

Sustainability Appraisal of the Bordesley Park Area Action Plan

Sustainability Appraisal Report to accompany the AAP Pre-Submission Report

February 2017



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the AAP Pre-Submission Report,
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Acronyms

AAP	Area Action Plan
BAP	Biodiversity Action Plan
BCC	Birmingham City Council
BDP	Birmingham Development Plan
BREEAM	BRE Environmental Assessment Methods
CHP	Combined Heat and Power
(D)CLG	(Department of) Communities and Local Government
COMAH	Control of Major Accident Hazards
CfSH	Code for Sustainable Homes
GI	Green Infrastructure
GIS	Geographic Information Systems
HGV	Heavy Goods Vehicle
HSE	Health and Safety Executive
PPG	Planning Practice Guidance
PPP	Policy, Plan and Programme
SA	Sustainability Appraisal
SEA	Strategic Environmental Assessment
SHLAA	Strategic Housing Land Availability Assessment
SLINC	Sites of Local Importance for Nature Conservation
SPD	Supplementary Planning Document
SuDs	Sustainable Drainage Systems

Non-technical summary

What is Sustainability Appraisal (SA)?

Sustainability Appraisal (SA) is integral to the preparation and development of a Local Plan, to identify how sustainable development is being addressed. SA is a statutory process incorporating the requirements of the European Union Strategic Environmental Assessment (SEA) Directive.

The Bordesley Park AAP

A Sustainability Appraisal (SA) is being carried out alongside the development of the Bordesley Park Area Action Plan Pre-Submission Report (January, 2017). The Area Action Plan (AAP) is a new plan that helps to shape the area's growth strategy for the coming years. The AAP sets out where houses and places of work will be located. The AAP has been developed in consultation with a range of local stakeholders and has the following vision:

A revitalised neighbourhood, delivering growth in a high quality urban environment

The vision is in turn supported by four objectives:

- For Bordesley Park to become a focus for sustainable growth in terms of economic activity, housing and community infrastructure;
- For Bordesley park to benefit from improved linkages within and across the area to the City centre and other centres of activity;
- For the character and quality of the environment across the whole of Bordesley Park to be improved; and
- To ensure a sustainable future for Bordesley Park, and for the area to make a positive contribution to the City's sustainability targets.

The Birmingham Unitary Development Plan (UDP) is the current statutory plan for Birmingham. The Birmingham Development Plan (BDP) was adopted in January 2017. The BDP is the key document that sets out the overall strategic policies for the city and in turn informs other documents dealing with specific areas or proposals (such as the Bordesley Park AAP).

Once adopted, the AAP will form part of the Local Development Framework (LDF) and will be a formal Development Plan Document, which has statutory plan status. As such it will be a material consideration in the determination of future planning applications and development proposals, and provide more detailed planning policies for the area.

SA of the Bordesley Park AAP

The version of the AAP which is assessed in this SA report is the pre- submission version of the Bordesley Park Area Action Plan; the draft version of the Plan which will be submitted to the Secretary of State for Communities and Local Government for Examination in Public. It is based on the results of the public consultation undertaken on the Bordesley Park Options Report between August and October 2011 and the subsequent Preferred Options report between July and October 2013, as well as further technical work. Further comments on the SA are now invited as part of the process and prior to the submission of the AAP to the Secretary of State for public examination.

Local Planning Authorities such as Birmingham City Council use SA to assess local plans against a set of sustainability objectives developed in consultation with local stakeholders and communities. This assessment helps Local Planning Authorities identify the relative environmental, social and economic performance of possible strategic and policy options, and to evaluate which of these may be most sustainable.

This document is known as an SA Report. It includes the requirements of an environmental report in accordance with the SEA Directive. It has been prepared to appraise the pre-submission stage of the Bordesley Park AAP.

Purpose and content of the Sustainability Appraisal Report

The purpose of this SA Report is to:

- Identify, describe and evaluate the likely significant effects of the Pre-Submission Version of the Bordesley Park AAP and its reasonable alternatives; and
- Provide an opportunity for statutory consultees, interested parties and the public to offer views on any aspect of the SA process, which has been carried out to date.

The SA Report contains:

- An outline of the contents and main objectives of the AAP and its relationship with other relevant plans, programmes and strategies;

- Relevant aspects of the current state of the environment and key sustainability issues for the area;
- The SA Framework of objectives and indicators against which the AAP has been assessed;
- A summary of the appraisal findings from earlier stages in the plan making process, including the appraisal of reasonable alternatives for the AAP;
- The likely significant sustainability effects of the AAP;
- The measures envisaged to prevent, reduce, and as fully as possible offset any significant adverse effects which may arise as a result of the AAP;
- A description of the measures envisaged concerning monitoring the sustainability effects of the AAP; and
- The next steps for the SA.

The scoping stage for the SA

A Scoping Report was prepared by Birmingham City Council (BCC), and this was submitted to stakeholders in 2009. This set out the intended scope and level of detail to be included in the SA Report and included a plan, programme and policy review, an evidence base for the assessment, key issues and environmental challenges to address, and an SA Framework of objectives and indicators against which the AAP could be assessed. Following consultation on the Scoping Report, the information presented in the document was updated to take into account responses received. This concluded the first stage of the SA process.

Assessment of reasonable alternatives

The SA process requires plan makers to identify, describe and evaluate reasonable alternatives for the different development and policy opportunities that could be chosen to formulate the plan. Reasonable alternatives are also known as options. Reasonable alternatives have been prepared at different stages of the AAP's evolution.

Initial reasonable alternatives were prepared in 2010. These reasonable alternatives had been identified following (i) discussions with major stakeholders, Members and Senior Officers, (ii) recognising changes in Government Policy and (iii) taking account of the latest evidence. All of the options at this stage related to the Wheels site and immediate environs. Four options were identified. Each option was appraised by the SA process and results were published in an SA Options Report dated August 2010.

AAP Options were then prepared in August 2011 and related to four 'areas of transformation':

- The Wheels site and Environs
- Adderley Park
- Alum Rock Road
- Small Heath Local Centre

Each option was appraised by the SA process and results were published in an SA Options Report dated September 2011.

The findings from both of these options assessments were used to inform a third options document: the Preferred Options version of the AAP, which was produced in July 2013. The Preferred Options consisted of Development Principles, Key Opportunities for Change and Neighbourhoods. The SA process was again used to appraise this latest AAP version. The Preferred Options SA Report was produced in July 2013.

The results of the options stages are summarised in **Chapter 3** of this document. **Chapter 4** explains which of the reasonable alternatives were chosen for inclusion in the Pre-Submission version of the AAP.

Assessment of the opportunities included in the Draft Pre-Submission Report of the AAP

The Pre-Submission Report of the AAP (January, 2017) includes four Development Principles, six Neighbourhoods and five Key Opportunities for Change Areas. All content has been assessed against the SA Framework of objectives and indicators. The likely positive and adverse sustainability effects of the plan, established within this SA report in **Chapters 5-7**, are presented in **Table N1** and **Table N2**.

Where assessment uncertainty prevailed this was due to a lack of information available to fully assess the policy or site, for example because the policy relies on behavioural change which may or may not occur; because the effect development has depends upon its design and layout, whereby issues such as flood risk could be mitigated by designing the development in such a way as to minimise the risk; or an ambiguity in how a policy could be interpreted, such as uncertainty over whether community facilities or housing will be developed on site.

Those opportunities identified as uncertain have been treated as being potentially adverse in nature. They should be monitored in order to establish early on in the process of plan

implementation whether they will in fact become negative, as well as provide time to compensate for and mitigate these potential negative effects. The uncertain impacts of the AAP should be mitigated where possible so that only positive impacts remain.

Table N1: Potential sustainability effects of the AAP

Potential sustainability effects of the AAP
Accessibility and transportation <p>Strong focus on supporting a modal shift from the private car to more sustainable forms of transport.</p> <p>Promotion of rapid transit routes through the area which provide better sustainable transport links to the city centre and airport.</p> <p>A combination of measures to reduce traffic and congestion.</p> <p>Supports enhancements in walking and cycling routes.</p> <p>There is the potential for an increase in local traffic as a result of additional parking facilities.</p>
Air quality <p>Improved accessibility and promotion of sustainable modes of transport are likely to improve baseline air quality in the area.</p> <p>Reducing an anticipated net reduction in traffic and congestion is likely to improve air quality.</p>
Biodiversity and geodiversity <p>Natural environments will be protected and enhanced in line with the principles of the Birmingham and Black Country Nature Improvement Area, with new opportunities for wildlife and biodiversity encouraged as part of new and existing development.</p> <p>The plan seeks to enhance green spaces, the canals, River Rea, parks and playing fields, all of which are likely to have associated biodiversity benefits.</p> <p>Enhancements to the area's Green Infrastructure (GI) network as well as developing pedestrian friendly water spaces, can help support and protect biodiversity within the area and improve the connectivity between habitats.</p> <p>Opportunities to create new GI are also encouraged and a GI network is actively promoted within each neighbourhood.</p>
Climate change <p>Strong focus on promoting sustainable transport and reducing the area's carbon footprint.</p> <p>Improves the energy efficiency of the city's buildings and homes and reduces the City's reliance on traditional energy sources.</p> <p>Promotion of digital technology infrastructure facilitation which will be an important part of the future knowledge economy and help contribute to improved transport, health provision, access to education and employment, and the City's green agenda.</p> <p>Recognition that new development should demonstrate measures to mitigate against flood risk and to ensure that they do not increase flood risk elsewhere.</p>

Potential sustainability effects of the AAP	
Economic factors	
<p>Strong focus on building an extensive and co-ordinated programme of support for businesses and improving the economic vitality of Bordesley Park.</p> <p>The creation of major new employment uses at the Wheels site will provide much needed employment opportunities for local people.</p> <p>Support for sustainable methods could create a new thriving and vibrant green economy.</p> <p>New transportation links improve business accessibility.</p>	
Health	
<p>Improvements to the legibility, attractiveness and safety of walking and cycling, as well as the wider network of GI.</p> <p>Health and wellbeing is supported by the encouragement of non-car use and healthier modes of travel.</p>	
Historic environment and townscape	
<p>Aims to recognise and enhance the historic environment, as well as historically significant buildings and sites across the area.</p> <p>The historic environment will also be used to influence the design of new development.</p> <p>The sympathetic re-use of historic buildings is supported.</p>	
Housing	
<p>Commitment to demonstrate best practice in sustainable development including sustainable construction and design of the built environment.</p> <p>Delivery of up to 750 new homes to meet existing and future housing needs.</p>	
Material assets	
<p>Improves vacant and under used buildings and sites to bring them back into productive use.</p> <p>Focus on redeveloping vacant and derelict properties where possible.</p>	
Population and quality of life	
<p>The focus on employment and providing a stable economy could help improve job opportunities in an area characterised by low employment.</p> <p>Aim to improve the learning and skills base of Bordesley Park.</p> <p>Enhancements to the area's GI network will be a key contributor to overall quality of life.</p>	
Water and soil	

Potential sustainability effects of the AAP

Improvements to Bordesley Park's general environment could improve the River Rea's water quality, which is currently poor.

Improvements to Bordesley Park's general environment are likely to help with the remediation of contaminated land in the area.

Contaminated land such as the Wheels site is to be developed which will require remediation.

Mitigation

In cases where uncertain, and hence potentially adverse, effects have been identified, mitigation suggestions have been cited in **Chapter 8**. Mitigation should be considered as part of a sequential hierarchy to deal with adverse effects: avoid, reduce, and then mitigate. Mitigation prescriptions might include changes to policy wording, advocating design guides, offsetting biodiversity effects or provision of new supporting GI. In the case of this SA Report, mitigation has been supplied to help address negative effects so that no residual significant effects remain.

Recommendations

Whilst the AAP as it stands brings a range of positive sustainability effects; a number of recommendations have been proposed to help the AAP further improve its sustainability performance when implemented. These are presented in **Chapter 9**.

Monitoring

Chapter 10 of the SA Report explains why there should be a monitoring programme for measuring the AAP's implementation in relation to the areas where the SA has identified significant effects.

Conclusions

Having appraised all policies in the Pre-Submission Report (January, 2017), the process has identified positive and negative sustainability effects. Through applying a suite of mitigation measures, significant residual adverse effects are not anticipated. These measures have been presented in **Chapter 8**. Recommendations for dealing with uncertainty in the assessment process are also presented in **Chapter 8**.

Next Steps

This SA report forms part of the evidence base that the Planning Inspectorate will refer to in order to assess the soundness of the AAP during Independent Examination. If the Inspector suggests significant changes should be made to the AAP, the changes will be subject to SA.

Following Independent Examination, a Post Adoption Statement will be published with the adopted version of the AAP. This will outline how the SA process has informed and influenced the AAP development process and demonstrate how consultation on the SA has been taken into account.

1 Introduction

1.1 Background

- 1.1.1 Sustainability Appraisal (SA) provides a means to assess the economic, social and environmental effects of a plan at various points during its preparation. SA is a requirement of the Planning and Compulsory Purchase Act 2004 and is the process of informing and influencing the development of the Area Action Plan (AAP) to maximise the sustainability value of the plan.
- 1.1.2 This SA Report has been prepared by Lepus Consulting on behalf of Birmingham City Council as part of the SA of the Bordesley Park AAP. Comprising the latest stage of the SA, this document sets out an assessment of the Pre-Submission AAP¹ for the Bordesley Park area.
- 1.1.3 SA is the process of informing and influencing the development of the Pre-Submission AAP to help ensure the plan is sustainable. In this context this report should be read alongside the Bordesley Park Draft Pre-Submission AAP.
- 1.1.4 The SA report has been produced in compliance with the Town and Country Planning (Local Development) (England) Regulations 2004 SI No. 2204 and the Environmental Assessment of Plans and Programmes Regulations 2004 SI No. 1633. The report incorporates the requirement to produce an Environmental Report as required by the SEA Directive 2001/42/EC.
- 1.1.5 Strategic Environmental Assessment (SEA) is a systematic process for evaluating the environmental consequences of proposed plans or programmes to ensure environmental issues are fully integrated and addressed at the earliest appropriate stage of decision-making. Government policy recommends that both SA and SEA are undertaken under a single sustainability appraisal process, which incorporates the requirements of the SEA Directive. This is to be achieved through integrating the requirements of SEA into the SA process.

¹ BCC (2016) Draft Pre-Submission Version of the Bordesley Park AAP, Version 18, Dated 3rd June 2016.

1.2 Overview of Bordesley Park Area Action Plan

- 1.2.1 The Bordesley Park AAP covers an area of around 580 hectares in inner city Birmingham, directly east of the city centre, including parts of Washwood Heath, Bordesley Green, Bordesley Village and Small Heath. (see **Figure 1.1**).
- 1.2.2 The AAP area has a population of just under 33,000 (2011 Census). The age profile of the AAP area is notably younger than that of both Birmingham as a whole and England; the proportion of the population aged 0-4 is more than 10% compared to a citywide average of 7.6%. Almost half of the population of the AAP area is of Pakistani origin, and more than 10% Bangladeshi. An increasing proportion of people (5.3% in 2011 compared with 0.8% in 2001) are from African backgrounds.
- 1.2.3 The worklessness rate in the plan area is persistently higher than in the city as a whole. Within the AAP area there is a mixture of residential, mixed use and industrial neighbourhoods as well as large local centres at Coventry Road and Alum Rock Road. The areas of employment land within and near to the AAP area are of poor quality and do not generally meet the needs of new and growing employers. There are a number of formal parks, such as Small Heath Park, and smaller areas of incidental open space within the area, as well as linear green/blue space along the Birmingham and Warwick Junction Canal. The area is dominated by significant transport corridors including major rail lines, the ring road (A4540) and the A45 which connects the City Centre with Birmingham Airport and the NEC. The area will be affected by the construction and operation of the HS2 line.

Table 1.1: Key facts relating to the Bordesley Park Area Action Plan

Name of Responsible Authority	Birmingham City Council
Title of plan	Bordesley Park Area Action Plan Pre-Submission Report (January, 2017)
What prompted the plan (e.g. legislative, regulatory or administrative provision)	The Sustainability Appraisal of the Bordesley Park Area Action Plan is being prepared as part of Birmingham City Council's Local Development Framework.
Subject (e.g. transport)	Sustainability Appraisal
Period covered by the plan	2017 to 2031.
Frequency of updates	When required.

Area covered by the plan	The area covered by Bordesley Park (Figure 1.1).
Purpose and/ or objectives of the plan	To appraise the sustainability of the Bordesley Park Area Action Plan.
Plan contact point	Doug Lee Bordesley Park AAP, Development Planning Manager Planning and Regeneration Birmingham City Council P.O. Box 2470 Birmingham B1 1TR

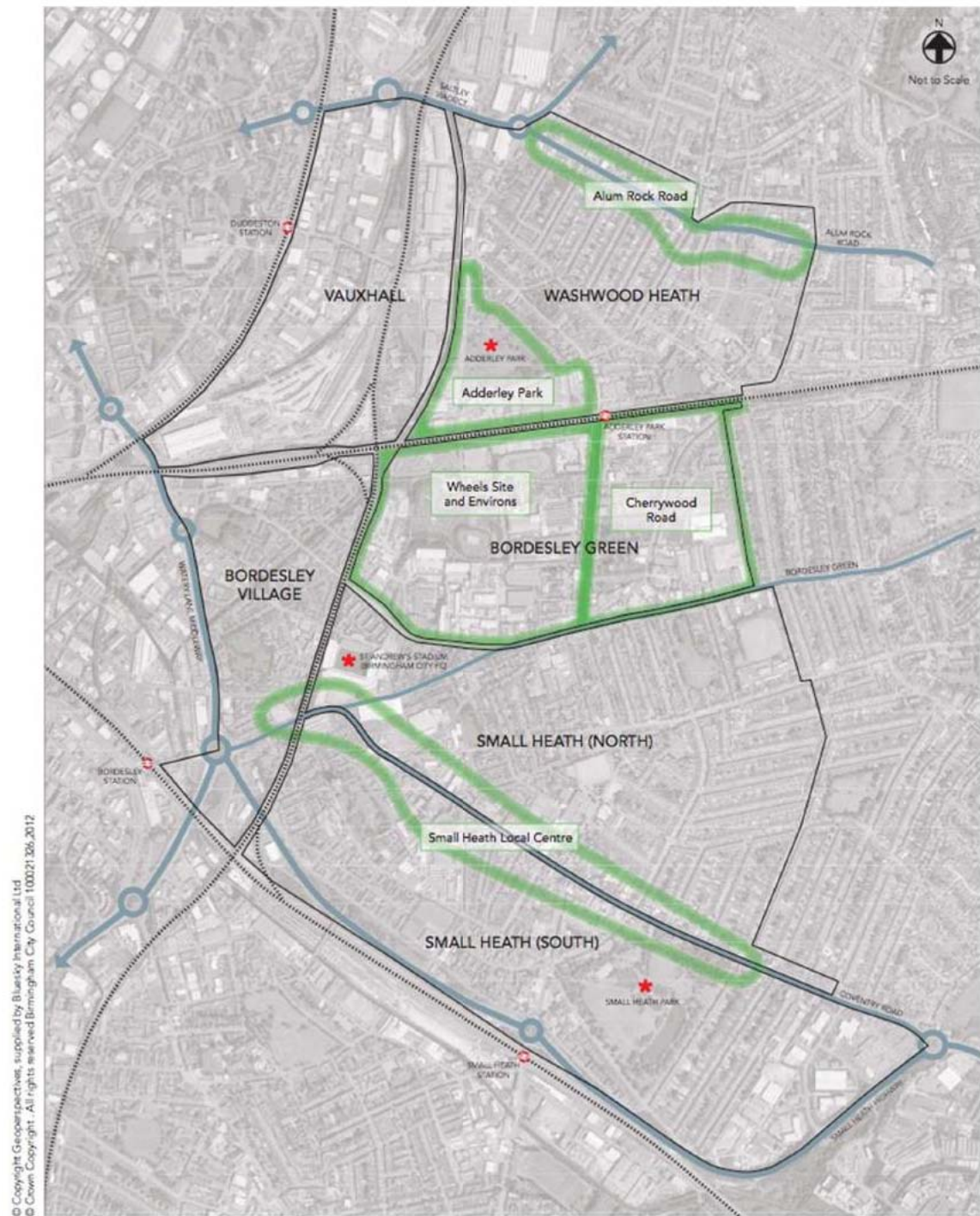


Figure 1.1: Areas of Key Opportunities for Change within Bordesley Park

1.3 The Bordesley Park Area Action Plan

1.3.1 Once adopted, the Bordesley Park AAP will form part of the Local Development Framework (LDF) and will be a formal Development Plan Document, which has statutory plan status. As such it will be a material consideration in the determination of future planning applications and development proposals for the Bordesley Park area.

1.3.2 The AAP had been developed in consultation with a range of local stakeholders and has the following delivery aims::

- A focus for growth including a wide range of employment opportunities for local people;
- High quality housing suitable for the needs of existing and new communities;
- Attractive and thriving local centres;
- Infrastructure that meets the current and future needs of business and residents;
- A connected place including enhanced public transport and a high quality pedestrian environment; and
- A clean, safe, attractive and sustainable environment in which to live and work.

1.3.3 The Birmingham Unitary Development Plan (UDP) is the current statutory plan for Birmingham. The Birmingham Development Plan (BDP) was adopted in 2017. The BDP is the key document that sets out the overall strategic policies for the city and will in turn inform other documents dealing with specific areas or proposals (such as the Bordesley Park AAP).

1.3.4 The AAP area has been divided into:

Four development principles:

- (1) Growth
- (2) Connectivity
- (3) Local Character
- (4) Sustainability.

Five key areas of opportunity for change:

- (1) The Wheels site and Environs
- (2) Cherrywood Road
- (3) Adderley Park

- (4) Alum Rock Road
- (5) Coventry Road Local Centre.

Six key neighbourhoods:

- (1) Vauxhall
- (2) Washwood Heath
- (3) Bordesley Village
- (4) Bordesley Green
- (5) Small Heath North
- (6) Small Heath South.

1.4 An integrated approach to SA and SEA

1.4.1 Integrated SA should fulfil the requirements for producing an Environmental Report under Annex 1 of the SEA Directive. In the interests of efficiency, following guidelines and the desire to avoid duplication, the two assessment types, SA and SEA, have been integrated under the umbrella of SA and are being undertaken simultaneously for the AAP.

1.4.2 The combined approach has been prepared on the following principles:

- Objectives are used as the basis for appraising impacts on various environmental, social and economic components (see **Appendix B**);
- A review of the baseline situation is undertaken, including social and economic factors (see **Appendix A**);
- Proposals in the AAP are appraised on the same basis;
- SA is an objectives-led methodology and is based on published evidence. Analysis is undertaken on the basis of professional judgement, recognised methodologies, qualitative and quantitative information.

1.4.3 Where the requirements of the Planning Practice Guidance (PPG) have been met is set out in Appendix C.

2 Methodology

2.1 Sustainability Appraisal

- 2.1.1 Birmingham City Council has appointed Lepus Consulting to assist with the SA process in order to fully integrate sustainability considerations within the production of the AAP. The Council, statutory consultees, other environmental bodies and working groups have been engaged in the SA process at different times.

2.2 Best practice guidance

- 2.2.1 The approach for carrying out the SA of the AAP is based on current best practice and the following guidance:
- Office of the Deputy Prime Minister (September 2005): A Practical Guide to the SEA Directive; and
 - Planning Policy Guidance on SA and SEA of local plans (Revision date March 2014).

2.3 Approach to appraisal

- 2.3.1 Full details of the appraisal procedure are set out in the Scoping Report. An SA framework of 23 objectives (see **Table 2.2** and **Appendix B**) has been used to assess the effects of the plan. These objectives align with those used in the Birmingham Development Plan (BDP) SA Framework. The integration of SA and SEA has meant that all objectives have been derived from sustainability themes which incorporate the SEA 'topics' derived from Annex I(f) of the SEA Directive:
- Biodiversity flora and fauna;
 - Population;
 - Human health;
 - Soil;
 - Water;
 - Air;
 - Climatic factors;
 - Material assets;
 - Cultural heritage (including architectural and archaeological heritage);
 - Landscape; and

- The inter-relationship between these factors.

2.4 Scoping Report

2.4.1 The first phase of the SA process is the scoping stage. Scoping is the process of deciding the scope and level of detail of an SA, including the relevant background and environmental issues; the assessment methods to be used; and the structure and contents of the SA Report. Documenting this process, the Scoping Report sets out the scope of, and methodology for the SA of the AAP and summarises the tasks and outcomes of the first stage of the SA process.

2.4.2 The purpose of the Scoping Report is to set the criteria for assessment (including the SA objectives), and establish the baseline data and other information, including a review of relevant policies, programmes and plans. The scoping process involves an overview of key issues, highlighting areas of potential conflict and includes:

- Identification of other relevant policies, plans and programmes, and sustainability objectives;
- Collection of baseline information;
- Identification of sustainability issues and problems; and
- Development of the SA Framework.

2.4.3 The Scoping Report² for the AAP was completed by Birmingham City Council and was published for consultation with key stakeholders in 2009.

2.4.4 The comments received on the Scoping Report were reviewed, and following receipt of responses, the Scoping Report was updated to take into account comments received and to reflect new information that had become available. A final, post-consultation version, was released in May 2010.

2.5 Policy, plan and programme review

2.5.1 An AAP may be influenced in various ways by other plans or programmes, or by external environmental protection objectives such as those laid down in policies or legislation. The full policy, plan and programme (PPP) review can be found in the Scoping Report.

² BCC (2010) Sustainability Appraisal Scoping Report. (May 2010)

2.6 Baseline and key sustainability issues

- 2.6.1 A key part of the scoping process is the collection of baseline data. The purpose of this exercise is to help identify key issues and opportunities facing the area which might be addressed by the AAP and to provide an evidence base for the assessment.
- 2.6.2 Scoping information has been updated in order to identify any new relevant plans, policies and programmes and new baseline data that have been published since the Scoping Report was updated in May 2010. These updates were prepared in February 2016 and are presented in **Appendix A**.

2.7 The sustainability appraisal framework

- 2.7.1 The purpose of the SA Framework is to provide a way of ensuring that the AAP considers the sustainability needs of the area in terms of its social, environmental and economic effects. It also enables the sustainability effects of the AAP to be described, analysed and compared.

2.8 Appraisal methodology

- 2.8.1 The assessment of the AAP proposals has been prepared using the SA Framework (see **Appendix B**). The assessment findings are expressed in summary format using symbols (see **Table 2.1**). The symbols are presented in matrix format; each of the 23 SA Objectives is scored separately for each proposal in the AAP. The matrix is accompanied by a written assessment commentary on identified effects. The matrix is not a conclusive tool. Its main function is to identify whether or not the proposed options are likely to bring positive, adverse or uncertain effects in relation to the SA Objectives. Reasonable alternatives have been appraised in the same way.
- 2.8.2 **Table 2.1** shows the key to identifying whether the effects of an option are positive, adverse or uncertain.

Table 2.1: Key to the matrix assessment of Bordesley Park's AAP Options

Key:	
Likely strong positive effect	++
Likely positive effect	+
Neutral/no effect	0
Likely adverse effect	-
Likely strong adverse effect	--

Uncertain effects

+/-

2.8.3 The SA Objectives are based on those used to appraise the emerging BDP. They have been developed through the policy, plan and programme (PPP) review, the baseline data collection and the key issues identified for the area during the Scoping Review. Alongside, the SEA topics identified in Annex I (f) of the SEA Directive were one of the key determinants when considering which SA Objectives should be used for appraisal purposes. The SA Objectives seek to reflect each of these influences to ensure the assessment process is robust and thorough.

2.8.4 The SA Objectives included within the SA Framework, and the sustainability theme to which they relate are set out in **Table 2.2**.

Table 2.2: SA Framework

SA Objective		Sustainability theme
1	Use natural resources such as water and minerals efficiently.	Material assets, air, water and soil.
2	Reduce overall energy use and contributions to the causes of climate change.	Climate change, accessibility and transport.
3	Make efficient use of the existing transport infrastructure by promoting sustainable transport, promoting modal shift and minimising the need to travel by private car.	Climate change, accessibility and transport.
4	Encourage and enable waste minimisation, reuse, recycling and recovery.	Material assets.
5	Encourage land use and development that optimises the use of previously developed land and buildings.	Material assets.
6	Ensure that the design and planning process reduces the impact of climate change and the risk of flooding.	Climate change.
7	Promote the expansion and improvement of a comprehensive and multifunctional green infrastructure network.	Biodiversity and geodiversity.
8	Value, protect, enhance and restore the AAP area's built and historic environment and landscape.	Historic environment and townscape.
9	Value, protect, enhance, restore and re-create local biodiversity.	Biodiversity and geodiversity.
10	Minimise air pollution levels and create good quality air.	Air, accessibility and transport.
11	Minimise water pollution levels and improve water quality.	Water.
12	As part of new development address and mitigate land contamination issues with the AAP area.	Soil.
13	Minimise noise pollution levels.	Accessibility and transport.
14	Encourage corporate social and environmental responsibility, with local organisations and agencies leading by example.	Economic factors.
15	Encourage regeneration and economic growth to achieve a strong, stable and sustainable economy that benefits the inhabitants of the AAP area.	Economic factors, population and quality of life.

16	Promote investment in future prosperity, including on-going investment and engagement in learning and skill development.	Population and quality of life.
17	Enable communities to influence the decisions that affect their neighbourhoods and quality of life.	Population and quality of life
18	Promote social inclusion by ensuring easy and equitable access to services, facilities and opportunities, including jobs and learning.	Accessibility and transport, population and quality of life, economic factors.
19	Address poverty and disadvantage, taking into account the particular difficulties of those facing multiple disadvantages.	Population and quality of life, housing.
20	Improve health and reduce health inequalities by encouraging and enabling healthy active lifestyles and protecting health as well as providing equitable access to health services and facilities.	Human health.
21	Improve community safety and reduce crime, fear of crime and antisocial behaviour.	Population and quality of life, human health.
22	Provide decent and affordable housing for all, of the right quantity, type, tenure and affordability to meet local needs.	Housing, population and quality of life.
23	Improve opportunities to participate in diverse cultural sporting and recreational activities.	Human health, population and quality of life.

2.9 Limitations

2.9.1 There are a number of limitations which should be borne in mind when considering the results and conclusions of this assessment:

- SA is a tool for predicting potential significant effects. The actual effects of the policies may be different from those identified. Prediction of effects is made using an evidence based approach and incorporates a judgement.
- The appraisal has been prepared at a strategic level with the most up to date data available. The matrices and their symbols are a visual aid and should not be regarded as singularly conclusive; accompanying assessment narrative text should always be read in conjunction with the matrices.
- The strategic nature of the assessment identifies issues that could be improved and can therefore be used to guide the plan.
- Every attempt has been made to predict effects as accurately as possible using the best available information.

3 Findings of the previous SA stages

3.1 Introduction

3.1.1 This chapter summarises the SA findings from previous appraisal stages, during which reasonable alternatives to the AAP were assessed.

3.1.2 The SEA Directive requires that the Environmental Report³ should consider:

‘Reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme’ and give ‘an outline of the reasons for selecting the alternatives dealt with’ (Article 5.1 and Annex I (h)).

3.1.3 SA work has been carried out on an iterative basis, accompanying each stage of the AAP’s development, to help optimise sustainability value. **Table 3.1** presents an abbreviated history of the different stages of plan production and the accompanying assessments that were prepared. Three rounds of options assessment have been undertaken as follows:

- Early development options (2010) concerned four options for the Wheels Site and immediate environs.
- The 2011 Options Report concerned four ‘areas of transformation’: (1) The Wheels Site and Environs, (2) Adderley Park, (3) Alum Rock Road, and (4) Small Heath Local Centre.
- Preferred Options (2013) concerned the Preferred Options version of the AAP, which was published in July 2013. The Preferred Options consisted of Development Principles, Key Opportunities for Change and Neighbourhoods.

3.1.4 The results of each all three options stages are summarised in the following sections of this chapter. The same assessment methodology has been used at each stage of assessment.

³ The requirements of the SEA Directive are addressed in this Preferred Options SA Report.

Table 3.1: Abbreviated history of the SA process

Type of document	Title	Date published	Summary description
AAP Documentation	Baseline AAP Report	2009	Formal commencement of the AAP. Baseline report produced setting out current conditions in the area and likely evolution.
SA Output	SA Scoping Report	May 2010	Report produced including sustainability indicators against which the draft policies and proposals were to be appraised.
AAP Documentation	Early Development Options	(Unpublished) Jul 2010	The Council produced a report of the four development options proposed for the Wheels site and immediate environs.
SA Output	SA of the Bordesley Park AAP: Options SA Report focused on Wheels site Options	Aug 2010	Options SA Report of the four development options proposed for the Wheels site and immediate environs to feed into the ongoing development of the AAP.
AAP Documentation	AAP Options Report	Aug 2011	This report sets out work taken on the AAP to date. The report provides overall vision for the AAP, and discusses a range of options for key areas of change.
SA Output	SA of the Bordesley Park AAP: Options SA Report	Sept 2011	This document sets out an assessment of the various development options currently proposed for the Bordesley Park AAP. Four 'areas of transformation' are put forward, each with their own reasonable alternatives: <ol style="list-style-type: none"> 1. The Wheels site and Environs 2. Adderley Park 3. Alum Rock Road 4. Small Heath Local Centre Additionally, a series of recommendations are set out which are intended to feed into the ongoing evolution of the AAP.
AAP Consultation	Period of Non-Statutory Consultation		Non-statutory consultation on the Options Report was carried out to engage stakeholders in the process. Responses were considered in the production of the Preferred Options Report.

AAP Documentation	Preferred Options Report	July 2013	The Council produced a revised report responding to the outcomes of consultation, SA and further technical work, setting out proposed vision, objectives, and preferred approach.
SA Output	SA of the Bordesley Park AAP: Preferred Options SA Report	July 2013	Independent revision of SA reflecting the Preferred Options against the agreed sustainability indicators.
AAP Consultation	Statutory consultation on the Preferred Options		Statutory consultation in line with regulations. This included online consultation, exhibitions and meetings. Subsequent consultation on the associated SA.
AAP Documentation	Pre-Submission Report	January 2017	This report is a consultation document identifying proposals, based on the Preferred Options Report and reflecting responses to previous consultation, further technical work etc.
SA Output	SA of the Bordesley Park AAP: Pre-Submission Report	January 2017	This Report.

3.2 Options SA Report focused on Wheels site Options (August 2010)

3.2.1 In 2010 the Council presented reasonable alternatives for the potential re-development of the Wheels site and Environs. The following options were considered:

- Do minimum
- Community uses
- Commercial uses
- Major Leisure Attraction

3.2.2 The August 2010 Options SA Report⁴ presents the SA findings. These are reproduced in **Appendix C**. For more information on the findings, please see the 2011 SA Report.

⁴ UE Associates (2010) Sustainability Appraisal of the Bordesley Park Area Action Plan. August.

3.3 SA of the Bordesley Park AAP: Options SA Report (September 2011)

3.3.1 In 2011 the Council presented reasonable alternatives for those parts of the AAP area that would be identified as areas with key opportunities for change. The following options were considered:






- The Wheels site and environs;
- Adderley Park;
- Alum Rock Road; and
- Small Heath Local Centre.

3.3.2 The September 2011 Options SA Report⁵ presented an appraisal of alternative options for each of the four Transformational Change Areas in Bordesley Park. Each Transformational Change Area had alternatives as follows:

- The Wheels site and environs (four alternative options);
- Adderley Park (three alternative options);
- Alum Rock Road (two alternative options); and
- Small Heath Local Centre (two options).

3.3.3 The appraisal findings from the 2011 Options SA Report are summarised in matrix format in **Appendix D**. A text summary of the assessment findings by SA theme is presented in **Table 3.2**. For more information on the findings, please see the 2011 SA Report.

Table 3.2: Key sustainability findings and recommendations from the 2011 SA Report

Accessibility and transportation 
Local pedestrian and cycle networks in the Bordesley Park area are poorly linked and are of poor quality. Alongside, a number of significant barriers for walkers and cyclists exist in the area. Aspects of the area's built environment and townscape quality probably reduce pedestrian and cyclists' perceptions of security.  The AAP should also seek to maximise the opportunities for improving public transport links in the area, including rail and bus services.  Whilst it is recognised that road improvements will be required at some locations in the area to address congestion and associated issues, the AAP should seek to ensure that new and improved public transport and walking/cycling networks should be considered in the first instance. 
Air quality 
Air quality in the area is closely linked to traffic and congestion on the area's road network. To support air quality in the area, the AAP should therefore seek to limit traffic growth and congestion through supporting modal shift and sustainable modes of transport.

⁵ UE Associates (2011) Sustainability Appraisal of the Bordesley Park Area Action Plan. September.

Biodiversity and geodiversity
<p>The AAP should seek to improve the biodiversity value of the area through the provision of new habitats, biodiversity linkages and through facilitating design and layout that supports species present locally. Improved habitat connectivity between features such as the canal, the River Rea and the area's railway corridors, all of which have been identified as Wildlife Corridors in the city's Nature Conservation Strategy, will be beneficial. In this context, the development of a multifunctional green infrastructure network will be a key means of improving and enhancing the area's biodiversity value. Opportunities to raise awareness about geodiversity could be explored.</p>
Climate change
<p>The Preferred Option for the AAP should seek to address both climate change mitigation and adaptation. References to climate change in the AAP should be clearly defined in relation to climate change mitigation (limiting greenhouse gas emissions) and adaptation (adapting to the effects of climate change). This will clarify which aspect of climate change the AAP is seeking to address, and help demonstrate that to effectively address climate change in the area and the wider city, action will be required to both limit greenhouse gas emissions and to implement effective adaptation.</p> <p>The AAP should be supported by more solid recommendations related to targets for renewable energy provision, and related to regional and national efficiency and emissions standards. The AAP should encourage development that supports adaptation to climate change.</p>
Economic factors
<p>The economic performance of the AAP area has the potential to be closely linked to the skills and qualifications of local residents. In this context, improvements to local educational provision (including as proposed at Bordesley Green Girls School) should be augmented by a commitment to increase opportunities for further and adult education in the AAP area. This will help facilitate an improvement in existing skills levels, which is significant in an area with a higher proportion of the population having no qualifications or lower qualifications than the citywide and national average. The AAP should also seek to limit the out-migration of people with higher skills and qualifications from the area. This could be done by creating good quality housing and employment opportunities in the area.</p>
Health
<p>As highlighted by the assessment of the development options, the proposed options have a strong overall focus on the provision of sports, leisure and recreational facilities. This will support the health and wellbeing of residents by promoting physical activity and healthier lifestyles.</p>
Historic environment
<p>There are 16 nationally listed buildings and 14 locally listed buildings within the AAP's boundary. According to the Heritage at Risk Register, six out of the 16 nationally listed buildings are deemed to be 'at risk'. Only a limited proportion of the area's overall historic environment resource is subject to statutory designations, and undesignated features represent a significant part of the area's cultural heritage and local identity. In this context the canal network is a key asset.</p> <p>New development in the Bordesley Park area should incorporate design that complements and enhances individual heritage assets and their settings, reducing its impact on designated and non designated sites and townscapes. Alongside, development should seek to rejuvenate and protect the listed buildings currently 'at risk' in the area, and support the integrity of historic landscapes.</p>
Housing

Residential development in the AAP should seek to reflect local housing demand in terms of housing types and tenure and linked to a predicted population growth in the area of 10-20% in the next ten years. For example there is a significant demand for larger family housing in the AAP area, alongside demand linked to a growth in single person households.

Material assets

To support city-wide objectives in relation to sustainable waste management, the AAP should support the development of waste facilities at sustainable locations, encourage the reduction, reuse or recycling of waste, and where appropriate, realise the opportunities for renewable energy generation through waste. At the same time the AAP should recognise the impacts that waste management can have on noise, soil and air quality; the built environment and the setting of cultural heritage assets; flora and fauna; and effects on residents' quality of life.

Population

The AAP should therefore seek to help to meet the needs of the young and growing population through promoting new and improved educational and community facilities, facilitating new sports, leisure and recreation provision, and improving local employment and training prospects. The AAP should also seek to support the needs of the various communities living in the area.

Quality of life

An improvement of the area's Green Infrastructure networks has the potential to be a key contributor to quality of life in the Bordesley Park area. It also helps reduce the fear of crime, improve the satisfaction of residents with their neighbourhoods as a place to live, and have positive effects for the townscape and built environment of the area. Green Infrastructure also provides additional leisure, recreation and sporting opportunities.

Soil

Earlier versions of the options for the Wheels site were assessed in relation to land contamination and remediation by the Reclamation and Remediation Options Preliminary Costs Appraisal Contaminated Land Study (Atkins, 2010). Further detailed studies will be carried out on the likely remediation requirements and costs of different options to be taken forward by the AAP.

Townscape

The AAP has significant potential to facilitate large-scale improvements to the public realm and built environment in the Bordesley Park area through transformational change. This should be achieved by ensuring that design and layout in the AAP area enriches the existing urban form of the wider city, supports the vitality and vibrancy of the area, is multifunctional and meets the needs of a broad range of people, and is legible, safe and secure.

Water

Water quality in the area is closely linked to the presence of contaminated land, the effectiveness of local drainage systems and the local presence of industry. The AAP should seek to limit and reduce the release of diffuse and point source pollutants into local watercourses through the remediation of contaminated land in the most sensitive areas for water quality, reducing 'unsatisfactory intermittent discharges' and improving the management of waste water, and promoting the use of high quality drainage systems in the area, including sustainable drainage systems where appropriate.

3.4 SA Report to accompany the AAP Preferred Options Report (July 2013)

3.4.1 In July 2013, BCC published the Area Action Plan Preferred Options Report for consultation. This document set out the work undertaken on the AAP to date, in particular the public consultation that was undertaken on the Bordesley Park Options Report in 2011.

3.4.2 The Preferred Options AAP Report includes four Development Principles, six Neighbourhoods and five Key Opportunities for Change Areas. All content has been assessed against the SA Framework of objectives and indicators. The findings are summarised in three assessment matrices in **Appendix E**.

3.4.3 The SA report identified numerous positive effects that had materialised in the Preferred Options SA Report in response to earlier SA work. Negative effects were identified due to:

- Increases in parking provision;
- Potential loss or damage to SLINC and priority habitat for biodiversity preservation;
- Flood risk; and
- Loss of housing.

3.4.4 The SA report concluded that through applying a suite of mitigation measures, it is possible to ensure most residual significant adverse effects are overcome.

3.4.5 Whilst this chapter explains the assessment results of the reasonable alternatives put forward, in line with the Planning Practice Guidance (PPG; Reference ID: 11-018-20140306), an outline of reasons for selection is necessary. This is provided by the Council, and can be found at **Chapter 4**.

4 Reasonable Alternatives: Outline of the reasons for selection and rejection of options

4.1 Introduction

- 4.1.1 This chapter discusses how the SA process has informed and influenced the AAP development process to date.
- 4.1.2 The Planning Practice Guidance (PPG)⁶ states that an environmental report should 'outline the reasons the alternatives were selected, the reasons the rejected options were not taken forward and the reasons for selecting the preferred approach in light of the alternatives'.
- 4.1.3 It is stressed that selection and rejection of sites is a decision made by Birmingham City Council based upon the evidence base for the plan (including the SA) and not by Lepus Consulting. The role of Lepus Consulting is to provide an objective assessment of options, which can then be used by plan makers to make decisions regarding the selection of preferred options. This chapter presents the decision-making processes of the Council, as they have communicated it to Lepus Consulting.
- 4.1.4 The preferred options in the Pre Submission Draft of the AAP have been developed, taking account of the 2011 Options consultation and the findings of the Options Sustainability Appraisal Report⁷ (2011) together with the development of the wider evidence base for both the BDP⁸ and the AAP itself.

⁶ DCLG (2015) Planning Practice Guidance

⁷ UE Associates (2011) Sustainability Appraisal of the Bordesley Park Area Action Plan: Options SA Report

⁸ BCC (2013) Birmingham Development Plan. Pre-Submission Version. Planning for Sustainable Growth. December 2013

- 4.1.5 This chapter sets out the justification for the selection of preferred options for the key areas of change, largely in light of the findings of the Options Sustainability Appraisal Report (2011) (which accompanied the Options Report⁹), but also in light of other work as appropriate. The SA has been one of a number of factors affecting the development of the preferred options. The evidence base, viability, deliverability, support through consultation, further technical work and discussions with stakeholders have also been important.

4.2 Relationship with the BDP

- 4.2.1 The main planning document driving the process is the Birmingham Development Plan (BDP). Within the BDP, Policy GA7: Bordesley Park provides some background to the AAP and options as follows:

‘An AAP will be prepared for the Bordesley Park area. Future growth and development will be brought forward in line with the policies set out in the AAP.

The AAP will plan for the following levels of growth; 750 new homes and up to 3000 new jobs.

The AAP covers an area of around 580 ha to the immediate east of the City Centre, including parts of Washwood Heath, Bordesley Green, Bordesley Village and Small Heath. The development of the AAP provides the opportunity to work with the local community to build upon this area’s assets and to establish:

- A focus for growth including a wide range of employment opportunities for local people.
- Attractive and thriving local centres.
- High quality housing suitable for the needs of existing and new communities.
- Infrastructure that meets the current and future needs of business and residents.
- A connected place including enhanced public transport and a high quality pedestrian environment.

⁹ Birmingham City Council (2011) Bordesley Park Area Action Plan Options Report

- A clean, safe, attractive and sustainable environment in which to live and work.
- Protection for and, where appropriate, enhancement of the varied sports facilities currently located in the area, including at Birmingham City Football Club and Birmingham Wheels Park.'

4.2.2

Paragraph 5.73 of the supporting text goes on to state that:

'The Wheels site and surrounding environs is the major opportunity for transformational change in the area and provides the potential for new employment uses that are integrated with the adjoining areas of Saltley, Bordesley and Small Heath. There are issues with regard to land contamination (the Wheels site is a former landfill site) and infrastructure (mainly transport and access) that will need to be addressed as proposals for the area come forward. The site currently accommodates the Birmingham Wheels Park, providing a range of wheeled sports facilities including speed-skating and go-kart tracks and a stock-car racing circuit, which attract users and spectators from across Birmingham, the West Midlands and further afield. Some of the facilities are extensively used by young people from local schools and community groups. The importance of these facilities is recognised and the AAP will need to support their continued operation through equivalent or better quantity and quality replacement provision elsewhere and/or consolidation on site, in conjunction with any redevelopment of the Wheels site. This will include consideration of the catchment area of the participants involved. Appropriate provision will also need to be made for other existing business occupiers of the site. '

4.3

The Birmingham Wheels site

The Options

4.3.1 The Options Report presented four options for the purposes of Consultation. These were broadly drawn following extensive options analysis including an initial examination of viability and deliverability. They were deliberately not mutually exclusive in order that combinations of options or individual elements could be considered. The options for the Wheels site were:

- W1: Incremental Change
- W2: Residential
- W3: Major Leisure Attraction
- W4: Industrial and Employment

4.3.2 The preferred option for the Wheels site is:

- W4: The promotion of new industrial and employment opportunities, creating a high quality employment site in an improved environment.

Responding to the SA

4.3.3 The Options SA Report¹⁰ identified the 'Residential' option as the most positive in SA terms, followed closely by the 'Major Leisure Attraction' and 'Incremental Change' options. The 'Industrial and Employment' option was found to be likely to have a negative effect against 10 of the SA Objectives.

4.3.4 The Industrial and Employment option has emerged as the preferred option for the Wheels site, as it was necessary to respond to a range of other factors, as set in paragraphs 4.3.6 to 4.3.11. In developing the preferred option for the Wheels site it has been necessary to reflect the city's requirement to meet demand for industrial land and job creation whilst mitigating against some of the issues identified in the Options SA Report. The incremental approach was not supported as it is not capable of delivering the large scale, necessary economic benefits, that this site can potentially realise and for which there is a clear need.'

4.3.5 **Table 4.2** identifies the SA Objectives against which the Industrial and Employment option was assessed negatively in the Options SA Report (2011), and the measures emerging in the preferred option to mitigate against these.

¹⁰ UE Associates (2011) Sustainability Appraisal of the Bordesley Park Area Action Plan: Options SA Report

Table 4.2: Mitigation measures envisaged by BCC in relation to negative sustainability effects identified through the SA process

SA Objective	SA Concerns	Consideration of mitigation in preferred option
SA Objective 2: Reduce overall energy use and contributions to the causes of climate change.	Potential increase in traffic flows, including HGVs and an increase in energy demand are the main concerns.	Buildings over 1000sqm will be required to meet BREEAM 'Excellent' standard.
		Increased traffic flows are inevitable as a result of new employment uses on a previously underutilised site, but traffic management measures will be implemented.
SA Objective 3: Promoting sustainable transport, modal shift and minimising reliance on private car.	Potential increase in traffic flows.	Improvements to rail and bus services, as well as development of a rapid transit route (Metro) through the area and improvements to the pedestrian and cycling provision will ensure jobs can be accessed without reliance on the private car.
SA Objective 8: Value, protect, enhance & restore the area's built and historic environment.	The main concern in SA terms arose from the impact of freight traffic on the townscape.	This has been recognised as a significant issue, and measures to better manage HGV traffic are included in the preferred option.
SA Objective 10: Minimise air pollution and create good quality air.	Potential increase in traffic flows, including HGVs is the main concern.	Promoting sustainable travel by employees (use of public transport etc.) will help address this.
		The new development should be designed such that deliveries and distribution is properly accommodated within the site, which will reduce queuing, enable better management of emissions, etc.
SA Objective 11: Minimise water pollution and improve water quality.	Concern was that lower levels of remediation required for this use might have less of an impact in terms of reducing water pollution, and that new industries moving in might be polluters.	Remediation will be considered in more detail as proposals develop, with this concern borne in mind.
		The nature of businesses expected to be attracted to the area, and the requirement for BREEAM 'Excellent' standard, should minimise risk of water pollution.
SA Objective 13:	Increased traffic, particularly HGVs, is the main concern.	The new development should be designed such that deliveries and distribution is properly

Minimise noise pollution levels.		accommodated within the site, which will reduce queuing, enable better management of noise emissions, etc.
SA Objective 17: Enable communities to influence the decisions that affect their neighbourhoods and quality of life.	The impact of a significant new employment use on the surrounding neighbourhoods is the main concern.	Improving the gateways to the site will improve the visual amenity of the area.
		Creating jobs for local people may better position them to influence the future of their neighbourhood.
SA Objective 19: Address poverty & disadvantage, taking into account the particular difficulties of those facing multiple disadvantages.	The concern in this case focuses largely on the potential negative impacts on the local environment.	Mitigation against impacts on the public realm and pollution levels are addressed above.
		Access to sustainable employment opportunities is likely to have the greatest and most significant impact on local residents who suffer from high levels of unemployment.
SA Objective 21: Improve community safety and reduce crime, fear of crime, and anti-social behaviour.	Concern relates largely to the perceived lack of improvement to the public realm as a result of this option.	Measures to improve the public realm, particularly pedestrian safety can be incorporated in the AAP and within any development of the Wheels site.
SA Objective 22: Provide decent, affordable housing for all, of the right quantity, type, tenure and affordability to meet local needs.	The negative assessment arises from a lack of proposals for new housing and the potential impact of the development on surrounding neighbourhoods.	There are no proposals for residential development, as this could not be successfully combined with employment uses. Other areas, such as the Cherrywood Road area, have more potential for residential development.
		A range of measures to mitigate the potential impacts of employment uses are detailed above and can be included in the AAP.

Responding to other factors

- 4.3.6 The justification for proceeding with this as the preferred option is as follows:

Evidence Base

- 4.3.7 There is a limited supply of significant employment sites in the city, with pressure exacerbated as a result of the proposals for the route of High Speed 2 to run through the area and the subsequent designation of safeguarded area for the railway by the Secretary of State for Transport. The scale, accessibility and availability of this site make it an important strategic opportunity, responding to the need to increase the supply of high quality employment land identified in the Employment Land Review 2012. The focus will be on job creation, training and promoting education and community facilities. It also correlates well with areas of high unemployment, so such use on the site can be strategically justified.

Viability & Deliverability

- 4.3.8 Whilst the options for the Wheels site all have challenges, this option appears to be more deliverable than others because:

- The cost of reclamation for employment uses is less than that for residential, for example; and
- There is market interest in delivering employment uses on the site (to date, no interest has been expressed in delivering residential or leisure uses).

Community & Stakeholder Consultation

- 4.3.9 Each of the consultation options secured a range of comments, with many relating to the need to safeguard the existing sporting activities on site, explore opportunities for improved educational facilities, and address issues relating to some of the existing industrial premises (such as potential expansion or the environmental and amenity impact of particular businesses upon adjoining residential/educational uses). Although there was some support for the arena proposal as part of improving local sporting facilities, there was no interest shown from potential occupiers at that time, which limits the scope of this option from moving forward.

4.3.10 Constraints regarding the past use of the site also limit the potential for residential development. Local people, businesses and other stakeholders have expressed support for employment uses on the sites, particularly when associated with measures to support local people in accessing jobs, training etc.

4.3.11 There was significant concern from stakeholder groups associated with the Wheels occupiers as to their future operations. These concerns will continue to be addressed as the AAP progresses.

4.4 Adderley Park

The Options

4.4.1 The options proposed for Adderley Park were:

- A1: Do Minimum
- A2: Residential & Community
- A3: Employment

4.4.2 The preferred option for Adderley Park is:

- Combination of A1, A2 and A3: A flexible range of uses, including employment and community uses, within an improved environment. Each option acknowledged issues relating to the setting of Adderley School and the opportunities for further improvements to Adderley Park.

Responding to the SA

- 4.4.3 The preferred option includes elements of all three options (although not residential uses), and largely reflects those elements of the options which were identified as positive in the Options SA Report (2011), e.g. reuse of brownfield land (SA Objective 5), enhancement of GI (SA Objective 7), encouraging economic growth (SA Objective 15), promoting future prosperity (SA Objective 16), promoting social inclusion (SA Objective 18), improving health (SA Objective 20), and improving diversity of opportunities (SA Objective 23). Measures to mitigate against the predicted impact of increased HGV traffic may support a reduction in air and noise pollution on a localised basis (SA Objective 10 and SA Objective 13). The preferred option does not support the provision of decent and affordable housing (SA Objective 22) included as part of Option A3, but this is balanced by the provision of housing elsewhere in the AAP area.

Responding to other factors

Community & Stakeholder Consultation

- 4.4.4 The most significant factor in the direction taken for the preferred option was the responses to public consultation. The main comments received included a desire for a greater range and mix of uses in the area and opportunities to address environmental issues and the number of poorer quality industrial premises, particularly those on Adderley Road that face the park. There were also a number of comments made about the need to improve the general environment of the area, including the setting of Adderley School and the facilities within Adderley Park itself. The preferred option enables these comments to be addressed whilst limiting the impact on the industrial area to the west, and providing a 'buffer' between the industrial uses and the community/residential uses around Adderley Park.

- 4.4.5 The comments and submissions received during consultation on the Options Report were principally in support of the second option, plus the education and community elements of the third option, as well as suggestions that each of the options had proposals that should be carried forward into the final plan. There was some support for the allocation of land for new education and community facilities and Adderley Road and Bordesley Green Road was supported as the best locations for such new facilities. It is in this location that land and buildings have been vacant for many years.

Other factors

- 4.4.6 The residential option (A2) would have seen the introduction of housing alongside the railway, very close to the proposed new employment uses on the Wheels site. Residential development would also have required relocation of existing uses. As such this option was not considered an appropriate way forward.

- 4.4.7 The preferred option offers scope for a wider range of uses along Adderley Road that could include both retention of existing business uses and opportunities for the promotion of new employment uses and community and education facilities. Adderley Road would become an area of transition between the park, to the east, and the area of heavier industry beyond the canal to the west.

- 4.4.8 The emphasis will be on securing improvements to buildings and the environment - enhancing the amenity of nearby housing and the setting of both the park and school.

4.5 Alum Rock Road

The Options

- 4.5.1 The options proposed for Alum Rock Road were:

- AR1: Do Minimum
- AR2: Growth of centre to the east

- 4.5.2 The preferred option for Alum Rock Road is:

- Combination of AR1 and AR2: Investment encouraged within the centre, and expansion to the east to accommodate demand for growth of local

centre uses. The preferred option supports the maximisation of development opportunities within the existing centre.

Responding to the SA

4.5.3 The two options were assessed as having similar effects against the majority of SA Objectives. Only one SA Objective was assessed as negative for both options – this related to noise pollution (SA Objective 13), but it was recognised that traffic management measures could alleviate this to some extent.

4.5.4 By combining the options, the preferred option reflects the more sustainable option in relation to all but one SA Objective. The preferred option encourages the use of previously developed land and buildings (SA Objective 5). It also encourages economic growth (SA Objective 15) and social inclusion (SA Objective 18), and addresses poverty and disadvantage (SA Objective 19).

Responding to other factors

Evidence Base

4.5.5 There is a significant evidence base in place demonstrating demand for growth in Alum Rock Road local centre. This informed both the AAP and the adopted Shopping & Local Centres Supplementary Planning Document¹¹.

4.5.6 The Shopping and Local Centres SPD set out proposals for the expansion of the local centre to the east and this also gained support from local residents and businesses. The SPD also contains a number of policies to protect the core retail function of the local centre and prevent the over concentration of A3, A4 and A5 uses.

¹¹ Birmingham City Council (2012) Shopping and Local Centres Supplementary Planning Document

4.5.7 The BDP sets out a number of proposals for local centres including the opportunities for growth and regeneration of key local centres such as Alum Rock. It also includes detailed draft policies that set out how an AAP will be prepared to guide development and regeneration in the area, and how the Alum Rock Centre will be the focus of work to enhance its role as an important local centre; supporting its growth, maximising employment and training opportunities, and the promotion of the efficient use of existing sites and buildings. The proposal to expand the centre to the east has been taken forward in the Shopping and Local Centres SPD (following public consultation).

4.5.8 Addressing traffic and parking issues is recognised to be difficult as opportunities for off-street parking development are limited. However, this aim is vital in order to improve traffic flows, which could actually reduce air and noise pollution.

4.5.9 Other proposals within the preferred option relate to issues identified through the evidence base or through consultation (i.e. potential for extension of the school site).

Community & Stakeholder Consultation

4.5.10 Consultation responses supported growth of the local centre to the east, and also reflected the need to improve traffic flow and parking provision as well as the image of the centre. Promoting the development of sites within the centre will help improve its image, as well as promoting sustainable long term growth (i.e. growth will not just be focussed at the eastern end of the centre).

4.6 Small Heath Local Centre

The Options

4.6.1 The options proposed for Small Heath Local Centre were:

- SH1: Do Minimum
- SH2: The Gateway
- SH3: Local Centre Consolidation

4.6.2 The preferred option for Small Heath Local Centre is:

- Combination of SH1, SH2 and the Whitmore Road proposal from SH3: Support for investment to improve the centre, and the creation of a

'gateway' including new development to define the western end of the centre. In all options the potential to address traffic congestion and improve public realm and the pedestrian environment was outlined.

Responding to the SA

- 4.6.3 The three options were assessed as having similar effects against the majority of the SA Objectives, with Option SH2 marginally more positive overall. None of the options were identified as having an explicitly negative effect against any of the SA Objectives. The preferred option combines elements of all of the options, and in general terms reflects the elements of each option that performed most positively against the SA Objectives. In particular it encourages the use of previously developed land and buildings (SA Objective 5), enhancement of GI (SA Objective 7), and economic growth (SA Objective 15). It also addresses poverty and disadvantage (SA Objective 19), and supports the provision of decent and affordable housing (SA Objective 22) through proposals for new housing development.

Responding to other factors

Evidence Base

- 4.6.4 The Shopping and Local Centres SPD defines the boundary of the centre. The SPD also contains a number of policies to protect the core retail function of the local centre and restrict the over concentration of A3, A4 and A5 uses.
- 4.6.5 The BDP sets out a number of planning and regeneration proposals for local centres including the opportunities for growth and regeneration of key local centres such as Small Heath, which is one of several key centres along the A45 corridor.
- 4.6.6 The evidence base and consultation supported the progression of proposals relating to Parliament Street and the surrounding area. Measures to improve the image of the centre and to address traffic/parking issues were also supported by the evidence base and consultation comments.

Community & Stakeholder Consultation

- 4.6.7 The consultation on the Options Report generated significant interest in proposals for the centre, and many commented on the current limited opportunities for growth. There was support for the growth of the local centre - particularly to the west to create an improved gateway into the centre, and further opportunities for businesses that would complement existing facilities within the established centre.

4.7 Cherrywood Road

- 4.7.1 The Options Report (2011) did not identify Cherrywood Road as an area for significant change, and as such the Options SA Report (2011) did not examine options for this area in any detail.
- 4.7.2 The potential for change here was identified in the Neighbourhood 4 – Bordesley Green section of the Options Report, where improvements to public transport (including the introduction of Metro), improvements to Bordesley Green local centre, opportunities for expanded education uses, and opportunities for new housing at Cherrywood Road were all identified. These form the key elements of the proposals that emerge in the Preferred Options Report for the Cherrywood Road area.
- 4.7.3 Development opportunities have arisen from the Options Consultation and a “call for sites” through the review of the Strategic Housing Land Availability Assessment (SHLAA). These comprise former industrial land at Cherrywood Road (1.61Ha) and land at Humpage Road/ Cherrywood Road (2.02 Ha) both of which have been included in the SHLAA 2011. Both sites are in private ownership and offer potential development opportunities that could contribute to the transformation of the area.
- 4.7.4 The preferred option for Cherrywood Road is for the creation of a new residential neighbourhood with improved community facilities and local environment. This would contribute to meeting local housing needs, allowing the provision of a wider range of housing types and tenures.
- 4.7.5 The area presently suffers from conflicting business, residential and community uses which are often in close proximity to each other. The opportunity to review land use and promote new development would enable these issues to be resolved.
- 4.7.6 No reasonable alternative options came forward through the Options Consultation.

4.8 Neighbourhoods

- 4.8.1 For the purposes of the AAP the area is split into six neighbourhoods to enable a number of issues and potential opportunities to be considered in more detail. The six neighbourhoods are Vauxhall, Washwood Heath, Bordesley Village, Bordesley Green, Small Heath (North) and Small Heath (South). It is acknowledged that these boundaries are to a degree artificial, and that there will be cross boundary issues that affect two or more neighbourhoods. In particular, the local centres will draw trade from a much wider area. Nevertheless, this approach provides a means to focus on a number of issues at the local level.
- 4.8.2 The proposals for Neighbourhoods reflect local concerns expressed through the consultation on the Options Report and policies within the BDP. The emphasis on local issues within these neighbourhoods, focusing on small sites, traffic, housing and local employment has driven the policies within the AAP. No reasonable alternative options were identified for any of these policies.
- 4.8.3 SA issues that arose in the 2013 SA Report have been addressed in the Pre-Submission Version of the AAP (2017) however uncertainty remains in a few instances. These are identified and discussed in the rest of this report.

5 SA of the development principles

5.1 Introduction

- 5.1.1 This chapter sets out the appraisal findings for the assessment of the Bordesley Park AAP Pre-submission Report. **Table 5.1** summarises the scope and content of the AAP. The assessment findings are presented in matrix format as described in **Chapter 2** and are accompanied by an assessment commentary describing the sustainability performance of each part of the APP (see **Table 5.1**).
- 5.1.2 The 23 SA Objectives for Bordesley Park AAP (see **Table 2.2**) have been used to assess the sustainability performance of the plan.

Table 5.1: Development Principles, Key Opportunities for Change Areas and Neighbourhoods

Neighbourhoods and Key Opportunities for Change Areas	
Development Principles	
1	Growth
2	Connectivity
3	Local Character
4	Sustainability
Key Opportunities for Change Areas	
1	The Wheels site and Environs
2	Cherrywood Road
3	Adderley Park
4	Alum Rock Road
5	Coventry Road Local Centre (also known as 'Small Heath')
Neighbourhoods	
1	Vauxhall
2	Washwood Heath
3	Bordesley Village
4	Bordesley Green
5	Small Heath (North)
6	Small Heath (South)

5.2 Development Principles

5.2.1 This section discusses the assessment of the four development principles identified in the AAP. The principles are aspirational and challenging. Assessment findings are presented in **Table 5.2**.

Table 5.2: Assessment matrix of development principles

SA Objective		Development Principles			
		1	2	3	4
		Growth	Connectivity	Local character	Sustainability
1	Natural resources	+	0	0	+
2	Energy use	+	+	+	++
3	Sustainable transport	++	+	+	0
4	Waste minimisation	0	0	0	+
5	Previously developed land	+	0	++	0
6	Climate change	+	0	+	++
7	Green Infrastructure	+	++	++	+
8	Historic environment	0	0	++	0
9	Biodiversity	+	+	++	+
10	Air	0	+	0	0
11	Water	0	+	+	0
12	Land contamination	0	0	0	0
13	Noise	0	+	0	0
14	Corporate social and environmental responsibility	+	0	+	+
15	Economic growth	++	+	0	+
16	Investment	+	0	0	0
17	Community influence	+	+	+	0
18	Social inclusion	++	++	+	0
19	Poverty and disadvantage	+	0	+	0
20	Health	+	+	+	0
21	Community safety	0	+	++	0
22	Affordable housing	++	0	+	0
23	Recreational activities	+	+	+	0

5.3 Growth (Development Principle 1)

Principle 1: Growth

To promote growth in the AAP area, with a presumption in favour of sustainable development, by supporting proposals which:

- Provide the right conditions for growth, diversification and enhanced competitiveness to secure the economic revitalisation of the area and support a target of creating up to 3000 new jobs. This will include bringing forward land for significant employment development opportunities at the Wheels site, and promoting existing industrial areas at Vauxhall and Small Heath.
- Enhance and develop thriving local centres by supporting their niche market position and providing a strong retail offer and range of services. Alum Rock Road, Bordesley Green and Coventry Road are identified as key centres for investment and additional development and growth.
- Enhance the quality and range of the housing offer within the area, including the delivery of up to 750 new homes to meet existing and future housing needs, improvements to existing housing stock, and measures to bring vacant properties into residential use. The Cherrywood Road area is identified as having the greatest potential for new residential development.
- Improve access to high quality leisure, community and educational facilities and infrastructure.
- Maximise development opportunities along main transport routes, particularly along the proposed Metro line and at its stops, at transport hubs and within and adjacent to local centres.

- 5.3.1 The principle for Growth is assessed as strongly positive for SA Objectives 3, 15, 18 and 22. It is also assessed as positive for SA Objectives 1, 2, 5, 6, 7, 9, 14, 16, 17, 19, 20 and 23.
- 5.3.2 The principle advocates improving existing houses, and bringing vacant properties back into use. Both SA Objectives 1 and 5 concern redevelopment, and are consequently both assessed as positive.
- 5.3.3 The development of rapid transit routes through the area leads to a positive assessment for SA Objective 2 on energy use as the new routes could provide better links to the city centre and airport and reduce emissions.

- 5.3.4 The principle promotes the development of rapid transit routes, and improved links through the area to the city centre and airport. Improvements to public transport could lead to more people using these sustainable modes of transport and a reduction in car use. The objective supports the moulding of sustainable neighbourhoods, performing strongly positive for SA Objective 3 on sustainable transport
- 5.3.5 The growth principle is assessed as strongly positive for SA Objective 15 on economic growth as there is a strong focus on building an extensive and co-ordinated programme of support for businesses. The principle includes the expansion of local centres and other key economic growth sectors, which is likely to lead to a vibrant and stable economy. Improvements in connectivity through public transport are also likely to benefit the local economy.
- 5.3.6 The provision of a diverse economic base for a sustainable economy could help alleviate poverty; removing barriers to jobs through improvements in transportation. The principle has a target of creating up to 3,000 jobs, aiming to reduce the unemployment level of Bordesley Park (SA Objectives 15, 16 and 19).
- 5.3.7 Economic support of Bordesley Park leads to a positive assessment for SA Objective 18 on social inclusion. Improvements to the local centres of Bordesley Park, as well as the support of local initiatives and businesses is likely to lead to easy and equitable access to services, facilities and opportunities.
- 5.3.8 The principle proposes to provide for additional school places to meet the needs of the young and growing population within the area (SA Objective 16).

- 5.3.9 The principle promotes the protection, enhancement and use of parks, sports pitches local open spaces and other Green Infrastructure (GI) assets within the AAP. This leads to a positive assessment of the principle against SA Objectives 7 and 9, which relate to biodiversity and GI. Protecting and improving sporting and recreational facilities retains these facilities and ensures they are of high quality, making it more likely they will be used (SA Objective 23). Furthermore, the benefits of GI and green areas such as parks are manifold and help the area adapt to climate change (SA Objective 6) by capturing carbon, improving infiltration rates and providing a cooling effect to counteract the urban heat island effect. The green infrastructure network also encourages healthy, active lifestyles, in line with SA Objective 20.
- 5.3.10 The principle is assessed as strongly positive for SA Objective 22 on housing, as it aims to enhance the quality and range of housing in the area. The AAP proposes delivery of up to 750 new homes to meet existing and future housing needs, these will include affordable housing, large family housing, and housing suitable for the elderly and disabled.

5.4 Connectivity (Development Principle 2)

Principle 2: Connectivity

To improve linkages within and across the area to the City Centre and other centres of activity, connecting local residents and businesses with economic opportunities by supporting and promoting proposals which:

- Enhance public transport across the area including the promotion of rapid transit routes along Bordesley Green (Metro) and the A45 (SPRINT) as well as local rail and bus services.
- Better manage traffic and congestion within the area.
- Encourage more walking and cycling within the area reducing transport's impact on the environment thereby improving air quality, reducing carbon emissions and improving road safety.

- 5.4.1 The principle concerned with Connectivity is assessed as strongly positive for SA Objectives 7 and 18. The assessment is positive for SA Objectives 2, 3, 9, 10, 11, 13, 17, 20, 21 and 23.
- 5.4.2 The principle has a strong focus on Birmingham's vision for a transport system, which puts the user first and delivers the connectivity that people and businesses require (SA Objective 3). The principle proposed to improve the public transport offer in the area through enhancing the quality of rail and bus services, and walking and cycling routes. In particular, Birmingham's 'Cycle Revolution' proposes to improve cycling facilities within a 20-minute cycling time of Birmingham city centre, with the aim of making cycling an everyday way to travel in Birmingham over the next 20 years. Such a strong focus and investment in public and sustainable modes of transport could encourage people to use it, and reduce car use. A modal shift away from cars could reduce emissions (SA Objective 2), improve air quality (SA Objective 10) and reduce the noise pollution that traffic causes (SA Objective 13).
- 5.4.3 Within the connectivity development principle, creating a 'walkable neighbourhood' is emphasised. Creating a network of pedestrian routes, which are safe and attractive, could encourage more people to walk and reduce the use of cars. More people walking and less using cars could reduce emissions from transport (SA Objectives 3 and 2).

- 5.4.4 The strong emphasis on using public transport culminates in a strong positive assessment for SA Objective 15 on economic growth as public transport connects the AAP area to Birmingham and the airport. Connectivity and ease of pedestrian movement between the city centre and the AAP area is also highlighted. By improving the ease of access into the neighbourhood it could encourage more people into the area and promote the local economy. This link benefits the AAP area by maximising the benefit gained from the government's proposals for HS2, with a rail terminus at Curzon Street in the City Centre (within a short distance of the AAP area). This will enhance connections to London, the rest of the UK and Europe as well as provide a focus for new economic activity (SA Objective 15). The impact of the construction of HS2 includes the closure of Saltley Viaduct, a key gateway into the Alum Rock Road local centre and wider East Birmingham, for up to 18 months. The principle states that the City Council will work with HS2 and other stakeholders to minimise the impact of this on movement and businesses operations across the area. However, adverse impacts on the road traffic network and its users may still occur (SA Objective 3).
- 5.4.5 An additional benefit of connectivity through public transport throughout Bordesley Park and Birmingham is the improvement of access to facilities and services (SA Objective 18). In addition the sustainability development principle emphasises the creation of a low carbon green economy to reduce carbon dioxide emissions (SA Objective 2).
- 5.4.6 The principle is assessed as strongly positive for SA Objective 7 on GI as enhancements are to be made to walking and cycling routes that utilise existing and new green space. This will positively contribute to the areas existing GI network. Creating a network of safe, attractive, pedestrian and cycle routes is likely to promote healthy lifestyles (SA Objective 20). This is because the proposals advocate walking as an activity and the principle suggests improvements in connectivity to leisure and recreational activity facilities through sustainable transport methods (SA Objective 23). Improvements to the safety of pedestrian areas could reduce crime and fear of crime (SA Objective 21).

- 5.4.7 Introducing attractive pedestrian walkways and cycle routes, and developing a network of attractive and pedestrian friendly water spaces within the City Centre is likely to improve the attractiveness of the AAP area. It is assessed as positive for SA Objective 17 on community influence because an aesthetically pleasing appearance could increase the percentage of people who would like to remain living in the neighbourhood. The focus of building upon the canal's potential as a leisure amenity and nature conservation asset and the implementation of attractive water spaces could lead to an improvement to the water quality in the AAP area (SA Objective 11). The principle's aim to enhance the canal network means it is also assessed as positive for SA Objective 9 because the canals are a diverse habitat and home to a myriad of biodiversity features.
- 5.4.8 The route of the metro is likely to require land take at some locations along its path, which could impact existing shops and local businesses. Without knowing more about the proposals at the time of writing, the full extent of the effects are uncertain. Nonetheless, the metro would be expected to have an overall positive against SA Objective 15, Economic Growth.

5.5 Local Character (Development Principle 3)

Principle 3: Local Character

To improve the quality of the environment across the whole of the AAP area by supporting proposals which:

- Build upon local character to promote high quality design and community safety in new development. This will include acknowledging the area's rich variety of townscape, buildings, archaeology, parks, open space, waterways and industrial heritage and the promotion of high quality design of new development and public space.
- Improve the general amenity of the area including design, streetscape, and tackling problem sites and local eyesores.
- Develop a network of green infrastructure across the area in order to maximise the benefits of and linkages to the area's existing assets of parks, open spaces and canals that will enhance the natural environment, promote connectivity and improve health.

- 5.5.1 The Local Character principle consists of Historic Landscape Characterisation, Historic Legacy and Green Infrastructure. Local Character is assessed as strongly positive for SA Objectives 5, 7, 8, 9 and 21. Assessed positively are SA Objectives 2, 3, 6, 11, 14, 17, 18, 19, 20, 22 and 23.
- 5.5.2 The Local Character principle recognises that there are vacant sites and buildings in the AAP area. It is assessed as strongly positive for SA Objective 5 on previously developed land as it identifies opportunities for redevelopment, and overall encourages the reuse of existing buildings.
- 5.5.3 SA Objective 9 on biodiversity is assessed as strongly positive because formal parks, playing fields or other areas of significant open space - often within schools or other locally accessible facilities, and green spaces along road, rail, river and canal corridors; are recognised for their environmental and quality of life benefits. The objective aims to protect and enhance green space where appropriate by the AAP, with schemes to maximise access to these green spaces. This principle will protect biodiversity and habitats in the AAP area and could improve the water quality of the River Rea and the AAP area's canals (SA Objective 11). The River Rea and Birmingham and Warwick Junction Canal in particular are noted as important assets for the area in terms of amenity and leisure value (SA Objective 7). Opportunities to create new GI are also encouraged.
- 5.5.4 The multifunctional nature of many GI features could allow them to be used for sports and active recreation (SA Objective 23). GI has the potential to improve the AAP areas health, and provide improved recreational facilities (SA Objective 20).
- 5.5.5 Enhancements to green spaces within the AAP area, as well as increases in the number of trees could lead to a reduction in carbon dioxide (SA Objective 2) and could help reduce the impact of climate change (SA Objective 6). Green spaces have a cooling effect and improve infiltration rates by providing additional green areas for drainage and attenuation of water. Trees contribute to carbon capture. Protection of, and an increase in, GI features are likely to improve the aesthetics of the AAP area and could increase resident's satisfaction with their neighbourhood (SA Objective 17).

- 5.5.6 The canals and the section of River Rea running through the area are part of the AAP area's historical heritage. The principle is assessed as strongly positive for SA Objective 8 on the historic environment as it aims to recognise and enhance these features, as well as the other historically significant buildings. The historic environment will also be used to influence the design of new development. The principle mandates that all new development should reflect the local context, as well as protect the local distinctiveness of the area and townscape. New development design should be in line with adopted and emerging citywide guidance and Government guidance, and should be inclusive, accessible, adaptable, sustainable and good value (SA Objective 14). This could reduce household poverty, in line with SA Objective 19.
- 5.5.7 The mention of accessible, good value housing has led to the assessment of the priority to be positive for SA Objective 22 on housing.
- 5.5.8 The proposals aim to maximise the access to open space, as well as improve the connections between the City Centre GI network to the west and the River Cole linear open space to the east. These linkages help biodiversity, but also improve the accessibility of green space (SA Objective 18).
- 5.5.9 The principle promotes community safety to complement West Midlands Police's Priority Areas project for long-term police and partnership action. The principle is assessed strongly positive against SA Objective 21 on crime as the design of new public realm, including green space is encouraged to be accessible, safe and overlooked. Both the community safety initiatives and natural surveillance schemes could help reduce crime and the fear of crime in the AAP area. Existing spaces are to be improved through this principle, in order to promote walking and outdoor activity (SA Objective 18). Through making walking routes safer, more legible and overlooked, it could encourage people to use them, and lead to the beginnings of a modal shift in transport patterns (SA Objective 3).

5.6 Sustainability (Development Principle 4)

Principle 4: Sustainability

To support proposals which contribute to the City's sustainability targets and which:

- Demonstrate best practice in sustainable development, including:

- Sustainable construction and design of the built environment with □ new residential properties aiming to be carbon neutral and non- industrial buildings meeting the specified BREEAM standards and energy efficiency measures targeting existing buildings.
- Energy efficiency and low carbon generation. □
- Waste and water management through measures to secure the improvement of water quality and the introduction of Sustainable Drainage Solutions.
- Benefit the natural environment through measures to enhance the wide range of green and blue infrastructure across the area including canals and the River Rea.
- Promote a sustainable transport network.
- Reflect the need to manage the effects of climate change.
- Recognise and provide for emerging digital applications including promoting the principles set out by Birmingham’s Smart City Commission.

- 5.6.1 The development principle concerned with Sustainability is assessed as strongly positive for SA Objectives 2 and 6. It is also assessed positively against SA Objectives 1, 4, 7, 9, 14 and 15.
- 5.6.2 The principle is assessed as strongly positive for SA Objective 2 on energy use as the development principle states that new residential development should aim to be carbon neutral, incorporating measures to reduce energy and water consumption. The principle aims to reduce carbon emissions in line with the City Council's 60% reduction target by 2027¹².
- 5.6.3 The principle performs strongly positive for SA Objective 6 as it drives development to make the most efficient use of land and buildings, in line with the City’s overall development strategy. Non-residential buildings over 1000 square metres should meet the ‘Excellent’ Building Research Establishment Environmental Assessment Methods (BREEAM) standards. Additionally, Combined Heat and Power (CHP) is in use in the City Centre, and the proximity of the Tyseley Energy Recovery Facility presents the opportunity to introduce such a system within Bordesley Park.

¹² Birmingham’s Green Commission Building a Green City (2013)

- 5.6.4 The principle is assessed as positive for SA Objective 1 for natural resources as it promotes sustainable construction methods and the meeting of relevant national standards.
- 5.6.5 Although BREEAM is mandatory, the remainder of the proposals allow freedom to businesses and could lead to businesses becoming increasingly sustainable. The principle is assessed as positive for SA Objective 14 on corporate social and environmental responsibility as it encourages sustainable methods and an awareness of climate change issues.
- 5.6.6 SA Objective 4 on encouraging waste minimisation is assessed as positive as the area includes a number of waste management facilities serving a local and regional catchment. The principle highlights the City's recognition of the importance of such facilities, and supports such provision alongside measures to minimise waste production. Using waste as a resource could improve efficiency and reduce the overall amount of waste being produced (SA Objective 4).
- 5.6.7 SA Objective 15 on economic growth is assessed as positive as the sustainability principle aims to use waste as a resource and the provision of managed waste facilities is likely to generate employment. Support for sustainable methods could create a new thriving and vibrant green economy.
- 5.6.8 The principle encourages new development to demonstrate measures to mitigate against flood risk and to ensure that they do not increase flood risk elsewhere. Mitigation methods such as SuDS are proposed to reduce surface water flood risk, improve water quality, and contribute to enhanced green infrastructure and biodiversity (SA Objectives 6, 7 and 9).

6 SA of the Key Opportunities for Change Areas

6.1 Key Opportunities for Change Areas

6.1.1 Within Bordesley Park, five areas have been identified as key opportunities for change (see **Table 5.1**). BCC consider that these areas offer the greatest potential for change, where new development or new uses can make the biggest impact on the area and best deliver the aims of the plan. Drawing on the work undertaken to date, through the issues, ideas and opportunities outlined and consulted upon in the Options and Preferred Options Reports, a set of land use proposals have been drawn up for each of these areas. These proposals are assessed using the methodology in **Chapter 2** and the resulting high-level matrix is shown in **Table 6.1**.

Table 6.1: Assessment matrix of key opportunities for change areas

SA Objective		Key Opportunity for Change Areas				
		1	2	3	4	5
		Wheels	Cherry-wood	Adderley	Alum Rock	Coventry Rd
1	Natural resources	0	0	0	0	0
2	Energy use	+	+	0	0	+
3	Sustainable transport	+	+	++	+/-	++
4	Waste minimisation	0	0	0	0	0
5	Previously developed land	+	+	+	++	++
6	Climate change	0	0	0	0	0
7	Green Infrastructure	+	+/-	+	0	+
8	Historic environment	+	+	+	+	+
9	Biodiversity	0	0	+	0	+
10	Air	+	+	+	+/-	+
11	Water	0	0	0	0	0
12	Land contamination	++	+	0	0	0
13	Noise	+	+	+	+/-	+
14	Corporate social and environmental responsibility	0	0	0	0	0
15	Economic growth	++	+/-	+	++	++

SA Objective		Key Opportunity for Change Areas				
		1	2	3	4	5
		Wheels	Cherry-wood	Adderley	Alum Rock	Coventry Rd
16	Investment	++	+	++	+	+
17	Community influence	+	+	+	0	+
18	Social inclusion	+	+	+	+	+
19	Poverty and disadvantage	+	+	+	0	0
20	Health	+	+	++	0	+
21	Community safety	+	0	0	0	0
22	Affordable housing	+/-	++	+	+/-	++
23	Recreational activities	+/-	+	+	0	+

6.2 The Wheels site and Environs (Change Area 1)

Key Opportunity for Change 1: The Wheels site and Environs	
<p>The Wheels site and Environs will become an attractive location for high quality employment uses.</p> <p>This will include: □</p> <ul style="list-style-type: none"> a. Promotion of new industrial and employment opportunities including the comprehensive and coordinated development of the Wheels site to deliver up to 1 million sq ft of floor space and up to 3,000 jobs and training opportunities. The Council will work with existing occupiers regarding relocation opportunities. b. Redevelopment and enhancement of existing industrial areas for employment led mixed uses north of Bordesley Green through partnership working with occupiers regarding improvements to property and wider development opportunities. c. Opportunities for new and improved facilities at Bordesley Green Girls' School including the potential extension of the school site. d. New and improved access arrangements with improved access into the Wheels site (and the development of a spine road through the site) to serve the industrial development. 	

- e. High quality public transport including the promotion of rapid transit proposals (Metro) along Bordesley Green and improved access to local rail and bus services.
- f. Improvements to the wider environment including Bordesley Green local centre linked to the development of rapid transit proposals.

- 6.2.1 The first key opportunity for change area is assessed as strongly positive for SA Objectives 12, 15 and 16. The proposals are assessed as positive for SA Objectives 2, 3, 5, 7, 8, 10, 13, 17, 18, 19, 20 and 21. The assessment is uncertain for SA Objectives 22 and 23.
- 6.2.2 There is a strong positive assessment for SA Objective 12 on land contamination. The Wheels site is known to be contaminated due to having previously accommodated brick pits and landfill; development on the site will require remediation and consequently the proposals will reduce and mitigate land contamination issues in the AAP area.
- 6.2.3 The Wheels site is assessed as strongly positive for SA Objective 15 on economic growth because of the opportunities to promote new industrial and employment opportunities (B1(b) & (c), B2 & B8) on the site. The proposal responds to the need to increase the supply of high quality employment land identified in the Employment Land Review 2012 (BCC) and the evidence base for the BDP.
- 6.2.4 The Asset Accelerator programme put forward in the Wheels site delivery section of the AAP addresses reclamation, provision of infrastructure and financial modelling, as well as the potential relocation requirements of existing occupiers. This is expected to mitigate any negative effects sustained as a result of the proposed development.
- 6.2.5 There is the potential for the expansion of existing businesses and the ability for additional businesses to relocate into the area. This includes encouraging mixed-use development at Bordesley Green Local Centre and improvements to this area in line with emerging rapid transit proposals. Redevelopment of this area would include provision of new employment and commercial uses between the Wheels site and Bordesley Green Road to the west of the local centre. This maximises the potential to provide employment and training opportunities for the local community in an area of high unemployment (SA Objective 18). This strong promotion of businesses and the economy, as well as improved access could encourage economic growth within the area (SA Objective 15).

- 6.2.6 The proposals score strongly positive against SA Objective 16 on investment in future prosperity due to the aim to enhance education facilities within the Wheels site by potentially expanding the Bordesley Green Girls School and providing additional space for teaching and learning. Education/training facilities associated with the employment uses on the core site will also be supported, and there is potential for links to be developed with other universities and training establishments. This could promote investment in the future and encourage learning and skills development.
- 6.2.7 The focus on economic growth and skills development also leads to a positive assessment for SA Objectives 18 and 19 on social inclusion and poverty respectively. Employment opportunities could improve social inclusion and ensure that nearby residents have easy and equitable access to facilities and services. Furthermore the focus on employment could reduce the amount of unemployed people in the area and could reduce the number living in poverty.
- 6.2.8 Introducing a rapid transit route along Bordesley Green to the south of the site will provide additional and more efficient public transportation. Making public transport quick and easy to use is likely to encourage people to use these more sustainable modes of transportation and reduce travel by private car. Improved pedestrian connections will be promoted, particularly to Adderley Park Railway Station, major bus routes and future rapid transit routes, as well as the City Centre (SA Objective 3).
- 6.2.9 Routing traffic to and from the site away from nearby residential streets is likely to improve the satisfaction of people with their neighbourhoods (SA Objective 17).
- 6.2.10 By promoting public transportation and introducing the rapid transit route, car use in the area may reduce. Consequently greenhouse gas emissions may reduce, and air quality in the vicinity could improve (SA Objectives 2 and 10).

- 6.2.11 The BDP Scoping Report¹³ advised that the principal source of noise pollution in the area is traffic. The Wheels site experiences much HGV traffic due to the surrounding industrial activities. There is also noise pollution generated at the Wheels site during race days at the Wheels Stock Car Stadium. Redevelopment of the site, improvements to access, implementation of the rapid transit route, relocation of some activities as well as addressing the environmental and amenity issues for residential and other sensitive uses adjoining industrial activities, could minimise noise pollution levels (SA Objective 13).
- 6.2.12 Enhancement of learning facilities could improve the educational attainment in the area (SA Objective 20). Improvements in the local economy, as well as reductions in unemployment and deprivation levels are all likely to improve the health of residents. Due to the presence of speed skating facilities at the Wheels site and the need to relocate the existing sporting activities, opportunities are provided for participation in physical activity (SA Objective 20).
- 6.2.13 The majority of the Wheels site and environs is currently developed but under-used. According to the Bordesley Park GI Report (2013) there are areas of trees and scrub around the track, which have been left undeveloped. New Development will support improvements to the local centre, and retain the existing trees or re-introduce trees as part of the landscaping for the site (SA Objective 5).
- 6.2.14 The Grand Union canal, located to the northwest of the Wheels site, is a Site of Local Importance to Nature Conservation (SLINC). The proposed landscaping strategy is designed to incorporate this important feature, which will reduce the likelihood of significant adverse effects to biodiversity. The Birmingham and Black Country BAP (2010) advises that canals represent a priority habitat for conserving biodiversity as identified within section 41 of the Natural Environment and Rural Communities Act 2006.

¹³ AMEC Environment & Infrastructure UK Limited (2012) Birmingham City Council Sustainability Appraisal of the Birmingham Plan: Scoping Report – Autumn 2012 Update

- 6.2.15 The indicative scheme for development suggests that the trees and shrub species that currently screen the tracks will be retained and enhanced as part of a landscaping strategy; this would be positive for GI (SA Objective 7). It also appears that the green corridor connection to the canal network to the northwest would not be cut off by development. The policy addresses the environmental issues faced by adjoining residents, this aspect, coupled with the general enhancement of the area, and improved accessibility may promote green spaces in the area.
- 6.2.16 Improving the rate of employment and increasing training and education in the area is likely to lead to a reduction in crime (SA Objectives 21 and 23). The Wheels site was originally opened in the 1970s, in part, to help provide a destination for recreation and positive community activities for disengaged youths. Today the Wheels site is used mostly for commercial motor racing and go karting with youth activities playing a more minor role (the probation service no longer has any involvement in the site). The range of activities operating from the site has expanded up to the present day. Where possible a loss of provision of these facilities should be avoided through relocation of facilities. A relocation study is currently being undertaken in order to determine the options for relocating the facilities currently onsite.
- 6.2.17 The option is assessed as uncertain for SA Objective 22 on housing. Housing along Bordesley Green Road may be incorporated into the proposed employment site, which could lead to the loss of some existing housing in the longer term. Major challenges are identified in securing the rehousing of the existing occupiers of residential properties on Bordesley Green Road. Alternatively, encouraging mixed-used development in Bordesley Green may improve local housing provision and/or quality.

6.3 Cherrywood Road Area (Change Area 2)

Key Opportunity for Change 2: Cherrywood Road

A new residential neighbourhood with improved community facilities and local environment will be created.

This will include:□

- a. New residential development at Cherrywood Road and Cherrywood Road/Humpage Road that addresses amenity issues and constraints presented by adjoining uses.
- b. Opportunities to review education needs within the area including the site issues of Al-Hijrah school.
- c. Improving the setting and amenity of the area by reviewing the concentration and operation of car repair and recycling uses to improve the amenity of existing housing and allow new residential development to take place including at Cherrywood Road/Denbigh Street.
- d. Improvements to Bordesley Green local centre through the promotion of new retail and community development and the promotion of a rapid transit route (Metro) along Bordesley Green.

- 6.3.1 Cherrywood Road is assessed as strongly positive for SA Objective 22 and positive for SA Objectives 2, 3, 5, 8, 10, 12, 13, 16, 17, 18, 19, 20 and 23. It is assessed as uncertain for SA Objectives 7 and 15.
- 6.3.2 The option proposes new residential development, with the scope for a wide range of housing types to meet the needs of the local area (SA Objective 23). Providing affordable housing could lead to a reduction in homeless families (SA Objective 19).
- 6.3.3 New housing will be built to meet building regulations, which helps meet SA Objective 3 on reducing energy use. In addition, the rapid transit route could encourage more people to take public transport and reduce car use and greenhouse gas emissions.
- 6.3.4 The Cherrywood Road area is assessed as strongly positive for SA Objective 22 on housing because the policy promotes new residential development within the site. These houses will provide a wide range of housing types to meet the needs of the local area. Implementing the CfSH procedures could also improve the longer term affordability of new housing due to improved energy efficiency and a consequent reduction in energy bills.

- 6.3.5 Two sites are considered for potential residential development should they become available (industrial land at Cherrywood Road and land at Humpage Road). Both sites are previously developed (SA Objective 5). Risk Assessments have been carried out by the Health and Safety Executive (HSE) under the Control of Major Accident Hazards (COMAH) Regulations. Issues identified are to be addressed further with the HSE to enable development to take place. The density of new development is unknown, but will reflect advice from the HSE.
- 6.3.6 The promotion of a rapid transit route near to the site will provide additional and more efficient public transportation. Currently over half of people who both live and work in the City use their car to get to work, only a fifth use the bus, and a tenth walk or work from home¹⁴. Improving public transport could increase the amount of people using these sustainable modes of transportation (SA Objective 3).
- 6.3.7 The proposal to introduce a rapid transport route near to the site could reduce the use of cars as people start to use more sustainable modes of transportation. The reduction in car use, coupled with increases in public transport could reduce congestion on Bordesley Green and therefore improve air quality in the vicinity (SA Objective 10).
- 6.3.8 Bordesley Green, which borders the area to the south, experiences high levels of noise pollution during the day. As part of the option, the rapid transit route proposed along this road could lead to a reduction in car use and noise pollution (SA Objective 13).
- 6.3.9 The proposals consider the future of the Al Hijrah School, which could lead to enhancements to the school, which would be investment in the learning and skills of the residents. There could consequently be improvements in educational attainment, although the future of the Al Hijrah School is to be further reviewed (SA Objective 16).

¹⁴ AMEC Environment & Infrastructure UK Limited (2012) Birmingham City Council Sustainability Appraisal of the Birmingham Plan: Scoping Report – Autumn 2012 Update

- 6.3.10 The policy proposes improvements to the local centre, including the scope for additional convenience retail and community/service provision. This could provide additional health services (SA Objectives 20 and 22). Proposals will be supported where they contribute to the vitality of the local centre, the promotion of a rapid transit route, and the safeguarding of historic buildings (SA Objective 8). These changes could provide additional access to general services and facilities (SA Objective 18) as well as specifically providing additional sports and leisure facilities (SA Objective 23). Other benefits to the local economy will be achieved through improved connectivity, which will be provided by the proposed rapid transit route.
- 6.3.11 Potential improvements to the local centre could enhance and support the local economy. The promotion of new employment land and economic development opportunities on the Wheels site will counter the loss of employment land in this area and enable the safeguarding of jobs (SA Objective 15).
- 6.3.12 The policy suggests improvements to the setting of existing residential areas, introducing complementary frontages, as well as reviewing the impact of large numbers of vehicle repair premises, which could enhance the quality of the built environment (SA Objective 8). The focus placed on housing provision is likely to reduce the proportion of people living in non-decent housing (SA Objective 20). Meeting the needs of the residents by providing a range of housing types, as well as improving the environment of the area could encourage people to stay within the area (SA Objective 17).
- 6.3.13 The Cherrywood Road Area is assessed as positive for SA Objective 12 on contamination as the proposals address the impact of the existing hazardous substances consents and recommend the involvement of the Health and Safety Executive. The Environment Agency maps suggest there was a significant waste pollution incident within the Cherrywood Road Area in 2002. In addition, the site occupied by AkzoNobel Packaging Coatings Ltd is designated as a Hazardous Installation, and there are industrial units which may be contaminated from their previous manufacturing use. For development to take place on these sites remediation will be needed, therefore development will reduce the amount of land contamination.

- 6.3.14 This key opportunity for change was assessed as uncertain for SA Objective 7 on GI. There are two parks within the Cherrywood Road area - Denbigh Street, which is 0.4ha, and Priory Gate Way, which is 0.5ha, meaning new housing in the area will have some green areas nearby. Increasing the population of Bordesley Park will mean more people are likely to use the existing green and open spaces. The average open space in Bordesley Park AAP per 1,000 population is 1.88ha, below the 2ha target. New housing will reduce this ratio unless new open and green space is created in the area.

6.4 Adderley Park (Change Area 3)

Key Opportunity for Change 3: Adderley Park

An improved neighbourhood will be created, responding to opportunities for employment and community uses focussed around Adderley Park along with the improvement of the environment - particularly for existing housing.

This will include:

- a. The promotion of a wider mix of uses including for employment, education and community (but not residential) along Adderley Road and to the south of Arden Road.
- b. Creating active and attractive frontages to the neighbourhood along Adderley and Arden Roads, promoting quality design and reviewing existing scrap and vehicle repair premises.
- c. Improving the environment of Adderley Primary School.
- d. Improving traffic management and junction arrangements including access into the Wheels site and EMR.
- e. Improving the quality and promoting greater use of Adderley Park and the Birmingham and Warwick Junction Canal.

- 6.4.1 The Adderley Park area is assessed as strongly positive for SA Objectives 3, 16 and 20 and positive for SA Objectives 5, 7, 8, 9, 10, 13, 15, 17, 18, 19, 22 and 23. There are no negative or uncertain assessments.
- 6.4.2 The policy proposes traffic management, improved access and changes to junctions. This could reduce the number of people and children harmed in road accidents (SA Objective 3). There is a possibility of improvements to the pedestrian environment at the junction of Adderley Road and Arden Road, which could encourage more people to walk to local amenities.
- 6.4.3 Adderley Primary School experiences high levels of HGV traffic on Landor Street/Arden Road, which may lead to high levels of noise pollution. Noise pollution could be reduced by the improvements to traffic management and junctions in the area, reducing congestion and improving air quality (SA Objective 10). Traffic management improvements may also improve noise levels (SA Objective 13).

- 6.4.4 Such reductions in noise pollution levels around Adderley Primary School could help students perform better. There are proposals to promote training facilities and education facilities. These are heavily supported and could improve learning and skills development (SA Objective 16). In the longer term the potential for relocation will be considered. This could improve the quality of educational facilities in the area and improve educational attainment (SA Objectives 16 and 20).
- 6.4.5 Adderley Park is assessed as positive for SA Objective 5 on previously developed land as the sites identified for development are brownfield sites.
- 6.4.6 Adderley Park is located near to the Birmingham and Warwick Junction Canal, which is also a public right of way and acts as a GI asset. The park is highlighted for enhancement, through improvements to the quality and use of the park as a recreational and green asset for the community. These include measures such as waymarked footpaths and outdoor fitness equipment to encourage exercise, which could be beneficial for the health of the neighbourhood (SA Objective 23).
- 6.4.7 Adderley Park key opportunity for change area identifies the potential for growth in employment, education and community uses (for example space for start-up businesses or social enterprises) along Arden Road leading to a positive assessment of SA Objective 15 on economic growth. The option aims to promote a mix of uses in the area. This could contribute towards a strong and stable economy, which benefits local residents (SA Objective 18).
- 6.4.8 The focus on creation of employment and training space could reduce the amount of unemployed people in the area. This has been assessed as positive for SA Objective 19 on poverty and disadvantage as it could reduce the number living in poverty.
- 6.4.9 The description of the neighbourhood refers to Adderley Park as a mixed-use area. The scope to offer a wider mix of uses along Adderley Road and to the south of Arden Road encourages employment, training, education, community and potentially leisure use within the area. Promoting a more diverse mix of uses within the neighbourhood could ensure easy and equitable access to services and opportunities (SA Objective 18). The proposals also strongly promote new community facilities in the neighbourhood (SA Objective 17).

- 6.4.10 Adderley Park is assessed as positive for SA Objective 8 on the historic environment. The Grade II listed building: Church of St Saviour is located next to the Adderley Park area. There is unlikely to be any effect on the church as it is screened from the view of potential development by the houses along Ash Road. Improvements to the environment of the park could enhance the historic building's setting.
- 6.4.11 The Adderley Park key opportunity area is assessed as positive for SA Objective 7 on GI as it proposes to contribute to the overall uplift of the environment, whilst further resist provisions that may have a negative impact on the local environment (scrap yards, car breakers, etc.). Improvements to Adderley Park as a recreational and green asset for the area will be supported (see paragraph 6.4.6) and will encourage exercise and enable healthy active lifestyles (SA Objectives 9 and 20).

6.5 Alum Rock Road (Change Area 4)

Key Opportunity for Change 4: Alum Rock Road	
An improved local centre will be secured through investment and development within the existing centre and its growth to the east.	
This will include:□	
a.	Maximising development opportunities and use of space within the existing centre.
b.	Expansion of the centre to the east between Langton Road and Naseby Road.
c.	Provision of additional off road parking and loading facilities at locations along the centre.
d.	Improvement of the public realm and environment.

- 6.5.1 The fourth key opportunity for change area, Alum Rock Road, is assessed as strongly positive for SA Objectives 5 and 15 and positive for SA Objectives 8, 16 and 18. There is uncertainty associated with SA Objectives 3, 10, 13 and 22.

- 6.5.2 Due to the land constraints the AAP is focused on utilising existing space efficiently. There is a strong positive assessment of the key opportunity for change against SA Objective 5 on previously developed land as the former Leyland Club, The Crown Buildings and the former Tilt Hammer Public House are proposed for improvement and redevelopment. The wider community use of Saltley Methodist Church and the use of the upper floors of existing retail premises will be supported, particularly those which will complement the centre (SA Objective 15).
- 6.5.3 The option is assessed as positive for historic environment (SA Objective 8) because the improvement of existing buildings is encouraged. The historic character of Saltley Methodist Church is to be safeguarded, which helps preserve, and broaden access to, the area's historic environment. In addition, the character of the built environment is enhanced by improvements to the setting of gateways and the public realm throughout the area.
- 6.5.4 The assessment is strongly positive for SA Objective 15 on economic growth as there is a strong focus on the economy and supporting the local centre. The neighbourhood policy proposes potential expansions of the centre (within the centre boundary and to the east), supporting the provision of new facilities. Enhancement of the local centre is likely to lead to a vibrant and thriving local economy due to demand for units being high. The Shopping and Local Centres SPD (2012) sets out proposals for the expansion of the local centre to the east, and this also gained support from local residents and businesses. Increases in the vitality of the local centre could increase employment opportunities as well as increase access to services, facilities and opportunities (SA Objective 18).
- 6.5.5 The opportunities within the area include the expansion of St. Saviour's School, which increases the accessibility of the school to all (SA Objective 16). Enhancements to education facilities and improvements to the access of these facilities represent investment in learning and skills development.
- 6.5.6 The focus of development on the Alum Rock Road area is on enhancing commercial floorspace in the area. Some new housing is anticipated and some housing is anticipated to be lost as a result of the expansion of the centre to the east, with a consequent uncertain effect for SA Objective 22. Any loss of housing could be mitigated by development of alternative appropriate housing nearby and consultation with any residents who may be displaced.
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- 6.5.7 There is uncertainty in relation to SA Objectives 3, 10 and 13 due to the potential consequence of increasing parking facilities. Development is to take place in the local centre, which benefits from existing public transport infrastructure. It is stated that any opportunity to provide off-road parking and loading, in association with new development or otherwise, will be of benefit to the centre. However, there is the potential that increasing parking facilities could lead to an increase in road traffic and conflict with the area-wide objective to reduce car use and congestion.
- 6.5.8 Increased car parking facilities may make car travel a more attractive form of transport to access the local centre, whereas if parking was restricted, visitors may be more likely to access the centre by sustainable modes of transport. An increase in car parking may make the local centre more accessible, resulting in a need to balance the potential impacts of increased car travel with accessibility of the local centre (SA Objective 3). It is noted that the APP seeks to ensure that measures to support access by sustainable modes, including walking, will be 'a priority'.
- 6.5.9 There is a strong focus on providing additional parking areas within the neighbourhood policy, leading to uncertainty when assessing SA Objectives 10 and 13 on air quality and noise pollution respectively. Additional parking could either encourage more people to drive and cause a deterioration of air quality, or reduce congestion, improve traffic flow and air quality as well as reduce noise pollution (SA Objective 13). There is a proposal to tackle traffic congestion and as Alum Rock Road sees much congestion in the afternoon, increased parking facilities may improve air quality. This uncertain effect should be monitored.

6.6 Coventry Road Local Centre (Change Area 5)

Key Opportunity for Change 5: Coventry Road Local Centre

An improved local centre will be secured with investment within the existing centre and the promotion of new development and creation of a gateway at its western end.

This will include:

- a. New development to define the gateway at the western end of the centre.
- b. Creating a high quality business and enterprise environment in the area to the south of Coventry Road.
- c. Enhancing the provision of retail and other facilities within the centre.
- d. Addressing local accessibility and car parking issues.
- e. Improvement of the public realm and environment.
- f. Support for the extension of the Metro route through the northern edge of the centre.

- 6.6.1 The final key opportunity for change, Coventry Road Local Centre (also known as 'Small Heath') is assessed as strongly positive for SA Objectives 3, 5, 15 and 22 and positive for SA Objectives 2, 7, 8, 9, 10, 13, 16, 17, 18, 20 and 23. The remaining SA Objectives are assessed as having neutral or no effect.
- 6.6.2 There are proposals for mixed-use development, including housing on part of the former tram/bus depot and at the corner of Golden Hillock Road and Coventry Road/Dart Street. The additional housing could address shortages in the existing housing stock (SA Objective 22) through providing a range of types and tenures as well as affordable housing.
- 6.6.3 There are a number of opportunities at the western edge of the centre, which are to be developed so as to maximise the benefits of the proposed Metro route. Consideration is to be given to the positioning of stops to maximise the access benefits for the centre. This is likely to have a positive effect on the areas existing transport infrastructure (SA Objective 3).

- 6.6.4 The policy suggests improvements to the public realm and pedestrian environment, which could encourage people to walk more. Landscaping and planting enhancements will enhance pedestrian linkages to the City Centre, and contribute positively to the areas GI network (SA Objective 7). In addition, the construction of the Bordesley Chords is likely to have a positive impact on public transport and benefit the Birmingham area generally, reducing car commutes into the city centre of Birmingham. Facilitating easy and convenient sustainable modes of transport could reduce car use (SA Objective 3), reduce congestion, improve air quality and reduce emissions (SA Objective 2 and 10). There could also be a reduction in noise pollution (SA Objective 13).
- 6.6.5 The neighbourhood policy suggests enhancing the provision of retail and other facilities to create a high quality business and enterprise environment. Opportunities have been identified at a number of sites along Coventry Road. Investment in existing buildings is to be encouraged to safeguard heritage, protecting the areas built and historic environment (SA Objective 8).
- 6.6.6 The policy seeks to enhance the provision of retail and other facilities, which is likely to improve the attractiveness and vitality of the local centre and enhance local employment opportunities. This could promote social inclusion and ensure equitable access to services, facilities and opportunities (SA Objective 18). General improvements to the setting, a reduction of congestion and additional parking is likely to attract more people to the centre and support a vibrant economy (SA Objective 15).
- 6.6.7 The site adjacent to 511 Coventry Road is likely to be used for education (SA Objective 16) where it would provide additional facilities and access to education and training. Or it could be used for community uses and lead to a positive assessment for SA Objective 17.
- 6.6.8 The option is assessed as positive for SA Objective 5 on previously developed land as it seeks to redevelop the derelict premises at 670-672 Coventry Road.

- 6.6.9 There are plans to improve the environment including Small Heath Park and Sara Park, which is assessed positively against SA Objective 7 on GI. Small Heath Park has assorted habitats including grassland, woodland and a pond. The variety of habitats and the size of the park means there is a myriad of biodiversity features within Small Heath Park. The neighbourhood policy aims to improve the park and could positively impact biodiversity (SA Objective 9). There is also a proposal to complete general environmental works, which could go towards increasing biodiversity within the area.
- 6.6.10 Proposals in the AAP aim to provide increased services and improve Small Heath Park, which could facilitate opportunities to participate in diverse recreational activities and improve health (SA Objectives 20 and 23).

7 SA of the Neighbourhoods

7.1 Neighbourhoods

7.1.1 For the purposes of the AAP the area is split into six neighbourhoods to enable a number of issues and potential opportunities to be considered in more detail (see **Table 5.1**). The Bordesley Park AAP Pre-submission Report identifies a number of opportunities within each neighbourhood, which will be taken forward through the AAP. These opportunities are assessed using the methodology described in **Chapter 2**. The high level assessment can be seen in matrix format in **Table 7.1**.

Table 7.1: Assessment matrix of the six neighbourhoods

SA Objective		Neighbourhood					
		1	2	3	4	5	6
		Vauxhall	Washwood Heath	Bordesley Village	Bordesley Green	Small Heath (North)	Small Heath (South)
1	Natural resources	0	0	0	0	0	0
2	Energy use	+	++	+	+	+	++
3	Sustainable transport	++	+/-	++	++	+	++
4	Waste minimisation	0	0	0	0	0	0
5	Previously developed land	+	+	+	+	+	++
6	Climate change	+	0	+	0	+	+
7	Green Infrastructure	++	++	++	+	++	++
8	Historic environment	0	+/-	+	0	+/-	0
9	Biodiversity	+	+	++	+	+	++
10	Air	+/-	+	+	+	+	+
11	Water	+	+	+	0	0	0
12	Land contamination	+	+	0	++	0	0
13	Noise	+/-	+	+	+	+	+
14	Corporate social and environmental responsibility	0	0	0	0	0	0
15	Economic growth	+	+	+	++	+	++
16	Investment	0	+	0	+	+	+
17	Community influence	0	+	0	0	+	+
18	Social inclusion	0	+	+	+	+	+

SA Objective		Neighbourhood					
		1	2	3	4	5	6
		Vauxhall	Washwood Heath	Bordesley Village	Bordesley Green	Small Heath (North)	Small Heath (South)
19	Poverty and disadvantage	0	0	+	0	0	0
20	Health	0	0	0	+/-	+	+
21	Community safety	0	0	0	0	0	0
22	Affordable housing	0	+	+	+	+	0
23	Recreational activities	+	+/-	+	+/-	+	+

7.1.2 In the case of each Neighbourhood the following six sections have reproduced the text relating to 'vision' from the AAP; please see the AAP for full text relating to opportunities for each of the neighbourhoods since text reproduced below has been abbreviated. The assessment findings reflect consideration of the vision and objectives for each neighbourhood alongside the associated policies.

7.2 Vauxhall (Neighbourhood 1)

Neighbourhood Vision: Vauxhall
Vauxhall has the potential to be a thriving industrial area and proposals for the growth of existing and the introduction of new businesses will be supported. This will include working with existing and potential occupiers, major business on Landor Street and also with HS2 Ltd regarding the impact of their proposals through the area. Measures will be introduced to improve access into the area and enhance the general environment including addressing the impact of car breakers and similar uses and maximising opportunities and local benefits offered by the area's canals, river and the wider green infrastructure network.

7.2.1 The options for Vauxhall are assessed as strongly positive for SA Objectives 3 and 7 and positive for SA Objectives 2, 5, 9, 11, 12, 15 and 23. The assessment is uncertain for SA Objectives 6, 10 and 13.

- 7.2.2 The assessment is strongly positive for SA Objective 3 on sustainable transport because of the proposals to improve Vauxhall, the environment and accessibility of Duddeston Rail Station, and the Birmingham and Warwick Junction Canal (the enhancement of the canal towpath, improved pedestrian access, lighting to improve safety, landscaping and opening the canal up to public view where it is crossed by roads). The development of access and setting of these sustainable methods of transportation could encourage more people to walk (SA Objective 23) and take the train.
- 7.2.3 The Vauxhall options are assessed as positive for SA Objective 7 on GI as they provide improvements to the general environment as well as specific improvements to the canal area. The canal network is an important GI feature as it provides multifunctionality between human use, and an ecological network which links separate habitats. It is also proposed to improve the general quality of the GI network across the neighbourhood, supporting the use of green walls/roofs to promote biodiversity (SA Objective 9).
- 7.2.4 The River Rea is currently classified as having 'moderate' ecological quality (Environment Agency 2015). The proposals aim to work with the Environment Agency to reduce the risks of flooding and identify opportunities for improvements to its course through the area. Where possible the River Rea and the surrounding environment will be enhanced, through the improvement of the channel bed and banks and enhancement of marginal aquatic habitat. This could improve its water quality and satisfy SA Objective 11. It is proposed that new development should be set back from the River Rea through the creation of a blue corridor.
- 7.2.5 MAGIC (Natural England, 2015) show there are no areas or populations of biodiversity importance in the neighbourhood. However improvements to the general environment in the neighbourhood and particularly the focus on improving the Birmingham and Warwick Junction Canal could aid biodiversity (SA Objective 9) as canals are noted as a habitat type of principal importance for the purpose of conserving biodiversity within the Birmingham and Black Country 2010¹⁵ Biodiversity Action Plan (BAP).

¹⁵ <http://www.bbcwildlife.org.uk/sites/default/files/bbcbapfinal2010.pdf>

- 7.2.6 Focusing on expanding industry in this area is likely to improve the vitality of the local economy. Improvements to access could also support local businesses (SA Objective 15). The options include an aim to address the localised traffic congestion, which could speed up traffic and reduce the amount of emissions produced by slow moving vehicles (SA Objective 2). Currently there is much congestion due to Heavy Goods Vehicles (HGVs) along Landor Street. The option suggests a number of improvements that would enhance access to the area, in particular from the ring road at Landor Street and at Saltley Viaduct. This may reduce congestion within the neighbourhood, which could improve connectivity. However, the consolidation and expansion of industrial facilities within the area could mean further HGVs, increase in noise pollution (SA Objective 13) and a decrease in air quality (SA Objective 10).
- 7.2.7 The neighbourhood has been assessed as positive for SA Objective 12 on land contamination as Vauxhall is mainly industrial and could be contaminated. Vauxhall has experienced two significant pollution incidents, rated as category 2 incidents, which suggests the area has contamination potential. The neighbourhood policy aims to improve the general environment and so could go towards remediating the contamination.
- 7.2.8 The Vauxhall Opportunities mention the potential re-use of the locally listed, vacant, former Wagon Works building, which would conserve natural resources (SA Objective 5). In addition, the overview development principle on local character introduces initiatives to improve vacant and under-used buildings and sites, to bring them back into productive use.

- 7.2.9 The Opportunities are assessed as positive for SA Objective 6 on climate change due to the flood risk to the neighbourhood. The Environment Agency maps show there is a moderate (equivalent to a Flood Zone 2) flood warning/flood risk area covering part of the south east corner of the neighbourhood area. The flood risk area includes the EMR Recycling Facility, which is noted for potential expansion. The opportunity highlights that the potential managed growth of EMR's operations on Landor Street are to incorporate improved access arrangements and other measures to mitigate the impact of the facility on the surrounding environment. The EMR is identified as a compatible use with Flood Zone 2 in the Planning Practice Guidance¹⁶.

7.3 Washwood Heath (Neighbourhood 2)

Neighbourhood Vision: Washwood Heath

Washwood Heath has the potential to be an increasingly attractive residential neighbourhood and this will be delivered through the promotion of housing growth and relocation of non-conforming businesses. The area will be served by high quality community facilities including its parks, community buildings and schools and a vibrant local centre at Alum Rock Road. It will benefit from an improved range of employment opportunities including at Saltley Business Park and Crawford Street and enhanced accessibility through key junction improvements, and the development of new cycle routes.

- 7.3.1 The Washwood Heath neighbourhood policy is assessed as strongly positive for SA Objectives 2 and 7 and assessed as positive for SA Objectives 5, 9, 10, 11, 12, 13, 15, 16, 17, 18 and 22. The neighbourhood policy is assessed as uncertain for SA Objectives 3, 8 and 23.
- 7.3.2 The Opportunities within the Washwood Heath neighbourhood will explore methods to improve the energy efficiency of the housing stock. The promotion of housing growth within the area is highlighted, with redevelopment of the former clearance sites in the Clodeshall Road / Couchman Road area now underway (SA Objective 22).

¹⁶

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/575184/Table_3_-_Flood_risk_vulnerability_and_flood_zone_compatibility.pdf

- 7.3.3 Transportation measures, including a review of HGV movement in the area, will be undertaken; which will aim to reduce congestion through improvements to access and increases in parking. Reductions in congestion could speed up traffic and lead to a reduction in emissions (SA Objective 2). It could also improve air quality leading to a positive assessment against SA Objective 10.
- 7.3.4 The principle source of noise pollution within the AAP area is traffic noise (Birmingham City Council 2014). A reduction in congestion could also reduce noise pollution in Washwood Heath (SA Objective 13).
- 7.3.5 The Birmingham and Warwick Junction Canal is rated as having moderate ecological quality (Environment Agency 2013). Improvements to the general neighbourhood environment could improve the quality of the water (SA Objective 11). The options also aim to enhance Adderley Park, which would benefit biodiversity (SA Objective 9) and GI (SA Objective 7). In addition, the Opportunities suggest improving the quality of the GI network across the neighbourhood.
- 7.3.6 Adderley Park is a valuable asset for the area. Improvements to Adderley Park would also provide facilities for leisure/exercise, which would encourage and enable healthy active lifestyles (SA Objective 23).
- 7.3.7 The options are assessed as positive for SA Objective 5 on previously developed land as the redevelopment of the former clearance sites in the Clodeshall Road / Couchman Road area is now underway. Further opportunities are presented on sites at Adderley Road/St Saviour's Road/George Arthur Road, and to the rear of properties on Ralph Road.
- 7.3.8 There is support for new businesses, particularly at Saltley Business Park (located just outside the AAP area) as a core employment area. The neighbourhood vision promotes its refurbishment for industrial and employment uses, which could help provide a strong and stable economy (SA Objective 15).
- 7.3.9 The enhancement of community facilities is highlighted within Washwood Heath. The enhancement of Adderley Park as a valuable asset for the area could include facilities for community use and provide opportunities for community influence (SA Objective 17). Improvements to Alum Rock Road's shopping environment could improve access to local services and facilities (SA Objective 18).
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- 7.3.10 The options are assessed as positive for SA Objective 16 on investment in future prosperity as there is a focus on the enhancement of education provision within Washwood Heath. The options include a number of possibilities such as extending the site area of existing schools, and the improvement of the physical environment around individual school sites such as Parkfield School. Potential for educational uses on the former Smith and Nephew site on Alum Rock Road (just outside the AAP area) is also highlighted. Additionally, facilities for students, businesses and community users at St. Peter's College are proposed to be enhanced (SA Objective 16).
- 7.3.11 SA Objective 22 for affordable housing is assessed as positive because the options promote housing growth within the neighbourhood and encourages residential development at a number of locations. Furthermore, improvements to the residential stock and environment are supported.
- 7.3.12 The option is assessed as uncertain for SA Objective 8 on the historic environment as there are a number of listed buildings within the Washwood Heath neighbourhood including St. John's House and St. Saviour Church, which could be adversely affected by development. The policies support the enhancement of facilities at St. Peter's College, which is a Grade II listed building.
- 7.3.13 The proposals have been assessed as positive for SA Objective 12 land contamination, as Washwood Heath has experienced three significant pollution incidents (Environment Agency 2015), rated as category 2 incidents, which suggests the area has contamination potential. The neighbourhood policy aims to improve the general local environment, which could include addressing contamination issues on individual sites.
- 7.3.14 Washwood Heath is assessed as uncertain for access to recreational activities (SA Objective 23) as the future of the existing sports pitch on Cranby Street is uncertain, notwithstanding the short term use of the site as a likely plant storage location during HS2 construction. General improvements to Washwood Heath's environment, especially facilities for leisure/exercise, and more widely improving the quality of the GI network across the neighbourhood are likely to improve opportunities to participate in sporting activities. Improvements to the physical environment around individual school sites such as Parkfield School are also encouraged (SA Objective 7).
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- 7.3.15 The neighbourhood policy is assessed as uncertain for SA Objective 3, regarding sustainable transport. The proposals incorporate improved off-street parking to serve Alum Rock Local Centre. Birmingham City Council's (BCC) Annual Parking Report (2012) declares that parking policies have an influence on the level of car journeys and travel behaviour, with increased parking facilities leading to additional car journeys. The uncertain assessment against SA Objective 3 relates to the fact that any changes in car use are dependent on the behaviour of individuals. Whilst off-street parking may make car travel a more attractive option, Alum Rock Road has a number of bus stops, thus it is accessible by public transport. It will be important to consider proposals for additional car parks alongside wider-scale sustainable transportation policies.
- 7.3.16 The proposal supports better connectivity across the area through promoting sustainable transport methods. A waymarked cycle route between the City Centre and Stechford is proposed, which would minimise the need to travel by car. The cycle route would utilise quiet roads and include marked cycle lanes, shared pavements for pedestrians and cyclists, improvements to side road junctions, new and upgraded signalised crossings where routes cross main roads, and measures to reduce vehicle speeds (SA Objective 3).

7.4 Bordesley Village (Neighbourhood 3)

Neighbourhood Vision: Bordesley Village

Bordesley Village is an established residential area and will benefit from improved connectivity including pedestrian and public transport routes, and links to the City Centre across the ring road. Existing ring road junctions will be improved. Additional housing development will consolidate its residential nature, whilst commercial opportunities will be promoted along key routes and at major junctions. There are opportunities for improvements to the Bordesley Village local centre and to the areas parks, open spaces and canal network.

- 7.4.1 The options for Bordesley Village are assessed as strongly positive for SA Objectives 3, 7 and 9 and positive for SA Objectives 2, 5, 6, 8, 10, 11, 13, 15, 18, 19, 22 and 23. There are no negative or uncertain assessments for any SA Objectives.

- 7.4.2 Bordesley Village options are assessed as strongly positive for SA Objective 3 on sustainable transport, as there is a strong emphasis on sustainable modes of transportation. Improved pedestrian flow from the City Centre to the Bordesley Park area is supported, through measures to improve pedestrian access across the ring road and junctions, and by upgrading the canal bridge on Coventry Road. Public transport is incorporated through the rapid transit and bus priority measures, and by providing high quality walking links from residential and commercial areas to the new Metro route. Improving pedestrian and public transport facilities could encourage more people to use these sustainable methods of transportation and reduce the use of cars. In addition the proposals include reducing levels of congestion. Speeding up traffic flows could lead to reductions in emissions (SA Objective 2), improve air quality (SA Objective 10) and reduce noise pollution (SA Objective 13).
- 7.4.3 The proposals in this neighbourhood strongly support biodiversity and the expansion of GI (SA Objectives 7 and 9). Enhancements to the GI network across the neighbourhood are supported, in particular Kingston Hill Park and Garrison Lane Park as high quality areas of public open space with improved linkages with surrounding residential communities. Environmental improvements are proposed along the canal corridor such as enhancing pedestrian access, bridges, embankments and towpaths, which will increase its recreational and wildlife value. Landscaping to improve the green frontage of the ring road and general planting enhancements to the neighbourhood gateways are also likely to protect, restore and re-create local biodiversity.
- 7.4.4 Green spaces and waterways in an urban environment provide important GI assets (SA Objective 7). Improvements to green areas, and the introduction of new green spaces in the area such as planting at gateways, and enhancements to green frontages, could go towards helping the neighbourhood adapt to climate change (SA Objective 6). Trees, and green spaces help provide a cooling effect in urban areas and improve the infiltration rates, which could reduce the risk of flooding.

- 7.4.5 The proposals to support the recreational use and wildlife assets of the canal corridor, as well as general environmental improvements to the neighbourhood could lead to an improvement in the water quality of the canals (SA Objective 11). GI features are multifunctional and can support a range of uses. The improvements to GI assets, such as the canal, could aid opportunities for recreational activities (SA Objective 23).
- 7.4.6 Measures to enhance the area as an attractive residential neighbourhood have been proposed, which is likely to improve the satisfaction of people with their neighbourhoods (SA Objective 19). Further residential development is proposed on vacant or under-used sites along the canal corridor, for example at Lower Dartmouth Street (SA Objective 5). Additional housing should include the provision of affordable housing (SA Objective 22).
- 7.4.7 New development is encouraged along the frontage of junctions and the ring road. Improvements to the permeability of the Bordesley Village local centre are suggested and could support the local economy's vitality and viability (SA Objective 15). Improving connections and permeability through the introduction of pedestrian walkways and public transport provides equitable access to opportunities throughout the neighbourhood (SA Objective 18).
- 7.4.8 The proposals were assessed as positive for SA Objective 8 on the historic environment. The locally listed canal bridge on Coventry Road was identified as potentially being upgraded. There are other historic buildings within the neighbourhood such as the Grade II listed Garrison Centre and the locally listed Sportsman Pub, these are not explicitly mentioned within the neighbourhood proposals but principle 3: Local Character refers to the general protection of historic buildings.

7.5 Bordesley Green (Neighbourhood 4)

Neighbourhood Vision: Bordesley Green
The Bordesley Green neighbourhood will be the main focus for the AAP's employment and housing growth with new employment uses proposed on the Wheels site and new housing at Cherrywood Road which will be supported by the potential for enhancement of the Bordesley Green local centre. Enhanced pedestrian, vehicle and public transport movement, including Metro, will complement these transformational proposals.

- 7.5.1 Bordesley Green neighbourhood policy is assessed as strongly positive for SA Objectives 3, 12 and 15 and positive for SA Objectives 2, 5, 7, 9, 10, 13, 16, 18 and 22. They are assessed as uncertain for SA Objectives 20 and 23.
- 7.5.2 Bordesley Green is assessed as strongly positive for SA Objective 3 on sustainable transport as the proposals aim to improve public transport in the neighbourhood. The proposals support the introduction of a Rapid Transit Route along Cattell Road/Bordesley Green and plans to explore improvements to rail services, accessibility and the general environment of Adderley Park Railway Station. It is anticipated that works will be required at Cattell Road/Bordesley Green to accommodate the Metro. Improvements in public transport could lead to more people using sustainable modes of transportation. There is also a proposal to reduce congestion and improve road safety at the junction of Garrison Lane and Bordesley Green and at the junction of Bordesley Green with Bordesley Green Road/ Victoria Street. Reduced congestion and improved road safety could reduce road accidents and improve public access to services and facilities (SA Objective 20). Furthermore the Opportunities emphasise improvements to the accessibility of the canal and cycle network.
- 7.5.3 Improvements to the public transport system could encourage more people to use it. SA Objective 2, energy use, is assessed as positive. A reduction in car use is likely to lead to reduced emissions and improve the neighbourhood's air quality (SA Objective 10). Encouraging people onto public transport and out of their cars, as well as reducing congestion, could lead to improved traffic flow and a reduction in noise (SA Objective 13).
- 7.5.4 The Wheels site is categorised as contaminated land, as it is the former Adderley Park Brickworks Landfill Site. Development on the site will require remediation and consequently the proposals will reduce and mitigate land contamination issues in the AAP area, satisfying SA Objective 12 on land contamination.
- 7.5.5 Bordesley Green is assessed as strongly positive for SA Objective 15 since the transformational change at the Wheels site will create job opportunities and significantly enhance the existing restricted employment levels at the Wheels site.

- 7.5.6 Although not explicitly stated, development in the neighbourhood is likely to take place on previously developed land due to the lack of greenfield sites within the neighbourhood. Development on brownfield sites leads to a positive assessment against SA Objective 5 on previously developed land.
- 7.5.7 Improvements to the quality of the GI network across the neighbourhood are recommended, including promoting access to the canal and cycle network. This has led to the positive assessment of the proposals against SA Objectives 7 and 9.
- 7.5.8 Currently the education facilities in the neighbourhood are constrained by availability of space. The proposals explore opportunities for the Bordesley Green Girls School to extend and show investment in future prosperity (SA Objective 16). Extension of the local schools could lead to an increase in access to education facilities. In addition the support for employment facilities could lead to improvements in access to services and facilities (SA Objective 18).
- 7.5.9 There are proposals to extend the local schools where possible, which could increase educational attainment (SA Objective 20).
- 7.5.10 The proposals are assessed as uncertain against SA Objectives 20 and 23 due to the relocation of the existing activities on the Wheels site. This could reduce the diversity of recreational and sporting activities available both for those who take part in the activities and sports offered at the Wheels site and for those who enjoy spectating (SA Objective 23). This may have implications for health and wellbeing by reducing opportunities for recreation for both participants and spectators (SA Objective 20).
- 7.5.11 Residential development is proposed in the Cherrywood Road area. Additional housing could lead to the provision of more affordable housing (SA Objective 22).

7.6 Small Heath (North) (Neighbourhood 5)

Neighbourhood 5: Small Heath (North)

A range of measures will be promoted to improve the environment of Small Heath (North), including reuse of vacant or underutilised sites including a number for residential purposes, enhancements to shopping and community facilities such as Green Lane local centre and a number of local schools, and management of the

impact of the football ground. These will contribute to a more attractive neighbourhood.

- 7.6.1 The Small Heath (North) neighbourhood policy is assessed as strongly positive for SA Objective 7 and positive against SA Objectives 2, 3, 5, 6, 9, 10, 13, 15, 16, 17, 18, 20, 22, and 23. There is uncertainty regarding the assessment of SA Objective 8.
- 7.6.2 Small Heath (north) is assessed as strongly positive for SA Objective 7 on GI as there are plans to enhance existing open spaces within the area and improve the quality of the GI across the neighbourhood. The Henry Barber Recreation Ground, Green Lane Playing Fields and Digby Park are all examples of GI assets. Increasing and improving the GI within Small Heath (North) is likely to increase the amount of biodiversity in the neighbourhood (SA Objective 9). GI assets are multifunctional and can offer recreational facilities as well as provide habitats.
- 7.6.3 Another benefit of GI and retaining key green areas is the role these areas play in adapting to climate change (SA Objective 6).
- 7.6.4 The proposals aim to enhance the existing open spaces and sports facilities within the neighbourhood, including the Henry Barber Recreation Ground, Green Lane Playing Fields and Digby Park, potentially providing additional areas to take part in sport and other active recreation (SA Objective 20).
- 7.6.5 It is suggested that the proposed rapid transit route along Bordesley Green will require changes to traffic management, and potentially reconfiguration of uses on the Bordesley Green frontage. The location of the rapid transport route along the top of the neighbourhood could encourage people to use more sustainable modes of transportation (SA Objective 3) due to ease and proximity. There is also an emphasis on a reduction in congestion and improving traffic flow through traffic management measures and junction improvements. Measures will also be identified to address the parking and congestion issues surrounding St Andrews Stadium on match days for local residents and businesses. Increasing the speed of traffic is likely to reduce the amount of emissions (SA Objective 2) and could improve the air quality of the neighbourhood (SA Objective 10).

- 7.6.6 The focus on reducing congestion and improving road junctions is why the assessment for SA Objective 13 is positive. Improving traffic flow and reducing the amount of vehicles diverting onto residential roads could lead to a reduction in noise pollution.
- 7.6.7 Small Heath (North) was assessed as positive for SA Objective 15 on economic growth as the options promote the enhancement of the local centres as well as the vitality of St Andrew's Retail Park. It is also stated that the City Council will work with the football club as their aspirations develop. The focus on improving employment and business sites could encourage economic growth and lead to a strong and resilient local economy.
- 7.6.8 Increases in employment opportunities and additional provision of community facilities could increase the ability for people to access services and amenities. Improvements to Green Lane local centre could improve the accessibility and range of local services, thus making the neighbourhood more attractive for residents (SA Objective 18) and could aid participation (SA Objective 23). The neighbourhood is also near to the Heartlands Hospital and provides easy access to health facilities. Locating residential development within proximity to health services improves access to health facilities (SA Objective 20).
- 7.6.9 Small Heath (North) encourages the redevelopment of vacant sites and buildings including the former Emerald Club, land in Grove Cottage Road, and land at the corner of Green Lane and Victoria Street (SA Objective 5). There is support for community facilities including education and training uses, and places of worship, to meet the needs of the local community (SA Objective 17).
- 7.6.10 Residential development is proposed on Eversley Road, Hafton Grove, Talfourd Street and Wright Street. There are also opportunities for new housing at North Warwick Street, Regency Close, Carlton Road and the former Emerald Club on Green Lane. The National Express WM site on Bordesley Green is also highlighted as suitable for residential development should the land become available. Additional housing could lead to the provision of more affordable housing (SA Objective 22).

- 7.6.11 Opportunities include the potential for extension of the sites of Wyndcliffe, Somerville, Marlborough and Small Heath Schools. New facilities and an improvement in the environment surrounding the schools could aid the achievements of children and improve the educational attainment of the residents within the neighbourhood (SA Objective 16).
- 7.6.12 There are five listed buildings within the neighbourhood: 147, 149 and 155 Green Lane, the Vicarage as well as the former Small Heath Public Library and Baths. Development and improvements to the areas surrounding these historic buildings could harm these either directly or indirectly if the design and setting of new development does not consider the historic environment. The proposals are assessed as uncertain for SA Objective 8.

7.7 Small Heath (South) (Neighbourhood 6)

Neighbourhood 5: Small Heath (South)

The Small Heath (South) neighbourhood provides a mixed residential offer, shopping and community uses at Coventry Road Local Centre, a range of employment uses, and open spaces including Small Heath Park. The area benefits from access to key transport corridors and proximity to the City Centre and these will be maximised through the improvement of a range of transport facilities including SPRINT, pedestrian and cycle routes and improvements to the general environment.

- 7.7.1 The Small Heath (South) neighbourhood policy is assessed as performing strongly positive for SA Objectives 2, 3, 5, 7, 9 and 15. The proposals are assessed as positive for SA Objectives 6, 10, 13, 16, 17, 18, 20 and 23.
- 7.7.2 The Small Heath (South) options are assessed as strongly positive for SA Objective 3 as they support improvements to public transport. They aim to enhance links to the City Centre through improving bus routes as well as introducing a rapid transit (Sprint) route along the A45.
- 7.7.3 Improvements are proposed to pedestrian routes and linkages across the area, particularly across Coventry Road and across Small Heath Highway at Poets Corner to Small Heath Rail Station. Focus is placed on improved cycle and walking linkages to the River Cole linear open space and the canal. This could lead to more people using public transport and reducing car use.

- 7.7.4 Improvements to public transport and walking could lead to reductions in emissions due to a reduction in the use of cars, improvements to air quality (SA Objective 10) and also reduce the noise pollution caused by vehicles on the road (SA Objective 13). In addition there are proposals to explore the potential for Combined Heat and Power (CHP) in the area, which could also reduce emissions (SA Objective 2).
- 7.7.5 The neighbourhood policy aims to enhance Small Heath Park. The Opportunities also aim to enhance Sara Park. These, together with the protection and enhancement of green areas, has led to a strong positive assessment for SA Objective 9 on biodiversity. The Grand Union Canal and the Ackers is also identified for improvement and is a priority habitat for conserving biodiversity as identified within Section 41 of the Natural Environment and Rural Communities Act 2006 (BAP 2010).
- 7.7.6 The proposals explore the potential to improve linkages to the River Cole Linear Open Space, which is a Country Park and an excellent GI asset. The plan also aims to improve linkages to the Grand Union Canal, Small Heath Park and Sara Park, as well as pedestrian linkages across the area. Improved green and blue corridors link fragmented habitats and provide a network for biodiversity and provide a strong positive assessment for SA Objective 7 on GI.
- 7.7.7 The proposals to improve pedestrian linkages and the existing green areas within the neighbourhood such as Small Heath Park and Sara Park provide and create additional access to recreation opportunities (SA Objective 23).
- 7.7.8 Improvements to the general environment could include the planting of trees which help cooling in urban environments. Enhancements to the existing green areas of Small Heath (south) could also reduce the impact of climate change and help reduce the risk of flooding through improving infiltration rates (SA Objective 6).
- 7.7.9 The proposals aim to support the vitality and viability of the local centre of Small Heath. The focus on the opportunities for growth and regeneration as well as enhancing the centres niche role could facilitate a strong and stable local economy (SA Objective 15). This is reinforced by the support of Small Heath local centre, the Small Heath Business Park and Sapcote Trading Estate (SA Objective 17). This could increase the number of community networks.

- 7.7.10 The Small Heath (South) Opportunities aim to make the Small Heath Business Park more attractive to potential occupiers and will support the occupation of vacant units. Similarly, the adjacent Sapcote Trading Estate presents opportunities for investment and refurbishment (SA Objective 5), as well as utilising vacant sites to transform the gateway to the Small Heath local centre. Making the area more legible and attractive, as well as promoting mixed-use opportunities within the neighbourhood could have the additional benefit of easy access to facilities and amenities (SA Objective 18).
- 7.7.11 The neighbourhood is fairly close to Heartlands Hospital and residents in this area will have access to health facilities. In addition the neighbourhood includes parks and other green spaces which will be enhanced and provide access to areas where people could take part in sport or active recreation (SA Objective 20).
- 7.7.12 The requirements of the local schools are considered and supported in terms of their site area, improved facilities and the quality of the surrounding environment. Local schools include Regent's Park, Holy Trinity and Holy Family. There are potential opportunities for site expansion as well as improved facilities. The consideration of schools could lead to improved educational attainment in the neighbourhood (SA Objective 16).

8 Significant effects and mitigation

8.1 Significant effects, mitigation and uncertainty

8.1.1 This chapter considers those uncertain effects that have been identified during the assessment process. Where possible, mitigation has been prescribed. In cases where uncertainty prevails, to recognise the fact that some uncertainty might be positive, a series of recommendations to enhance positive assessment findings have been presented in **Chapter 9**. Monitoring recommendations are designed to help ensure that assessment findings are in fact correct (see **Chapter 10**).

8.1.2 The mitigation hierarchy is a sequential process that operates in the following way. Firstly, if possible, adverse effects should be avoided. Failing this, the nature of the effect should be reduced, if possible, so that it is no longer significant. If neither avoidance nor reduction is feasible, mitigation measures should be considered.

8.1.3 Mitigation prescriptions might include changes to policy wording, advocating design guides, offsetting or replacement of a particular resource.

8.1.4 In the case of this SA Report, mitigation has been supplied to help address uncertain, and therefore potentially negative, effects so that if possible no residual adverse effects remain.

8.2 Accessibility and transportation

8.2.1 SA Objectives relevant to this sustainability theme include SA Objectives 2 (reduce energy use and causes of climate change), 3 (promotion of sustainable transport), 10 (minimise air pollution), 13 (minimise noise pollution) and 18 (promote social inclusion).

8.2.2 The appraisal process has identified no adverse impacts against SA Objectives 2, 3, 10, 13 or 18.

8.2.3 Uncertainty was identified in relation to the following policies:

- SA Objective 3: Alum Rock Road Key Opportunity for Change Area, and Washwood Heath Neighbourhood

- SA Objective 10: Alum Rock Road Key Opportunity for Change Area, and Vauxhall Neighbourhood
- SA Objective 13: Alum Rock Road Key Opportunity for Change Area and Vauxhall Neighbourhood.

8.2.4 The uncertainty associated with these findings is due to the fact that the plan is relying on behavioural change for the policies to be successful in delivering benefits against the three objectives (3, 10 and 13).

8.2.5 There is also uncertainty as to the effects of introducing more parking as well as consolidating and expanding industrial facilities. BCC's Annual Parking Report (2012) declared that parking policies have an influence on the level of car journeys and travel behaviour.

8.2.6 Within the AAP there is a focus on encouraging public transport, rapid transit and walking, which will help mitigate the potential adverse impact additional parking facilities may have. In the short term the effect of off-street parking is likely to reduce congestion and improve road safety. However it should be borne in mind that introducing more accessible parking could lead to an increase in car journeys, not the reduction and modal shift promoted within Bordesley Park as a whole. It is recommended that these issues be carefully monitored to ensure that a modal shift in transportation does occur, and that the air quality, emissions and noise pollution improves. Monitoring should also focus on the extent to which sustainable methods of transportation sufficiently mitigates against the potential for easier driving.

8.2.7 In order to mitigate the possible adverse effects, proposals to limit the increase in parking provision are suggested. An increase in sustainable transport infrastructure, such as the proposed waymarked cycle route, provides opportunities for people to travel sustainably. As reducing parking facilities may not be feasible in the short term, policies in the AAP should continue to support a large-scale modal shift in transportation modes to increase the use of more sustainable methods in the long term.

8.3 Air quality

8.3.1 SA Objectives relevant to this sustainability theme include SA Objectives 1 (natural resources) and 10 (air pollution).

8.3.2 The appraisal process has not identified any adverse impacts of the AAP in relation to SA Objectives 1 or 10. Uncertainty was identified in the following Opportunities:

- SA Objective 10: Alum Rock Road Key Opportunity for Change Area, and Vauxhall Neighbourhood.

8.3.3 Please see **Section 8.2** for information on how to mitigate the uncertainty regarding air quality.

8.4 Biodiversity and geodiversity

8.4.1 SA Objectives relevant to this sustainability theme include SA Objectives 7 (multifunctional GI network) and 9 (local biodiversity).

8.4.2 The appraisal process has identified no adverse or uncertain impacts against SA Objective 9. Uncertain effects are associated with SA Objective 7 at Cherrywood Road since there are two parks within the Cherrywood Road area - Denbigh Street, which is 0.4ha and Priory Gate Way which is 0.5ha. New housing in the area will have some green areas nearby. Increasing the population of Bordesley Park will mean more people are using the existing green and open spaces. Disregarding the quality of the existing spaces, the average open space in Bordesley Park AAP per 1,000 population is 1.88ha, below the 2ha target. New housing will worsen this ratio unless new open and green space is created in the area. Denbigh Street Park could be lost to residential development in the future (see page 35 of the AAP).

8.5 Climate change

8.5.1 SA Objectives relevant to this sustainability theme include SA Objectives 2 (reduce energy use and causes of climate change), 3 (promotion of sustainable transport) and 6 (reduce impact of climate change).

8.5.2 The appraisal process has identified no adverse impacts against SA Objectives 2, 3 or 6.

8.5.3 Uncertainty was identified in relation to the following policies:

- SA Objective 3: Alum Rock Road Key Opportunity for Change Area and Washwood Heath Neighbourhood.

- 8.5.4 There is uncertainty in relation to SA Objectives 3 for the reasons cited in **section 8.2**.

8.6 Economic factors

- 8.6.1 SA Objectives relevant to this sustainability theme include SA Objectives 14 (corporate social and environmental responsibility), 15 (regeneration and economic growth), 16 (investment in future prosperity), and 18 (promote social inclusion).

- 8.6.2 Uncertainty applies to Cherrywood Road since AAP proposals will potentially involve the relocation of existing vehicle repair, recycling and other industrial premises. Such a move could affect local jobs. Again, to mitigate this effect local jobs should ideally be relocated to locations in the neighbourhood.

8.7 Health

- 8.7.1 SA Objectives relevant to this sustainability theme include SA Objectives 20 (improve health), 21 (community safety) and 23 (recreational activities).

- 8.7.2 The appraisal process has not identified any adverse impacts of the AAP in relation to SA Objectives 20, 21 or 23. Uncertainty was identified in the following policies:

- SA Objective 20: Bordesley Green Neighbourhood
- SA Objective 21: The Wheels site and Environs Key Opportunity for Change Area;
- SA Objective 23: Washwood Heath Neighbourhood, Bordesley Green Neighbourhood, and The Wheels site and Environs Key Opportunity for Change Area.

- 8.7.3 The uncertainty seen in SA Objectives 20, 21 and 23 is due to the potential trade-off between employment and industrial units against recreation and open space facilities. The future of the sports pitch off Cranby Street is uncertain. The proposals at the Wheels site could lead to a decrease in the availability of recreation facilities such as speed skating. Recreation facilities at the Wheels site are privately owned and a relocation study for these is currently being prepared. The Wheels site offers specialist activities, such as stock car racing, which attract spectators.

- 8.7.4 However, the change in use at these locations is anticipated to provide additional employment sites and opportunities. Improvements in the local economy, as well as reductions in unemployment and deprivation levels indirectly improve the health of residents. Nevertheless, the loss of open space and/or recreational facilities should be addressed. Where possible, additional areas of open space should be introduced. The inclusion of proposals to introduce GI within each neighbourhood proposal and the Local Character (GI) Development Principle go towards mitigating the potential loss. These policies have the additional benefit of increasing the amount of GI in the area, which has multiple benefits for Bordesley Park, as well as providing an area to take part in sport and active recreation.

8.8 Historic environment and townscape

- 8.8.1 The only SA Objective relevant to this sustainability theme is SA Objective 8 (built and historic environment).
- 8.8.2 The appraisal process has not identified any adverse impacts of the AAP in relation to SA Objective 8. Uncertainty was identified in the following opportunities:
- SA Objective 8: Washwood Heath Neighbourhood and Small Heath (North) Neighbourhood.
- 8.8.3 There are numerous historic sites and buildings within the AAP area. These historic buildings could be adversely affected by unsympathetic development. It is not necessary for all listed or historic buildings and sites to be named as protection is implied by the general Local Character Development Principle. To ensure the preservation of these important features, policies could emphasise conservation of heritage assets and their settings. Development should also be designed and sited in a manner which least affects historic buildings, or ideally in a manner that enhances them and embraces civic pride.

8.9 Housing

- 8.9.1 SA Objectives relevant to this sustainability theme include SA Objectives 19 (poverty and disadvantage) and 22 (affordable housing).

- 8.9.2 The appraisal process has identified uncertain impacts of the AAP on SA Objective 22 for the Wheels site and environs and Alum Rock Road Key Opportunity for Change Area. These uncertain assessments are due to the potential loss of housing to retail units and other commercial or employment uses. Although strengthening the local centre and increasing the amount of employment opportunities available in these areas is encouraged, appropriate housing should be allocated nearby within the AAP. Consultation with any existing residents who may have to relocate could ensure the best alternative is achieved.

8.10 Material assets

- 8.10.1 SA Objectives relevant to this sustainability theme include SA Objectives 1 (natural resources), 4 (waste minimisation) and 5 (previously developed land).
- 8.10.2 The appraisal process has not identified any adverse or uncertain impacts of the AAP in relation to SA Objectives 1, 4 or 5.

8.11 Population and Quality of life

- 8.11.1 SA Objectives relevant to this sustainability theme include SA Objectives 15 (regeneration and economic growth), 17 (community influence), 18 (promote social inclusion), 19 (poverty and disadvantage), 21 (community safety), 22 (affordable housing) and 23 (recreational activities).
- 8.11.2 The appraisal process has identified an uncertain impact of the AAP on SA Objective 22 for Alum Rock Road Key Opportunity for Change Area and the Wheels site and environs Key Opportunity for Change Area. See **Section 8.9** for explanation of the adverse effect. Uncertainty was also identified against the following opportunities:
- SA Objective 21: The Wheels site and Environs Key Opportunity for Change Area
 - SA Objective 23: Washwood Heath Neighbourhood, Bordesley Green Neighbourhood, and The Wheels site and Environs Key Opportunity for Change Area.

- 8.11.3 These assessments relate to uncertainty regarding the future of sport and recreation facilities, including potential relocation of the activities currently on offer at the Wheels site. Positive effects could be achieved by relocating the facilities. If facilities are relocated, they should be of equal or better quality and type.

8.12 Soil

- 8.12.1 SA Objectives relevant to this sustainability theme include SA Objectives 1 (natural resources) and 12 (land contamination).
- 8.12.2 The appraisal process has not identified any adverse or uncertain impacts of the AAP in relation to SA Objectives 1 or 12.

8.13 Water

- 8.13.1 SA Objectives relevant to this sustainability theme include SA Objectives 1 (natural resources) and 11 (water pollution).
- 8.13.2 The appraisal process has not identified any adverse or uncertain impacts of the AAP in relation to SA Objectives 1 or 11.

8.14 Post-mitigation matrices

- 8.14.1 The following tables present matrices of sustainability of each key opportunity for change areas and neighbourhood policies if the mitigation measures suggested in **sections 8.2 to 8.13** were applied.
- 8.14.2 There is no post-mitigation matrix for the development principles, as only one potential negative effect was identified: loss of potential employment premises. Mitigation for this is provided at **paragraph 8.6.3**. If this mitigation can be delivered, the effect on local businesses would be neutral since no loss of jobs or job locations will have taken place.

Table 8.1: Post-mitigation assessment matrix of key opportunities for change areas

SA Objective		Key Opportunity for Change Areas				
		1	2	3	4	5
		Wheels	Cherry-wood	Adderley	Alum Rock	Coventry Rd
1	Natural resources	0	0	0	0	0
2	Energy use	+	+	0	0	+
3	Sustainable transport	+	+	++	+	++
4	Waste minimisation	0	0	0	0	0
5	Previously developed land	+	+	+	++	++
6	Climate change	0	0	0	0	0
7	Green Infrastructure	+	+	+	0	+
8	Historic environment	+	+	+	+	+
9	Biodiversity	0	0	+	0	+
10	Air	+	+	+	+	+
11	Water	0	0	0	0	0
12	Land contamination	++	+	0	0	0
13	Noise	+	+	+	+	+
14	Corporate social and environmental responsibility	0	0	0	0	0
15	Economic growth	++	+	+	++	++
16	Investment	++	+	++	+	+
17	Community influence	+	+	+	0	+
18	Social inclusion	+	+	+	+	+
19	Poverty and disadvantage	+	+	+	0	0
20	Health	+	+	++	0	+
21	Community safety	+	0	0	0	0
22	Affordable housing	0	++	+	0	++
23	Recreational activities	+	+	+	0	+

Table 8.2: Post-mitigation assessment matrix of the six neighbourhoods

SA Objective		Neighbourhood					
		1	2	3	4	5	6
		Vauxhall	Washwood Heath	Bordesley Village	Bordesley Green	Small Heath (North)	Small Heath (South)
1	Natural resources	0	0	0	0	0	0
2	Energy use	+	++	+	+	+	++
3	Sustainable transport	++	+	++	++	+	++
4	Waste minimisation	0	0	0	0	0	0
5	Previously developed land	+	+	+	+	+	++
6	Climate change	0	0	+	0	+	+
7	Green Infrastructure	++	++	++	+	++	++
8	Historic environment	0	+	+	0	+	0
9	Biodiversity	+	+	++	+	+	++
10	Air	+	+	+	+	+	+
11	Water	+	+	+	0	0	0
12	Land contamination	+	+	0	++	0	0
13	Noise	+	+	+	+	+	+
14	Corporate social and environmental responsibility	0	0	0	0	0	0
15	Economic growth	+	+	+	++	+	++
16	Investment	0	+	0	+	+	+
17	Community influence	0	+	0	0	+	+
18	Social inclusion	0	+	+	+	+	+
19	Poverty and disadvantage	0	0	+	0	0	0
20	Health	0	0	0	+	+	+
21	Community safety	0	0	0	0	0	0
22	Affordable housing	0	+	+	+	+	0
23	Recreational activities	+	+	+	+	+	+

9 Recommendations to enhance sustainability performance

9.1 Introduction

9.1.1 This chapter provides recommendations for maximising the sustainability opportunities presented in the AAP. This will enable the sustainability performance of the AAP to be maximised.

9.2 Recommendations for enhancement

9.2.1 The SA has suggested measures to prevent, reduce or offset significant adverse effects of implementing the AAP throughout **Chapter 8**. These measures are collectively referred to as 'mitigation measures'. To improve the sustainability potential of the AAP, these mitigation measures should be implemented.

9.2.2 The following additional measures, if adopted, would further enhance the sustainability performance of the plan:

- Place stronger emphasis on the protection of the historic buildings and emphasise the role of good design in enhancing the historic environment;
- Ensure that development takes place on previously developed land where possible in accordance with the National Planning Policy Framework and local development plan;
- The principle of no net loss of biodiversity should be upheld; and
- The Grand Union canal is currently classified as of 'moderate' ecological quality, which could be improved by remediation and general environmental improvements in the area. Care should be taken to improve the water quality of all watercourses in the AAP area. This could be done through a reduction in pollution, Sustainable Drainage Systems (SuDS) and general environmental improvements.

10 Monitoring

10.1 Monitoring proposals

10.1.1 The SEA Directive states that 'member states shall monitor the significant environmental effects of the implementation of plans and programmes...in order, inter alia, to identify at an early stage unforeseen adverse effects, and to be able to undertake appropriate remedial action' (Article 10.1). In addition, the Environmental Report (or SA Report) should provide information on a 'description of the measures envisaged concerning monitoring' (Annex I (i)).

10.1.2 The monitoring requirements typically associated with the SA process are recognised as placing heavy demands on authorities with SA responsibilities. For this reason, the proposed monitoring framework should focus on those aspects of the environment that are likely to be negatively impacted upon, where the impact is uncertain or where particular opportunities for improvement might arise. The areas specified for monitoring include:

- Housing including the amount of affordable housing built versus the amount needed;
- The effect of parking changes on improving ease and accessibility of driving, and its consequence on the number of car users;
- Flood risk;
- The behavioural response of residents to ensure a modal shift in transportation methods;
- The water quality of local water bodies;
- The design of new development; and
- The impact of housing proposals on the local economy.

10.1.3 Monitoring is particularly useful in answering the following questions:

- Were the assessment's predictions of sustainability effects accurate?
- Is the AAP contributing to the achievement of desired sustainability objectives?
- Are mitigation measures performing as well as expected?
- Are there any unforeseen adverse effects? Are these within acceptable limits, or is remedial action required?

- 10.1.4 The purpose of monitoring is to measure the environmental effects of a plan, as well as to measure success against the plan's objectives. It is therefore beneficial if the monitoring strategy builds on monitoring systems that are already in place. To this end, many of the indicators of progress chosen for the SA require data that is already being routinely collected at a local level by BCC and their partner organisations. It should also be noted that monitoring could provide useful information for future plans and programmes.

10.2 Links with the Annual Monitoring Report

- 10.2.1 The SA guidance suggests that SA monitoring and reporting activities can be integrated into the regular planning cycle. As part of the monitoring process for their Local Plan, Birmingham City Council will be required to prepare Annual Monitoring Reports. It is anticipated that elements of the SA monitoring programme for the AAP could be incorporated into these processes.
- 10.2.2 The monitoring programme is, at this stage, preliminary and may evolve over time based on the results of consultation and the identification of additional data sources (as in some cases information will be provided by outside bodies). The monitoring of individual schemes/proposals should also be addressed at project level.
- 10.2.3 Consultees are invited to suggest any further indicators, or propose amendments to this monitoring programme.

11 Conclusions & next steps

11.1 Conclusions

11.1.1 This SA report has appraised the Bordesley Park AAP Pre-Submission Report (January, 2017).

11.1.2 Having appraised all 15 policies in the plan, the process has identified several positive and negative effects. Through applying a suite of mitigation measures, it is possible to overcome significant residual adverse effects. These measures have been presented in **Chapter 8**. Recommendations for dealing with uncertainty in the assessment process are presented in **Chapter 8** and **9**.

11.2 Next steps

11.2.1 The next stage of the SA process, following adoption of the plan, is to produce a 'statement', which will be made available to accompany the plan. SEA Regulations 16.3c)(iii) and 16.4 require this to be produced as soon as possible after the adoption of the plan or programme. The purpose of the SA Statement is to outline how the SA process has influenced and informed the development of the Local Plan (Allocations) and demonstrate how consultation on the SA has been taken into account.

11.2.2 As the regulations outline, the statement should contain the following information:

- The reasons for choosing the preferred strategy in the light of other reasonable alternatives dealt with;
- How environmental considerations have been integrated into the AAP;
- How consultation responses have been taken into account; and
- Measures that are to be taken to monitor the significant environmental effects of the AAP.

11.2.3 To meet these requirements, following an Independent Examination, a Post Adoption Statement will be published with the adopted version of the AAP.

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Appendix A: Updates to Scoping

A1 Summary

A1.1 This appendix includes updates to the Bordesley Park AAP Sustainability Appraisal Scoping Report, October 2009. This includes relevant changes to the baseline; plan, policy or programme; and any key issues. These updates will assist Birmingham City Council in the development and appraisal of the AAP and enable performance of policies to be monitored against the updated baseline conditions.

Table A.1: Summary of PPP review

Type	Plan, policy or programme
International	
Update: 2006/12/EC	EU (2008) Directive on Waste (2008/98/EC, Waste Framework Directive)
Update: 2001/77/EC	EU (2009) Directive on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC (2009/28/EC)
Additional	EU (2006) Directive on the protection of groundwater against pollution and deterioration (2006/118/EC)
Additional	EU (2011) The EU Biodiversity Strategy to 2020
Update: 96/43/EEC	EU (2008) Directive on ambient air quality and cleaner air for Europe (2008/50/EC)
Additional	EU (2009) Directive on the conservation of wild birds (2009/147/EC, Birds Directive)
National	
Update: Defra (2007) Waste	Defra (2013) Waste Management Plan for England
Update: CLG (2006) Cities	CLG (2011) Updating the evidence base on English cities: Final Report
Update: PPS'	CLG (2012) National Planning Policy Framework
Update: PPG's	CLG (2012) National Planning Policy Guidance

Additional	SS for Health (2010) Healthy Lives, Healthy People: Our Strategy for public health in England
Additional	Sustainable Communities Act 2007 (Amended 2010)
Additional	Public Health England (2014) The National Conversation on Health Inequalities
Additional	Social Mobility & Child Poverty Commission (2014) State of the Nation 2014: Social Mobility and Child Poverty in Great Britain
Additional	DfWP, DfES, The Rt Hon Iain Duncan Smith MP and DWP social justice team (2014) Helping to reduce poverty and improve social justice
Update: Defra (2002) Biodiversity	Defra (2011) Biodiversity 2020: A strategy for England's wildlife and ecosystem services
Additional	Water Act 2014
Update: Environment Agency (2001) Water resources	Defra (2008) Future Water: The Government's water strategy for England
Additional	Defra (2012) UK Climate Change Risk Assessment (CCRA)
Additional	Defra (2013) The National Adaptation Programme: Making the country resilient to a changing climate
Update: Environment Agency (2008) water	Environment Agency (2013) Groundwater Protection: Principles and Practice (GP3)
Additional	DECC (2014) Digest of UK energy statistics (DUKES) 2014
Out of date (not updated)	DfES (2002) Education and Skills: Delivering Results, A Strategy to 2006
Regional	
Additional	Sustainability West Midlands (2008) Sustainable Housing Action Programme 2007-08: West Midlands Low Carbon Housing Market Framework
Update: 7 Authorities of the West Midlands Metropolitan Area (2006) Transport	Centro (2011) West Midlands Local Transport Plan 2011-2026
Additional	Giving it our All: The West Midlands Region (2012) Prepare for 2012: Priorities for the West Midlands Region
Additional	Sustainability West Midlands (2012) A review of progress towards an environmentally sustainable and socially just West Midlands
Additional	Institution of Civil Engineers (ICE) (2014) The State of the Nation, Infrastructure 2014: West Midlands

Additional	The Work Foundation (2009) Supporting Sustainable Economic Growth in the West Midlands
Additional	Dudley Metropolitan Borough Council, Sandwell Metropolitan Borough Council, Walsall Council, Wolverhampton City Council (2011) Black Country Core Strategy
Additional	Severn Trent Water (2014) Final Water Resources Management Plan 2014
Additional	Solihull CCG (2014) Draft Five Year Strategic Plan: Birmingham, Solihull and Sandwell (health and social care economies) 2014/15 – 2018/19
Update: Environment Agency (2008) Humber	Environment Agency (2009) Water for Life and Livelihoods: River Basin Management Plan Humber River Basin District
Update: Environment Agency (2009) Tame	Environment Agency (2011) River Tame Flood Risk Management Strategy
Out of date (not updated)	Regional Assemblies (RA) were abolished between 2008 and 2010. Whilst some documents produced by RA's may still be relevant, they no longer have legal standing.
Local	
Additional	Lepus Consulting (2017) Bordesley Park AAP Habitats Regulation Assessment
Additional	Birmingham Community Safety Partnership Annual Report 2012-13
Update: Birmingham City Council (2006) air	Birmingham City Council (2011) Air Quality Action Plan
Update: Birmingham City Council (2006) waste	Birmingham City Council (2012) Refresh of the Municipal Waste Management Strategy
Update: Birmingham City Council (2005) housing	Birmingham City Council (2010) Housing Plan 2008+ review
	Birmingham City Council (date not available) Housing Development Plan
Additional	Birmingham City Council (2011) Supporting People Strategy – A Strategy For Housing Related Support 2011+
Additional	Birmingham City Council (2013) Planning Birmingham's Future & Budget Consultation 2014-15
Additional	NHS Birmingham CrossCity Clinical Commissioning Group (2012) Integrated Plan 2012-2015
Update: Birmingham City Council (2000) transport	Birmingham City Council (2011) Local Transport Plan 2011-2026

Additional	Birmingham City Council (2012) Birmingham Low Carbon Transport Study
Additional	CH2MHILL (2014) Birmingham Eastern Fringe Rail Study
Additional	Birmingham Connected White Paper 13 November 2014
Update: Birmingham City Council/Birmingham Strategic Partnership (2007) climate change	Birmingham City Council (2010) Climate Change Action Plan 2010+
Update: Ludi Simpson (2007) population	Birmingham City Council (2010) Population Based Projections
	Birmingham City Council (2011) Ethnicity in Birmingham
Update: Professor Michael Parkinson CBE (2007) masterplan	Birmingham City Council (2011) Big City Plan
Update: Birmingham City Council (2005) UDP	Birmingham City Council (2014) Birmingham Development Plan (not yet adopted)
Update: Birmingham City Council (2001) Eastside	Birmingham City Council (2011) Eastside Masterplan
Additional	Birmingham City Council (2011) Playing Pitch Strategy
Update: Birmingham City Council (2006) lighting	Birmingham City Council (2008) Lighting Places – A lighting strategy for the city centre and local centres of Birmingham
Update: Birmingham City Council (1992) housing	Birmingham City Council (2001) Affordable Housing SPG (threshold amended in 2006)
Additional	Greater Birmingham & Solihull Local Enterprise Partnership Annual Report 2013-14
Additional	Lepus Consulting (2012) Green Infrastructure Study
Update: Birmingham and the Black Country BAP Steering Group (2000)	Birmingham and Black Country Biodiversity Partnership (2010) Birmingham and the Black Country Biodiversity Action Plan
Additional	Birmingham City Council (2013) Strategy for the Conservation and Enjoyment of Birmingham's Historic Environment
Additional	Birmingham City Council (2010) Waste Capacity Study and 2010 update addendum
Additional	Birmingham City Council (2013) Carbon Plan Analysis

Additional	Birmingham City Council (2013) Report on Birmingham's carbon dioxide (CO ₂) emissions reduction target baseline
Additional	Birmingham City Council (2013) Report on the impact of national policy and programmes on Birmingham's carbon dioxide (CO ₂) emissions to 2027
Additional	Birmingham City Council (2013) Green Living Spaces Plan
Additional	The Planning Inspectorate 11 March 2016 Report on the Examination of the Birmingham Development Plan and Appendix of Main Modifications
Additional	Birmingham City Council (July 2015) Birmingham Curzon HS2 Masterplan for Growth
Additional	GBSLEP (July 2015) The Midland HS2 Growth Strategy: Accelerating the UK's Engine for Growth
Out of date (not updated)	Birmingham City Council (2007): Religion and Belief Equality Scheme 2007–2010 Lesbian, Gay and Bi-sexual People Equality Scheme 2007–2010 Race Equality Scheme 2007–2010 Birmingham City Council (2000) Sustainability Strategy and Action Plan 2000–2005k

A2 Key sustainability issues – baseline update

Resource Use

- A2.1 Severn Trent has now published the Final Water Resources Management Plan (WRMP) (2014). This document identified 15 water resource zones (WRZs), with Birmingham falling within the Strategic Grid Zone. The WRMP states “the Strategic Grid Zone is likely to require significant future investment because of the need to reduce environmentally unsustainable abstractions and to meet the longer term challenge of future climate change impacts”.
- A2.2 Abstraction license reductions are expected to reduce deployable output to the Strategic Grid Zone by 40Ml/d. The strategy set out in the WRMP, including reducing leakage and reducing demand, is likely to continue meeting water demand in the area. The WRMP also sets out a range of potential additional water resources in the Strategic Grid Zone, including a possible Aquifer Storage and Recovery scheme at Whitacre treatment works.

Sustainable Design, Construction and Maintenance

- A2.3 A Combined Heat and Power (CHP) network is planned for the Eastside area and is in the first phase of construction. The CHP scheme is expected to expand to other parts of the city in the future.
- A2.4 The Green Living Spaces Plan (Birmingham City Council, 2013), promotes incorporation of green walls and roofs into the urban environment as well as improving green and blue infrastructure in the city. This document demonstrates that the Bordesley Park area is within the highest area or urban heat island intensity in Birmingham, being an estimated 4.35°C above average during heatwaves. This document also identifies; areas of surface water flooding in the plan (**Figure A.1**), areas of trees and allotments (**Figure A.2**), important areas for nature (**Figure A.3**) and blue and green infrastructure (**Figure A.4**).

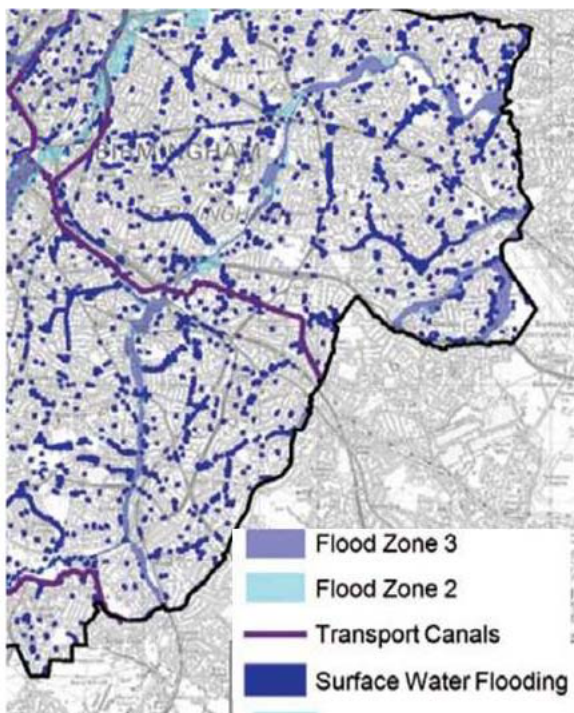


Figure A.1: Flooding in the east of Birmingham

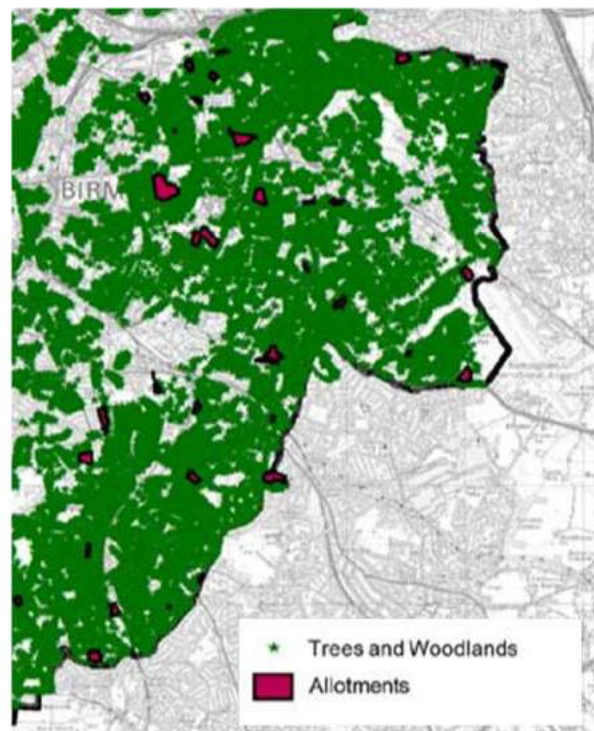


Figure A.2: Trees and allotments in the east of Birmingham

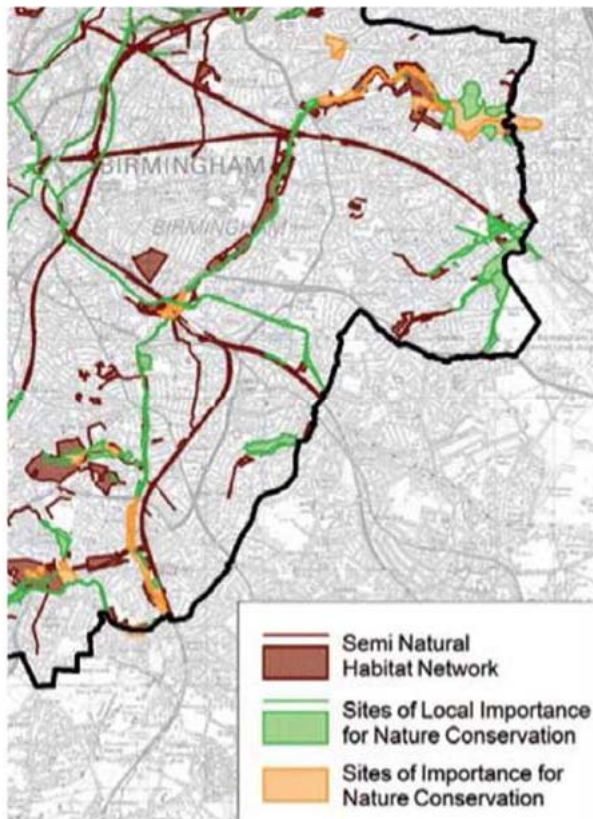


Figure A.3: Important areas for nature in the east of Birmingham

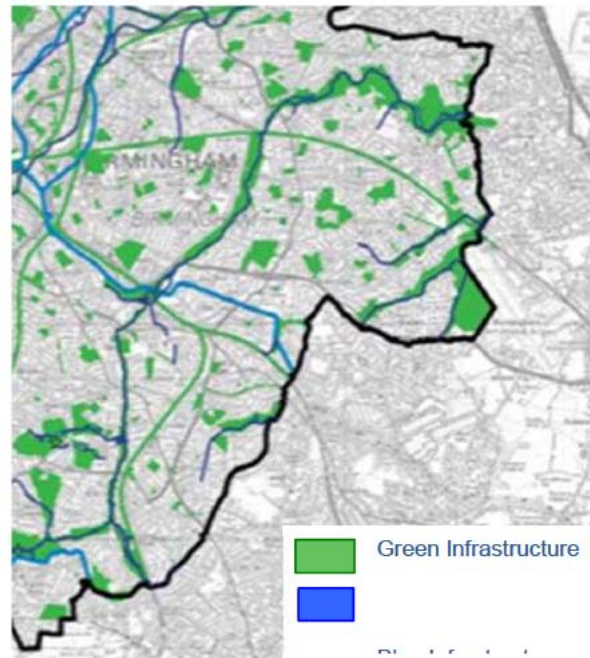


Figure A.4: Blue and green infrastructure in the east of Birmingham

- A2.5 The West Midlands Low Carbon Housing Market Framework (2008) states that the average home in the West Midlands has a SAP rating for its buildings fabric of 48.8, which is considered to be a fairly low level of energy efficiency. This may be due to the fact that about 60% of the region's housing stock is older than fuel and power regulations for buildings.

Energy Use, Efficiency and Renewables

- A2.6 Birmingham imports about 22,800 GWhr of energy each year, more than Manchester, Leeds, Sheffield, Liverpool and Edinburgh. Whilst Birmingham releases less CO₂ per capita than the cities previously mentioned, it still produces more than the global 'fair share'. The largest proportion of Birmingham's energy consumption is natural gas for domestic uses (30.6%), followed by petroleum products for road transport (24.5%) and natural gas for commercial and industry uses (17.91%) (Birmingham City Council Climate Change Action Plan 2010+).

- A2.7 In 2013, domestic energy use in Birmingham was 7,066.52 GigaWatt hours, which is over 2,000 GigaWatt hours less than in 2005. Non-domestic energy use was 6,005.11 GigaWatt hours in 2013.
- A2.8 In 2010, Birmingham had reduced its CO₂ emissions by 10.05% from a baseline year of 2005 (Birmingham City Council 2013, Report on Birmingham's carbon dioxide (CO₂) emissions reduction target baseline).
- A2.9 Renewable energy sources generated 17.8% of the UK's energy in quarter 3 of 2014. This represents an increase from both 2013 and quarter 1 of 2014, which is likely to be due to an increase in renewable energy generation capacity, including additional facilities¹⁷.
- A2.10 **Figure A.5** demonstrates carbon emissions for Birmingham by end use and fuel for 2010.

¹⁷ DECC (2014) Digest of UK energy statistics (DUKES) 2014

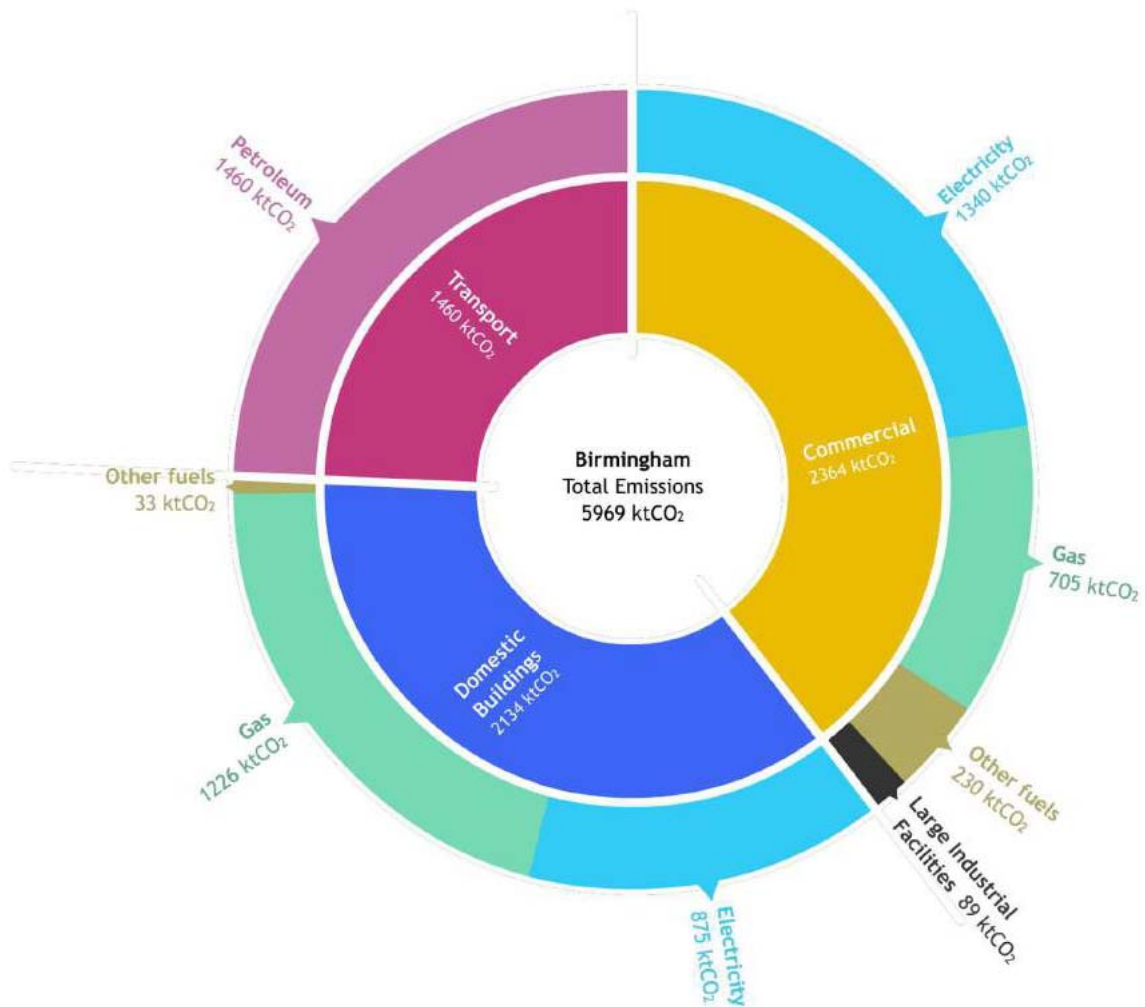


Figure A.5: Emissions for Birmingham, by end use and fuel, 2010.
Taken from Birmingham City Council (2013) Birmingham Carbon Plan
Analysis: An illustrative look at future emissions in Birmingham

Sustainable Transport

Car ownership and travel to work

- A2.11 In 2011, 64% households in Birmingham owned a car and there were 3.9 % more cars and vans per person than 2001¹⁸. Between 2001 and 2011, Birmingham was one of the top ten local authorities with the largest decrease in workers commuting by bus/coach, with small increases in those driving and those walking and cycling to work. The number of drivers and car owners in Birmingham has increased from 2001, whilst the number of passengers has declined, leading to a higher number of cars on the road¹⁹.

Road network and Congestion

- A2.12 The average morning peak travel time speeds in Bordesley Park are generally 10 to 20 miles per hour, but the evening peak introduces more slow-moving areas, particularly along and around Coventry Road and Alum Rock Road. Washwood Heath Road, Bordesley, Bordesley Green Road and were also found to have average speeds of less than 10mph and the Coventry Road / Wordsworth Road junction was identified as a top 20 delay hotspot²⁰.
- A2.13 The Birmingham Mobility Action Plan White Paper (2014) states that upgrades to the Ring Road will be completed in 2015/16, as well as piloting 20mph streets across the city.

Bus

- A2.14 **Table A.2** shows bus services that stop in, or adjacent to the AAP area. High frequency services are those that stop 4 times per hour or more, moderate frequency stop less than four times per hour but more than once an hour and low frequency services stop once an hour or less.

¹⁸ RAC Foundation (2012) Car Ownership Rates per local authority in England and Wales

¹⁹ ONS (2013) 2011 Census Analysis – Method of Travel to Work in England and Wales Report

²⁰ Birmingham City Council (2014) Congestion Review

Table A.2: Bus service frequencies in and around the plan area

Service	Route	Frequency
8C	Saltley – Small Heath – Five Ways – Jewellery Quarter – Hockley – Aston Cross [Inner circle clockwise]	High
8A	Saltley – Aston Cross – Hockley – Jewellery Quarter – Five Ways – Small Heath [Inner circle anticlockwise]	High
14	Birmingham – Duddeston – Saltley – Alum Rock – Kitts Green – Marston Green – Chelmsley Wood	High
53	Erdington to Smiths Wood via Saltley and Heartlands Hospital	Moderate
97	Birmingham – Bordesley Green – The Mackadown – Chelmsley Wood – Pine Sqaure	High
97A	Birmingham – Bordesley Green – The Mackadown – Chelmsley Wood – Airport / NEC	High
28a	Small Heath (Heartlands Hospital) – Bordesley Green – Fox and Goose – Erdington – Great Barr (Scott Arms)	Moderate
58	Birmingham – Small Heath – Yardley, Swan – Lyndon – Solihull	High
59	Birmingham – Yardley, Swan – Yardley, Yew Tree – Lea Hall – Kingshurst	Moderate
59A	Birmingham Business Park – Chelmsley Wood – Kitts Green – Yardley, Swan – Birmingham	Low
59S	To Sheldon Heath School	School bus
60	Birmingham – Small Heath – Yardley, Swan – Sheldon, Wheatsheaf – Cranes Park	High
876	To Blossomfield Schools	School bus
900A	Birmingham – Birmingham International Airport – Internationals Station / NEC – Coventry	High
17	Birmingham – Hob Moor Road – Garretts Green – The Radleys – Tile Cross	High
73	Birmingham – Heartlands Hospital – Yardley, Yew Tree – Sheldon, Wheatsheaf – Solihull	Moderate

AH5	Solihull – Hall Green – Yardley – Stechford – Alum Rock – King Edward VI Aston School – King Edward VI Handsworth School	School bus
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Rail

A2.15 The Birmingham Eastern Fringe Rail Study (2014) established that it is technically possible to re-open the Sutton Park line for passenger services provided provision of new stations, improved junction capacity and confirmation of a local terminal in the city centre were completed.

A2.16 The Birmingham Mobility Action Plan White Paper (2014) and the New Street: New Start website²¹ claim that updates to Birmingham New Street Station will be completed in 2015, including a brighter and more attractive station, 36 new escalators and 15 new lifts. The proposed High Speed rail link (HS2) will provide further opportunities to build on this success and enhance the City's connectivity and improve rail capacity.

Rapid Transit

A2.17 The first Sprint bus rapid transit route is due to open in Autumn 2016, running from Birmingham to Quinton but due to expand into a network across the West Midlands²². In 2013, Centro produced a paper entitled Towards A World Class Integrated Transport Network, which set out plans for a rapid transit route passing through the plan area via Bordesley Green and improvements to services to and from Adderley Park rail station.

A2.18 Transport for West Midlands (formerly Centro) is planning on expanding the Midland Metro network into the centre of Birmingham and the extension from Snow Hill to New Street Station has opened. Centro have secured funding for extensions of the network into Birmingham Eastside to link with HS2, passing close to the boundary of the plan area.

Pedestrian and cycle routes

²¹ <http://www.newstreetnewstart.co.uk/about-the-development.aspx>

²² Centro (2015) Sprint, available at: <http://centro.org.uk/transport/sprint/sprint-network-vision/>, accessed 28/04/2015

- A2.19 The Birmingham Mobility Action Plan White Paper (2014) promises a 'revolution' in the cycle and pedestrian network for Birmingham by 2016, including improved cycle routes and bike storage. Details of planned improvements to the cycle network are set out via the Birmingham Cycle Revolution²³.

Recorded accidents resulting in injury

- A2.20 New statistics on road accidents following the 2011 census are not available.
- A2.21 Levenes cycle injury law firm record accidents involving cyclists on an interactive map. The latest data, from 2013, suggests that within the plan area, the B4145 and around Bordesley Circus are cycling accident hotspots along with the A45 and Bordesley Green, just outside of the plan area.
- A2.22 The Birmingham Road Safety Partnership run a range of campaigns to try and increase road safety across Birmingham, for drivers as well as cyclists and pedestrians²⁴.

Reducing the Need to Travel

- A2.23 The 2011 census follows the previous trend that more people work in Birmingham than the working population that lives there, although there was a fall in the proportion of workday population to usual residents.

Waste Disposal and Reduction

- A2.24 From 2004/5 to 2010/11 the percentage of household waste sent for reuse, recycling and composting in Birmingham rose from 15% to approximately 31%. Total household waste has been reduced from a peak of 480,000 tonnes per annum in 2006/7 to 420,000 tonnes per annum in 2010/11²⁵.

Efficient Use of Land

²³ Birmingham City Council (date not available) Birmingham Cycle Revolution, available at: <http://www.birmingham.gov.uk/birminghamcyclerevolution>, accessed 28/04/15

²⁴ Birmingham Road Safety Partnership (2010) available at: <http://www.brsp.org.uk>, accessed 28/04/2015

²⁵ Birmingham City Council (2012) Municipal Waste Review

- A2.25 The Summary of Development in Birmingham 2012 – 2013, produced by Birmingham City Council (date not available) states that as of April 2013, most of the city's supply of sites for development consisted of brownfield land. In 2012-2013 94% of new homes were built on previously developed land. This report notes that further development on brownfield sites is constrained as there are few remaining brownfield sites available for development. Due to the urban nature of the AAP area, site allocations in the AAP are likely to be on brownfield land.

Responding to climate change

- A2.26 The Birmingham Low Carbon Transport Strategy 2011+ aims to reduce CO₂ emissions per person by 60% from 1990 levels by 2026. Road transport is responsible for about a quarter of CO₂ emissions in Birmingham. The Birmingham Low Carbon Transport Strategy aims to achieve this by influencing behavioural changes, promoting efficient transport networks, investing in low emission vehicles and technologies and considering how the Council's transport and planning services can be delivered in a more sustainable way.
- A2.27 Wyndcliffe Primary School, which lies within the plan area, purchased new cycle lockers and shelters as well as holding cycling training in order to encourage cycling to school as part of their School Travel Plan²⁶.
- A2.28 In 2009, electricity use was responsible for 37% of Birmingham's carbon emissions. Current electricity-generated emissions accounted for 2214 KtCO₂ in Birmingham, a reduction by about 500 KtCO₂ from 2005. With increased efficiency of lighting and appliances and decarbonisation of the national grid, it is estimated that Birmingham's carbon emissions could fall to 720 KtCO₂ by 2026²⁷.
- A2.29 Evidence for climate change projections and implications of climate change remain unchanged, as these can still be drawn from UKCP09.

Sense of Place

²⁶ Birmingham City Council (date not available) School Travel Plans – case studies, available from: <http://www.birmingham.gov.uk/cs/Satellite?c=Page&childpagename=SystemAdmin%2FCFPageLayout&cid=1223092719870&packedargs=website%3D4&pagename=BCC%2FCommon%2FWrapper%2FCFWrapper&rendermode=live>, accessed 28/04/2015

²⁷ Birmingham City Council (date not available) Birmingham Carbon Plan Analysis

- A2.30 The 2015 Leader's Policy Statement sets out the economic opportunities that the city is experiencing and acknowledges that there are remaining difficult social problems and major funding challenges to local public services. It recognises that people's homes and neighbourhoods are at the heart of their lives in the city. The statement sets out a number of priorities including achieving better housing, better living standards and better investment and regeneration. A number of outcomes are set out that amplify the vision and goals set out in the Council Business Plan and Budget 2016+ including the promotion of a fair, prosperous and democratic city.
- A2.31 The commitments to improving the environment for all residents is encapsulated within the common strategic outcomes in the Sustainable Community Strategy, Local Area Agreement, Big City Plan and the Council Plan. These are:
- Stay safe in a clean, green city;
 - Be healthy;
 - Enjoy a high quality of life; and
 - Make a contribution
- A2.32 Improvements to the environment will remain a priority, with formal parks, public open spaces, the Black Country Urban Forest, gardens and water bodies, all adding to the living landscape matrix²⁸. All of these features help to "soften" the urban fabric.
- A2.33 The Birmingham 2026 sustainable community strategy²⁹ has not been updated since the 2008 version.

Built and Historic Environment

- A2.34 Accessible historic databases show that there has been no change in regard to Bordesley's built and historic environment.

Natural Landscape and Biodiversity

²⁸ Birmingham and the Black Country (2010) Biodiversity Action Plan

²⁹ Birmingham City Council (2008) Birmingham Sustainable Community Strategy

- A2.35 Birmingham and the Black Country's biodiversity is a critical component of high quality of life and contributes significantly to the quality of the environment within the conurbation. Birmingham's Biodiversity Action Plan (2010) states that Bordesley Park is within a low biodiversity impact zone. Additional to the two previously identified Designated Nature Conservation Sites within the AAP is a further Site of Local Importance for Nature Conservation: The Vauxhall and Birmingham Canal.
- A2.36 No further changes have been identified for the landscape and biodiversity significance of the Bordesley Park AAP.

Air Quality


- A2.37 Impacts on air quality can be caused by various development activities or associated development outcomes. The primary impact, as previously identified, is through increased car use and commuting which may be further enhanced due to visitor pressures. There are a variety of air pollutants that can have adverse effects upon the environment. These pollutants include: Nitrous oxides (NO_x), Ammonia (NH_x), Sulphur dioxide (SO₂), Low-level ozone (O₃), and Dust. In combination effects should also be addressed, particularly where vulnerable ecological features are present³⁰.
- A2.38 The City of Birmingham remains an AQMA (as designated in January 2003) for nitrogen dioxide, in accordance with the requirements of Part IV of the Environment Act 1995. This was extended to include particulate matter in 2004, however the Air Quality Action Plan 2011³¹ states that this was revoked in December 2010.
- A2.39 The 41 actions detailed in the Air Quality Action Plan 2006 have been either closed or updated. The Air Quality Action Plan (2011) sets out twelve revised actions that have been identified to reduce levels of nitrogen dioxide. Many of these actions relate to existing Council policies and Strategies, notably the Local Transport Plan (LTP3). Proposals are being considered for a Low Emissions Zone to be introduced in the city centre.

³⁰ Lepus Consulting (2012) Habitats Regulation Assessment of the Birmingham Development Plan 2031 - Options Consultation

³¹ Birmingham City Council (2011) Air Quality Action Plan

- A2.40 It should be noted that the LTP2 target for nitrogen dioxide of a 1% reduction set across the West Midlands by 2010 would appear to have been achieved within Birmingham.

Water Quality and Watercourses

- A2.41 Recent hydraulic modelling identified within the Level 1 Strategic Flood Risk Assessment (2012)³² shows that there is a fluvial flood-warning zone along the River Rea (PPS25 Flood Zones 2 and 3). Particular areas of flood risk in Bordesley include Bordesley Green East, Bordesley Street and Bordesley Middle Way and Canal. Initial assessment will identify constraints that are imposed upon development within these zones. Council planners and developers will be provided with the information they need to locate future development outside of flood risk areas, in accordance with the Sequential Test.
- A2.42 An assessment of the flood risk from all other sources will be carried out to identify sites that are outside of the Flood Zones but may still require a FRA as they are at risk of flooding from other sources.
- A2.43 Following the Sequential Test, if it is not possible or consistent with wider sustainability objectives to locate all development in zones of lower flooding probability, then it will be necessary to apply the Exception Test as described in PPS25³³. The test provides a method for managing flood risk whilst still allowing necessary development to occur. 

Soil Quality and Contamination

- A2.44 No changes have been identified with regard to soil quality and contamination. Assessment remains in line with land contamination legislation under Part 2A of the Environmental Protection Act 1990, as stated within the Contaminated Land Inspection Strategy For Birmingham (2008)³⁴.

Noise

³² Birmingham City Council (2012) Level 1 Strategic Flood Risk Assessment

³³ Department for Communities and Local Government (2010) – Planning Policy Statement 25: Development and Flood Risk.

³⁴ Birmingham City Council (2008) Contaminated Land Inspection Strategy for Birmingham – Second Edition

- A2.45 Levels of noise pollution remain problematic in some parts of the city. Vehicles are one of the principal sources of both air and noise pollution, therefore improvements have been recommended to Birmingham's roads and public transport to reduce the effects of pollution. Birmingham has also pioneered "noise mapping"³⁵

Social and Environmental Responsibility

- A2.46 The Birmingham Total Place Pilot Document³⁶ states that Birmingham is a city of a million people, receiving over £7,500 million of public spending and investment each year. The Total Place Pilot Document (2010) puts forward a national set of legislative, technical, and process changes, underpinned by 6 pilot themes to improve service delivery:

- Early intervention
- Drugs and alcohol
- Gangs
- Learning Disabilities
- Mental Health
- Total Community

- A2.47 A seven-point plan of radical reform to public services in Birmingham has been developed. The Pilot Document (2010) aims to embed a "Total Place" approach systematically across the city, encouraging effective partnership working. Action required from national government to overcome obstacles within the above themes.

Economy and Equality

Business and Enterprise

- A2.48 According to the Business Demography 2009-2013³⁷ Active enterprise numbers from 2010-2013 have increased from 30,675 to 32,235 for Birmingham. Particularly prevalent sectors within the area are professional, scientific and technical (16%) and retail (12%) based on 2014 figures.

³⁵ Birmingham City Council (2005) Birmingham Community Strategy

³⁶ Be Birmingham (2010) Birmingham Total Place Pilot: Final Report, available at: [http://www.bebirmingham.org.uk/uploads/TP%20Birmingham%20Final%20Report%20190210\(1\).pdf](http://www.bebirmingham.org.uk/uploads/TP%20Birmingham%20Final%20Report%20190210(1).pdf) accessed: 29/07/2015

³⁷ Birmingham City Council (date unknown) Business Demography 2009-2013: Birmingham, the Greater Birmingham & Solihull Local Enterprise Partnership (GB&SLEP) and the UK

- A2.49 The AAP area falls within three of the Birmingham Constituencies identified within the Business Activity Document 2014³⁸: Ladywood, Hodge Hill and Yardley. For these constituencies, the retail sector represents over 10% of all businesses in the area.
- A2.50 The Profile of Birmingham's Business and Professional Services Sector³⁹ states that the Business and Professional Services Sector represents a significant proportion of Birmingham's economy:
- The majority are small firms (92% under 10 employees), which is similar to the sector picture across the UK ☐
 - Sector employment stands at 87,369 employees: 19% of the city's workforce, and an increase of 16% in five years ☐
 - The Gross Value Added (GVA) from the sector is £2.97bn. ☐
- A2.51 There were 13,169 firms in the sector in 2010: 20% of the city's business base, and an increase of 40% since 2005.
- A2.52 As a regional centre, Birmingham's business and professional services firms have good transport links to put them in touch with London and, via the airport, much further afield. The proposed development of the 'High Speed 2' rail line, would bring Birmingham within 50 minutes travel of central London. ☐
- A2.53 The 2014 Local Economic Assessment for Birmingham⁴⁰ states that economic forecasts for the period to 2030 show that economic output in the city is forecast to grow by around 2.5% per annum from 2015. Major infrastructure investments are set for the area in the coming years which will further serve to enhance strategic linkages across the functional economic area:
- HS2 – 50,000 jobs £4bn GVA
 - New St Gateway – 3,000 jobs £3bn GVA
 - Metro Extension – 1,500 jobs £50m GVA
 - Birmingham Airport Runway Extension – 19,000 jobs £800m GVA

³⁸ Birmingham City Council (date unknown) Business Activity 2014: Birmingham Constituencies

³⁹ Birmingham City Council (date unknown) Profile of Birmingham's Business and Professional Services Sector

⁴⁰ Birmingham City Council (2014) 2014 Local Economic Assessment Birmingham, available at: http://www.birmingham.gov.uk/cs/Satellite?blobcol=urldata&blobheader=application%2Fpdf&blobheadervalue1=Content-Disposition&blobkey=id&blobtable=MungoBlobs&blobwhere=1223571048741&ssbinary=true&blobheadervalue1=attachment%3B+filename%3D873183Birmingham_LEA_2014.pdf accessed: 29/07/15

- A2.54 The Birmingham Local Economic Assessment (2014) states that employment in Birmingham reached its lowest level in 2010, however since then it has recovered with overall employment growing by 20,100 between 2010 and 2013.
- A2.55 Addressing the change in employment by sector between 2010 and 2013; public services shows the largest decline followed by construction with transport and communications and manufacturing also seeing employment fail to recover. The sectors demonstrating the strongest growth in employment were financial and professional services and retail and leisure. This is mirrored in the latest official workplace based employment Data from the 2013 Business Register and Employment Survey (BRES). This data details Birmingham's employment structure, showing that the public sector is the largest sector – accounting for around one third of all employment in the city (33.4% compared to 26.5% nationally).
- A2.56 Only 60% of Birmingham's working age residents are in employment, well below the national employment rate of 72%. The Local Economic Forecasting Model (LEFM) estimates around 250,000 job opportunities will be generated in the city between 2013 and 2025.
- A2.57 Household earnings in Birmingham for 2012 was between £15,000 and £25,000 for 29% of the population, and a further 29% obtained an income of £25,000-£39,000. 23% had an income of below £15,000. Within the AAP area this proportion was over 30% indicating areas of very low household income (Aston 37%, Bordesley Green 31%, Lozells & East Handsworth 35%, Nechells 38%, Soho 31% and Washwood Heath, 34%).
- A2.58 Data from 'End Child Poverty' published in 2013 details that at 31% Birmingham has one of the highest child poverty rates of all the local authorities in the UK with 84,114 children living in poverty. Within the three constituencies of the AAP, the Birmingham Local Economic Assessment shows child poverty at 30-40%. The recent Birmingham Child Poverty Commission Report June 2016 provides a series of recommendations aimed at reducing child poverty in Birmingham.

- A2.59 The Birmingham Big City Plan, City Centre Masterplan⁴¹, was launched in July 2011 as a non statutory planning and regeneration guidance and framework for Birmingham's city centre, setting out the vision for the future of Birmingham to 2026⁴². The economic development vision looks to strengthen alignment of Birmingham City's spatial planning and economic priorities. Key principles are of sustainable growth and an innovative and connected city.

Learning and Skills

Qualifications

- A2.60 Occupation reflects the low levels of qualifications in the area. According to the Birmingham Local Economic Assessment (2014), currently 117,000 or 17.5% of working age residents within Birmingham have no qualifications. This proportion is above the average for the GBSLEP (14%) and significantly above the nation as a whole (10%).

Education Provision

- A2.61 The Primary School Expansion Report⁴³ states that in line with the Primary Capital Programme (2009), a phased approach had been developed to meet the additional school places needed from September 2010 through to September 2012.
- A2.62 The Primary School Expansion Report (2011) identifies that there remains an urgent need for additional primary school places in the City. Options identified: building additional schools; or expand some of existing ones. There are insufficient suitable sites available in the areas of greatest demand for additional places to create new schools and no funding available from government to acquire land for this purpose. As a result, existing schools are to be expanded, however challenges remain relating to the retention of outside space as a result of expansion. Consideration needs to be given to new ways to secure access to both green space for nature studies and access to playing pitches locally for schools.

⁴¹ Birmingham City Council (2011) Birmingham Big City Plan: City Centre Masterplan

⁴² Warwick Economics & Development (2012) Employment Land Study for the Economic Zones and Key Sectors in Birmingham

⁴³ Birmingham City Council (2011) Primary School Expansion

- A2.63 Further challenges are expected for Birmingham as the increased pupil population meets the secondary phase of schooling.

Achievement

- A2.64 Secondary performance in the AAP area and Aol remains good, with trends increasing from 48% to 60% of pupils achieving 5+ GCSEs A*-C⁴⁴.

Community Involvement

- A2.65 Since 2001, electoral turnout for the AAP has improved in all three constituencies:

- Ladywood 52.71%
- Hodge Hill 54.49%
- Yardley 57.03%
- UK 66.1%

Age Diversity and Equality

- A2.66 The 2014 mid year population estimate, Birmingham⁴⁵ supports that Birmingham is a youthful city. 45.7% of Birmingham residents are estimated to be under 30, compared with estimates of 39.4% for England. In contrast 13.1% of our residents are over 65, compared with 17.6% nationally.

- A2.67 With regard to ethnicity in Birmingham, the demographic briefing 2011/02⁴⁶ shows the Black African group increased by 223.4% between 2001 and 2009, and according to ONS estimates the number of Pakistani, White Irish and Black Caribbean residents decreased between 2001 and 2009. It is noted that these are only population estimates, and the 2001 Census contains the most comprehensive information about ethnic groups in Birmingham.

Poverty

- A2.68 The English Indices of Deprivation 2010⁴⁷ are based on broadly the same methodology as the previous version in 2007. Overall 66 per cent of areas in England are in the same decile of the IMD 2010 as they were in 2007.

⁴⁴Institute for Fiscal Studies and Institute of Education (2014) Lessons from London Schools on assignment gaps and social mobility

⁴⁵Birmingham City Council (2015) Mid 2014 Mid Year Population Estimates

⁴⁶Birmingham City Council (2011) Ethnicity in Birmingham

⁴⁷Department for Communities and Local Government (2011) The English Indices of Deprivation 2010

Health

- A2.69 Within the Birmingham Demographic Briefings, topic reports have not been updated since the 2001 Census. The Birmingham Health Profile 2009⁴⁸ gives a snapshot of health in the AAP and surrounding area. The health of the people of Birmingham remains worse than the England average. Infant mortality and life expectancy are significantly worse. Whilst early death rates from heart disease, stroke and cancer have fallen over the past ten years, they still remain higher than the England average.

Crime

- A2.70 Crime and ASB rates in the West Midlands have continued to decrease in the West Midlands, from 22,892 incidents to 21,754 incidents from July 2014 to July 2015.

Housing

Decent Homes

- A2.71 In July 2000 the Government set a target for all social housing providers (councils, housing associations etc) to bring their housing stock up to the government standard of decency by 2010. To be considered 'decent' a dwelling has to meet the current statutory minimum standard for housing, be in a reasonable state of repair and have reasonably modern facilities and services. The scheme has been very successful and by April 2008, 78% of the City's council housing had achieved decency.

Housing Forecasts

- A2.72 The BDP Main Modifications outline Birmingham's objectively assessed housing need for the period 2011 to 2031 is 89,000 additional homes. ONS (2012) projections indicate a population rise of 156,000 by 2031 and DCLG 2012 household projections indicate that this will result in an increase in households of 86,000 households between 2011 and 2031.

⁴⁸ APHO and Department of Health (2009) Health Profiles Birmingham

- A2.73 According to the Housing Market Reports Birmingham City⁴⁹ the pattern of property price variation in Birmingham can be seen to broadly mirror that of the West Midlands, as well as England and Wales. Birmingham's property prices have remained above the regional average, but below the national figure, from the 2007 peak and through the fluctuations afterwards. However, Birmingham's average drop in price was less than both the regional and the national decrease, while the rebound has been stronger. This has brought Birmingham's average price closer to that of England and Wales in 2010, before a slight widening in average prices again in 2011, but the gap has been maintained during 2012. This suggests that Birmingham's housing market has so far suffered a less severe downturn than the region.

Culture, Sport and Recreation

- A2.74 The City Council has announced its intention to bid to host the 2026 Commonwealth Games which could bring significant economic, social and cultural benefits to the city and region. The national decision on the successful English candidate city will be made later in 2017, whilst the final decision on the games host city will be made in 2019.

⁴⁹ Birmingham City Council's Homes and Neighborhood Directorate (2013) Housing Market Reports Birmingham City

Appendix B: SA Framework

Bordesley Park AAP SA Framework

	Sustainability theme	SA Objective	Decision making criteria: Will the option/proposal...		Indicators	Ta
1	Material assets, water	To use natural resources such as water and minerals efficiently	Q1a	Will it include measures to limit water consumption?	Average domestic water consumption (l/head/day)	
			Q1b	Will it lead to reduced consumption of materials and resources?	Percentage of commercial buildings meeting BREEAM Very Good Standard or above or equivalent	
					Percentage of housing developments achieving a four star or above sustainability rating as stipulated by the Code for Sustainable Homes	
			Q1c	Will it safeguard the area's minerals resources for future use?	Area of land with potential for minerals use sterilised	
2	Climate change	To reduce overall energy use and contributions to the causes of climate change.	Q2a	Will it help limit the area's carbon footprint?	Proportion of electricity produced from renewable resources	
					Proportion of new homes achieving a four star or above sustainability rating for the "Energy/CO ₂ " category as stipulated by the Code for Sustainable Homes	
					Per capita greenhouse gas emissions	Re 20 wic
					Emission by source	
					Percentage of people aged 16-74 who usually travel to work by driving a car or van	
					CO ₂ , methane and nitrous oxide emissions per sector	Re 20 Re 20 tar
3	Accessibility and transportation	Make efficient use of the existing transport infrastructure by promoting sustainable transport, promoting modal shift and minimising the need to travel by	Q3a	Will it reduce the need to travel?	Percentage of completed significant local service developments located within a defined centre	
					Average distance (km) travelled to fixed place of work	

Sustainability theme	SA Objective	Decision making criteria: Will the option/proposal...	Indicators	Ta
	private car.		Percentage of new residential development within 30 minutes public transport time of a GP, hospital, primary and secondary school, employment and major health centre. Percentage of residents surveyed finding it easy to access key local services.	
		Q3b Will it encourage walking and cycling?	Percentage of people aged 16-74 who usually travel to work by bicycle or on foot Proportion of new development providing cycle parking.	
		Q3c Will it reduce car use?	Percentage of people aged 16-74 who usually travel to work by driving a car or van	
		Q3d Will it encourage use of public transport?	Percentage of people aged 16-74 who usually travel to work by bus or train Number of journeys made by bus per annum Percentage of development in urban/rural areas within 400m or 5 minutes walk of half hourly bus service Number of journeys made by train per annum	Ze
		Q3e Will it provide adequate means of access by a range of sustainable transport modes?	Distance of new development to existing or proposed public transport routes. Provision of new walking and cycling links to accompany new development	
		Q3f Will it help limit HGV traffic flows?	HGV traffic flows	
4	Material assets	Encourage and enable waste minimisation, reuse, recycling and recovery	Q4a Will it provide facilities for the separation and recycling of waste? Q4b Will it encourage the use of recycled materials in construction?	Type and capacity of waste management facilities Household waste (a) arisings and (b) recycled or composted Reuse of recycled materials from former building stock and other sources
5	Material assets	Encourage land use and development that optimises the use of previously developed land	Q5a Will it utilise derelict, degraded and under-used land?	% of dwellings built on previously developed land

Sustainability theme	SA Objective	Decision making criteria: Will the option/proposal...		Indicators	Ta
		use of previously developed land and buildings		Previously developed land that has been vacant or derelict for more than five years	
			Q5b	Will it lead to the more efficient use of land?	Housing density in new development: average number of dwellings per hectare
6	Climate change, water	Ensure that the design and planning process reduces the impact of climate change and the risk of flooding	Q6a	Will it increase the number of properties at risk of flooding?	Amount of new development (ha) situated within a 1:100 flood risk area or 1:200 tidal flood risk area (Flood Zone 3), including an allowance for climate change
					Number of planning permissions granted
					Number of properties at risk of flooding.
			Q6b	Will it encourage the development of buildings prepared for the impacts of climate change?	% of developments meeting the minimum standards for the "Surface Water Run-Off" and "Surface Water Management" categories in the Code for Sustainable Homes
					Thermal efficiency of new and retro fitted development; % planning permissions for projects designed with passive solar design, building orientation, natural ventilation
					No. of planning permissions incorporating SUDS
			Q6c	Will it retain existing green infrastructure and promote the expansion of green infrastructure to help facilitate climate change adaptation?	Amount of new greenspace created per capita
7	Quality of life, townscape	Promote the expansion and improvement of a comprehensive and multifunctional green infrastructure network.	Q7a	Will it meet open space standards?	Area of parks and green spaces per 1,000 head of population
					Accessible Natural Greenspace
					Number of planning permissions granted on open space land for other uses
			Q7b	Will it reduce deficiencies in open space and improve linkages between areas of open space?	Amount of land needed to rectify deficiency in Open Space Standards (ha)
					Percentage of eligible open spaces managed to green flag award standard

	Sustainability theme	SA Objective	Decision making criteria: Will the option/proposal...		Indicators	Ta
					Percentage of residents that are satisfied with the quantity/quality of open space	
8	Historic environment, townscape	Value, protect, enhance and restore the AAP area's built and historic environment and landscape.	Q8a	Will it preserve buildings of architectural or historic interest and, where necessary, encourage their conservation	Number of Grade I and Grade II* buildings at risk.	No
			Q8b	Will it preserve or enhance archaeological sites/remains?	Number of Grade II and locally listed	No
					Proportion of scheduled monuments at	No
			Q8c	Will it improve and broaden access to, understanding, and enjoyment of the historic environment?	Number/proportion of development proposals informed by archaeological provisions, including surveys	All
					Annual number of visitors to historic attractions	
			Q8d	Will it safeguard and enhance the character of the townscape and local distinctiveness and identity?	Application of detailed characterisation studies to new development	
Q8e	Will it preserve or enhance the setting of cultural heritage assets?	Proportion of conservation areas covered by up-to-date appraisals (less than five years old) and published management plans.				
9	Biodiversity and geodiversity	Value, protect, enhance, restore and re-create local biodiversity.	Q9a	Will it lead to a loss of or damage to biodiversity interest?	Extent (and condition) of priority habitats	
			Q9b	Will it lead to habitat creation, matching BAP priorities?	Area and condition of internationally and nationally designated sites in appropriate management	
					Area of Nature Conservation designation per 1,000 population (ha).	At 1,0
					Area of new habitat creation reflecting Hampshire BAP priorities	
			Q9c	Will it increase the area of sites designated for their geodiversity interest?	Extent and condition of key habitats for which Biodiversity Action Plans (BAPs) have been established	
					Area designated for geological interest	
Q9d	Will it link up areas of fragmented habitat?	Extent (and condition) of priority habitats				
Q9e	Will it increase awareness of biodiversity and geodiversity assets?	Number of school trips to Birmingham's Nature Reserves				
		Number of accessibility improvements to nature reserves and local sites (including geodiversity sites)				

	Sustainability theme	SA Objective	Decision making criteria: Will the option/proposal...		Indicators	Ta
					Number of interpretation improvements (including information boards etc) in nature reserves and local sites	
10	Air quality, heath	Minimise air pollution levels and create good quality air	Q10a	Will it lead to improved air quality?	Number and area of Air Quality Management Areas No. of days when air pollution is moderate or high for NO ₂ , SO ₂ , O ₃ , CO or PM ₁₀	To
11	Water	Minimise water pollution levels and improve water quality	Q11a	Will it lead to improved water quality?	% of watercourses classified as good or very good biological and chemical quality	All at Fr
12	Soil, water	As part of new development address and mitigate land contamination issues within the	Q12a	Will it maintain and enhance soil quality?	Area of contaminated land (ha) % of projects (by number and value) involving remediation of any kind	
13	Health, quality of life	Minimise noise pollution levels	Q13a	Will it reduce noise pollution	Noise pollution readings in local area Number of noise complaints made to Environmental Protection Unit	
14	Economic factors	Encourage corporate social and environmental responsibility, with local organisations and agencies leading by example	Q14a	Will it enable communities to influence the decisions that affect their neighbourhoods and quality of life?	Percentage of adults surveyed who feel they can influence decisions affecting their own local area Geographic coverage of community neighbourhood forums Membership of community networks and associations Percentage of people who say they are satisfied with their local area as a place to live	
15	Economic factors	Encourage regeneration and economic growth to achieve a strong, stable and sustainable economy that benefits the inhabitants of the AAP area	Q15a	Will it ensure that new employment, office, retail and leisure developments are in	Proportion of residential development within 30 minutes public transport time of key services	
			Q15b	Will it support or encourage new business sectors?	No. of start-up businesses in the environmental and social enterprise sector Expenditure on R&D as the proportion of GVA Number of new VAT registrations in the AAP area	
			Q15c	Will it help reduce unemployment and worklessness?	Percentage difference between worklessness in the AAP area and the City average Number of people employed in local businesses	
			Q15d	Will it help ensure an adequate	Ha of new employment land provision	

	Sustainability theme	SA Objective	Decision making criteria: Will the option/proposal...		Indicators	Ta
				supply of employment land?	Employment land supply by type Loss of employment land to other uses	
16	Quality of life, economic factors	Promote investment in future prosperity, including ongoing investment and engagement in learning and skill development	Q16a	Will it help improve educational attainment?	Number of working age adults achieving basic skills qualification in the AAP area Number of working age adults achieving NVQ Level 2 qualification in the AAP area Number of working age adults achieving NVQ Level 3 qualification in the AAP area Percentage of 16 year olds achieving at least 5 A*-C GCSE or equivalent Percentage of 16 year olds achieving 5 or more GCSEs with grades A* - G or equivalent (including English, and Maths Education, Skills & Training Deprivation Index)	
			Q16b	Will it increase learning participation and adult education and help achieve life-long learning?		
17	Quality of life	Enable communities to influence the decisions that affect their neighbourhoods and quality of life	Q17a	Will it enable communities to influence the decisions that affect their neighbourhoods and quality of life?	Percentage of adults surveyed who feel they can influence decisions affecting their own local area	
			Q17b	Will it improve the satisfaction of people with their neighbourhoods as a place to live?	% respondents very or fairly satisfied with their neighbourhood	
18	Quality of life	Promote social inclusion by ensuring easy and equitable access to services, facilities and opportunities, including jobs and learning	Q18a	Will it reduce the need to travel?	Percentage of completed significant local service developments located within a defined centre Average distance (km) travelled to fixed place of work Percentage of new residential development within 30 minutes public transport time of a GP, hospital, primary and secondary school, employment and major health centre. Percentage of residents surveyed finding it easy to access key local services.	
			Q18b	Will it encourage walking and cycling?	Percentage of people aged 16-74 who usually travel to work by bicycle or on foot Proportion of new development providing cycle parking.	

	Sustainability theme	SA Objective	Decision making criteria: Will the option/proposal...		Indicators	Ta
			Q18c	Will it reduce car use?	Percentage of people aged 16-74 who usually travel to work by driving a car or van	
			Q18d	Will it encourage use of public transport?	Percentage of people aged 16-74 who usually travel to work by bus or train Number of journeys made by bus per annum Percentage of development in urban/rural areas within 400m or 5 minutes walk of half hourly bus service Number of journeys made by train per annum	
			Q18e	Will it provide adequate means of access by a range of sustainable transport modes?	Distance of new development to existing or proposed public transport routes. Access to corner shop or supermarket, post office, childcare, doctor or hospital Provision of new walking and cycling links to accompany new development	
19	Quality of life	Address poverty and disadvantage, taking into account the particular difficulties of those facing multiple disadvantages	Q19a	Will it help achieve life-long learning?	No. of people with NVQ2 qualifications	
			Q19b	Will it enable communities to influence the decisions that affect their neighbourhoods and quality of life?	Percentage of adults surveyed who feel they can influence decisions affecting their own local area	
			Q19c	Will it improve the satisfaction of people with their neighbourhoods as a place to live?	% respondents very or fairly satisfied with their neighbourhood	
			Q19d	Will it reduce crime and the fear of crime?	Crime Deprivation Index	
			Q19e	Will it increase learning participation and adult education?	Education, Skills & Training Deprivation Index	
20	Health	Improve health and reduce health inequalities by encouraging and enabling healthy active lifestyles and protecting health as well as providing equitable access to health services and facilities.	Q20a	Will it improve access for all to health, leisure and recreational facilities?	Travel time by public transport to nearest health centre and sports facility.	
			Q20b	Will it provide sufficient areas of open space for all?	Area of parks and green spaces per 1,000 head of population Accessible Natural Greenspace	BC be 10 Gr 5 n BC de

	Sustainability theme	SA Objective	Decision making criteria: Will the option/proposal...		Indicators	Ta
					Area of playing fields and sports pitches.	2.8 pla Fie sp de
			Q20c	Will it improve long term health?	Life expectancy at birth Standardised mortality rates	
			Q20d	Will it ensure that risks to human health and the environment from contamination are identified and removed?	Area of contaminated land (ha)	
			Q20e	Will it encourage healthy and active lifestyles?	% of adults (16+) participating in at least 30 minutes of moderate intensity sport and active recreation (including recreational walking) on three or more days of the week The number of sports pitches available to the public per 1,000 population	To ye po thr Fra
			Q20f	Will it reduce obesity?	Percentage of adult population classified as obese	
			Q20g	Does it consider the needs of the city's growing elderly population?	Percentage of older people being supported intensively to live at home	Ino be by
			Q20h	Will it enable communities to influence the decisions that affect their neighbourhoods and quality of life?	Percentage of adults surveyed who feel they can influence decisions affecting their own local area	
			Q20i	Will it improve the satisfaction of people with their neighbourhoods as a place to live?	% respondents very or fairly satisfied with their neighbourhood	
			Q20j	Will it reduce crime and the fear of crime?	Indices of Multiple Deprivation: Crime domain	
			Q20k	Will it reduce deprivation in the area?	Indices of Multiple Deprivation	
			Q20l	Will it improve road safety?	Number of people killed or seriously injured on the roads per year	
21	Quality of life	Improve Community safety and reduce crime, fear of crime and antisocial behaviour	Q21a	Will it reduce crime and the fear of crime?	Indices of Multiple Deprivation: Crime domain (Crime Deprivation Index)	
22	Housing, health, quality of life	Provide decent and affordable housing for all, of the right quantity, type, tenure and affordability to meet local needs	Q22a	Will it improve access to services and facilities from rural	Percentage of rural households within 800m of an hourly or better bus service	
			Q22b	Will it provide sufficient areas of open space for all?	Area of parks and green spaces per 1,000 head of population	2.8 pla Fie

	Sustainability theme	SA Objective	Decision making criteria: Will the option/proposal...		Indicators	Ta
					Accessible Natural Greenspace	10 Gr 5 r
					Number of planning permissions granted on open space land for other uses	
			Q22c	Will it improve long term health?	Life expectancy at birth	
					Standardised mortality rates	
23	Health, quality of life	Improve opportunities to participate in diverse cultural sporting and recreational activities	Q23a	Will it ensure all groups have access to decent, appropriate and affordable housing?	Affordable housing completions	
			Q23b	Will it identify an appropriate supply of land for new housing?	Net additional dwellings for the current year.	
			Q23c	Will it ensure that all new development contributes to local distinctiveness and improve the local environment?	Number of major housing applications refused on design grounds. Accessible Natural Greenspace	10 Gr 5 r BC be
			Q23d	Will it meet the building specification guidance in the Code for Sustainable Homes? (DCLG)	Percentage of housing developments achieving a four star or above sustainability rating as stipulated by the Code for Sustainable Homes	All 20
			Q23e	Will it reduce the number of households on the Housing Register?	Number of households on the Housing Register	To ho of ho

Appendix C: Where the Planning Practice Requirements have been met

Planning Practice Guidance	How and where this has been addressed in the SA
Stage A: Setting the context and objectives, establishing the baseline and deciding on the scope	
(Paragraph: 014 Reference ID: 11-014-20140306) Does the scoping stage set out the context, objectives and approach of the assessment?	Bordesley Park Area Action Plan Sustainability Appraisal Scoping Report (May 2010) Baseline information and the PPP review was updated in 2016.
(Paragraph: 014 Reference ID: 11-014-20140306) Does the scoping stage identify relevant environmental, economic and social issues and objectives?	Bordesley Park Area Action Plan Sustainability Appraisal Scoping Report (May 2010), Chapters 2 to 4.
(Paragraph: 014 Reference ID: 11-014-20140306) Has the scope of the SA been consulted on with the consultation bodies: Natural England, Historic England and Environment Agency?	The Scoping Report was consulted on for a five week period with the statutory consultees and other stakeholders in November and December 2009.
Paragraph: 016 Reference ID: 11-016-20140306 Does the baseline information consider existing environmental, economic and social characteristics of the area including data on historic and likely future trends, including a 'business as usual' scenario?	Bordesley Park Area Action Plan Sustainability Appraisal Scoping Report (May 2010), Chapter 3.
Stage B: Development and refining alternatives and assessing effects	
Paragraph: 018 Reference ID: 11-018-20140306 Does the SA identify, describe and evaluate the likely significant positive and negative effects of the preferred approach and all reasonable alternatives on environmental, economic and social factors, using the evidence base and taking account of: (a) The probability, duration, frequency and reversibility of the effects; (b) The cumulative nature of the effects; (c) The transboundary nature of the effects; (d) The risks to human health or the environment; (e) The magnitude and spatial extent of the effects; (f) The value and vulnerability of the area likely to be affected due to:	SA of the Bordesley Park AAP: Options SA Report focused on Wheels site Options (August 2010) SA of the Bordesley Park AAP: Options SA Report (September 2011) SA of the Bordesley Park AAP: Preferred Options SA Report (July 2013) This report, Chapters 5 to 7

<p>(i) Special natural characteristics or cultural heritage;</p> <p>(ii) Exceeded environmental quality standards or limit values; or;</p> <p>(iii) Intensive land use; and</p> <p>(g) The effects on areas or landscapes which have recognised national, Community or international protection status?</p>	
<p>Paragraph: 017 Reference ID: 11-017-20140306 and 018 Reference ID: 11-018-20140306</p> <p>Does the SA identify measures to prevent, reduce and, as fully as possible, offset likely significant adverse effects, maximise beneficial effects and ways of monitoring likely significant effects?</p>	<p>SA of the Bordesley Park AAP: Preferred Options SA Report (July 2013)</p> <p>This report, Chapters 8 and 9</p>
<p>Paragraph: 018 Reference ID: 11-018-20140306</p> <p>Does the SA assess all reasonable alternatives in the same level of detail as the option the plan-maker proposes to take forward?</p>	<p>Yes. The same SA Framework has been used at each stage.</p>
<p>Paragraph: 018 Reference ID: 11-018-20140306</p> <p>Does the SA outline the reasons the alternatives were selected, the reasons the rejected options were not taken forward and the reasons for selecting the preferred approach in light of the alternatives?</p>	<p>This report, Chapter 4</p>
<p>Paragraph: 018 Reference ID: 11-018-20140306</p> <p>Does the SA provide conclusions on the overall sustainability of the different alternatives, including those selected as the preferred approach in the Local Plan?</p>	<p>SA of the Bordesley Park AAP: Options SA Report focused on Wheels site Options (August 2010)?</p> <p>SA of the Bordesley Park AAP: Options SA Report (September 2011)</p> <p>This report, Chapter 3</p>
<p>Paragraph: 018 Reference ID: 11-018-20140306</p> <p>Does the SA document any assumptions used in assessing the significance of effects of the Local Plan?</p>	<p>This report, Section 2.9</p>
<p>Stage C: Prepare the sustainability appraisal report</p>	
<p>Paragraph: 019 Reference ID: 11-019-20140306</p> <p>Does the SA clearly show how the requirements of the SEA Directive have been met?</p>	<p>In meeting the requirements of the PPG, as set out in this table, the SA Report has also met the requirements of the SEA Directive.</p>
<p>Paragraph: 019 Reference ID: 11-019-20140306</p>	<p>This report, Non-Technical Summary</p>

Does the SA include a non-technical summary of the information within the main report?	
Stage D: Seek representations on the sustainability appraisal report from consultation bodies and the public	
<p>Paragraph: 020 Reference ID: 11-020-20140306</p> <p>Have the following been consulted on the sustainability appraisal:</p> <ul style="list-style-type: none"> • Natural England; • Historic England; • Environment Agency; and • Other parties who are affected or likely to be affected by, or have an interest in, the decisions involved in the assessment and adoption or making of the plan? 	<p>The statutory bodies were consulted on the Preferred Options (July 2013) SA Report.</p> <p>This report will also be subject to consultation with the statutory consultees for a six-week period.</p>
<p>Paragraph: 020 Reference ID: 11-020-20140306</p> <p>Has the SA, including non-technical summary, been published alongside the draft Local Plan for a minimum of six weeks?</p>	<p>This report will be published alongside the final version of the plan for a minimum of six weeks.</p>
<p>Paragraph: 021 Reference ID: 11-021-20140306 and 023 Reference ID: 11-023-20140306</p> <p>Has the SA considered modifications proposed following consultation or examination that substantially alter the plan and/or are likely to give rise to significant effects?</p>	<p>Following consultation and/or examination, the SA process will consider any relevant modifications.</p>
Stage E: Post adoption reporting and monitoring	
<p>Paragraph: 024 Reference ID: 11-024-20140306</p> <p>Does the SA meet the post-adoption requirements of the SEA Directive?</p>	<p>Not applicable at this stage.</p>
<p>Paragraph: 025 Reference ID: 11-025-20140306</p> <p>Does the SA, post-adoption statement or Local Plan include details of monitoring arrangements?</p>	<p>This report, Chapter 10</p>

Appendix D: Summary of 2010 Early Development Options

Summary of 2010 Early Development Options

SA Objective		DM	CYS	CLS	MLA
1	Natural resources	0	0	0	0
2	Energy use	0	+/-	+/-	--
3	Sustainable transport	+	+/-	+/-	-
4	Waste minimisation	0	0	0	0
5	Previously developed land	+/-	+	+	++
6	Climate change	0	+/-	+/-	+/-
7	Green Infrastructure	0	0	0	0
8	Historic environment	-	+	+/-	+
9	Biodiversity	+/-	+/-	+/-	+/-
10	Air	0	-	--	--
11	Water	0	+	-	+
12	Land contamination	+	++	+	++
13	Noise	0	+/-	-	-
14	Corporate social and environmental responsibility	0	0	0	0
15	Economic growth	+/-	+	++	++
16	Investment	+	++	+	+
17	Community influence	0	+	0	0
18	Social inclusion	+/-	++	+	+
19	Poverty and disadvantage	+/-	++	+	+
20	Health	0	++	+	+
21	Community safety	-	++	-	+/-
22	Affordable housing	0	+	+	+
23	Recreational activities	+	++	+	+
Code for Table 3.2	Development principles				
DM	Do minimum				
CYS	Community uses				
CLS	Commercial uses				
MLA	Major Leisure Attraction				

Appendix E: Summary of 2011 Options SA Report Assessment Matrix

Summary of 2011 Options SA Report assessment matrix

SA Objective		Reasonable Alternatives											
		W1	W2	W3	W4	A1	A2	A3	AR1	AR2	SH1	SH2	SH3
1	Natural resources	0	+	0	0	0	0	0	0	0	0	0	0
2	Energy use	0	+/-	-	-	0	+/-	+/-	+/-	+/-	0	+/-	0
3	Transport	+	++	+/-	-	+	+	-	+	+	+	+	+
4	Waste	0	+	0	0	0	0	0	0	0	0	0	0
5	Developed land	+/-	+	+	+	+/-	+	+	++	+	++	++	+
6	Climate change	0	+	+/-	+/-	0	0	0	+/-	+/-	0	0	0
7	GI	0	+	+/-	+	++	++	0	0	0	+	++	+
8	Historic	-	+/-	+	--	+	+	+	+	+	+	+	+
9	Biodiversity	+/-	+/-	-	+/-	+/-	+/-	+/-	+/-	+/-	+/-	+/-	+/-
10	Air	0	+/-	-	--	0	-	--	+/-	+/-	+/-	+/-	+/-
11	Water	0	+	+	-	0	+	+/-	0	0	0	0	0
12	Land	+	++	++	+/-	0	+	+/-	0	0	0	0	0
13	Noise	0	+/-	-	--	+	+/-	-	-	-	+/-	+/-	+/-
14	Responsibility	0	0	0	0	0	0	0	+	+	0	0	0
15	Economic growth	+/-	-	++	++	+/-	-	++	+	++	+	++	+
16	Investment	+	++	+	+/-	0	+	+	+	+	+	+	+
17	Community	0	++	0	-	0	+/-	-	+	+	++	++	++
18	Social inclusion	+	++	+	+	0	+	+	+	++	+	+	+
19	Poverty	+/-	++	+	-	0	0	+/-	+	++	+	++	+
20	Health	+	+	+	+/-	+	+	-	+	+	+	+	+
21	Community safety	-	+	+/-	-	-	+/-	+/-	+	+	+	+	+
22	Housing	0	++	+/-	-	0	++	0	0	-	0	+	0
23	Recreation	+	+	+	+	+	+	0	0	0	+	+	+
Code		Reasonable alternative (from 2011 Options SA Report)											
W1		Wheels site and environs: Incremental Change											

W2	Wheels site and environs: Residential
W3	Wheels site and environs: Major Leisure Attraction
W4	Wheels site and environs: Industrial and Employment
A1	Adderley Park: Do Minimum
A2	Adderley Park: Residential and Community
A3	Adderley Park: Employment
AR1	Alum Rock Road: Do Minimum
AR2	Alum Rock Road: Growth of the Centre to the East
SH1	Small Heath Centre: Do Minimum
SH2	Small Heath Centre: The Gateway
SH3	Small Heath Centre: Local Centre Consolidation

Appendix F: Assessment Matrices of the AAP Preferred Options (2013)

Assessment matrix of AAP development principles (2013 Preferred Options)

SA Objective		G	C	LC	S
1	Natural resources	+	0	0	+
2	Energy use	+	+	+	++
3	Sustainable transport	++	++	+	0
4	Waste minimisation	0	0	0	+
5	Previously developed land	+	0	++	0
6	Climate change	+	0	+	+/-
7	Green Infrastructure	+	++	++	0
8	Historic environment	0	0	++	0
9	Biodiversity	+	+	++	0
10	Air	0	+	0	0
11	Water	0	+	+	0
12	Land contamination	0	0	0	0
13	Noise	0	+	0	0
14	Corporate social and environmental responsibility	0	0	0	+
15	Economic growth	++	++	0	+
16	Investment	+	0	0	0
17	Community influence	0	+	+	0
18	Social inclusion	++	++	+	0
19	Poverty and disadvantage	+	0	+	0
20	Health	0	+	+	0
21	Community safety	0	+	++	0
22	Affordable housing	++	0	+	0
23	Recreational activities	+	+	+	0
Code	Development principles				
G	Growth				
C	Connectivity				
LC	Local Character				
S	Sustainability				

Assessment matrix of the five transformational change areas (2013 Preferred Options)

SA Objective		Key opportunities for change				
		WS	CR	AP	AR	SH
1	Natural resources	0	0	0	0	0
2	Energy use	+	+	0	0	+
3	Sustainable transport	+	+	++	+/-	++
4	Waste minimisation	0	0	0	0	0
5	Previously developed land	+/-	+	+	++	++
6	Climate change	0	0	0	0	0
7	Green Infrastructure	+/-	+/-	0	0	+
8	Historic environment	+	+	+	+	+
9	Biodiversity	+/-	0	0	0	+
10	Air	+	+	+	+/-	+
11	Water	+	0	0	0	0
12	Land contamination	++	+	0	0	0
13	Noise	+	+	+	+/-	+
14	Corporate social and environmental responsibility	0	0	0	0	0
15	Economic growth	++	+/-	+	++	++
16	Investment	++	+	++	+	+
17	Community influence	0	+	+	0	+
18	Social inclusion	+	+	+	+	+
19	Poverty and disadvantage	+	+	+	0	0
20	Health	+/-	+	++	0	+
21	Community safety	+/-	0	0	0	0
22	Affordable housing	-	++	+	-	++
23	Recreational activities	+/-	+	+	0	+
Code	Key opportunities for change					
WS	The Wheels site and Environs					
CR	Cherrywood Road Area					
AP	Adderley Park					
AR	Alum Rock Road					
SH	Small Heath Local Centre					

Assessment matrix of the six neighbourhoods (2013 Preferred Options)

SA Objective		Neighbourhood					
		V	WH	BV	BG	SHn	SHs
1	Natural resources	0	0	0	0	0	0
2	Energy use	+	++	+	+	+	++
3	Sustainable transport	++	+/-	++	++	+	++
4	Waste minimisation	0	0	0	0	0	0
5	Previously developed land	+	+	+	+	+	++
6	Climate change	-	0	+	0	+	+
7	Green Infrastructure	++	++	++	+	++	++
8	Historic environment	0	+/-	+	0	+/-	0
9	Biodiversity	+	+	++	+	+	++
10	Air	+/-	+	+	+	+	+
11	Water	+	+	+	0	0	0
12	Land contamination	+	+	0	++	0	0
13	Noise	+/-	+	+	+	+	+
14	Corporate social and environmental responsibility	0	0	0	0	0	0
15	Economic growth	+	+	+	++	+	++
16	Investment	0	+	0	+	+	+
17	Community influence	0	+	0	0	+/-	+
18	Social inclusion	0	+	+	+	+	+
19	Poverty and disadvantage	0	0	0	0	0	0
20	Health	0	0	0	+/-	+	+
21	Community safety	0	0	0	0	0	0
22	Affordable housing	0	+	+	+	+	0
23	Recreational activities	+	+/-	+	+/-	+	+
Code	Neighbourhoods						
V	Vauxhall						
WH	Washwood Heath						
BV	Bordesley Village						
BG	Bordesley Green						
SHn	Small Heath (North)						
SHs	Small Heath (South)						



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