it would not be possible to entirely mitigate the impact on this objective, the degree of impact could be reduced to an extent by ensuring the retention of existing trees and, where possible, seeking to protect the setting of the remnants of the former Halsnead Estate.

4.1.30 It is also considered that development in this location is likely to have a significant negative impact on the objective of adapting to climate change. This is due to the area of greenfield land that would be lost and also reflects the fact that a portion of the location is within Flood Zones 2 and 3, as defined by the Strategic Flood Risk Assessment, and the location is also within an area that has been identified by the Preliminary Flood Risk Assessment as being susceptible to ground water flooding. It may be possible to entirely mitigate some of these impacts. For instance, as only a small proportion of the location is within Flood Zones 2 and 3, the application of the sequential and exception tests, and, if necessary, excluding parts of the site at greatest risk of flooding from the developable area would mitigate some of this impact. Other key mitigation measures to reduce the impact on this objective are likely to include undertaking more detailed flood risk assessments and applying appropriate measures to mitigate flood risk such as the use of Sustainable Drainage Systems.

4.1.31 The potential development of this location could also have some negative impact on the objectives relating to mitigating climate change; and protecting air quality and an uncertain impact on the objectives relating to reducing the need to travel and water quality. It is however acknowledged that there is only a limited degree of certainty that development in this location would have a negative impact on the objectives relating to mitigating climate change and protecting air quality.

Land at Knowsley Lane, to the north of Huyton (KGB 7)

- 4.1.32 The Core Strategy Preferred Options report identifies the land at Knowsley Lane as a 'reserve' location for a mixed use development. The report indicates that development in this location could comprise of approximately 800 dwellings and 13 hectares of employment land.
- 4.1.33 The SA concluded that the potential development of the Land at Knowsley Lane could have a positive impact on a wide range of objectives. In particular, through the delivery of a substantial number of dwellings and a range of employment premises, it is envisaged that development in this location could have a major positive impact on the objectives relating to providing good quality, affordable and resource efficient housing; and business growth. In particular, development in this location could provide a mix of new development which complements the regeneration of North Huyton and help achieve a wider choice of accommodation in the area, which is particularly important given that the Strategic Housing Market Assessment (2010) identified that the proportion of the housing stock in North Huyton that is socially rented is over double the national, North West and Merseyside averages.
- 4.1.34 Development in this location would also result in the generation of a range of employment opportunities, both during the construction and operation of the development, in a location that is well-related to areas of deprivation. Consequently, it is envisaged that development in this location could also have a major positive impact on the objectives of reducing unemployment; and reducing poverty and social deprivation and securing economic inclusion. Due to the scale of the development that could be delivered, it is considered that the potential development in this location would be likely to generate additional expenditure in the Prescot and Huyton town centres and, as a result, have a major positive impact on the objective relating to enhancing the vitality and viability of Knowsley's town centres. Other objectives that the proposals are likely to have a positive impact on include those which relate to improving local accessibility of goods, services and amenities; reducing the need to travel; and improving educational attainment, training and opportunities for lifelong learning.
- 4.1.35 The potential development in this location would however have a negative impact on a number of objectives. In particular, due to the scale of greenfield land that would be lost, including Grade 3 Best and Most Versatile agricultural land, it is considered that development in this location would have a significant negative impact on the objective of protecting land and soil and its sub-objective of directing housing to previously developed land. Whilst the impact on this objective cannot in itself be mitigated as any built development in this location would inevitably lead to the loss of greenfield land and Best and Most Versatile agricultural land, ensuring that any development in this

location is built to an appropriate density could help minimise the loss of further greenfield sites and Best and Most Versatile agricultural land.

- 4.1.36 The loss of this area of open space and potentially also the areas of woodland and sports pitches within the site would mean that development in this location would also have the potential to have a negative impact on the objectives relating to landscape character; biodiversity; health; and green infrastructure. Some of these impacts could be effectively mitigated. For instance, the retention of the existing sports pitches or the provision of a suitable alternative pitches could successfully mitigate any negative impact of development in this location on the objective relating to health. In addition, as much of the areas of woodland are located around the perimeter of the site it may be possible to mitigate some of the impact on the objectives relating to biodiversity and the local landscape character by retaining these areas of woodland. Other key mitigation measures to reduce the degree of impact on these objectives include undertaking ecological surveys and securing appropriate landscaping.
- 4.1.37 Notwithstanding the scope for the development to encourage the use of sustainable transport modes, due to the quantum of development it is considered that development in this location is likely to result in a considerable increase in traffic in the immediate surrounding area. It is therefore considered that the location also has the potential to have a negative impact on the objectives relating to air quality; and mitigating climate change. Securing improvements to the public transport network and ensuring that the development is accessible by a choice of means of transport are likely to be key measures to minimise any adverse impacts on these objectives.

4.2 Summary of the Significant Effects of the ‘Tier 2’ Locations

- 4.2.1 The Core Strategy Preferred Options report identified four sites as Tier Two “reserve locations”. The Preferred Options version of the Core Strategy states that development in these locations may still take place within the period to 2027 however because of their larger scale the Council consider that their inclusion within Tier Two will allow for the additional lead-in times to take into account the likely requirements for infrastructure and site-wide master planning. The following section gives a brief summary of the outcomes of the SA of each of these Tier Two “reserve” locations. Maps showing the location of each of these Tier Two locations are provided in Appendix 4 and the full matrices for the SA of these locations are provided in Appendix 5.

Land at Finch Lane / Higher Road, to the east of Halewood (KGB 21)

- 4.2.2 The Core Strategy Preferred Options report identifies the land at Finch Lane/Higher Road as a 'reserve' location for residential development with an indicative capacity of 1,170 dwellings.
- 4.2.3 The SA concluded that the potential development of Land at Finch Lane/Higher Road would have a relatively mixed impact on the sustainability objectives. The delivery of the scale of housing proposed would have a major positive impact on the objective of providing good quality, affordable and resource efficient housing and could contribute to the housing needs identified by the 2010 Strategic Housing Market Needs Assessment which established that the proportion of two- and three-bed properties in Halewood is below the borough average and that the area has average house prices above the Borough average. In addition, the creation of employment during the construction of the development and the potential for the proposals to stimulate further investment in the area would also support the objectives relating to reducing unemployment; access to training; reducing poverty and social deprivation; and business growth.
- 4.2.4 The potential development of this location could also have a positive impact on the objective relating to improving accessibility to goods and facilities by resulting in the provision of housing in a location which would provide the future occupants of the site with easy access to existing services and facilities by a choice of means of transport. In addition, given its significant residential capacity, the potential development at this location could support the Ravenscourt redevelopment, which is scheduled to be completed by the end of 2012, and also have a positive impact on the vitality and viability of the local shopping centre on Bailey's Lane. It is therefore considered that the potential development of this location could have a major positive impact on the objective of enhancing the vitality and viability of town and local centres.
- 4.2.5 The potential development in this location would however have a negative impact on a number of objectives. In particular, it would result in the loss of a substantial area of greenfield land, which is predominately classified as Grade 2 Best and Most Versatile agricultural land, and which contributes to the setting of Halewood. It is therefore considered that the potential development would have a major negative impact on the objectives relating to protecting land and soil; and protecting landscape character. It may be possible to mitigate some of these impacts through, for example, seeking to secure appropriate landscaping to moderate the impact of the proposals on the local landscape character. However, given that development in this location would inevitably lead to the loss of greenfield land and Best and Most Versatile agricultural land, it would not be possible to wholly mitigate the impact of development in this location on the objective

relating to protecting land and soil and its sub-objective of directing new housing to previously developed land. It is however recommended that any development in this location should be built to an appropriate density to help minimise the need to release further greenfield sites and Best and Most Versatile agricultural land.

- 4.2.6 Due to the scale of the location and the distances of parts of it from facilities and services, it is considered that the impact of development in this location on the objective of reducing the need to travel and encouraging the use of sustainable modes of transport is uncertain. By extension, and also due to the quantum of development that could be delivered in this location, it is considered that the proposals have the potential to have a negative impact on air quality and mitigating climate change. Other objectives which it is considered that the potential development is likely to have a negative impact on include those which relate to Knowsley's built heritage; adapting to climate change; biodiversity; and green infrastructure.

Land to the south of Whiston (Phase 2), Lickers Lane (KGB 14)

- 4.2.7 The Core Strategy Preferred Options report identifies the land to the south of Whiston as a 'reserve' location for residential development with an indicative capacity of 1,450 dwellings.
- 4.2.8 The potential development of Land south of Whiston would have a positive impact on a significant number of objectives. In particular, given the scale of the potential development, it is considered that it could make an important contribution to the housing needs identified in the Strategic Housing Market Assessment (2010) and have a significant positive impact on the objective relating to providing good quality, affordable and resource efficient housing; and its sub-objective of providing a wider choice of accommodation to create a greater tenure mix. The potential development in this location is also considered to be of a scale where it could generate a number of employment and training opportunities during the construction of the development. It is therefore considered that the potential development of this location would have some positive impact on the objectives relating to reducing poverty and social deprivation; improving training and opportunities for lifelong learning; and reducing unemployment. Furthermore, it may encourage additional investment in the area, helping to sustain existing local employment and facilities and resulting in a positive impact on the objectives concerned with business growth; and the vitality and viability of town and local centres. The potential development in this location could also have some positive impact on the objectives relating to health; and improving access to goods, services and amenities.



4.2.9 The appraisal of the location did however identify a number of possible negative impacts on the sustainability objectives. In particular, the significant area of greenfield land that would be lost as part of the proposed development, together with the potential impact on areas of priority habitat and Local Wildlife Sites that are within or adjoin the site, resulted in the location being considered to have a major negative impact on the objective relating to protecting land and soil; and some negative impact on the objectives relating to protecting biodiversity, species and habitats; mitigating climate change; and conserving green infrastructure. It may not be possible to wholly mitigate some of these impacts. For instance, due to the amount of greenfield land that would be lost it is considered that development in this location would inevitably have a negative impact on the objective relating to protecting land and soil and its sub-objective of directing new housing to previously developed land. It may however be possible to partially mitigate some of the other negative impacts that would result from development in this location. For example, the potential impact on the objective relating to biodiversity could possibly be reduced by undertaking appropriate ecological surveys, protecting areas of woodland, and securing appropriate buffers around LWSs.

4.2.10 The possible impact of the development on listed buildings on the northern and eastern boundaries of the location also resulted in the potential development being considered to have the potential to have a negative impact on the objective that seeks to preserve, enhance and manage built heritage. It is however acknowledged that due to these features being located on the edge of what is a very large location there may be some scope to provide adequate buffers around the setting of these heritage assets. There is therefore only a limited level of certainty that development in this location would have a negative impact on this objective. Given the landscape value of parts of the site and the area of greenfield land that could be lost as part of the development, it is considered that the potential development of this location could also have a negative impact on the objective relating to protecting local landscape character. It is however noted that the impact on this objective could be mitigated to an extent by ensuring the retention of existing trees and, where possible, seeking to protect the setting of the remnants of the former Halsnead Estate.

4.2.11 It is also considered that the potential development of this location is likely to have some negative impact on the objective of adapting to climate change due to the area of greenfield land that would be lost and also because of the location being within an area that has been identified by the Preliminary Flood Risk Assessment as being susceptible to ground water flooding. Due to the quantum of development that could be delivered in this location, it is considered that the potential development of Land to the South of Whiston could also have some negative impact on the objective relating to mitigating

climate change; and protecting air quality. It is however acknowledged that there is only a limited degree of certainty that development in this location would have a negative impact on these objectives.

Land at Carr Lane, to the west of Prescott (KGB 10)

- 4.2.12 The Core Strategy Preferred Options report identifies the land to at Carr Lane, to the west of Prescott, as a 'reserve' location for employment development with an indicative capacity of 3 hectares of employment land.
- 4.2.13 The SA concluded that the potential development of the Land at Carr Lane could have a positive impact on a wide range of social, environmental and economic objectives. In particular, it could support the regeneration of South Prescott, result in the provision of high quality employment premises that provide accommodation for new/expanding businesses and stimulate investment in the wider area. It is therefore considered that the potential development in this location could have a positive impact on the objective relating to business growth and, through the creation of employment opportunities, could also have some positive impact on the objectives relating to reducing unemployment; and reducing poverty and social deprivation and securing economic inclusion. The employment opportunities that would be created would be accessible by a range of modes of transport and it is therefore envisaged that development in this location could also have some positive impact on the objective of reducing the need to travel and improving the use of sustainable modes of transport.
- 4.2.14 Particularly when viewed cumulatively with regeneration at South Prescott, the potential development at the Land at Carr Lane could generate additional expenditure in the nearby Prescott town centre which, according to the Knowsley Town Centre and Shopping Study (2009), has suffered a loss of vitality and viability in recent years. It is therefore considered that development in this location could have some positive impact on this objective although it is acknowledged that the proximity of the site to the Cable's Retail Park reduces the level of certainty that the proposals would have a positive impact on this objective. Other objectives that development in this location may have a positive effect on include those which relate to training and opportunities for lifelong learning; and restoring land and soil quality.
- 4.2.15 The potential development at the Land at Carr Lane could however result in the loss of priority habitat and, as a result, have a negative impact on the objective relating to biodiversity and habitats unless appropriate mitigation measures are implemented. In particular, as the areas of priority habitat are predominantly found around the perimeter of the location it may be possible to reduce the impact on this objective though protecting areas of woodland and excluding them from the

developable area. It is considered that development in this location could also have a negative impact on the objective relating to adaptation to climate change due to it resulting in development taking place in a location that has been identified by the Preliminary Flood Risk Assessments (2011) as being susceptible to groundwater flooding. Key mitigation measures to reduce the level of impact on this objective are likely to include undertaking flood risk studies and applying appropriate measures to mitigate flood risk such as the use of Sustainable Drainage Systems.

4.2.16 It is envisaged that the potential development would not have a negative impact on any other objectives but the proximity of the location to Prescot Brook means that its impact on the objective relating to water quality is considered to be uncertain. The impact of the potential development in this location on the objective relating to mitigating climate change is also considered to be uncertain.

Land to the east of Knowsley Industrial Park (KGB 4)

4.2.17 The Core Strategy Preferred Options report identifies the land to the east of Knowsley Industrial Park, as a 'reserve' location for employment development with an indicative capacity of 25 hectares of employment land.

4.2.18 The SA concluded that the potential development of Land to the east of Knowsley Industrial Park would have a positive impact on a number of objectives. In particular, by providing a range of employment premises, creating a significant number of employment opportunities and contributing to the regeneration of Knowsley Industrial and Business Parks, development in this location is likely to have a major positive impact on the objectives relating to business growth; education and training; and unemployment; and some positive impact on the objective of reducing poverty and social deprivation.

4.2.19 It is considered that development in this location is unlikely to have any significant impact on the objective of enhancing the vitality and viability of Knowsley's town centres. In addition, the potential development in this location is unlikely to have a significant negative impact on the objective of protecting landscape character.

4.2.20 It is however recognised that development in this location could have some negative impacts, particularly in relation to certain environmental objectives. Specifically, the proposals have the potential to have a negative impact on the objectives relating to air quality; and reducing the need to travel due to the recognition that they are likely to generate a significant amount of vehicular movements and the proximity of the location to the A580 and the motorway network increases the likelihood that a significant proportion of these would be made by car. This

potential to result in unsustainable patterns of travel together with the inevitable carbon emissions associated with the construction and operation of the development mean that it is considered that the potential development would also have a negative impact on the objective relating to mitigating climate change. It is however acknowledged that there is only limited certainty about the impact on the objective relating to mitigating climate change due to the identified potential for the development in this location to connect to decentralised energy networks and also because the potential development could benefit from the planned improvements to the public transport network in association with the regeneration of Knowsley Industrial Park. Key mitigation measures to reduce any negative impact on these objectives are likely to include securing improvements to the public transport network and ensuring that the development is accessible by a choice of means of transport.

4.2.21 The presence of Kirkby Brook within the location results in the proposals having the potential to have a negative impact on the objective relating to biodiversity, and an uncertain impact on the objective relating to water quality. The loss of greenfield land, much of which is classified as Grade 1 Best and Most Versatile agricultural land, also means that the potential development is likely to have a negative impact on the objectives relating to adaptation to climate change; green infrastructure; and protecting land and soil. Whilst it is recognised that it will not be possible to completely mitigate the impact on these objectives due to development in this location inevitably resulting in the loss greenfield and Best and Most Versatile agricultural land, it is recommended that ensuring development is built to an appropriate density could help minimise the need to release further greenfield sites.

4.2.22 The possible impact of the potential development on Archaeological Sites within the location could result in a negative impact on the objective that seeks to preserve, enhance and manage Knowsley's archaeological buildings, areas, sites and features. It is however acknowledged that due to the limited information on these Archaeological Sites there is only a limited level of certainty about the impact on this objective.

4.3 Summary of the Significant Effects of the 'Safeguarded' Locations

4.3.1 In addition to the "reserve locations", the Preferred Options version of the Core Strategy identifies two 'safeguarded' locations which the Council consider are likely to be required for development after 2027. The following section gives a brief summary of the outcomes of the SA of each of these 'safeguarded' locations. Maps showing the location of each of these safeguard locations are provided in Appendix 6 and the full matrices for the SA of these locations are provided in Appendix 7.

Cronton Colliery (and land south of M62) (KGB 18)

- 4.3.2 The Core Strategy Preferred Options report identifies the land to at Cronton Colliery as a 'safeguarded' location for employment development with an indicative capacity of 77 hectares of employment land.
- 4.3.3 The SA concluded that the potential development of Cronton Colliery could have a positive impact on a number of objectives. In particular, it could result in the provision of a range of employment premises that provide accommodation for new businesses, stimulate investment in the area and generate a significant number of employment opportunities. It is therefore considered that the potential development of this location could have a major positive impact on the objectives relating to business growth; maintaining high levels of employment and reducing unemployment; reducing poverty and social deprivation; and improving opportunities for training and lifelong learning. It is however recognised that the relatively isolated position of the location coupled with its distance from identified principal regeneration areas, reduces the level of certainty that development in this location would have a major positive impact on some of these objectives.
- 4.3.4 The potential development of Cronton Colliery would however have a negative impact on a number of objectives. In particular, it could have a significant negative impact on the objective relating to adaptation to climate change due, in part, to sections of the site being within Flood Zones 2 and 3 as defined by the Strategic Flood Risk Assessment and also because of the proposals resulting in development taking place in a location that has been identified by the Preliminary Flood Risk Assessments (2011) as being susceptible to groundwater flooding. It is however recognised that only a relatively small portion of the Cronton Colliery location falls within Flood Zones 2 and 3 and it may therefore be possible to successfully mitigate some of these impacts by applying the sequential test and, if necessary, excluding parts of the location from the developable area. Other measures to mitigate some of the impact on this objective are likely to include undertaking more detailed site-specific flood risk assessments and implementing other appropriate measures to mitigate flood risk such as the use of Sustainable Drainage Systems.
- 4.3.5 The relatively isolated location of the site and its distance from the existing public transport network and established residential communities means that the potential development is likely to have some negative impact on the objectives relating to mitigating climate change; protecting air quality; and reducing the need to travel. Key mitigation measures are likely to include securing improvements to the public transport network and ensure that the development is accessible by a choice of means of transport.

- 4.3.6 The presence of a listed building and archaeological sites within the location also means that the potential development could have some negative impact on the objective relating to Knowsley's built heritage. However, it is recognised that these features are located primarily along the edges of what is a large site and, as a result, there may be scope to incorporate adequate buffers around these assets to protect their setting and significance. As a result, there is only a limited level of certainty that development in this location would have a negative impact on this objective. Development in this location would also have the potential to have a negative impact on the objective relating to the prudent use of minerals if it were to result in the sterilisation of clay reserves. It is however recognised that only a relatively small proportion of the location falls within the potential Mineral Safeguarding Area for clay identified by Evidence Base for Minerals Planning on Merseyside (2008) and any negative impact on this objective could potentially be wholly mitigated by the prior extraction of clay. Other objectives that may be adversely affected by the potential development unless the developable area was to be adapted accordingly include those relating to biodiversity; and green infrastructure.
- 4.3.7 The impact of the potential development on the objective relating to protecting and restoring land and soil is considered to be uncertain due to it being unclear whether the loss of a substantial area of greenfield land, sections of which are classified as Grade 2 Best and Most Versatile agricultural land, is outweighed by the benefits the potential development would deliver to the restoration of the former colliery land.

Land at Knowsley Village (KGB 6)

- 4.3.8 The Core Strategy Preferred Options report identifies the land to at Knowsley Village as a 'safeguarded' location for residential development with an indicative capacity of 1,090 hectares of employment land.
- 4.3.9 The SA concluded that the potential development of Land at Knowsley Village would have a positive impact on a significant number of objectives. In particular, given the scale of the proposals, it is considered that they have the potential to make an important contribution to housing needs identified in the Strategic Housing Market Assessment (2010) and have a significant positive impact on the objective relating to providing good quality, affordable and resource efficient housing; and its sub-objective or providing a wider choice of accommodation to create a greater tenure mix. The potential development in this location is also considered to be of a scale where it could generate a number of employment and training opportunities during the construction of the development. It is therefore considered that the potential development would have some positive impact on the

objectives relating to reducing poverty and social deprivation; improving training and opportunities for lifelong learning; and reducing unemployment. Furthermore, the additional expenditure generated by development in this location could result in a significant positive impact on the vitality and viability of Knowsley's town and local centres and by encouraging further investment in the area could also help sustain existing local employment and have a positive impact on the objective that is concerned with business growth.

4.3.10 Development in this location would result in the provision of housing on a site that is in close proximity to a range of existing local services and facilities. It could also make a contribution to the continued viability of these services and facilities. It is therefore considered that development in this location would have some positive impact on the objective relating to the accessibility of goods, services and amenities. Nevertheless, the level of certainty of this impact is reduced by the fact that some of these facilities would not be within convenient walking distance of all parts of the location.

4.3.11 The appraisal of Land at Knowsley Village did however identify a number of potential negative impacts on the sustainability objectives. In particular, development in this location would result in the loss of a large swathe of greenfield land that contributes to the local landscape character and which contains areas of priority habitat (woodlands) and is itself largely covered by a Local Wildlife Site (LWS) designation. It is therefore considered that the potential development would be likely to have a major negative impact on the objectives relating to landscape; biodiversity; land and soil; and green infrastructure. Key mitigation measures to reduce the level of impact are likely to include ensuring development is built to an appropriate density to minimise the need to release further greenfield sites, undertaking appropriate ecological surveys, protecting areas of woodland, and securing appropriate landscaping and on-site open space provision. However, given that the location is largely covered by a LWS designation, it is considered to be unlikely that the impact on the objective relating to biodiversity could be wholly mitigated.

4.3.12 Due to the quantum of development proposed, it is considered that the potential development is also likely to have some negative impact on the objectives relating to mitigating climate change; and protecting air quality. Mitigation measures recommended to reduce the degree of impact on these objectives include securing improvements to the public transport network and ensuring that the development is accessible by a choice of means of transport. The possible impact on the three identified Archaeological Sites within the location and Knowsley Village Conservation Area also result in the potential development being considered to have the potential to have a negative impact on the

objective that seeks to preserve, enhance and manage Knowsley's archaeological buildings, areas, sites and features.

- 4.3.13 It is also considered that the potential development in this location is likely to have some negative impact on the objective of adapting to climate change due to the area of greenfield land that would be lost and also because of the location being within an area that has been identified by the Preliminary Flood Risk Assessment as being susceptible to ground water flooding.

4.4 Summary of the Significant Effects of the Locations Discounted by the draft Knowsley Green Belt Study

- 4.4.1 In order to ensure that there has been a suitable appraisal of all reasonable options, this SA also provides an appraisal of those locations that were discounted at the final stage of the draft Knowsley Green Belt Study. The following section gives a brief summary of the outcomes of the SA of each of these discounted locations. Maps showing the location of each of these safeguard locations are provided in Appendix 8 and the full matrices for the SA of these locations are provided in Appendix 9.

Land at Eastfield Walk, Kirkby (KGB 2)

- 4.4.2 Prior to the location being discounted during the final stage of the study, the draft Knowsley Green Belt Study identified land at Eastfield Walk as a potential location for a residential development with an indicative capacity of 30 dwellings.
- 4.4.3 Due to the limited capacity of the location, the SA considered that the potential development of the Land at Eastfield Walk would not have a significant impact on many of the objectives. By resulting in the provision of housing in a location that is relatively well served by public transport and within convenient walking distance of a number of community facilities, it is considered that the potential development could have some positive impact on the objectives relating to the accessibility of goods and services; and reducing the need to travel. Given the limited capacity of the location, it is however considered that the potential development is unlikely to have any significant impact on any of the economic objectives and it is also uncertain whether they would have a significant impact on the objective of providing good quality, affordable and resource efficient housing.
- 4.4.4 The potential development of this location would however result in the loss of a greenfield site which comprises entirely of Grade 2 Best and Most Versatile agricultural land. It is therefore considered that it would have a negative impact on the objective of protecting land and soil and

its sub-objective of directing new development to previously developed land. Whilst this impact cannot in itself be mitigated, it is recommended that ensuring development is built to an appropriate density could help minimise the need to release further greenfield sites.

4.4.5 The location also falls within the M57 Green Belt Corridor 'Strategic Green Link' and the Knowsley and Sefton Green Belt Study – Draft Knowsley Report (2011) concludes that the development would be likely to have a small-scale negative impact on the integrity of this Strategic Green Link. The potential development may also result in the loss of a band of mature trees on the perimeter of the site. It is therefore considered that the potential development may have a negative impact on the objectives relating to local landscape character; biodiversity; and green infrastructure. Key mitigation measures to reduce the level of impact on these objectives are likely to include securing appropriate landscaping and on-site open space provision and undertaking ecological surveys. In addition, given that the area of woodland largely occupies a strip along the western boundary of the location it may be possible to retain these features as part of any development in this location.

4.4.6 Development in this location would also result in the loss of an area of designated Urban Greenspace which appears to be used for informal recreation. Nevertheless, given the small scale of the location, it is considered to be uncertain whether the loss of this area would have a significant impact on the objective relating to health. The impact of the potential development on the objective relating to mitigating climate change is also considered to be uncertain.

Land at Boundary Lane, Kirkby (KGB 3)

4.4.7 Prior to the location being discounted during the final stage of the study, the draft Knowsley Green Belt Study identified land at Boundary Lane as a potential location for an employment development with an indicative capacity of 137 hectares.

4.4.8 The SA concluded that the potential development of the Land at Boundary Lane would have a positive impact on a number of objectives. In particular, through the provision of a range of employment premises and the creation of a significant number of employment opportunities, the potential development in this location is likely to have some positive impact on the objectives relating to business growth; education and training; and reducing unemployment.

4.4.9 The potential development of this location would however have a negative impact on a wide range of objectives with the impact on many of these becoming increasingly significant over the longer term as the development is built out. It would have a particularly significant

negative impact on the objective relating to protecting land and soil due to the resultant loss of a substantial greenfield site which is classified as Grade 1 Best and Most Versatile agricultural land and parts of which are presently within agricultural use. Whilst this impact cannot in itself be mitigated, it is recommended that ensuring the development is built to an appropriate density could help minimise the loss of further greenfield sites and Best and Most Versatile agricultural land.

4.4.10 The potential impact of development in this location on Local Wildlife Sites adjacent to the site and priority habitats within the site means that it is also likely to have a significant negative impact on the objective relating to biodiversity. Whilst it may not be possible to eliminate the impact on many of these assets, particularly in terms of the loss of on-site priority habitat, key measures to reduce the level of impact on this objective are likely to include undertaking ecological surveys, protecting areas of priority habitat where possible and creating an appropriate buffer around the Local Wildlife Sites. In addition, the peripheral location of the site on the edge of Knowsley Industrial Park coupled with its proximity to the A580 and motorway network lead to the conclusion that the proposals are likely to have a significant negative impact on the objectives relating to air quality; and reducing the need to travel. Key mitigation measures to reduce the level of impact on these objectives are likely to include securing improvements to the public transport network and ensuring that the development is accessible by a choice of means of transport.

4.4.11 The potential development in this location is also likely to have an adverse impact on a number of other environmental objectives, including a significant negative impact on the objectives relating to mitigating climate change; conserving green infrastructure; and protecting the local character of the landscape; and some negative impact on the objectives relating to adapting to climate change. It also has the potential to have a negative impact on a number of social objectives. In particular, the possible impact on the three identified Archaeological Sites within the location also result in the potential development having the potential to have a negative impact on the objective that seeks to preserve, enhance and manage Knowsley's archaeological buildings, areas, sites and features. It is however acknowledged that due to the limited information on these Archaeological Sites there is only a limited level of certainty about the impact of the proposals on this objective. In addition, the possible impact of the proposed development on the regeneration of Knowsley Industrial Park are considered to result in some negative impact on the objective of reducing poverty and social deprivation and securing economic inclusion.

Land at Pinfold Lane, Knowsley Village (KGB 5)

- 4.4.12 Prior to the location being discounted during the final stage of the study, the draft Knowsley Green Belt Study identified land at Pinfold Lane, Knowsley Village, as a potential location for a residential development with an indicative capacity of 60 dwellings.
- 4.4.13 Due to the relatively limited capacity of the location, it is considered that the potential development of the Land at Pinfold Walk would not have a significant impact on many of the SA objectives. It is however considered that by resulting in the provision of housing in a location that is relatively well served by public transport and within convenient walking distance of a number of community facilities, development in this location would have the potential to have some positive impact on the objectives relating to the accessibility of goods and services; and reducing the need to travel. Given the limited capacity of the location, it is however considered that the proposals would not have any significant impact on the economic objectives and only a minor positive impact on the objective of providing good quality, affordable and resource efficient housing.
- 4.4.14 Development in this location would however result in the loss of a greenfield site which contains Grade 2 Best and Most Versatile agricultural land. It is therefore considered that it would have a negative impact on the objective of protecting land and soil and its sub-objective of directing new development to previously developed land. Whilst this impact cannot in itself be mitigated as any development in this location would inevitably lead to the loss of greenfield land and Best and Most Versatile agricultural land, it is recommended that ensuring the development is built to an appropriate density could help minimise the loss of further greenfield sites and Best and Most Versatile agricultural land.
- 4.4.15 Development in this location would also lead to new housing being directed to a location that is immediately adjacent to Knowsley Village conservation area. It is noted that the Conservation area appraisal for Knowsley Village emphasises that the character of the area is shaped by its rural setting with wide open spaces and coppices of trees. The potential development in this location would result in the loss of an area of open space along the western boundary of the conservation area and, as a result, it would have the potential to have a significant detrimental on the character and significance of this historic asset. Development in this location may also impact upon features of archaeological interest within the location and it is therefore considered that the potential development would have a significant negative impact on the objective of preserving, enhancing and managing Knowsley's rich diversity of cultural, historic and archaeological buildings, areas, sites and features. Key measures to mitigate the impact of development in this location on built heritage are likely to include

undertaking more detailed assessments of the impact of the potential development on the significance of the conservation area and seeking to protect trees that make a valuable contribution to the setting of the conservation area. It is however considered that it may not be possible to entirely mitigate the negative impact of development in this location on this objective.

4.4.16 Development in this location would result in the loss of a greenfield site, which contains areas of priority habitat. It is therefore considered that the potential development may have a negative impact on the objectives relating to local landscape character; biodiversity; and green infrastructure. Mitigation measures recommended to reduce the degree of impact on these objectives include securing appropriate landscaping and on-site open space provision, undertaking ecological surveys, and protecting areas of woodland. Development in this location could also have a negative impact on the objective relating to adaptation to climate change due, in part, to the proposals resulting in development taking place in a location that has been identified by the Preliminary Flood Risk Assessments (2011) as being susceptible to groundwater flooding. A key mitigation measure to reduce any potential negative impact on this objective is likely to be the application of appropriate measures to mitigate flood risk such as the use of Sustainable Drainage Systems.

4.4.17 In addition, development in this location may result in the loss of an area which appears to be used for informal recreation. It is therefore considered that the impact of the proposed development on the objective relating to health is uncertain. The impact on the objective relating to mitigating climate change is also considered to be uncertain.

Recreation Ground, Two Butt Lane, Whiston (KGB 9)

4.4.18 Prior to the location being discounted during the final stage of the study, the draft Knowsley Green Belt Study identified the recreation ground on Two Butts Lane as a potential location for a residential development with an indicative capacity of 110 dwellings.

4.4.19 The SA concluded that the potential development of the recreation ground at Two Butt Lane, Whiston, would have a relatively mixed impact on the sustainability objectives. The provision of housing on this site would have a positive impact on the objective of providing good quality housing and its sub-objective of providing a wider choice of accommodation to create a greater tenure mix. The potential development at this location would also result in the provision of housing in a location that is well served by public transport and within convenient walking distance of a range of community facilities. It is therefore considered that the potential development could have a positive impact on the objective of reducing the need to travel; and

improving the local accessibility of goods, services and amenities. It is however acknowledged that the loss of the recreation ground at this location reduces the level of certainty that the proposals would have a positive impact on this second objective.

4.4.20 The potential development at this location could generate additional expenditure in Prescot town centre and thereby have some positive impact on the objective of enhancing the vitality and viability of Knowsley's town centres. It is however acknowledged that the relatively limited capacity of the location reduces the degree of certainty that the potential development would have a significant impact on the vitality and viability of Prescot town centre.

4.4.21 The potential development at this location would however have a negative impact on a number of the objectives. In particular, the loss of the recreation ground would potentially have a negative impact on the objective relating to health due to the resultant loss of opportunities to participate in sport and informal recreation. Potential measures to mitigate this impact include the provision of on-site public open space and the provision of a replacement playing field. The loss of this area of open space and potentially also the areas of woodland within the site would mean that potential development in this location could have a negative impact on the objectives relating to landscape character; biodiversity; adaptation to climate change; green infrastructure; and protecting land and soil. It is however acknowledged that as much of the areas of woodland are around the perimeter of the location it may be possible to mitigate some of the impact on the objectives relating to biodiversity and the local landscape character by retaining these areas of woodland. Other key mitigation measures to reduce the degree of impact on these objectives include undertaking ecological surveys and securing appropriate landscaping.

4.4.22 It is considered that the potential development at this location is unlikely to have a negative impact on any of the other objectives. It is however recognised that the construction and operation of the development would inevitably result in carbon emissions. The potential development could also result in the loss of on-site trees and the recreation ground at Two Butt Lane is not within a 'Priority Zone' for renewable/low carbon energy as identified by the Liverpool City Region Renewable Energy Capacity Study (2009) nor is it in particularly close proximity to a site identified by the Knowsley Renewable and Low Carbon Energy Options study (2009) as a potential location for implementing district heating. It is therefore considered that the potential development at this location could have some negative impact on the objective relating to mitigating climate change. However, due to the location being well served by public transport and within convenient walking distance of a range of community facilities, and also because of the relatively limited scale of the potential development, it is

considered to be uncertain whether the potential development at this location would have a significant negative impact on this objective.

Land to the south of Kings Business Park, Huyton (KGB 11)

- 4.4.23 Prior to the location being discounted during the final stage of the study, the draft Knowsley Green Belt Study identified the land to the south of Kings Business Park as a potential location for a residential development with an indicative capacity of 60 dwellings.
- 4.4.24 The potential development at land to the south of King's Business Park has the potential to deliver a range of housing types and tenures and could thereby contribute to housing needs identified in the Strategic Housing Market Assessment (2010) and a positive impact on the objective of providing good quality housing and its sub-objective of providing a wider choice of accommodation to create a greater tenure mix. The potential development at this location would also lead to the provision of housing in a location which would provide the future occupants of the location with easy access to existing services and facilities by a choice of means of transport and would also make a contribution to the continued viability of these services and facilities. It is therefore envisaged that the potential development could have some positive impact on the objectives relating to improving the local accessibility of goods, services and amenities; and reducing the need to travel.
- 4.4.25 The potential development at this location would however have a negative impact on a range of objectives, particularly those relating to environmental issues. The location comprises of an area of woodland and landscaped parkland. Consequently, although there may be scope to retain some trees on site, it is considered that the potential development would have a negative impact on the objectives relating to protecting the local character of the landscape; and conserving and maintaining green infrastructure.
- 4.4.26 The potential development at this location would result in a greenfield site being developed for housing which would inevitably have some negative impact on the objective of protecting land and soil quality and its sub-objective of directing new housing to previously developed land. Furthermore, the potential loss of priority habitat means that the proposals are likely to have some negative impact on the objective relating to biodiversity unless suitable mitigation measures are implemented, such as undertaking ecological surveys and excluding areas of priority habitat from the developable area. The potential loss of priority habitat, together with the Preliminary Flood Risk Assessment's (2011) identification of the site as being within an area that is susceptible to ground water flooding, means that it is also considered that development at this location could have a negative impact on the

objective of adapting to climate change, including flood risk. A key mitigation measure to reduce the level of impact on this objective would be the application of appropriate measures to mitigate flood risk such as the use of Sustainable Drainage Systems.

Eastern Side, Stadt Moers Park (north east), Prescott (KGB 12)

4.4.27 Prior to the location being discounted during the final stage of the study, the draft Knowsley Green Belt Study identified the eastern side of Stadt Moers Park as a potential location for a residential development with an indicative capacity of 340 dwellings.

4.4.28 Given the substantial capacity of the location, it is considered that the potential development at the eastern side of Stadt Moers Park would have the potential to make an important contribution to housing needs identified in the Strategic Housing Market Assessment (2010) and have a significant positive impact on the objective of providing good quality housing and its sub-objective of providing a wider choice of accommodation to create a greater tenure mix. The potential development at this location would result in the provision of housing in a location that is well served by public transport, within convenient walking distance of a range of community facilities and in close proximity to the local centres on Greene's Road and Dragon Drive. It is therefore considered that the potential development at this location could have a positive impact on the objective of reducing the need to travel and, through the generation of additional expenditure in the local area, may also have a positive effect on the objective of enhancing the vitality and viability of town and local centres. In addition, due to the size of the potential development, the delivery of additional dwellings may stimulate investment in the local area and create jobs in the construction sector. The potential development could therefore have some positive impact on the objectives of reducing poverty and social deprivation; and maintaining high and stable levels of employment.

4.4.29 Nevertheless, it is envisaged that the potential development at the eastern side of Stadt Moers Park would have an adverse impact on a number of objectives. In particular, it would result in the loss of approximately a quarter of what is identified by the Council's Greenspace Audit as one of only four borough parks in Knowsley. The location also forms a key part of the Whiston to Cronton Corridor 'Strategic Green Link'. It is therefore considered that the potential development would have a major negative impact on the objective of conserving green infrastructure and some negative impact on the objectives relating to the accessibility of services and amenities; health; adapting to climate change; and protecting land and soil.

4.4.30 It is considered that it may be possible to lessen the negative impact on these objectives. For instance, securing the provision of on-site open

space and green corridors through the site and applying appropriate measures to mitigate flood risk such as the use of Sustainable Drainage Systems should reduce the degree of impact on the objectives relating to green infrastructure and adapting to climate change. Nevertheless, it may not be possible to wholly mitigate all of these impacts. In particular, the potential development of the site would unavoidably result in the loss of a significant area of greenfield land and, as a result, would inevitably have some negative impact on the objective relating to protecting land and soil and its sub-objective of directing new development to previously developed land. Similarly, as the potential development would lead to the loss of approximately a quarter of Stadt Moers Park it is unlikely that its impact on the objectives relating to health and the accessibility of services and amenities would be wholly mitigated through the provision of on-site open space and green corridors through the site.

- 4.4.31 The potential development at this location would also result in the loss of an area of parkland and could therefore have an adverse impact on the objectives relating to protecting the character and accessibility of the local landscape; and protecting, enhancing and managing biodiversity. It is however acknowledged that there can only be limited certainty about the impact of the proposals on the objective relating to biodiversity in the absence of detailed ecological surveys to establish their potential impact on nature conservation value.
- 4.4.32 The potential development would result in the provision of housing in a location that is within walking distance of a range of community facilities and well served by public transport. Nevertheless, it is recognised that the construction and operation of a development of the scale proposed would undoubtedly result in a significant amount of carbon emissions. Consequently, and notwithstanding the fact that other policies in the Core Strategy are likely to ensure that all new development is designed in a way to maximise energy efficiency, it is considered that the impact of the potential development in this location on the objective of mitigating climate change is uncertain.

Southern Tip, Stadt Moers Park, Prescott (KGB 13)

- 4.4.33 Prior to the location being discounted during the final stage of the study, the draft Knowsley Green Belt Study identified the southern tip of Stadt Moers Park as a potential location for a residential development with an indicative capacity of 50 dwellings.
- 4.4.34 The SA concluded that the potential development of the Southern tip of Stadt Moers Park would make some positive contribution to the objective of providing good quality, affordable and resource efficient housing. In addition, by generating some additional expenditure in nearby district centres, the potential development may also have some

positive impact on the objective of enhancing the vitality and viability of town and local centres, although it is recognised that the relatively limited capacity of the location would reduce the degree of certainty that the potential development would have a significant impact on this objective.

- 4.4.35 It is however envisaged that the potential development at the Southern tip of Stadt Moers Park would have a negative impact on a number of objectives. In particular, it is considered that the possible loss of priority habitat coupled with the potential impact on nearby Local Wildlife Sites, including Tushingham's Pond, mean that the potential development is likely to have a significant negative impact on the objective relating to biodiversity unless appropriate mitigation measures are implemented. Key mitigation measures to reduce the level of impact on this objective are likely to include undertaking ecological surveys, protecting areas of woodland and the creation of an appropriate buffer around the LWS.
- 4.4.36 It is also considered that the loss of this section of the park could have a negative impact on the objectives relating to accessibility of facilities; landscape character; protecting land and soil; and green infrastructure, particularly as the Greenspace Audit (2012) identifies Stadt Moers Park as one of four borough parks in Knowsley which reflects the range of recreation opportunities and community facilities provided at the park. Whilst it may be possible to mitigate some of these impacts, for example the provision of on-site landscaping could lessen the negative impact on the objective relating to local landscape character, it is considered that it may be difficult to mitigate some of the other impacts. In particular, the potential development of the location would inevitably result in the loss of an area of greenfield land and it would therefore be difficult to mitigate the adverse impact on the objective relating to protecting land and soil and its sub-objective of directing housing to previously developed land.
- 4.4.37 The limited range of local facilities within convenient walking distance of the location and its distance from a train station mean that the impact of the potential development on the objective of reducing the need to travel and encouraging the use of sustainable modes of travel is uncertain. It is also considered that the potential development would have an uncertain impact on the objective relating to mitigating climate change. In order to reduce the likelihood of the potential development in this location having a negative impact on these objective key mitigation measures are likely to include ensuring that any new development is built to a high standard of sustainability and ensuring that the proposals cater for an appropriate range and choice of transport options.

Bowring Park (north), Huyton (KGB 15)

- 4.4.38 Prior to the location being discounted during the final stage of the study, the draft Knowsley Green Belt Study identified Bowring Park (north) as a potential location for a residential development with an indicative capacity of 167 dwellings.
- 4.4.39 The potential development at Bowring Park (north) would have a relatively mixed impact on the sustainability objectives. The provision of housing at this location would have a positive impact on the objective of providing good quality housing and its sub-objective of providing a wider choice of accommodation to create a greater tenure mix, which is particularly pertinent in South Huyton given that the Strategic Housing Market Assessment (2010) established that the area's housing stock is characterised by a very low proportion of socially-rented housing. The potential development at this location would result in the provision of housing in a location that is well served by public transport and within convenient walking distance of a range of community facilities. It is therefore considered that the potential development could have a positive impact on the objective of reducing the need to travel; and improving the local accessibility of goods, services and amenities. It is however acknowledged that the loss of the recreation ground at this location reduces the degree of certainty that the potential development would have a positive impact on this second objective.
- 4.4.40 The potential development at this location could also generate additional expenditure in Huyton town centre and thereby have some positive impact on the objective of enhancing the vitality and viability of Knowsley's town centres. It is however acknowledged that the relatively limited capacity of the location reduces the level of certainty that the potential development would have a significant impact on this objective. In addition, the potential development at this location may have some positive impact on the objective of maintaining high and stable levels of employment and reducing long-term unemployment through the creation of employment opportunities associated with the construction of the development.
- 4.4.41 The potential development at Bowring Park would however have a negative impact on a number of objectives. In particular, although it is recognised that the Green Space Audit identified that the location is within an area that has a surplus of 5.79 ha of public open space relative to the Council's adopted standards, it is considered that the loss of the recreation ground could have a negative impact on the objective relating to health due to the resultant loss of opportunities to participate in sport and informal recreation.
- 4.4.42 The development of a greenfield site for housing and the potential loss of areas of woodland within the site would also mean that the potential development could have a negative impact on the objectives relating to



landscape character; biodiversity; green infrastructure; and protecting land and soil. It may be possible to mitigate some of these impacts, for instance the negative impact on the objectives relating to landscape character and biodiversity could be reduced through undertaking appropriate ecological surveys, protecting areas of woodland along the perimeter of the location and securing appropriate landscaping. Nevertheless, the impact on other objectives such as the one relating to protecting land and soil cannot be mitigated wholly as the potential development of this location would inevitably result in built development taking place on a significant area of greenfield land. It is however recommended that any development which takes place on this location should be built to an appropriate density in order to reduce the need to release further greenfield sites to meet Knowsley's development needs.

4.4.43 It is considered that any potential development in this location could also have a negative impact on the objective relating to adaptation to climate change due, in part, to the proposals resulting in development taking place in a location that has been identified by the Preliminary Flood Risk Assessments (2011) as being susceptible to groundwater flooding. A key mitigation measure to reduce the impact on this objective is likely to be the application of appropriate measures to mitigate flood risk such as the use of Sustainable Drainage Systems.

4.4.44 The northern part of the location is within the setting of Roby Conservation Area and there are eight Grade II listed buildings along Roby Road and Station Road to the north of the location. Given the openness of land to the south of the Conservation Area it is recognised that development in this location has the potential to have an adverse impact on the historic character and openness of the Conservation Area. However, given that the section of the conservation area which the location adjoins comprises largely of a relatively new housing estate, it is considered to be uncertain whether the potential development in this location would have a significant impact on the objective of preserving, enhancing and managing Knowsley's rich diversity of cultural, historic and archaeological buildings, areas, sites and features. The impact of the potential development on the objective relating to mitigating climate change is also considered to be uncertain.

Land to the north of Cronton Village (KGB 19)

4.4.45 Prior to the location being discounted during the final stage of the study, the draft Knowsley Green Belt Study identified the land to the north of Cronton Village as a potential location for a residential development with an indicative capacity of 100 dwellings.

4.4.46 The SA concluded that the potential development of the Land to the north of Cronton Village would have a relatively mixed impact on the sustainability objectives. The potential development in this location



would lead to the provision of new housing in the village and would thereby have the potential to make a positive contribution to the objective of providing good quality, affordable housing and its sub-objective of providing a wider choice of accommodation to create a greater tenure mix. However, given the relatively limited capacity of the location, it is considered that the potential development in this location is unlikely to have any significant impact on the objectives relating to reducing poverty and social deprivation; improving educational attainment, training and opportunities for lifelong learning; and maintaining high and stable levels of employment and reducing long-term unemployment.

4.4.47 The potential development in this location would however result in the loss of two parcels of greenfield land that contribute to both the local landscape character and also to the setting of a number of historic assets, including Cronton Conservation Area and several listed buildings. Accordingly, it is considered that the potential development could have a significant negative impact on the objectives that relate to preserving and enhancing Knowsley's historic environment; and protecting the local character and accessibility of the landscape. Whilst development in this location could incorporate appropriate landscaping to lessen its impact on these two objectives, it is considered that it is unlikely that the negative impact on these objectives could be wholly mitigated.

4.4.48 The loss of this greenfield site, including the recreation ground on Hall Park Lane, would mean that the potential development is also likely to have a negative impact on the objectives relating to health; adapting to climate change; conserving and enhancing green infrastructure; and protecting land and soil quality. The impact on some of these objectives would be difficult to mitigate wholly. In particular, development in this location would inevitably result in the loss of a greenfield site which comprises largely of Grade 2 Best and Most Versatile agricultural land. As such, it would not be possible to completely mitigate the impact of development in this location on the objective relating to protecting land and soil quality and its sub-objective of directing new housing to previously developed land. Similarly, the impact of the potential development in this location on the objective relating to health could only be effectively mitigated if replacement open space provision was secured.

4.4.49 The relatively limited range of community facilities within a convenient walking distance of the site, coupled with the limited public transport provision in the area means that it is considered that the potential development in this location is likely to have some negative impact on the objective of reducing the need to travel and improving the use of sustainable transport modes. This limited range of facilities within convenient walking distance of the site, together with the distance of

the location from Knowsley's town centres, means that the potential development would also have an uncertain impact on objectives of improving local accessibility of goods, services and amenities; and enhancing the vitality and viability of town and local centres. Delivering enhancements to public transport provision is likely to be a key measure to mitigate the potential negative impact on these objectives.

4.5 Summary of the Significant Effects of the 'Alternative' Locations

4.5.1 During the public consultation on the Knowsley and Sefton Green Belt Study: Draft Knowsley Report a series of alternative locations for development within the Green Belt were proposed by landowners/developers. The following section gives a brief summary of the outcomes of the SA of each of these alternative locations. Maps showing the location of each of these safeguard locations are provided in Appendix 8 and the full matrices for the SA of these locations are provided in Appendix 9.

Shrogs Farm, East Lancashire Road (Alternative A)

4.5.2 The land at Shrogs Farm, East Lancashire Farm, was proposed as a potential location for employment development during the consultation on the Knowsley and Sefton Green Belt Study: Draft Knowsley Report.

4.5.3 The SA concluded that the potential development of Shrogs Farm would have some positive impact on a number of objectives. In particular, the potential development at this location could result in the provision of employment premises in a prominent location which may be suitable for attracting sectors that are identified by the Council's Economic Regeneration Strategy (2012) as sectors where there are current and emerging strengths or aspirations to develop. It could thereby have some positive impact on the objective relating to business growth and, through the resultant employment opportunities that would be generated, also have a positive effect on the objectives relating to reducing unemployment; reducing poverty and social deprivation; and improving educational attainment, training and opportunities for lifelong learning. It is however recognised that the relatively limited scale of the potential development would reduce the degree of impact on these objectives. In addition, it is acknowledged that directing employment uses to this area could potentially have some negative secondary impacts on the Council's aspirations for the regeneration of Knowsley Industrial Park.

4.5.4 Shrogs Farm is however located within Flood Zone 2 as defined by the Strategic Flood Risk Assessment. As a result, the potential development of this location could have a significant negative impact on the objective of adapting to climate change and its sub-objective of reducing flood risk. As the majority of the location is within Flood Zone

2 it is unlikely that this negative impact could be wholly mitigated through excluding the area at greatest risk of flooding from the developable area. Key mitigation measures to reduce the impact on this objective are therefore likely to include undertaking a more detailed Flood Risk Assessment, applying the sequential test to the development proposals and implementing other appropriate measures to reduce flood risk, such as the use of Sustainable Drainage Systems.

- 4.5.5 The potential development of Shrogs Farm would also have a negative impact on a number of other objectives. In particular, the Knowsley and Sefton Green Belt Study – Draft Knowsley Report (2011) identifies that development in this location could reduce an already narrow essential gap between Kirkby and Liverpool and could thereby have a negative impact on the objective of protecting local landscape character. Whilst development in this location could incorporate appropriate landscaping, it is considered that it would be difficult to wholly mitigate the impact on this objective.
- 4.5.6 The location forms part of the M57 Green Belt Corridor ‘Strategic Green Link’ and comprises largely of Grade 2 Best and Most Versatile agricultural land. The loss of this largely greenfield site, together with the potential impact on small patches of woodland mean that development in this location could also have a negative impact on the objectives relating to green infrastructure; biodiversity; and protecting land and soil. A range of measures could however be implemented to mitigate some of these impacts, such as undertaking ecological surveys and, if appropriate, protecting areas of woodland. However, as the development would inevitably result in the loss of a greenfield site which is predominantly classified as Grade 2 Best and Most Versatile Agricultural Land it would not be possible to wholly mitigate the impact of development in this location on the objective relating to protecting land and soil.
- 4.5.7 The proximity of the location to the A580 and the motorway network results in development in this location having the potential to also have a negative impact on the objective of reducing the need to travel and encouraging the use of sustainable modes of transport. In addition, the potential impact of the development on the identified Archaeological Site within this location results in the proposals having the potential to have a negative impact on the objective that seeks to preserve, enhance and manage Knowsley’s archaeological buildings, areas, sites and features. It is however acknowledged that due to the limited information on this Archaeological Site there is only a limited level of certainty about the impact on this objective. The completion of an appropriate desk-based assessment/field evaluation of this archaeological site is therefore recommended to establish the significance of this asset and, if appropriate, identify measures to preserve or enhance it.

Axis Business Park (Alternative B)

- 4.5.8 The land at Axis Business Park was proposed as a potential location for employment development during the consultation on the Knowsley and Sefton Green Belt Study: Draft Knowsley Report. The location was identified as having the potential to provide 19.6 hectares of employment land.
- 4.5.9 The SA concluded that the development of this location would have the potential to have a positive impact on a number of objectives, especially those relating to economic issues. In particular, it could result in the provision of a range of employment premises in a prominent location which would appear to be suitable for attracting sectors that are identified by the Council's Economic Regeneration Strategy (2012) as sectors where there are current and emerging strengths or aspirations to develop. The potential development could thereby have a significant positive impact on the objective relating to business growth and, through the resultant employment opportunities that would be generated, also have a major positive effect on the objective relating to reducing unemployment; and some positive impact on the objectives concerned with reducing poverty and social deprivation; and improving educational attainment, training and opportunities for lifelong learning. It is however recognised that directing employment uses to this area could potentially have some negative secondary impact on the Council's aspirations for the regeneration of Knowsley Industrial and Business Parks.
- 4.5.10 There are also a number of objectives that the potential development could have a negative impact on. In particular, the Knowsley and Sefton Green Belt Study – Draft Knowsley Report (2011) identifies that development in this location could reduce an already narrow essential gap between Kirkby and Liverpool and the proposals could thereby have a negative impact on the objective of protecting local landscape character. The provision appropriate landscaping and on-site open space provision may mitigate some of this impact on the local landscape character. However, in light of the conclusions of the Knowsley Green Belt Study it is unlikely that the impact on this objective could be wholly mitigated.
- 4.5.11 The loss of this greenfield site, which forms part of the M57 Green Belt Corridor 'Strategic Green Link', together with the potential impact on small patches of woodland and the Knowsley Brook Local Wildlife Site (LWS) mean that the proposals could also have a negative impact on the objectives relating to green infrastructure; biodiversity; and protecting land and soils. Some of these impacts could potentially be mitigated. For instance, it may be possible to retain areas of woodland within the development. However, it may not be possible to mitigate the impact on other objectives, for example development in this location

would inevitably result in the loss of greenfield land and thereby have a negative impact on the objective relating to protecting land and soil.

4.5.12 The loss of greenfield areas, together with the location being within an area identified by the Preliminary Flood Risk Assessment as being susceptible to groundwater flooding, results in the potential development being considered to have the potential to have a negative impact on the objective relating to adapting to climate change. A key mitigation measure to reduce the level of impact on this objective is likely to be the application of appropriate measures to mitigate flood risk such as the use of Sustainable Drainage Systems.

4.5.13 It is also considered that the potential development in this location could have a negative impact on the objectives relating to mitigating climate change and the use of sustainable modes of transport; and an uncertain impact on the objectives that relate to air quality and the quality of inland and estuarine waters.

Epicentre, Land adjacent to M57 (Alternative C)

4.5.14 The land at Epicentre, adjacent to the M57 was proposed as a potential location for a range of uses during the consultation on the Knowsley and Sefton Green Belt Study: Draft Knowsley Report. The range of potential uses identified for this location included sports facilities, a care home, hotel, outdoor education centre and housing.

4.5.15 The potential development at Epicentre would have a positive impact on a number of sustainability objectives. The inclusion of a range of sports facilities on the site, including a national facility for polo, other equestrian sports and a regional centre the Modern Pentathlon, has the potential to have a positive impact on the objective relating to health. The inclusion of a housing element within the location would also result in some positive impact on the objective of provide good quality, affordable and resource efficient housing. Nevertheless, due to the limited information available on the level of housing to be provided, there is only a low level of certainty about the degree to which the potential development would have a positive impact on this objective.

4.5.16 The potential development in this location would create a number of employment and training opportunities both during the construction and operation of the development and may also stimulate additional expenditure in the local area. It is therefore considered that the potential development could have a positive impact on the objectives relating to poverty and social deprivation; training and opportunities for lifelong learning; business growth; the vitality and viability of town and district centres; and maintaining high and stable levels of employment. The potential development may also have some positive impact on the

objective of improving the local accessibility of goods, services and amenities.

- 4.5.17 The appraisal of the location did however identify a number of potential negative impacts on the sustainability objectives. In particular, the potential development could result in significant built development being directed to an area which abuts a conservation area and thereby have a detrimental effect on the character and significance of this historic asset. This potential impact on the Knowsley Village conservation area, together with the presence of a listed building and features of archaeological interest within the location, have resulted in the appraisal concluding that the potential development in this location could have a significant negative impact on the objective relating to preserving and enhancing Knowsley's built heritage. It is uncertain whether the any potential impact on this objective could be mitigated and the appraisal recognised that it would be important for an assessment to be undertaken of the impact of the potential development on these heritage assets.
- 4.5.18 Whilst it is acknowledged that a number of the leisure uses proposed would preserve areas of greenspace on the site, it is recognised that the proposals would lead to the loss of some areas of greenfield land that comprise principally of open fields that provide a semi-rural appearance. It is therefore considered that the proposals have the potential to have a negative impact on the objectives relating to the local landscape character; protecting land and soil; and green infrastructure. It may however be possible to mitigate some of these impacts through for example securing appropriate on-site landscaping.
- 4.5.19 This loss of an area of greenfield land, together with the location of the site within an area identified by the Preliminary Flood Risk Assessment (2011) as being susceptible to groundwater flooding, also results in the potential development being likely to have a negative impact on the objective relating to adapting to climate change. A key mitigation measure to reduce the level of impact on this objective is likely to be the application of appropriate measures to mitigate flood risk such as the use of Sustainable Drainage Systems.
- 4.5.20 The proximity of the site to designated Local Wildlife Sites (LWS) and the presence of natural grassland Priority Habitat within the site mean the potential development could have a negative impact on the objective relating to biodiversity, particularly if measures are not taken to mitigate their impact such as the creation of a suitable buffer around these LWSs. It is also considered that the potential development could have a negative impact on the objective relating to mitigating climate change and an uncertain impact on the objectives that relate to air quality and the use of sustainable modes of transport.

Land at Lydiate Lane (Alternative D)

- 4.5.21 The land at Lydiate Lane, Halewood, was proposed as a potential location for residential development during the consultation on the Knowsley and Sefton Green Belt Study: Draft Knowsley Report. The location was identified as having the potential to provide approximately 600 – 750 dwellings.
- 4.5.22 The potential development at the Land at Lydiate Lane would have a positive impact on a number of objectives. In particular, given their scale, it is considered that they have the potential to have a significant positive impact on the objective relating to providing good quality, affordable and resource efficient housing; and its sub-objective or providing a wider choice of accommodation to create a greater tenure mix. It could also contribute to the housing needs identified by the 2010 Strategic Housing Market Needs Assessment which established that the proportion of two- and three-bed properties in Halewood is below the borough average and that the area has average house prices above the Borough average. The potential development is also considered to be of a scale where it could generate a number of employment and training opportunities during the construction of the development. It is therefore considered that the potential development would have some positive impact on the objectives relating to reducing poverty and social deprivation; improving training and opportunities for lifelong learning; and reducing unemployment.
- 4.5.23 The potential development would result in the provision of housing in a location which would provide the future occupants of the location with easy access to existing services and facilities by a choice of means of transport. It would also make a contribution to the continued viability of these services and facilities. It is therefore considered that it would have some positive impact on the objective relating to the accessibility of goods, services and amenities; reducing the need to travel; and enhancing the vitality and viability of town and local centres. Furthermore, the potential development could encourage further investment in the area, helping to sustain existing local employment and resulting in a positive impact on the objective that is concerned with business growth.
- 4.5.24 The appraisal of the potential development at Land at Lydiate Lane did however identify a number of possible negative impacts on the sustainability objectives. In particular, the significant area of greenfield land that would be lost as part of the proposed development, together with the potential loss of priority habitat, resulted in the location being considered to have a major negative impact on the objective relating to protecting land and soil; and some negative impact on the objectives relating to local landscape character; protecting biodiversity, species and habitats; mitigating climate change; and conserving green infrastructure.

4.5.25 The impact on some of these objectives would be difficult to mitigate wholly. In particular, development in this location would inevitably result in the loss of a greenfield and, as such would unavoidably impact upon the objective relating to protecting land and soil quality and its sub-objective of directing new housing to previously developed land. It may however be possible to mitigate some of the other negative impacts. For instance, given that the areas of woodland within the location are predominantly around its perimeter and as such the impact on the objective relating to biodiversity could potentially be mitigated in part through undertaking appropriate surveys and, if necessary, protecting areas of woodland.

4.5.26 The loss of the area of greenfield land and the potential loss of areas of woodland, coupled with the Draft Knowsley and Sefton Green Belt Study's (2011) conclusion that the development in this location would significantly reduce an essential gap between settlements means that it is considered that development in this location could also have a negative impact on the objective relating to landscape character. This impact on this objective may be difficult to mitigate wholly however potential measures to lessen the scale of impact would include securing appropriate landscaping and on-site open space provision.

4.5.27 Due to the quantum of development proposed, it was considered that the location also has the potential to have some negative impact on the objectives relating to mitigating climate change; and protecting air quality. The possible impact on the three identified Archaeological Sites within the location also result in the potential development having the potential to have a negative impact on the objective that seeks to preserve, enhance and manage Knowsley's archaeological buildings, areas, sites and features. It is however acknowledged that due to the limited information on these Archaeological Sites there is only a limited level of certainty about the impact on this objective.

4.6 Secondary, Cumulative and Synergistic Effects

4.6.1 Under the provisions of the SEA Directive, when appraising the sustainability of the Core Strategy it is necessary to consider whether or not there are any secondary, cumulative and/or synergistic effects.

4.6.2 A wide range of positive secondary, cumulative and synergistic effects have been identified, for example:

- The potential development of many of these locations, particularly those which are well related to Principal Regeneration Areas such as land at Bank Lane (KGB1), Land at Knowsley Lane, to the north of Huyton (KGB7) and Land to the east of Knowsley Industrial Park (KGB4), have the potential to have a cumulative

positive impact with other development on levels of deprivation and perceptions of the area;

- A number of the locations are located close to a range of facilities and services, are within close proximity of employment opportunities and are also well-served by public transport. It is considered that the potential development of many of these locations would therefore have a positive impact on reducing the need to travel, particularly by car, and could thereby have positive secondary impacts on congestion, air quality and carbon emissions;
- A number of locations, particularly those which are larger in scale, have the potential to generate a significant amount of additional expenditure in Knowsley's town and local centres which would have a positive impact on their vitality and viability and potential secondary impacts on perceptions of the area;
- The potential development of many of the locations would generate a number of employment opportunities and could thereby have a positive secondary impact on levels of deprivation and quality of life;
- Given their scale, it is considered that the potential development of land south of Whiston (KGB14 and KGB16) and Cronton Colliery (KGB18) could have a positive cumulative impact on perceptions of the area and help support the wider regeneration of the area; and
- Similarly, given their scale, it is considered that the potential development of the identified locations for residential development at Land at Greenbridge Lane (KGB20) and Land at Finch Lane/Higher Road (KGB21) could cumulatively have a significant impact on investment Halewood.

4.6.3 Nevertheless, a number of negative secondary, cumulative and/or synergistic effects were also identified. For instance:

- the potential development of a number of the locations was considered to have the potential to have a negative impact on the objective of mitigating climate change and could therefore contribute to a number of negative secondary impacts associated with climate change, such as increased flood risk;
- The potential development of a number of locations would have a significant negative impact on the local landscape character and could thereby have an adverse secondary impact on perceptions of the area; and
- Certain locations for which the anticipated development would incorporate employment uses could compete with Knowsley Industrial Park and other existing employment areas and thereby have adverse secondary impacts on the regeneration of these areas.

4.7 Difference the Sustainability Appraisal Process has Made

4.7.1 The SA process concluded that the potential development of each of the locations could have a positive impact on a range of objectives. However, it also identified several instances where locations have the potential to have a negative impact on sustainability objectives, a number of uncertain impacts and a range of opportunities for further enhancements to improve the sustainability of the any potential development of these locations.

4.7.2 It is recognised that there may be opportunities to mitigate several of these negative impacts through the development management process and through the master planning of the larger sites. A number of recommendations have however been made by the SA and the application of these mitigation measures could improve the performance of a number of the locations in relation to the sustainability objectives. Many of the recommended measures are applicable to several different locations. These include:

- Undertaking appropriate ecological surveys, protecting priority habitat and/or Local Wildlife Sites and incorporating on-site habitats in order to reduce the impact of the potential development of certain locations on biodiversity;
- Undertaking more detailed flood risk assessments and applying appropriate measures to mitigate flood risk such as the use of Sustainable Drainage Systems to reduce the impact of certain locations on the objective of adapting to climate change. A Strategic Flood Risk Assessment (Level 2) is also likely to be needed to support the application of the sequential and exception tests where these are required;
- Ensuring development is built to an appropriate density to minimise the need to release further greenfield sites; and
- Securing improvements to the public transport network and ensuring that the development is accessible by a choice of means of transport in order to mitigate some impact on the objectives relating to air quality; mitigating climate change; and the uses of sustainable modes of transport.

4.7.3 A number of other recommendations have been made which are more unique to individual locations. These include:

- Protecting the setting of the remnants of the former Halshead Estate to reduce any negative impact from the potential development of Land to the south of Whiston (KGB14 and KGB16) on the objective of protecting local landscape character;

- Providing consideration to the prior extraction of clay from part of the Cronton Colliery (KGB18) site to prevent development at this location from sterilising this resource;
- Ensuring the any potential development at the Land to the East of Knowsley Industrial Park (KGB 4) incorporates linkages to the existing Industrial Park to ensure it does not have an adverse impact on efforts to secure its regeneration;
- Ensuring that any potential development at the Land at Knowsley Lane (KGB7) and Land at Carr Lane (KGB10) incorporates effective linkages to neighbouring Principal Regeneration Areas. to maximise the contribution of development in these locations to the regeneration of the wider areas; and
- Ensuring that any potential development at Land at Bank Lane (KGB1) is effectively integrated to the Tower Hill area in order to support investment in, and the regeneration of, this Principal Regeneration Area.

5. MONITORING

5.1 The Monitoring Report

5.1.1 The Localism Act has removed section 35(1) of the Planning and Compulsory Purchase Act 2004 which required local planning authorities to produce an Annual Monitoring Report (AMR) for submission to the Secretary of State. The Localism Act does however still require every local planning authority to prepare reports containing information as to the extent to which the policies set out in the local development documents are being achieved. This monitoring report will provide a basis for the:

- Identification of unforeseen adverse effects and any necessary remedial action.
- Assessment of whether the Strategy is achieving the SA objectives
- Assessment of the performance of mitigation measures.

5.2 Monitoring Indicators

5.2.1 The indicators used to monitor the sustainability effects of implementing the Core Strategy were set out in the SA Scoping Report of May 2009. The indicators are set out below by sustainability objective and sub-objective:

Social

Objective	To reduce poverty and social deprivation and secure economic inclusion.	
	Sub Objectives	Indicator
	Improve the overall Index of Multiple Deprivation rating of the Borough.	Borough Index of Multiple Deprivation ranking
	Reduce the proportion of children living in poverty.	Proportion of children in poverty
		Percentage of children living in workless households
	Reduce the percentage of lower level Super Output Areas that are in the top 10% most deprived in England.	Lower Super Output Area ranking
	Improve health and reduce long-term limiting illness.	Residents with long term illness
	Improve rates of economic	Overall employment rate

	activity.	
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Objective	To improve local accessibility of goods, services and amenities and reduce community severance.	
	Sub Objectives	Indicator
	Improve community facilities.	The amount of new or renovated facilities.

Objective	To improve safety and reduce crime, disorder and fear of crime.	
	Sub Objectives	Indicator
	Improve road safety	Numbers of people killed/seriously injured in traffic accidents
		Numbers of children killed/seriously injured in traffic accidents
	To reduce crime and fear of crime	Domestic burglaries per 1,000 dwellings
		Serious violent crime rate per 1000 population
		Theft of a vehicle per 1000 population.
		Percentage of residents surveyed who say that they feel fairly safe or very safe outside during the day.
		Percentage of residents surveyed who say that they feel fairly safe or very safe outside after dark.

Objective	To support voluntary and community networks, assist social exclusion and ensure community involvement in decision making.	
	Sub Objectives	Indicator
	None identified in the SA Scoping Report	None identified in the SA Scoping Report

Objective	To improve health and reduce health inequalities.	
	Sub Objectives	Indicator
	Increase life expectancy.	Life expectancy of males
		Life expectancy of females



	Reduce mortality rates.	All age all cause mortality (males)
		All age all cause mortality (females)
		Mortality rate from all circulatory diseases at ages under 75
	Reduce levels of obesity.	Levels of obesity
		Obesity among primary school age children in Year 6
		Children and young people's participation in high-quality PE and sport.

Objective	To provide good quality, affordable and resource efficient housing.	
	Sub Objectives	Indicator
	Provide a wider choice of accommodation to create a greater tenure mix.	Dwelling stock by council tax band.
		Net additional homes provided.
		Number of affordable homes delivered (gross)
		Housing by tenure type
	Increase the quality of housing by improving housing amenities.	Percentage of dwellings with central heating
	Minimise resource and energy use when developing housing and the energy efficiency of housing.	Percentage of non-decent council homes
		Percentage of new homes meeting Building for Life Assessments Good / Very Good.
		Percentage of new affordable / public homes achieving a level 3 or more code rating under the Code for Sustainable Homes.

Objective	To improve educational attainment, training and opportunities for lifelong learning and employability.	
	Sub Objectives	Indicator
	Increase educational achievement.	Percentage of residents with no qualifications.



		Achievement of 5 or more A*-C grades at GCSE or equivalent including English and Maths
		Achievement of a Level 3 qualification by the age of 19
		Working age population qualified to at least Level 2 or higher

Objective	To preserve, enhance and manage Knowsley's rich diversity of cultural, historic and archaeological buildings, areas, sites and features.	
	Sub Objectives	Indicator
	None identified in the SA Scoping Report	Number of listed buildings on the Heritage at Risk Register
		Number of conservation areas with current character appraisals
		Number of conservation areas with management plans.
		Number of Conservation Areas on the Heritage at Risk register
		Number of Historic Parks and Gardens on the Heritage at Risk register

Environment

Objective	To protect, enhance and manage the local character and accessibility of the landscape and countryside across Knowsley.	
	Sub Objectives	Indicator
	Provide the required amount of open space.	Hectares of open space per 1000 population by type of open space
	Provide open space in accessible locations.	Percentage of population within walking distance of open space
	Improve the quality of open space.	Percentage of open space considered to be good quality.
	Improve the cleanliness of open areas.	Percentage of space that is of a high or acceptable standard of horticultural maintenance

	Increase number of parks with green flag award.	Number of parks with green flag award
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Objective	To protect, enhance and manage biodiversity, the viability of protected and endangered species, habitats, geodiversity and sites of geological importance.	
	Sub Objectives	Indicator
	To conserve and enhance the natural environment, including species and habitat diversity. To improve the delivery of biodiversity targets as shown in the Ecological Framework	Number and area (ha) of Local Wildlife Sites (Sites of Biological Interest)
		Progress against Biodiversity Action Plan targets
		Number of local sites in 'active conservation management'
		Number and area (ha) of Local Nature Reserves
		Number of Sites of Local Geological Interest
		Area (ha) of new habitats created

Objective	To adapt to climate change including flood risk.	
	Sub Objectives	Indicator
	Reduce flood risk	Number of planning permission proceeding against EA advice to refuse on flood risk grounds
		Percentage of new developments containing Sustainable Drainage Systems
		Planning to adapt to climate change

Objective	To mitigate climate change including using energy prudently and efficiently and increasing energy generated from renewable sources.	
	Sub Objectives	Indicator
	Reduce CO2 emissions.	Per capita CO2 emissions
		Renewable energy generation in megawatts

Objective	To provide, conserve, maintain and enhance green infrastructure.	
	Sub Objectives	Indicator
	To improve size and quality of the green infrastructure network	Percentage change in the green infrastructure network
	To improve the size and quality of the Ecological Framework	Area (ha) of new habitats created

Objective	To protect, manage and restore land and soil quality.	
	Sub Objectives	Indicator
	Reduce the amount of derelict land.	Amount of previously developed land that is derelict.
	Direct new housing to previously developed land.	New build on previously developed land.
	Reduce the amount of contaminated land.	Amount of contaminated land

Objective	To protect, improve and where necessary, restore the quality of inland, and estuarine waters.	
	Sub Objectives	Indicator
	Increase the length of rivers in 'Good' or 'Fair' biological condition.	Percentage of rivers in "Good" or "Fair" biological condition
	Increase the length of rivers in 'Good' or 'Fair' chemical condition.	Percentage of rivers in "Good" or "Fair" chemical condition

Objective	To protect, and where necessary, improve local air quality.	
	Sub Objectives	Indicator
	None identified in the SA Scoping Report	Number and total area of Air Quality Management Areas (AQMAs)
		Population living in AQMAs

Objective	To use water and mineral resources prudently and efficiently.	
	Sub Objective	Indicator
	None identified in the SA Scoping Report	Daily domestic water use (per capita consumption, litres)
		Use of mineral aggregates and proportion of primary aggregates used

Objective	To reduce the need to travel and improve choice and use of more sustainable transport mode.	
	Sub Objective	Indicator
	Encourage sustainable transport use.	Method of travel to work
		Rates of car ownership

Objective	To minimise the production of waste and increase reuse, recycling and recovery rates.	
	Sub Objective	Indicator
	None identified in the SA Scoping Report	Household waste recycled and composted
		Household waste arisings which have been used to recover heat, power and other energy sources.
		Household waste arisings which have been landfilled.

Economic

Objective	To improve the competitiveness and productivity of business, exploit the growth potential of business sectors and increase the number of new businesses.	
	Sub Objective	Indicator
	Increase number of local and new businesses.	Number of VAT registrations
		Number of VAT de-registrations
	Increase industrial / commercial floorspace.	Amount of floorspace developed for employment purposes

Objective	To enhance the vitality and viability of town and local centres.	
	Sub Objective	Indicator
	Increase the vitality of shopping areas.	Amount of floorspace developed for retail use.
		Number of vacant shops
	Improve community facilities.	Amount of new or renovated facilities

Objective	Maintain high and stable levels of employment and reduce long-term unemployment.	
	Sub Objective	Indicator
	Reduce unemployment	Working age people on out of work benefits
		Number of persons claiming job seekers allowance for twelve months or more.

5.3 Next Steps

5.3.1 This report is being published for consultation alongside the Publication Version Core Strategy and supporting studies / assessments including the final report of Knowsley's Green Belt Study, the Technical Report: Green Belts and the final report of the Core Strategy Sustainability Appraisal. The consultation provides the public, statutory consultees and other stakeholders with an opportunity to express opinions on this report and also to use it as a reference point whilst commenting on other documents included in this stage of consultation.

5.3.2 Comments are invited on the contents of the report, in terms of the appraisal methodology, the accuracy of the assessment of the likely significant effects of the plan and the opportunities for additional mitigation to ensure that the Core Strategy is as 'sustainable' as possible. All comments submitted during this period will be considered and, where appropriate, amendments may be made to the SA scoring to reflect the comments received.

5.3.4 Comments can be submitted using the following methods:

- By email, to localplan@knowsley.gov.uk;
- By phone to 0151 443 2326; or
- By post, to:
Places and Neighbourhoods Manager
Policy, Impact and Intelligence Division

Chief Executive's Directorate,
Knowsley Council,
Archway Road
Huyton
Knowsley
Merseyside
L36 9YU

5.3.5 Further details regarding the consultation, including the deadline for receipt of comments, can be found on the Council's website.

5.3.6 Following consideration and analysis of the consultation responses received, any significant changes made to the Proposed Submission version of the Core Strategy will be subjected to further SA. It is envisaged that the Core Strategy will be submitted to the Secretary of State in early 2013.

5.3.7 A sustainability statement showing how the SA process has influenced the content of the Core Strategy will be published. This will constitute the final part of Stage D in the SA process.

5.3.8 Once the Core Strategy has been adopted, the significant effects of implementing the plan will be monitored, which represents Stage E in the SA process.

6. CONCLUSIONS

- 6.1 Urban Vision Partnership Ltd was commissioned by Knowsley MBC to undertake a Sustainability Appraisal of the broad locations in the Green Belt being considered for development by the emerging Knowsley Core Strategy. The appraisal work has been informed by national guidance, best practice and the methodology proposed by the Council in their Scoping Report.
- 6.2 The SA process involved the assessment of the Tier One reserve locations, Tier Two reserve locations, safeguarded locations, locations discounted by the draft Knowsley Green Belt Study and alternative locations proposed by landowners/developers against the twenty-two sustainability objectives identified in the SA Scoping Report. This appraisal considered the degree and type of impact, split by short term (0-5 years), medium term (5-10 years), and long-term (10+ years). It also predicted the certainty of impact (in terms of high, medium and low); the scale of impact (which ranged from local to national); the permanence of the impact; any key secondary, cumulative and/or synergistic impacts; and options for mitigation.
- 6.3 The SA process concluded that each of the locations appraised has the potential to have a number of benefits. Each of the locations would also have the potential to have some negative impacts on the objectives and a number of recommendations were therefore made about how individual locations could perform better against the sustainability objectives.
- 6.4 Whilst the impact of each of the proposals varied from site to site, there were a number of common themes. For instance, many of the locations for which the anticipated development would incorporate a residential element are likely to have a positive impact on the objective of providing good quality, affordable and resource efficient housing, although it is recognised that some locations had a greater impact on this objective due to the scale of development that could be delivered and their proximity to Principal Regeneration Areas and/or areas of housing need/deprivation. In addition, it was considered that the potential development of many of the locations, particularly those that are larger in scale, have the potential to generate additional employment opportunities and stimulate investment in the surrounding area. It was therefore considered that these locations had the potential to have some positive impact on the objectives relating to reducing poverty and social deprivation; business growth; and reducing unemployment.
- 6.5 The SA has also identified several instances where the potential development of certain locations has the potential to have a negative impact on sustainability objectives and a number of uncertain impacts.

In particular, as the majority of the locations comprised predominantly of greenfield land, and a significant proportion contained Best and Most Versatile agricultural land, the potential development of many of the locations was considered to have a negative impact the impact on the objective relating to protecting land and soil and its sub-objective of directing housing to previously developed land. Several of these locations also contained areas of priority habitat and were either located in close proximity to or contained Local Wildlife Sites. As a result, several of the locations would have the potential to have an adverse impact on the objective relating to protecting biodiversity, the viability of protected and endangered species, and habitats. The potential development of many of the locations would also have some negative impact on the objectives relating to conserving green infrastructure and protecting local landscape character.

6.6 The SA identified a range of opportunities to enhance the performance of the locations against the sustainability framework, whilst these vary from site to site, common mitigation measures that have been identified include:

- Undertaking appropriate ecological surveys, protecting priority habitat and/or Local Wildlife Sites and incorporating on-site habitats in order to reduce the impact of the potential development of certain locations on biodiversity;
- Undertaking more detailed flood risk assessments and applying appropriate measures to mitigate flood risk such as the use of Sustainable Drainage Systems to reduce the impact of certain locations on the objective of adapting to climate change;
- Ensuring development is built to an appropriate density to minimise the need to release further greenfield sites; and
- Securing improvements to the public transport network and ensuring that the development is accessible by a choice of means of transport in order to mitigate some impact on the objectives relating to air quality; mitigating climate change; and the uses of sustainable modes of transport.

6.7 As highlighted above, there were a number of common themes in terms of the performance of the locations. The SA did however identify that there was some variation in terms of the performance of the locations and Appendix 12 provides a matrix that summarises the performance of each of the locations. Nevertheless, the SA constitutes a strategic level assessment of the likely significant effects of development in each of the locations.

6.8 It is not considered to be appropriate to attempt to quantify the impacts of each location in order to produce a hierarchy of their relative sustainability and it is also recognised that to do so would fail to take into account the range of impact dimensions considered by the

appraisal, particularly the degree of certainty about particular impacts. The conclusions of this SA must also be considered alongside the findings of other evidence base studies in order to determine the most appropriate Green Belt locations for development. Where there is a commitment to pursue development in a particular location the findings of the SA should however be used in order to maximise its contribution to sustainable development.

7. GLOSSARY

Affordable housing: Social rented, affordable rented and intermediate housing, provided to eligible households whose needs are not met by the market.

Air Quality Management Areas: Areas designated by local authorities because they are not likely to achieve national air quality objectives by the relevant deadlines.

Ancient woodland: An area that has been wooded continuously since at least 1600 AD.

Archaeological interest: There will be archaeological interest in a heritage asset if it holds, or potentially may hold, evidence of past human activity worthy of expert investigation at some point. Heritage assets with archaeological interest are the primary source of evidence about the substance and evolution of places, and of the people and cultures that made them.

Best and most versatile agricultural land: Land in grades 1, 2 and 3a of the Agricultural Land Classification.

Biodiversity: Biodiversity refers to the variety of life in all forms (e.g. wildlife, plants etc).

Climate change adaptation: Adjustments to natural or human systems in response to actual or expected climatic factors or their effects, including from changes in rainfall and rising temperatures, which moderate harm or exploit beneficial opportunities

Climate change mitigation: Action to reduce the impact of human activity on the climate system, primarily through reducing greenhouse gas emissions.

Combined Heat and Power (CHP)

Combined Heat and Power (CHP) is the use of a heat engine / power station to simultaneously generate both electricity and useful heat.

Conservation Area: Conservation Areas are defined in the Planning (Listed Buildings and Conservation Areas) Act 1990 as “an area of special architectural and historic interest, the character or appearance of which it is desirable to preserve or enhance.”

Decentralised energy: Local renewable energy and local low-carbon energy usually but not always on a relatively small scale encompassing a diverse range of technologies.

District Centre: District centres usually comprise groups of shops often containing at least one supermarket or superstore, and a range of non-retail services, such as banks, building societies and restaurants, as well as local public facilities such as a library.

Geodiversity: The range of rocks, minerals, fossils, soils and landforms.

Greenfield Sites: Greenfield sites are land not previously developed and can include agricultural land in rural areas, but also undeveloped land within the urban area.

Green infrastructure: Green Infrastructure is a concept recognising the environmental, social and economic, often multi-functional value of the network of natural environmental components and green and blue spaces that lies within and between towns and villages. In the same way that the transport infrastructure is made up of a network of roads, railways, airports etc. green infrastructure has its own physical components, including parks, rivers, street trees and moorland.

Heritage asset: A building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest. Heritage asset includes designated heritage assets and assets identified by the local planning authority (including local listing).

Listed Buildings: Listed Buildings are buildings or other built structures included in the statutory list of buildings of special architectural or historic interest of national significance, which is compiled by the Secretary of State for Culture, Media and Sport.

Local Plan: The plan for the future development of the local area, drawn up by the local planning authority in consultation with the community. In law this is described as the development plan documents adopted under the Planning and Compulsory Purchase Act 2004. Current Core Strategies or other planning policies, which under the regulations would be considered to be development plan documents, form part of the Local Plan. The term includes old policies which have been saved under the 2004 Act.

Local Wildlife Site (LWS): A Local Wildlife Site, previously known as Sites of Importance for Nature Conservation (SINC) is an area of land with significant wildlife value. Typically they can comprise an area of woodland, grassland meadows or a local waterbody.

Main town centre uses: Retail development (including warehouse clubs and factory outlet centres); leisure, entertainment facilities the more intensive sport and recreation uses (including cinemas, restaurants, drive-through restaurants, bars and pubs, night-clubs, casinos, health and fitness centres, indoor bowling centres, and bingo halls); offices; and arts, culture and tourism

development (including theatres, museums, galleries and concert halls, hotels and conference facilities).

Minerals of local and national importance: Minerals which are necessary to meet society's needs, which according to the National Planning Policy Framework include aggregates, brickclay (especially Etruria Marl and fireclay), silica sand (including high grade silica sands), cement raw materials, gypsum, salt, fluorspar, shallow and deep-mined coal, oil and gas (including hydrocarbons), tungsten, kaolin, ball clay, potash and local minerals of importance to heritage assets and local distinctiveness.

Mineral Safeguarding Area: An area designated by Minerals Planning Authorities which covers known deposits of minerals which are desired to be kept safeguarded from unnecessary sterilisation by non-mineral development.

Out of town: A location out of centre that is outside the existing urban area.

Playing field: The whole of a site which encompasses at least one playing pitch as defined in the Town and Country Planning (Development Management Procedure) (England) Order 2010.

Pollution: Anything that affects the quality of land, air, water or soils, which might lead to an adverse impact on human health, the natural environment or general amenity.

Previously developed land: Land which is or was occupied by a permanent structure, including the curtilage of the developed land (and any associated fixed surface infrastructure. This excludes: land that is or has been occupied by agricultural or forestry buildings; land that has been developed for minerals extraction or waste disposal by landfill purposes where provision for restoration has been made through development control procedures; land in built-up areas such as private residential gardens, parks, recreation grounds and allotments; and land that was previously-developed but where the remains of the permanent structure or fixed surface structure have blended into the landscape in the process of time.

Principal Regeneration Area (PRA)

A Principal Regeneration Area is a location identified by the Council as having the greatest need and opportunity for comprehensive change through major new development during the Core Strategy plan period.

Priority habitats and species: Species and Habitats of Principle Importance included in the England Biodiversity List published by the Secretary of State under section 41 of the Natural Environment and Rural Communities Act 2006.

Renewable and low carbon energy: Includes energy for heating and cooling as well as generating electricity. Renewable energy covers those energy flows

that occur naturally and repeatedly in the environment – from the wind, the fall of water, the movement of the oceans, from the sun and also from biomass and deep geothermal heat. Low carbon technologies are those that can help reduce emissions (compared to conventional use of fossil fuels).

Setting of a heritage asset: The surroundings in which a heritage asset is experienced.

Significance (for heritage): The value of a heritage asset to this and future generations because of its heritage interest. That interest may be archaeological, architectural, artistic or historic. Significance derives not only from a heritage asset's physical presence, but also from its setting.

Strategic Environmental Assessment: A procedure (set out in the Environmental Assessment of Plans and Programmes Regulations 2004) which requires the formal environmental assessment of certain plans and programmes which are likely to have significant effects on the environment.

Supplementary planning documents: Documents which add further detail to the policies in the Local Plan and which are often produced to provide further guidance for development on specific sites, or on particular issues, such as design.

Sustainability Appraisal: A Sustainability Appraisal is an assessment of the economic, environmental and social effects of a plan from the outset of the preparation process to allow decisions to be made that accord with sustainable development.

Sustainable Drainage Systems (SuDS): Sustainable Drainage Systems (SuDS) provide an alternative to the traditional methods of dealing with water drainage aiming to mimic the natural movement of water from a development, slowing run-off, reducing flood risk, improving water quality and potentially providing attractive features.

Sustainable transport modes: Any efficient, safe and accessible means of transport with overall low impact on the environment, including walking and cycling and public transport.

Town centre: Area defined on the local authority's proposal map, including areas predominantly occupied by main town centre uses.

Vitality and Viability: Vitality and viability are terms used to assess the health of a town centre or other centre as measured by a number of indicators, such as the range of goods that are sold, level of vacancies, pedestrian "footfall" figures, etc.