2 Assessment methodology and scope of appraisal

2.1 Assessment of reasonable alternatives

2.1.1 Each of the reasonable alternatives or options appraised in this report have been assessed for their likely impacts on each SA Objective of the SA Framework. The SA Framework, which is presented in its entirety in **Appendix A**, is comprised of 14 SA Objectives. **Table 2.1** summarises the SA Objectives and their relevance to the SEA themes.

Table 2.11: Summary of SA Objectives

	SA Objectives	Relevance to SEA Regulations – Schedule 2
1	**Cultural heritage:** Protect, enhance and manage sites, features and areas of archaeological, historical and cultural heritage importance	Cultural heritage
2	**Landscape:** Protect, enhance and manage the character and appearance of the landscape and townscape, maintaining and strengthening local distinctiveness and sense of place	Landscape and cultural heritage
3	**Biodiversity, flora, fauna and geodiversity:** Protect, enhance and manage biodiversity and geodiversity.	Biodiversity, flora and fauna
4	**Climate change mitigation:** Minimise Sandwell's contribution to climate change.	Climatic factors
5	**Climate change adaptation:** Plan for the anticipated levels of climate change.	Climatic factors, soil, water
6	**Natural resources:** Protect and conserve natural resources.	Soil, water and material assets
7	**Pollution:** Reduce air, soil, water and noise pollution	Air, water, soil and human health
8	**Waste:** Reduce waste generation and disposal and achieve the sustainable management of waste.	Material assets
9	**Transport and accessibility:** Improve the efficiency of transport networks by increasing the proportion of travel by sustainable modes and by promoting policies which reduce the need to travel.	Climatic factors and material assets
10	**Housing:** Provide affordable, environmentally sound and good quality housing for all.	Population
11	**Equality:** Reduce poverty, crime and social deprivation and secure economic inclusion.	Population and human health
12	**Health:** Safeguard and improve community health, safety and wellbeing.	Population and human health
13	**Economy:** Develop a dynamic, diverse and knowledge-based economy that excels in innovation with higher value, lower impact activities.	Population and material assets

	SA Objectives	Relevance to SEA Regulations – Schedule 2
14	**Education, skills and training:** Raise educational attainment and develop and maintain a skilled workforce to support long-term competitiveness.	Population

2.1.2 The SA Framework is comprised of SA Objectives and decision-making criteria. Acting as yardsticks of sustainability performance, the SA Objectives are designed to represent the topics identified in Schedule 2 of the SEA Regulations[21]. Including the SEA topics in the SA Objectives helps to ensure that all of the environmental criteria of the SEA Regulations are represented. Consequently, the SA Objectives reflect all subject areas to ensure that the assessment process is transparent, robust and thorough.

2.1.3 It is important to note that the order of SA Objectives in the SA Framework does not infer prioritisation. The SA Objectives are at a strategic level and can potentially be open-ended. In order to focus each objective, decision making criteria are presented in the SA Framework to be used during the appraisal of policies and sites.

2.1.4 The purpose of this document is to provide an appraisal of reasonable alternatives, also known as 'options', in line with Regulation 12 of the SEA Regulations[22]:

2.1.5 *"Where an environmental assessment is required by any provision of Part 2 of these Regulations, the responsible authority shall prepare, or secure the preparation of, an environmental report … [which] shall identify, describe and evaluate the likely significant effects on the environment of implementing the plan or programme, and reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme".*

2.1.6 At this stage of the plan making process, SMBC have identified options for the levels of housing, Gypsy and Traveller and employment growth, broad spatial strategy options, and reasonable alternative sites. SMBC have also prepared a suite of draft policies for inclusion in the SLP.

2.1.7 This document also provides information in relation to the likely characteristics of effects, as per the SEA Regulations (see **Box 2.1**).

[21] Schedule 2 of the SEA Regulations identifies the likely significant effects on the environment, including "*issues such as (a) biodiversity, (b) population,(c) human health, (d) fauna, (e) flora, (f) soil, (g) water, (h) air, (i) climatic factors, (j) material assets, (k) cultural heritage including architectural and archaeological heritage, (l) landscape and (m) the interrelationship between the issues referred to in sub-paragraphs (a) to (l).*"

[22] The Environmental Assessment of Plans and Programmes Regulations 2004 (SEA Regulations). Available at: https://www.legislation.gov.uk/uksi/2004/1633/contents/made [Date accessed: 25/10/22]

Box 2.11: *Schedule 1 of the SEA Regulations*[23]

Criteria for determining the likely significance of effects (Schedule 1 of SEA Regulations)

The characteristics of plans and programmes, having regard, in particular, to:

- the degree to which the plan or programme sets a framework for projects and other activities, either with regard to the location, nature, size and operating conditions or by allocating resources;
- the degree to which the plan or programme influences other plans and programmes including those in a hierarchy;
- the relevance of the plan or programme for the integration of environmental considerations in particular with a view to promoting sustainable development;
- environmental problems relevant to the plan or programme; and
- the relevance of the plan or programme for the implementation of Community legislation on the environment (e.g. plans and programmes linked to waste management or water protection).

Characteristics of the effects and of the area likely to be affected, having regard, in particular, to:

- the probability, duration, frequency and reversibility of the effects;
- the cumulative nature of the effects;
- the transboundary nature of the effects;
- the risks to human health or the environment (e.g. due to accidents);
- the magnitude and spatial extent of the effects (geographical area and size of the population likely to be affected);
- the value and vulnerability of the area likely to be affected due to:
- special natural characteristics or cultural heritage;
- exceeded environmental quality standards or limit values;
- intensive land-use; and
- the effects on areas or landscapes which have a recognised national, Community or international protection status.

2.2 Impact assessment and determination of significance

2.2.1 Significance of effect is a combination of impact sensitivity and magnitude. Impact sensitivity can be expressed in relative terms, based on the principle that the more sensitive the resource, the greater the magnitude of the change, and as compared with the do-nothing comparison, the greater will be the significance of effect.

2.3 Sensitivity

2.3.1 Sensitivity has been measured through consideration as to how the receiving environment will be impacted by a plan proposal. This includes assessment of the value and vulnerability of the receiving environment, whether or not environmental quality standards will be exceeded, and for example, if impacts will affect designated areas or landscapes.

2.3.2 A guide to the range of scales used in determining impact sensitivity is presented in **Table 2.2.** For most receptors, sensitivity increases with geographic scale.

[23] The Environmental Assessment of Plans and Programmes Regulations 2004 (SEA Regulations). Available at: https://www.legislation.gov.uk/uksi/2004/1633/contents/made [Date accessed: 25/10/22]

Table 2.22: Impact sensitivity

Scale	Typical criteria
International/ national	Designations that have an international aspect or consideration of transboundary effects beyond national boundaries. This applies to effects and designations/receptors that have a national or international dimension.
Regional	This includes the regional and sub-regional scale, including county-wide level and regional areas.
Local	This is the district and neighbourhood scale.

2.4 Magnitude

2.4.1 Magnitude relates to the degree of change the receptor will experience, including the probability, duration, frequency and reversibility of the impact. Impact magnitude has been determined on the basis of the susceptibility of a receptor to the type of change that will arise, as well as the value of the affected receptor (see **Table 2.3**).

Table 2.33: Impact magnitude

Impact magnitude	Typical criteria
High	• Likely total loss of or major alteration to the receptor in question; • Provision of a new receptor/feature; or • The impact is permanent and frequent.
Medium	Partial loss/alteration/improvement to one or more key features; or The impact is one of the following: • Frequent and short-term; • Frequent and reversible; • Long-term (and frequent) and reversible; • Long-term and occasional; or • Permanent and occasional.
Low	Minor loss/alteration/improvement to one or more key features of the receptor; or The impact is one of the following: • Reversible and short-term; • Reversible and occasional; or • Short-term and occasional.

2.5 Significant effects

2.5.1 A single value from **Table 2.4** has been allocated to each SA Objective for each reasonable alternative. Justification for the classification of the impact for each SA objective is presented in an accompanying narrative assessment text for all reasonable alternatives that have been assessed through the SA process.

2.5.2 The assessment of impacts and subsequent evaluation of significant effects is in accordance with Schedule 2 (6) of the SEA Regulations, where feasible, which states that the effects should include: "*short, medium and long-term effects, permanent and temporary effects, positive and negative effects, cumulative and synergistic effects*".

Table 2.44: Guide to scoring significant effects

Significance	Definition (not necessarily exhaustive)
Major Negative --	The size, nature and location of a development proposal would be likely to: • Permanently degrade, diminish or destroy the integrity of a quality receptor, such as a feature of international, national or regional importance; • Cause a very high-quality receptor to be permanently diminished; • Be unable to be entirely mitigated; • Be discordant with the existing setting; and/or • Contribute to a cumulative significant effect.
Minor Negative -	• The size, nature and location of development proposals would be likely to: • Not quite fit into the existing location or with existing receptor qualities; and/or • Affect undesignated yet recognised local receptors.
Negligible 0	Either no impacts are anticipated, or any impacts are anticipated to be negligible.
Uncertain +/-	It is entirely uncertain whether impacts would be positive or adverse.
Minor Positive +	The size, nature and location of a development proposal would be likely to: • Improve undesignated yet recognised receptor qualities at the local scale; • Fit into, or with, the existing location and existing receptor qualities; and/or • Enable the restoration of valued characteristic features.
Major Positive ++	The size, nature and location of a development proposal would be likely to: • Enhance and redefine the location in a positive manner, making a contribution at a national or international scale; • Restore valued receptors which were degraded through previous uses; and/or • Improve one or more key elements/features/characteristics of a receptor with recognised quality such as a specific international, national or regional designation.

2.5.3 When selecting a single value to best represent the sustainability performance, and to understand the significance of effects of an option in terms of the relevant SA Objective, the precautionary principle[24] has been used. This is a worst-case scenario approach. If a positive effect is identified in relation to one criterion within the SA Framework (see the second column of the SA Framework in **Appendix A**) and a negative effect is identified in relation to another criterion within the same SA Objective, the overall impact has been assigned as negative for that objective. It is therefore essential to appreciate that the impacts are indicative summarily and that the accompanying assessment text provides a fuller explanation of the sustainability performance of the option or proposal being considered.

2.5.4 For the assessment of reasonable alternative sites, to enable further transparency and to provide the reader with contextual information that is relevant to each SA Objective, the full assessments presented in the SA report appendices have been set out per 'receptor'. The methodology used to assess reasonable alternative sites throughout the SA process, which sets out the receptors considered for each SA Objective and includes topic-specific methodologies and assumptions, is presented in **Appendix B**.

2.5.5 The assessment considers, on a strategic basis, the degree to which a location can accommodate change without adverse effects on valued or important receptors (identified in the baseline).

2.5.6 The level of effect has been categorised as minor or major. The nature of the significant effect can be either positive or negative depending on the type of development and the design and mitigation measures proposed.

2.5.7 Each reasonable alternative or option that has been identified in this report has been assessed for its likely significant impact against each SA Objective in the SA Framework, as per **Table 2.4**. Likely impacts are not intended to be summed.

2.5.8 It is important to note that the assessment scores presented in **Table 2.4** are high level indicators. The assessment narrative text should always read alongside the significance scores, and should bear in mind the limitations of assessments of a strategic nature.

2.6 Limitations of predicting effects

2.6.1 SA/SEA is a tool for predicting potential significant effects. Predicting effects relies on an evidence-based approach and incorporates expert judgement. It is often not possible to state with absolute certainty whether effects will occur, as many impacts are influenced by a range of factors such as the design and the success of mitigation measures.

[24] The European Commission describes the precautionary principle as follows: "*If a preliminary scientific evaluation shows that there are reasonable grounds for concern that a particular activity might lead to damaging effects on the environment, or on human, animal or plant health, which would be inconsistent with protection normally afforded to these within the European Community, the Precautionary Principle is triggered*".

2.6.2 The assessments in this report are based on the best available information, including secondary data that has been provided to Lepus by the Council and information that is publicly available. Every attempt has been made to predict effects as accurately as possible.

2.6.3 SA operates at a strategic level which uses available secondary data for the relevant SA Objective. All reasonable alternatives and options are assessed in the same way using the same method. Sometimes, in the absence of more detailed information, forecasting the potential impacts of development can require making reasonable assumptions based on the best available data and trends. However, all options must be assessed in the same way and any introduction of site-based detail should be made clear in the SA report as the new data could potentially introduce bias and skew the findings of the assessment process.

2.6.4 The assessment of development proposals is limited in terms of available data resources; for example, the appraisal of the SLP is limited in its assessment of carbon emissions, and greater detail of carbon data would help to better quantify effects. Furthermore, the evidence to inform assessments of reasonable alternative sites against SA Objective 2 (Landscape) is limited in that there is no landscape capacity or sensitivity information available for land parcels within the urban area (i.e. outside of the Green Belt).

2.7 Methodology for assessment of growth options and policies

2.7.1 The appraisal of growth options (housing, employment and Gypsy and Traveller), spatial strategy options and policies aims to assess the likely significant effects of each proposed option / policy, based on the criteria set out in the SEA Regulations (see **Box 2.1**).

2.7.2 **Table 2.5** sets out a guide to how likely impacts have been determined in the assessment of options within this report.

Table 2.55: *Presenting likely impacts*

Likely Impact	Description	Impact Symbol
Major Positive Impact	The proposed option contributes to the achievement of the SA Objective to a significant extent.	++
Minor Positive Impact	The proposed option contributes to the achievement of the SA Objective to some extent.	+
Negligible/ Neutral Impact	The proposed option has no effect or an insignificant effect on the achievement of the SA Objective.	0
Uncertain Impact	The proposed option has an uncertain relationship with the SA Objective or insufficient information is available for an appraisal to be made.	+/-
Minor Negative Impact	The proposed option prevents the achievement of the SA Objective to some extent.	-
Major Negative Impact	The proposed option prevents the achievement of the SA Objective to a significant extent.	--

2.7.3 The appraisal commentary provided should be read alongside the identified impact symbols, as it is often difficult to distill the wide-ranging effects of a broad growth option into one overall impact.