Longbridge Area Action Plan

Sustainability Appraisal and Strategic Environmental Assessment of the Longbridge Area Action Plan Submission Document

Sustainability Report: Public Consultation Document
March 2008

Halcrow Group Limited

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Halcrow Group Limited
Red Hill House 227 London Road Worcester WR5 2JG
Tel +44 (0)1905 361361 Fax +44 (0)1905 361362
www.halcrow.com

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Contents Amendment Record

This report has been issued and amended as follows:

Issue	Revision	Description	Date	Signed
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1	2	*DRAFT* Sustainability Report – for comment	05/12/07	NP
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2	2	Sustainability Report with amends	15/02/08	NP
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SUSTAINABILITY APPRAISAL AND

STRATEGIC ENVIRONMENTAL ASSESSMENT OF THE

LONGBRIDGE AREA ACTION PLAN SUBMISSION DOCUMENT

Non Technical Summary

March 2008

Birmingham City Council

worcestershire countycouncil

bromsgrove council
www.bromsgrove.gov.uk

Introduction

This document is a summary of the Sustainability Report which has been produced as part of a Sustainability Appraisal (SA) and Strategic Environmental Assessment (SEA) of the Longbridge Area Action Plan (AAP) Submission Document. A full version of the Sustainability Report is available to download from the Birmingham City's and Bromsgrove District's websites:

www.birmingham.gov.uk/longbridgeaap
http://bromsgrove.gov.uk

What is a Sustainability Appraisal?

Sustainability Appraisal (SA) is a process that looks at the extent to which plans contribute to the achievement of a set of objectives that cover environmental, social and economic considerations.

What is a Strategic Environmental Assessment?

The SEA process aims to ensure that likely significant environmental effects arising from plans and programmes are identified, assessed, mitigated, communicated and monitored, and that opportunities for public involvement are provided. It enables plan-making authorities to incorporate environmental considerations into decision-making at an early stage and in an integrated way.

The Longbridge AAP falls within the scope of the SEA Directive (2001/42/EC) on 'the assessment of the effects of certain plans and programmes on the environment', and the UK SEA Regulations 2004. The SEA Directive is an important advance in planning and environmental law. The objective of the Directive is to: *"Provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development"*.

What is the Longbridge AAP?

The Longbridge AAP sets out the detailed planning framework for regeneration of the former MG Rover works in Longbridge. The AAP aims to guide the future development of the area, using the available land in the most effective way. This involves considering the proposed land uses in the previous Longbridge Development Framework (LDF) and other policy documents, consulting with the local community on current needs and priorities and taking advice from technical development specialists about what is possible. Some proposals in the LDF are already being developed, such as the Longbridge Technology Park.

A plan of the AAP area is shown in Figure 1.

The SA Process

The SA process involves five stages, described below: *Table 1: The five stages of SA*

SA stages	
A	Setting the context and objectives, establishing the baseline and deciding on the scope.
B	Developing and refining options and assessing effects.
C	Preparing the Sustainability Appraisal Report.
D	Consulting on the preferred options of the AAP and Sustainability Report.
E	Monitoring the significant effects of implementing the AAP.

A more detailed methodology is presented in the full version of the Sustainability Report.

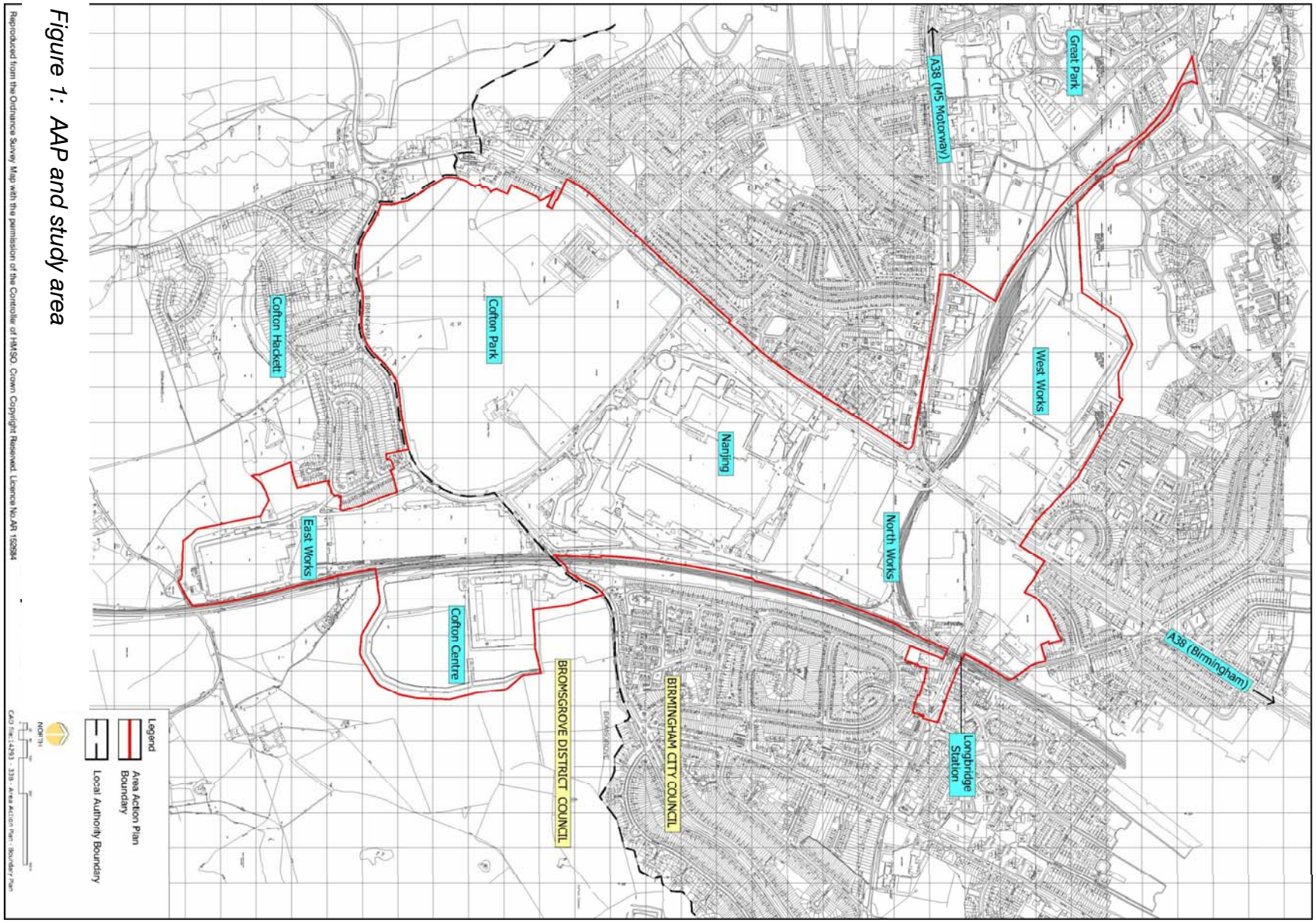

Figure 1: AAP and study area

SA and the Longbridge AAP

The SA was carried out alongside, and has interacted with, the development of the Longbridge AAP. This approach helps ensure that any potential adverse social, economic and environmental effects that the plan may have are identified and mitigated against, or removed. In some instances it also highlights opportunities for the Longbridge AAP to improve the social, environmental or economic conditions.

What does the Sustainability Report Contain?

A key product of the SA process is the Sustainability Report, which contains:

- An outline of the main objectives of the programme and its relationship with other relevant plans and programmes that may influence or be influence by the Longbridge AAP;
- Baseline information about the environmental, social and economic characteristics of the Longbridge area;
- An appraisal of strategic alternatives (options);
- Any relevant existing social, environmental and economic problems affecting Longbridge;
- The SA objectives and the way the objectives and any social, environmental and economic considerations have been taken into account;
- The likely significant effects on the environment (biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage, landscape and the inter-relationship between the above factors);
- The measures envisaged to prevent, reduce and as fully as possible offset any significant social, environmental or economic adverse effects as a result of the strategy; and
- A description of the measures envisaged concerning monitoring.

What does this Non-Technical Summary Contain?

This Non-Technical Summary contains:

- Information about plans and policies relevant to the Longbridge AAP;
- A summary of the key environmental and sustainability issues in the area;
- The main objectives of the AAP;
- The SA objectives used to assess the selected options of the AAP;
- A summary of the likely significant social, environmental and economic effects of the AAP;
- Mitigation measures for aspects of the AAP identified as having significant adverse environmental effects, together with general best practice recommendations;
- Monitoring proposals; and
- Details of the consultation on this Sustainability Report and how to respond with comments and/or questions.

Plans and Policies Relevant to the AAP

The Longbridge AAP is influenced by a range of other policies, plans and programmes and sustainability objectives. It also needs to be

consistent with national guidance, regional policy, strategic and local planning policies. The Sustainability Report contains a review of the relevant policies, plans and programmes.

Key Sustainability Issues within Longbridge

Key environmental and sustainability issues in the Longbridge area have been identified and are shown below. The full baseline study is detailed in the Sustainability Report.

- Traffic generated by construction and operation of the development;
- Climate change and energy consumption, and the need to significantly reduce carbon emissions consequent of all new development;
- Air quality and local environmental quality, and how they are impacted by construction and operation of the development;
- Incorporating biodiversity within the new development and enhancing the ecological value of the area;
- Water and resource efficiency during construction and operation of the new development;
- Reducing the risk flooding from water courses, as well as surface water flooding, and improving water quality; and
- Reducing waste generated during construction and operation of the development, and increasing the re-use and recycling of waste.

AAP Objectives

The objectives identified for the AAP are as follows:

- To establish sustainable communities, which embody the principles of sustainable development and meet current and future social, economic and environmental needs in a balanced and integrated way.
- To be at the forefront of sustainable development with commercial buildings, community facilities and housing which showcase excellence in all aspects of environmental sustainability. A key aim is to achieve carbon neutral standards within the lifespan of the scheme.
- To establish a rich tapestry of quality connected open spaces, and river corridors across the Longbridge development, which provide for visual amenity, recreational use, nature conservation value and address flood risk requirements across the plan area, and to protect the historic environment.
- To implement an integrated and sustainable transport infrastructure strategy for Longbridge, which secures appropriate investment in key public transport improvements and road infrastructure and supports the effective management of sustainable travel patterns across the site.
- To implement a comprehensive programme of management for the development, including a local centre management plan, management of open spaces and the public realm.
- To achieve excellence in design through the creation of high quality developments and

design that helps create a real sense of place with buildings, streets, spaces, features and facilities of which people are justifiably proud.

- To support the continued development of Longbridge as a regional investment location for industry and employment, securing economic diversification and business growth, providing 10,000 jobs, protecting existing employment and providing a long-term sustainable job environment.
- To support the protection of land for general industrial uses including the Nanjing Automotive Corporation (NAC) site and Cofton Centre.
- The development of a 25ha Regional Investment Site (RIS) which is attractive to high profile regional, national and international investors as well as a major location for high technology businesses.
- To ensure that employment opportunities are accessible to all and assist in securing the provision of employment and training opportunities for local residents, with no investment being lost for the lack of suitably qualified and skilled people.
- To support a local culture of enterprise, entrepreneurial activity, innovation and sustainable business growth and development.
- To create a sustainable mixed-use centre for Longbridge, which meets local needs by providing a range of quality retail, commercial, leisure, education and residential uses and establishes a distinctive sense of place and heart for the community.
- To deliver a minimum of 1,400 new dwellings to help meet existing and future housing needs and to create a sustainable mixed-use community.
- New homes will provide a mix of type, size and tenure including affordable housing, high density layout appropriate to the location of the site and be designed to highest standards that aim is to achieve carbon-neutral standards within the lifespan of the scheme and, where appropriate, to achieve lifetime homes standards.

SA Objectives

SA objectives have been formulated and used as a recognised way of considering the sustainability effects of a plan and comparing alternatives to it.

The SA objectives have been developed taking account of environmental protection and sustainability objectives identified in other plans, programmes and legislation. The results of baseline data collection and identification of opportunities and constraints also feed into the development of objectives.

Eighteen SA objectives (see in Table 2) were developed in consultation with the Statutory Consultees and relevant stakeholders.

Table 2: SA Objectives used to assess the preferred options in the AAP

	SA Objective
1	Reduce poverty and social exclusion, promote a strong community where people feel they have a say in the future, and encourage equitable accessibility to services.
2	Improve health and reduce health inequalities by encouraging and enabling healthy lifestyles and protecting health, as well as providing equitable access to health services and high quality open spaces, sports and recreational facilities.
3	Improve community safety, and reduce crime, antisocial behaviour and the fear of crime.
4	Support the local community by maximising use of local labour and support adaptation to changing employment circumstances. Encourage investment and engagement to support learning and raise levels and diversity of skills.
5	Encourage regeneration and economic growth in and around Longbridge that does not compromise the ability of future generations to meet their needs, and improve equitable access to job opportunities.

SA Objective	
6	Promote and support the development of new technologies, particularly those with high value and low impact, to encourage enterprise and innovation with a sense of environmental and social responsibility.
7	Make efficient use of the existing road network and reduce dependence on private vehicular travel. Prioritise modal shift to equitable, accessible, sustainable, and integrated forms of public transport, cycling and walking, and increase the provision of public transport networks and passenger facilities. Avoid adverse impacts on the motorway network by providing access appropriate to the required levels of growth.
8	Optimise the use of previously developed land and buildings where possible and practical, remediate contaminated land and create high quality built environments that incorporate a network of accessible interconnected sites and green spaces, enhance biodiversity and maximise opportunities for achieving BAP targets, and promote local distinctiveness and sense of place.
9	Provide high quality affordable housing, ensuring that all new buildings are environmentally sound and meet BREEAM standards.
10	Use renewable sources of energy and encourage energy efficiency, use resources prudently, making the most of local availability, and reduce contributions to climate change.
11	Conserve and, where appropriate, enhance the historic, industrial and cultural heritage of Longbridge and the surrounding area.
12	Maintain and enhance the quality and character of landscape and townscape.
13	Reduce air pollution and improve air quality.
14	Protect, enhance and increase the biodiversity of Longbridge and the surrounding area.
15	Protect water resources and improve water quality.
16	Avoid increasing, and take opportunities to reduce flood risk, and prepare for other impacts of climate change.
17	Minimise waste creation and optimise the re-use and recycling of waste.
18	Use local supply sources and support the sustainable extraction, re-use and recycling of minerals and aggregates resources.

Alternatives

Alternatives are a useful tool when considering different ways of achieving a plan in order that adverse effects are avoided. Alternatives are a statutory part of the SEA process. The SEA Directive requires that *'…reasonable alternatives, taking into account the objectives and the geographical scope of the plan or programme, are identified, described and evaluated'* and *'an outline of the reasons for selecting the alternatives dealt with'* is provided (Article 5.1 and Annex I (h)).

The AAP for Longbridge has been developed with the aid of a wide-ranging public consultation process and has been supported and informed by a series of technical studies (listed at Section 2.2.2 of the Sustainability Report). Five themes were identified together with issues, ideas and opportunities associated with these themes, which are:

- Employment and economy;
- Housing;
- Retailing and community services;
- Environment; and
- Transport.

Analysis of the themes, results of consultation, and the requirements of other relevant policies led to the identification of four strategic land use options and various infrastructure options, which were:

- Option 1: Employment led;
- Option 2: Mixed use, employment led;
- Option 3: Mixed use, town centre led;
- Option 4: Mixed use, housing led; and
- Infrastructure: options focused on road and public transport alternatives, walking and cycling, environmental enhancement and the Rivers Rea and Arrow.

The output of these activities was summarised and presented in an Issues and Options paper, which was consulted on in October / November 2006. Each option underwent an assessment against the SA framework and baseline (see Appendix E of the Sustainability Report).

Following the Issues and Options consultation and further technical and feasibility studies, the Preferred Options for the Longbridge AAP,

together with detailed options for transport and infrastructure proposals, were chosen. These underwent detailed assessment, revealing that the majority will lead to socioeconomic benefits but may come with environmental costs (see Appendix F). The Preferred Options document was published in February 2007 and consulted on for a period of six weeks. Comments received during this consultation period have been taken into account during the appraisal of the AAP submission document

Significant Effects Assessment

The results of the detailed assessment of effects of the Selected Option for the AAP, shown in Table 3 below, reveal some major anticipated benefits in environmental, social and economic terms, though in some cases more detail would help to secure maximum gains; for example with regards to biodiversity, flood risk, waste, energy and materials. The detailed assessment matrices are shown in Appendix L of the Sustainability Report, and an assessment of cumulative effects is shown in Chapter 5 and Appendix N. For details regarding recommendations, see Chapter 6 of the Sustainability Report.

Table 3 should be read in conjunction with the AAP submission document which lists the full details of each proposal.

Recommendations

In order to address the effects identified in the Sustainability Report, to remove or reduce the negative effects and maximise the positive effects, a number of recommendations can be made. Several of the recommendations made during earlier stages of the SA have already been incorporated within the AAP. Other measures that could be pursued during implementation of the Longbridge AAP are listed below.

Air

Potential exists to support the development and uptake of clean transport technologies, for example hydrogen propelled buses. The Councils should seek to influence service providers through operating agreements so that, as a minimum, low emissions technology will be used in conjunction with the Park & Ride and Frankley link.

Biodiversity, Flora and Fauna

A Nature Conservation Management Plan and site wide biodiversity strategy will be developed to ensure that locally important features are protected during redevelopment (proposal OS9 and S2). This should include the black poplar, a species of conservation concern. The NCMP should also promote the use of indigenous and fruit-bearing species for landscaping, linking up existing green areas, improving wildlife corridors, and promoting bat boxes, bird roosts and green roofs. The aim is to enable tree planting and landscaping to ensure green links such as hedgerows and scrub are incorporated into design to maximise the ecological benefits from green space, creating indigenous habitat to the benefit of BAP species, despite to lack of an unbroken wildlife corridor through the area.

Economic Factors

Ensure there are strong links between local employers, the Technology Park and the campus.

Landscape and Townscape

Landscape enhancements should follow a masterplanned approach which incorporates structural landscaping of the site both at its edges and internally and that is designed having regard to the site and its context.

The multi-storey car park adjacent to the local centre will be designed according to BCC's Design Guide; in addition to this, explore potential to locate some parking levels

underground to limit visual impact. This requirement can be incorporated into the brief for the Landscape strategy required by proposal OS9.

(Continues on page 15.)

Table 3: Summary of Effects of the AAP Preferred Options

Proposal	Summary of Effect (from Appendix L)
Sustainability Strategy	**Positive:** The sustainability strategy for the Longbridge AAP incorporates many of the recommendations made during earlier phases of sustainability appraisal and as such will provide far grater benefits, in environmental, social and economic terms, than would have otherwise been experienced. Virtually all SA objectives are promoted, with some major benefits anticipated. In some cases more detail would help to secure maximum gains; for example with regards to biodiversity, flood risk, waste, energy and materials a further 'strategy' is proposed but the details are not made clear.
Design Principles	**Positive:** The design principles for the Longbridge AAP are positive and forward thinking, incorporating some of the recommendations made in earlier phases of sustainability appraisal. Particular advantages relate to a vastly improved quality of townscape and reduced visual impact, improved security and reduced fear of crime, and a greener Longbridge.
Local Centre 1	**Mixed:** Significant benefits will be achieved through this proposal, particularly given its commitment to sustainable development. Economic growth, employment and provision of social facilities will be major wins, while sustainable design and transport measures will ensure these can be achieved at lowest expense to the environment in terms of carbon emissions, reductions in flood risk, waste and resource management, and biodiversity enhancements. Cultural heritage and landscape/townscape quality objectives will also be advanced. Conversely, some issues remain: the traffic impacts of development are unclear and the Local Centre is expected to be a significant trip generator, while air pollution related to construction and construction traffic, as well as operational buildings and commuters to the development cannot be ruled out.
Local Centre 2	**Mixed:** Significant direct and indirect positive effects will be experienced as a result of this proposal through raising the skills profile of the local population and helping to re-train people to access the re-structured employment environment associated with other AAP proposals. In addition, the college is an appropriate use of previously developed land that will greatly improve the visual amenity of the area, and its active frontages will help to provide natural surveillance and rectify the safety environment. Air pollution remains a concern: the traffic impacts of development are unclear and the college is expected to be a significant trip generator, while air pollution related to construction and construction traffic, as well as operational buildings and commuters to the development cannot be ruled out. All other environmental issues are addressed through other aspects of the AAP and as a result of recommendations made in earlier phases of sustainability appraisal.
Local Centre 3	**Mixed:** Minor benefits are associated with this proposal in relation to the provision of relatively small -scale (yet important) employment provision. Significant benefits will be experienced with regards to improving the visual amenity of the area and helping to create a locality that is attractive to new businesses, thereby helping to make the plan as a whole more viable. Air pollution remains a concern: the traffic impacts of development are unclear and the retail quarter is expected to be a significant trip generator, while air pollution related to

Proposal	Summary of Effect (from Appendix L)
	construction and construction traffic, as well as operational buildings and commuters to the development cannot be ruled out. All other environmental issues are addressed through other aspects of the AAP and as a result of recommendations made in earlier phases of sustainability appraisal.
Local Centre 4	**Mixed:** Significant benefits will be achieved through this proposal, particularly given its commitment to sustainable development. Economic growth, employment and provision of social facilities will be major wins, while sustainable design measures will ensure these can be achieved at lowest expense to the environment in terms of carbon emissions, waste and resource management. Cultural heritage and landscape/townscape quality objectives will also be advanced. Conversely, some issues remain: air pollution and the traffic impacts of development are unclear and the mixed use quarter is expected to be a significant trip generator, while air pollution related to construction and construction traffic, as well as operational buildings and commuters to the development cannot be ruled out.
Employment Zone 1	**Mixed:** Significant benefits can be achieved through this proposal with regards to the local employment and economic situation through the diverse range of employment uses proposed. Specifically, live/work units and micro-business facilities, combined with support for skills and training and business development programmes will help to renew and enliven the local economy and foster innovative and entrepreneurial activities; this could be further encouraged by proximity to the Technology Park and college. Proximity to public transport links makes this a sustainable location. Significant positive effects are also expected in visual impact terms, and by reducing crime and the fear of crime, as the proposal will contribute to a revived and active urban centre. Important strategic environmental benefits will be gained by delivering a CHP/biomass plant and a recycling facility; CHP is strongly recommended as it can deliver significant social (in terms of affordable heat and energy) and environmental gains area-wide. Air pollution remains a concern: the traffic impacts of development are unclear and the employment zone is expected to be a significant trip generator, while air pollution related to construction and construction traffic, as well as operational buildings and commuters to the development cannot be ruled out.
Employment Zone 2	**Mixed:** Benefits can be achieved through this proposal with regards to local employment through continued employment of some automotive professionals. Proximity to public transport links makes this a sustainable location. Redevelopment will make appropriate use of previously developed land, while positive effects may be experienced in landscape and visual impact terms with enhanced screening. Air pollution remains a concern: the traffic impacts of development are unclear and the Nanjing site is expected to be a significant trip generator for both cars and goods vehicles, while air pollution related to operational buildings and commuters to the development cannot be ruled out. There is a risk of further land and surface and ground water contamination when car production resumes.
Employment Zone 3	**Mixed:** Significant benefits can be achieved through this proposal with regards to local employment through the employment uses proposed. Proximity to public transport links makes this a sustainable location. Redevelopment will make appropriate use of previously developed land, while positive effects are also expected in landscape and visual impact terms with enhanced screening that will also

Proposal	Summary of Effect (from Appendix L)
	benefit biodiversity. Air pollution remains a concern: the traffic impacts of development are unclear and the Cofton Centre is expected to be a significant trip generator for both cars and goods vehicles, while air pollution related to construction and construction traffic, as well as operational buildings and commuters to the development cannot be ruled out.
Regional Investment Site 1	**Mixed:** The Regional Investment Site is the major source of economic regeneration associated with the Longbridge AAP. It meets regional and local economic policy objectives, is an appropriate land use and will secure thousands of new jobs in the area. Many of the significant negative effects potentially associated with the proposal have been successfully removed by adopting recommendations made in earlier phases of sustainability appraisal. Provision of jobs will help to alleviate social deprivation and exclusion in the local community, particularly as measures will be taken to ensure opportunities will be available to all. Active lifestyles are promoted through sustainable travel measures and provision of fitness centre. Significant benefits will be experienced with regards to improving the visual amenity of the area and helping to create a locality that is attractive to new businesses, thereby helping to make the plan as a whole more viable. Buildings standards and other sustainable energy and resource initiatives will help to ensure that these benefits can be delivered at the lowest cost to the environment in terms of carbon emissions, waste and resource management, and biodiversity enhancements. Re-engineering of the River Rea will also deliver significant biodiversity enhancements as well as reducing flood risk and helping to secure water quality improvements. Conversely, some issues remain: the traffic impacts of development are unclear and the RIS is expected to be a significant trip generator, while air pollution related to construction and construction traffic, as well as operational buildings and commuters to the development cannot be ruled out.
Housing 1	**Mixed:** The proposal delivers significant and important benefits in terms of helping to renew the local housing market and providing additional affordable homes in a sustainable location, while ensuring that this can be achieved with minimum cost to the environment by adopting challenging building standards (particularly with regards to energy, water, waste and resources) and achieving a greater provision of open space. In addition, the proposal will help to improve townscape and landscape character, utilising significant areas of previously developed land, while flood risk is effectively managed through engineering modifications to the River Rea, which will also have biodiversity benefits. Care home accommodation will help tend to the needs of an ageing population. Conversely, some issues remain: air pollution and the traffic impacts of development are unclear and the residential area is expected to be a significant trip generator, while air pollution related to construction and construction traffic, as well as operational buildings and commuters to the development cannot be ruled out.
Housing 2	**Mixed:** The proposal delivers significant and important benefits in terms of helping to renew the local housing market and providing additional affordable homes in a sustainable location, while ensuring that this can be achieved with minimum cost to the environment by adopting challenging building standards (particularly with regards to energy, water, waste and resources) and achieving a greater provision of open space with significant improvements for biodiversity. In addition, the proposal will help to improve townscape and landscape character, utilising significant areas of previously developed land and creating landscape buffers. Care home accommodation will help

Proposal	Summary of Effect (from Appendix L)
	tend to the needs of an ageing population, while new local services including community/library facilities will meet local needs. Conversely, some issues remain: air pollution and the traffic impacts of development are unclear and the residential area is expected to be a significant trip generator, while air pollution related to construction and construction traffic, as well as operational buildings and commuters to the development cannot be ruled out.
Transport 1	**Positive**: the proposal will deliver small-scale but significant benefits to accessibility, health and sustainable transport, with indirect benefits for air quality as a result. No negative effects identified.
Transport 2	**Positive**: this proposal makes best use of existing road infrastructure in relation to the strategic network. Although no further measures are given to minimise adverse effects, other proposals in the movement framework seek to address these areas.
Transport 3	**Positive**: a hierarchical network of routes within the area, including a dedicated/priority route to Frankley, will have significant benefits for accessibility and the road network, and support regeneration in general, while provision for pedestrians and cyclists will have indirect health benefits. No adverse effects are identified.
Transport 4	**Positive**: an improved network of bus routes within the area, including a high quality route to Frankley, will have significant benefits for accessibility and the road network, and support regeneration in general. No adverse effects are identified.
Transport 5	**Positive**: a new public transport interchange will have significant positive effects for the area as a whole, improving accessibility from, to and within the area, and supporting wider regeneration aims. Less significant indirect effects include minor health benefits due to the longer final walking distances associated with public transport use, and slight improvements in air quality. No adverse effects are identified.
Transport 6	**Positive**: an improved Longbridge station will contribute to significant benefits for accessibility and sustainable transport, and support regeneration in general. No adverse effects are identified.
Transport 7	**Mixed**: in theory a Park and Ride development is a sustainable form of public transport which helps to reduce car use over wide areas of the strategic road network, while improving accessibility, supporting economic regeneration and reducing congestion. However, P&R sites on suburban rail networks can have very intense traffic peaks, which can overload local road networks, reducing the overall effectiveness of the public transport service and increasing air pollution and carbon emissions. Travel demand and traffic assessments were unavailable when the SA was being carried out and so the effect of this proposal is uncertain.
Transport 8	**Mixed**: local highway improvements can be seen to be benefiting the local area as well as supporting wider regeneration aims of the AAP through increased accessibility. However, highway improvements can also increase the attraction of using the private car with consequent impacts on air quality and carbon emissions.

Proposal	Summary of Effect (from Appendix L)
Transport 9	**Mixed**: the multi-storey car park can be seen to form an essential part of redevelopment, providing access to the Local Centre, however the centre will be in a high-accessibility location with trains, buses and a new interchange plus Park and Ride adjacent. As a result the need for parking seems low and should be restricted to further encourage the use of sustainable transport modes. In addition, a multi-storey could have significant visual impacts, depending on design and location. Restricted parking standards are required to further discourage unsustainable travel patterns, and ameliorate carbon emissions and air quality; presently, although proposed standards are more stringent than national policy requires, their reasoned justification remains unclear.
Transport 10	**Positive:** the proposal will have minor positive effects on accessibility.
Transport 11	**Positive**: sustainable travel measures, together with substantial improvements to public transport, will help to ensure that trips generated by redevelopment become more sustainable and encourage modal shift. The measure will support accessibility, regeneration in general, and contribute to minor improvements in air quality and carbon emissions.
Transport 12	**Positive**: improved local rail services will help to ensure that trips generated by redevelopment become more sustainable and encourage modal shift. The measure will support accessibility, regeneration in general, and contribute to minor improvements in air quality and carbon emissions.
Transport 13	**Mixed**: local highway improvements can be seen to be benefiting the local area as well as supporting wider regeneration aims of the AAP through increased accessibility. However, highway improvements can also increase the attraction of using the private car with consequent impacts on air quality and carbon emissions.
Transport 14	**Mixed**: strategic road network improvements can be seen to be benefiting the local area as well as supporting wider regeneration aims of the AAP through increased accessibility. However, highway improvements can also increase the attraction of using the private car with consequent impacts on air quality and carbon emissions.
Transport 15	**Positive**: traffic management measures can be seen to be benefiting the local area as well as supporting wider regeneration aims of the AAP through increased accessibility, as well as providing a disincentive for using the private car.
Open Space 1	**Positive**: Protection of, and improvements to, Cofton Park will lead to only positive effects. Specific benefits will be achieved in relation to human health, biodiversity, landscape, open space provision and waste.
Open Space 2	**Positive**: re-opening of the water courses and provision of green spaces with biodiversity value produces only positive effects, mainly in terms of environmental quality, but with indirect benefits for socio-economics in providing a positive and welcoming environment for new businesses and communities. There are risks associated with these proposals, including the release of contaminants into surface and ground waters, and the disruption and possible damage to archaeological remains. However, the process of considering options for the

Proposal	Summary of Effect (from Appendix L)
	rivers has taken land contamination, water quality and cultural heritage issues into account, while other aspects of the AAP secure further protection for these receptors.
Open Space 3	**Positive**: re-opening of the water course and provision of green spaces with biodiversity value produces only positive effects, mainly in terms of environmental quality, but with indirect benefits for socio-economics in providing a positive and welcoming environment for new businesses and communities. There are risks associated with these proposals, including the release of contaminants into surface and ground waters, and the disruption and possible damage to archaeological remains. However, the process of considering options for the river has taken land contamination, water quality and cultural heritage issues into account, while other aspects of the AAP secure further protection for these receptors.
Open Space 4	**Positive**: re-opening of the water courses and provision of green spaces with biodiversity value produces only positive effects, mainly in terms of environmental quality, but with indirect benefits for socio-economics in providing a positive and welcoming environment for new businesses and communities. There are risks associated with these proposals, including the release of contaminants into surface and ground waters, and the disruption. However, the process of considering options for the rivers has taken land contamination, water quality and cultural heritage issues into account, while other aspects of the AAP secure further protection for these receptors.
Open Space 5	**Mixed**: this proposal secures important benefits for the local population in ensuring continued provision of sports and recreational facilities, with significant indirect benefits to health. Minor negative effects are possible due to alterations to car parking when the Sports and Social Club is situated in an essentially sustainable position adjacent to public transport services.
Open Space 6	**Positive**: the proposal will lead to only positive effects being realised, particularly in relation to townscape character, biodiversity and use of previously developed land, but also indirectly to health. The Nature Conservation Management Plan (NCMP, contained in OS9) will help to ensure benefits to biodiversity are maximised. No negative effects are identified.
Open Space 7	**Positive**: the proposal is only expected to generate positive effects, particularly with regard to the quality of townscape. No negative effects are identified.
Open Space 8	**Positive**: the proposal will lead to only positive effects being realised, particularly in relation to townscape character, biodiversity and indirectly to health. The NCMP (contained in OS9) will help to ensure benefits to biodiversity are maximised. No negative effects are identified.
Open Space 9	**Positive**: significant positive effects for landscape / townscape character and biodiversity are expected as a result of this proposal. No negative effects are identified.
Open Space 10	**Positive**: minor indirect positive effects on townscape character are expected as a result of this proposal. No negative effects are

Proposal	Summary of Effect (from Appendix L)
	identified.
Open Space 11	**Positive**: significant positive effects for cultural heritage are expected as a result of this proposal. No negative effects are identified.
Open Space 12	**Positive**: significant positive effects on townscape character are expected as a result of this proposal. No negative effects are identified.
Open Space 13	**Mixed**: the proposal will deliver significant and necessary benefits to allow re-development to go ahead, specifically with regard to health and the re-use of land, but also for townscape and biodiversity. Significant negative effects are possible if large amounts of material have to be transported off-site and disposed of to landfill. Risks remain regarding the possibility of contaminants entering surface and ground waters during remediation, although the strategy will be designed to minimise this risk.
Open Space 14	**Positive**: the proposal will deliver significant benefits to flood risk and health and safety. No negative effects identified.
Open Space 15	**Positive**: the proposal will deliver significant benefits to open space, landscape character and biodiversity. No negative effects identified.
Open Space 16	**Positive**: the proposal will deliver significant benefits to open space and landscape character. No negative effects identified.
Open Space 17	**Positive**: the proposal will help preserve open space and landscape character. No negative effects identified.

(Continued from page 8.)

Material Assets

The AAP does not seek to provide the level of Local Nature Reserve provision recommended in Natural England's Accessible Natural Greenspace Standards, instead promoting an urban park, greenways, neighbourhood parks, pocket parks and informal open space; measures within the AAP could also seek accessibility and quality enhancements at nearby Rubery Cutting and Leach Green Quarries LNR, and/or

accessibility, enhancement and expansion opportunities at Balaam's Wood proposed LNR. The CIL provides funding for off site ecological mitigation measures at various sites including Balaams Wood LNR and Rubery Hill SINC. Other sites could also be considered.

Recycling facilities should also be provided on new transport infrastructure and in the public realm (for newspapers, magazines, drinks containers, etc.). The AAP's waste strategy will require commercial recycling in the local centre.

Social Considerations

With regards to long-term Job Seekers Allowance claimants and economically inactive groups within the AAP area, the Community Infrastructure Levy will help to ensure that the new college provides suitable (and if appropriate, subsidised) re-training to offer the opportunity to adjust to a new employment environment through re-skilling, run flexible courses (part-time, evenings, weekends, on-job) and offers grant schemes.

Training agreements to be delivered through the Community Infrastructure Levy (CIL) include provision for training in environmental managements systems (for new businesses in the area), as well as wider environmental management and sustainability considerations.

Ensure provision of full range of facilities identified in Community Needs Study in accordance with Proposal S2.

The AAP needs to promote an inclusive approach to all sections of the community through the design of buildings and spaces, housing types, range of facilities and ongoing consultation with the community throughout the implementation of the plan. See the Equalities Impact Needs Assessment report for full details.

The provision of new community facilities in the new centre for Longbridge, including a new health centre, will help to improve accessibility to health services. This should be accompanied by a dentist, pharmacy and optician.

Soil and Contaminated Land

The remediation strategy should be risk-based but also incorporate measures to validate and monitor the success of remediation. Site remediation has the potential to generate significant amounts of ground waste to be landfilled; the risk-based strategy should aim to minimise this through use of on-site treatment techniques wherever possible to reduce the amount being transported. Where this is not possible, controlled traffic movements will help to minimise effects on the local area.

Ongoing management of hazardous substances, surface water and effluent will be required to prevent further contamination.

Transport

Restrictions on parking standards are required to further discourage unsustainable travel patterns, and ameliorate carbon emissions and air quality, while further encouraging the use of sustainable transport and offering a disincentivise to the use

of the private car. The proposed standards are rather more ambitious than the national maximum standards set out in PPG13 (Transport, ODPM, 2001) and the now superseded PPG3 (Housing; PPS3 (DCLG, 2006) does not contain detail on parking), but it is hard to anticipate whether they are stringent enough to catalyse a significant shift in modal choice without examining the basis on which they were chosen; this was not available when the SA was being carried out.

Further benefits could be gained by providing a high quality foot/cyclepath between Cofton Centre and the Local Centre between Nanjing and the rail corridor (which should also serve to enhance the existing wildlife corridor). AAP proposal EZ2 states that continued working with Nanjing will be encouraged to consider whether improved linkages around the site are feasible.

Enhancements to car parking facilities at the sports and social club could focus on environmental quality and safety, or potentially converting a proportion of parking area to playing surfaces, given the levels of parking to be provided elsewhere in the area, most notably on the other side of Longbridge Lane adjacent to the local centre.

Site-wide Considerations

Site-wide strategies are promoted in the AAP's sustainability strategy. In some cases more detail would help to secure maximum gains; for example with regards to biodiversity, flood risk, waste, energy and materials.

The monitoring proposals made as part of the SA process should be incorporated into the monitoring framework established as part of the AAP.

Monitoring

The purpose of monitoring is to measure the social, environmental and economic effects of the AAP, as well as to measure success against the plan's objectives. It is therefore beneficial if the monitoring strategy builds on monitoring systems which are already in place. The proposed monitoring framework focuses on those aspects of the environment that are likely to be negatively impacted upon, or where the impact is uncertain.

The inclusion of the monitoring proposals for consultation in the SA is a useful mechanism for obtaining views and feedback from a range of quarters, including those agencies who will potentially contribute to the monitoring process. Several other indicators could be used and may be added before monitoring commences. Monitoring reports should be published periodically as new information becomes available. The full suggested monitoring framework is given in Appendix J of the Sustainability Report.

Commenting on the Sustainability Report

The Sustainability Report has been produced alongside the AAP Submission Document so that comments can be made on the AAP with the benefit of the information presented in the Sustainability Report. These documents will be made available for the public and other interested parties to inspect and comment as they wish at:

Birmingham City Council
Council House
Victoria Square
Birmingham
B1 1BB

Bromsgrove District Council
The Council House
Burcot Lane
Bromsgrove
B60 1AA

The Sustainability Report and the separate Non-Technical Summary will also be made available on the Councils' websites:

www.birmingham.gov.uk/longbridgeaap

http://bromsgrove.gov.uk

Public involvement through consultation is a key element of SA and SEA. The SEA Regulations set specific requirements for consultation with the Statutory Consultation Bodies, as well as the public and 'other interested parties'.

In England, the Statutory Consultation Bodies are:

- English Heritage;
- Environment Agency; and
- Natural England (formerly English Nature and the Countryside Agency).

The Sustainability Report is to be issued for consultation alongside the AAP for a period of six weeks. Please see the representations form for details.

Representations on the Sustainability Report must be made on the form that can be obtained on the Councils websites or from the address below. Completed forms should be sent to the address below:

South Development Planning and Regeneration Team
17th Floor Alpha Tower
Suffolk Street
Queensway
Birmingham B1 1TR

List of Tables and Figures

Abbreviations

AAP	Area Action Plan
AMR	Annual Monitoring Report
ANGSt	Accessible Natural Greenspace Standards
AQMA	Air Quality Management Area
AWM	Advantage West Midlands
BAP	Biodiversity Action Plan
BCC	Birmingham City Council
BDC	Bromsgrove District Council
BME	Black and Minority Ethnic (Groups)
BREEAM	Building Research Establishment Environmental Assessment Method
CHP	Combined Heat and Power
CIL	Community Infrastructure Levy
CTB	Central Technology Belt
DBERR	Department for Business, Enterprise and Regulatory Reform
DCLG	Department for Communities and Local Government
DCMS	Department for Culture, Media and Sport
DEFRA	Department for Environment, Food and Rural Affairs
DPD	Development Plan Document
dpha	Dwellings per hectare
EA	Environment Agency
EH	English Heritage
EIA	Environmental Impact Assessment
EINA	Equalities, Needs and Impacts Assessment
gha	Global hectare
GOWM	Government Office for the West Midlands
GWh	Gigawatt hours
LDF	Longbridge Development Framework
LGBT	Lesbian, Gay, Bisexual and Transgender (Groups)
LNR	Local Nature Reserve
LSP	Local Strategic Partnership
NAC	Nanjing Automotive Corporation
NCMP	Nature Conservation Management Plan
NE	Natural England
NO_2	Nitrogen Dioxide
ODPM	Office of the Deputy Prime Minister (now DCLG)
ONS	Office for National Statistics
P&R	Park and Ride
PCB	Polychlorinated Biphenyls
RIS	Regional Investment Site
RQO	River Quality Objective
RSDF	Regional Sustainable Development Framework
SA	Sustainability Appraisal
SAC	Special Area of Conservation
SEA	Strategic Environmental Assessment
SLINC	Site of Local Importance to Nature Conservation
SMURF	Sustainable Management of Urban Rivers and Floodplains
SSSI	Site of Special Scientific Interest
SUDS	Sustainable Urban Drainage Systems
SWS	Special Wildlife Site
TTWA	Travel to Work Area
UDP	Unitary Development Plan
WCC	Worcester County Council
WMRO	West Midlands Regional Observatory

1 Context

1.1 Introduction

This Sustainability Report has been prepared for Birmingham City Council (BCC) and Bromsgrove District Council (BDC), who are working with Worcestershire County Council (WCC), Advantage West Midlands and St Modwen Developments Ltd, as part of the Area Action Plan (AAP) for Longbridge.

The AAP, a Development Plan Document, sets out a new planning policy framework for Longbridge. This framework is essential to initiating social, environmental and economic regeneration and urban renewal in an area acutely affected by the demise of MG Rover. The Sustainability Report, and Sustainability Appraisal process, help to ensure that the framework leads to positive sustainable outcomes.

1.2 Redevelopment of Longbridge: The Study Area, History and Context

Longbridge is located to the south-west of Birmingham city and straddles the administrative boundary between Birmingham City Council and Bromsgrove District Council. Longbridge owes its existence to car manufacturing. The Longbridge factory has a long history as a major player in the UK car industry. Prior to 1894 there was just one house at Longbridge, an agricultural area outside of the city boundaries. In 1905 Herbert Austin purchased the site from White and Pike tin box manufacturers and began production of the first Austin cars. The construction of the Longbridge car factory changed the area beyond recognition.

Adjacent to the AAP area land uses are predominantly residential with largely pre-war housing and post-war council properties. It is close to Lickey Hills where residents and visitors enjoy the countryside. Views from the hills look out over Longbridge and the outskirts of Birmingham.

The AAP area can be broadly sub-divided into seven components: (see Figure 1.1) West Works, North Works, North Works Car Park (Longbridge Technology Park), South Works, East Works, the Cofton Centre and Cofton Park. Several parts of the area are bounded or traversed by transport corridors: Bristol Road South (A38), Longbridge Lane, Lickey Road, Groveley Lane, the Birmingham to Bristol railway and the rail freight sidings. Two rivers traverse parts of the AAP area, the Rea and the Arrow, both culverted in part as they go. The area is 195 hectares in size.

MG Rover ceased to operate in April 2005 when it failed to secure an agreement with the Shanghai Automotive Industries Corporation to continue production. This resulted in the immediate loss of over 6,000 jobs at Longbridge, with a further 3,900 at risk in the supply chain. Birmingham City Council estimated a potential loss of 1% of regional GDP, or £486 million per annum (MG Rover Taskforce, 2005).

Figure 1.1: Aerial View of the former MG Rover Factory *(Source: BCC)*

Since then significant progress has been made in limiting the economic impact and helping people get back to work. According to its final report (March 2006), the MG Rover Taskforce estimates that of 6,300 Job Seekers Allowance claimants recorded, 66% are back in employment, with the remainder retired, on incapacity benefit, in training or seeking employment. Between 2005 and 2006 around 100 individuals a week were helped back into employment, over 4,000 received individual skills advice and over 2,000 received skills assessment or provision.

In July 2005 the Nanjing Automotive Corporation successfully bid for the MG and Austin brands. In February 2006 Nanjing secured a 33 year lease on approximately 42.5 hectares of the area (South Works) and resumed production in 2007.

Due to the history of Longbridge, its association with manufacturing and importance to the regional economy, the impacts of the closure of MG Rover extend outside of the Longbridge area, as will the effects of regeneration. As a result some definitions are needed. Within this document, references to the 'AAP area' should be taken to include the site of the former MG Rover works and focus for redevelopment, as defined by the map contained in Appendix A. References to the 'study area' should be interpreted as the locality of Longbridge. References to the wider area may include neighbouring wards, the rest of Birmingham City or any place significantly affect by MG Rover's closure or subsequent regeneration efforts.

1.3 Sustainability Appraisal and Strategic Environmental Assessment

The Planning and Compulsory Purchase Act (2004) requires that all Development Plan Documents (DPDs) are prepared with a view to contributing to the achievement of sustainable development. To this end Sustainability Appraisal is integral to the preparation of DPDs, to ensure that they reflect sustainable development priorities. The process appraises the social, environmental and economic effects of the strategies and policies in a DPD from the outset.

This approach complies with the provisions of the Strategic Environmental Assessment Regulations (the SEA Regulations, Statutory Instrument 2004, No 1633) which require formal SEA of plans and programmes which are likely to have significant effects on the environment. Government guidance (ODPM, 2005a, b) advocates the integration of SA and SEA. It is possible to combine the two processes without losing the essence of either; for more information on their requirements, see the statement of compliance at Appendix B. Throughout this document, where reference is made to sustainability appraisal or the SA Report, it denotes SA under the Act, incorporating the requirements of the SEA Regulations. Table 1.1 shows the overlap between the parallel assessment stages, as recommended by ODPM (now DCLG). The combined approach has been prepared on the basis of the following principles:

- Objectives are used as the basis for appraising impacts on various environmental, social and economic components;
- A review of the baseline situation is undertaken, including social and economic factors;
- Options are appraised against environmental, social, and economic objectives, as well as baseline conditions;

- Proposals are appraised on the same basis;
- Indicators are devised for all objectives to assist in monitoring delivery of the plan and any negative effects thereof; and
- 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.

Relevant subsequent chapters of this report explain the findings of each of the stages. See for example, Chapter Two regarding scoping, Chapter Three regarding baseline information and indicators, and Chapter Four regarding objectives.

Table 1.1: Link between SEA and SA Stages

	SEA Stages	**SA Stages**
A	Setting the context and objectives, establishing the Baseline and deciding on the scope.	Setting the context and objectives, establishing the baseline and deciding on the scope.
B	Developing and refining alternatives and assessing effects.	Developing and refining options.
C	Preparing the Environmental Report.	Appraising the effects of the plan.
D	Consulting on the draft plan and the Environmental Report.	Consulting on the draft plan and the Environmental Report.
E	Monitoring the significant effects of implementing the plan on the environment.	Monitoring implementation of the plan.

1.4 Habitats Regulations Assessment

In October 2005 the European Court of Justice ruled that the UK government had incorrectly transposed the requirements of the Habitats Directive (92/43/EEC) into national law. Specifically, its requirement that any activity that could threaten the integrity of a Natura 2000 site must undergo an appropriate assessment of its effects, now applies to land use plans. The Conservation (Natural Habitats &c) (Amendment) Regulations (2007, the Habitats Regulations) take account of this ruling and draft guidance on how to apply Habitats Regulations Assessment to land use plans has been prepared by the DCLG (2006).

With regards to the Longbridge Area Action Plan, informal consultation with English Nature (now Natural England) in July 2006 confirmed that the nearest Natura 2000 site is Fens Pools, approximately 15km to the North West. English Nature also confirmed that appropriate assessment need not be applied to this planning process. A separate study (Entec, 2007) provided further analysis and confirmed this view.

1.5 Equalities Impact and Needs Assessment

The Sustainability Appraisal considers the plan's effects on equalities issues, but a separate Equalities Impact and Needs Assessment has also been prepared. This will identify 'target' groups whom are currently experiencing inequalities, and examine the plan for its effects on these groups. The Scoping and Full Reports are available on the Councils' websites.

1.6 Signposting

This report is known as a Sustainability Report because it gives details about the sustainability appraisal process. The SEA Regulations require that an Environmental Report is prepared and Schedule Two of the Regulations (reproduced at Appendix C) prescribes the information that should be contained therein. This report contains information relevant to both SA and SEA. Table 1.2 indicates where in the report information required by the SEA Regulations can be found.

Table 1.2: SEA Environmental Report Requirements

Requirement of Schedule Two of the SEA Regulations:	Where in this report:
(1) an outline of the contents, main objectives of the plan or programme…	Section 1.7
and relationship with other relevant plans and programmes;	Chapter 3 / Appendix H
(2) the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme;	Section 3.3 / Baseline – Appendix I / Appendix E
(3) the environmental characteristics of areas likely to be significantly affected;	Section 3.3 and Baseline – Appendix I
(4) any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Directives 79/409/EEC and 92/43/EEC;	Section 3.3, 5.5 and Baseline – Appendix I
(5) the environmental protection objectives, established at international, Community or Member State level, which are relevant to the plan or programme and the way those objectives and any environmental considerations have been taken into account during its preparation;	Chapters 3 and 4 / Appendix H
(6) the likely significant effects on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors;	Chapter 5 / Appendices L and N
(7) the measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan or programme;	Chapter 6

(8) an outline of the reasons for selecting the alternatives dealt with…	Chapter 2 / Appendix G
…and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information;	Chapter 5
(9) a description of the measures envisaged concerning monitoring in accordance with Article 10.	Chapter 7 and Appendix J
(10) a non-technical summary of the information provided under the above headings.	NTS at start of document (also available separately)

1.7 The Area Action Plan for Longbridge

An Area Action Plan sets out the detailed planning framework for areas of change or conservation. The focus of an AAP is on implementation. It serves to deliver planned growth areas, stimulate regeneration, protect areas particularly sensitive to change, resolve conflicting objectives in areas subject to development pressures or focus the delivery of area based regeneration initiatives. For areas of change such as Longbridge, AAPs identify detailed land use distributions, and set out the timetable for implementation of proposals. Other material such as design requirements may also be included in the AAP.

In order to use the available land in the most effective way, and in line with the new planning system, the LPAs are re-examining strategic land uses in the Longbridge area. This involves considering the proposed land uses in the previous Longbridge Development Framework (LDF), the Unitary Development Plan for Birmingham and the Bromsgrove Local Plan, as well as other relevant policies, consulting with the local community on current needs and priorities, taking advice from technical development specialists about what is possible, and putting together an Area Action Plan to guide the future development of the area. Some proposals in the LDF are already being developed, such as the Longbridge Technology Park.

Opportunities have been provided for the community and stakeholders to be consulted and get involved at each stage of AAP preparation. Public participation on the AAP is a separate process to, although associated with, consultation on the SA which is described in Chapters Two and Eight.

The first stage of preparing the AAP examined local issues to be addressed by the new policy framework and suggested potential options for development. The community were invited to respond to a list of objectives and issues and suggest alternative options and ideas for further investigation. Views were gathered by several means including a telephone survey, a freepost response card distributed with the newsletter Future 4 Longbridge (Issue One), and a dedicated phone line and website (www.future4longbridge.co.uk).

The second stage addressed the Issues and four Strategic Options for the Longbridge AAP and consultation included establishing the Future Forum, a small workshop of local residents

to further develop early ideas. A second newsletter was distributed and the website and phone line remained active.

A team of technical specialists studied the various options and results of consultation in more detail, and examined them alongside physical and planning constraints. On the basis of this analysis, a Preferred Land Use Options was put forward for further consultation, together with several alternative transport options. These were also accompanied by Future Forum sessions, an additional newsletter, and the website and phone line. They were accompanied by a feasibility study and assessed by the Sustainability Appraisal process.

Comments received from the public, stakeholders and statutory consultees on the Preferred Option and Sustainability Appraisal have been used to work up the Preferred Option in more detail and prepare the final Submission Document. The plan is submitted to the Secretary of State and currently there is a further chance to make representations on it. The Secretary of State will appoint an independent Inspector to consider the plan and make final recommendations.

The agreed Vision for the AAP is:

Longbridge will undergo major transformational change redeveloping the former car plant and surrounding area into an exemplar sustainable, employment led mixed use development for the benefit of the local community, Birmingham, Bromsgrove, the region and beyond. It will deliver new jobs, houses, community, leisure and educational facilities as well as providing an identifiable and accessible new heart for the area. All development will embody the principles of sustainability, sustainable communities and inclusiveness. At the heart of the vision is a commitment to high quality design that can create a real sense of place with a strong identity and distinctive character. All of this will make it a place where people will want to live work, visit and invest and which provides a secure and positive future for local people.

Once the AAP has been adopted it will provide a set of achievable goals and proposed land uses to guide future development of the Longbridge area and environs. The AAP addresses five key themes, under which the objectives of the AAP, agreed through wide consultation, are listed; see Table 1.3.

Table 1.3: Area Action Plan Objectives

No	Objective
	Sustainable Development theme
1	To establish sustainable communities, which embody the principles of sustainable development and meet current and future social, economic and environmental needs in a balanced and integrated way.
2	To be at the forefront of sustainable development with commercial buildings, community facilities and housing which showcase excellence in all aspects of environmental sustainability. A key aim is to achieve carbon neutral standards within the lifespan of the scheme.
3	To establish a rich tapestry of quality connected open spaces, and river corridors across the Longbridge development, which provide for visual amenity, recreational use, nature

No	Objective
	conservation and address flood risk requirements across the plan area, and enhance the historic environment.
4	To implement an integrated and sustainable transport infrastructure strategy for Longbridge, which secures appropriate investment in key public transport improvements and road infrastructure and supports the effective management of sustainable travel patterns across the site.
5	To implement a comprehensive programme of management for the development, including a local centre management plan, management of open spaces and the public realm.
	High Quality Places for All
6	To achieve excellence in design through the creation of high quality developments and design that helps create a real sense of place with buildings, streets, spaces, features and facilities of which people are justifiably proud.
	Economic Transformation
7	To support the continued development of Longbridge as a regional investment location for industry and employment, securing economic diversification and business growth, providing 10,000 jobs, protecting existing employment and providing a long-term sustainable job environment.
8	To support the protection of land for general industrial uses including the Nanjing Automotive Corporation (NAC) site and Cofton Centre.
9	The development of a 25ha Regional Investment Site (RIS) which is attractive to high profile regional, national and international investors as well as a major location for high technology businesses.
10	To ensure that employment opportunities are accessible to all and assist in securing the provision of employment and training opportunities for local residents, with no investment being lost for the lack of suitably qualified and skilled people.
11	To support a local culture of enterprise, entrepreneurial activity, innovation and sustainable business growth and development.
	A New Heart for Longbridge
12	To create a sustainable mixed-use centre for Longbridge, which meets local needs by providing a range of quality retail, commercial, leisure, education and residential uses and establishes a distinctive sense of place and heart for the community.
	Homes for the Future
13	To deliver a minimum of 1,400 new dwellings to help meet existing and future housing needs and to create a sustainable mixed-use community.
14	New homes will provide a mix of type, size and tenure including affordable housing, high density layout appropriate to the location of the site and be designed to highest standards that aim is to achieve carbon-neutral standards within the lifespan of the scheme and, where appropriate, to achieve lifetime homes standards.

2 Progress on Sustainability

2.1 Introduction

Sustainability Appraisal follows a number of steps, as set out in Table 1.1 in the previous chapter. This chapter will give a brief outline of the SA stages that are already complete and how they have influenced the emerging Longbridge AAP. Figure 2.1 illustrates the interaction between the SA and plan-making processes.

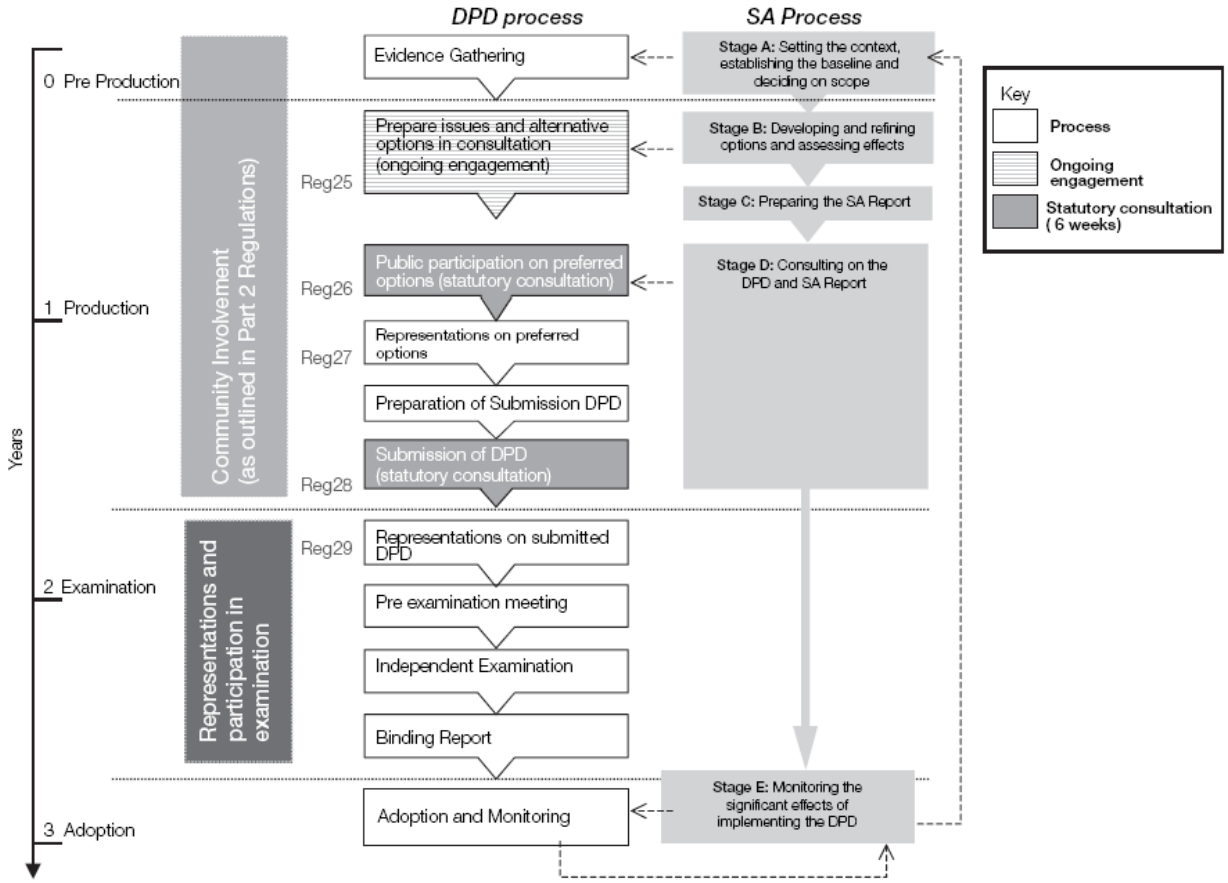

Figure 2.1: The Area Action Plan and Sustainability Appraisal processes *(Source: ODPM, 2005b)*

2.2 Scoping

Scoping is the process of deciding the scope and level of detail of an SA, including the environmental effects and sustainability issues which need to be considered, the assessment methods to be used, and the structure and contents of the Sustainability Report. Scoping also requires an investigation of baseline environmental, social and economic conditions, a review of other policies, plans and programmes affecting the plan, and establishing an assessment framework. Scoping is part of Stage A in the combined SA / SEA process; the SEA

Regulations do not require full consultation with the public at the scoping stage, largely due to the degree of technical information contained in the report, but do require consultation with statutory consultees. In England these are the Environment Agency, Natural England and English Heritage. In the case of this SA, the consultation was extended to include:

- Centro
- Strategic Rail Authority
- Royal Society for the Protection of Birds
- Worcestershire County Council
- Hereford and Worcestershire Learning Skills Council
- Health and Safety Executive
- Commission for Racial Equality Birmingham
- House Builders Federation
- Confederation of British Industry West Midlands
- Coalition of Disabled People Birmingham
- Lickey Hills Society
- West Midlands Fire Service
- Cofton Hackett Parish Council
- Council for the Protection of Rural England
- Frankley Parish Council
- Access Committee for Birmingham
- Worcestershire Wildlife Trust
- Birmingham LSP
- Redditch and Bromsgrove Learning Skills Council
- West Midlands Regional Assembly
- Highways Agency
- Network Rail
- Birmingham and Black Country Wildlife Trust
- Advantage West Midlands
- South Birmingham Primary Care Trust
- Strategic Health Authority
- West Midlands Registered Social Landlord Consortium
- Rea Valley Conservation Group
- Birmingham and Solihull Chamber of Commerce
- Learning Skills Council Birmingham and Solihull
- Sport England
- West Midlands Police
- Friends of Balaam's Wood
- New Frankley in Birmingham Parish Council
- Severn Trent Water
- Government Office West Midlands
- West Mercia Police
- Bromsgrove LSP
- Redditch and Bromsgrove Primary Care Trust
- St Modwen Developments Ltd

In addition, the Scoping Report was made available on the websites of Birmingham City and Bromsgrove District Councils, and distributed among various relevant policy officers at both Councils. Consultation commenced on 31st May 2006.

2.2.1 Scoping: Consultation

Early and informal contact was made with the statutory consultation bodies by telephone, in order to gain their view on issues of likely importance in the area and to help focus the Scoping Report. Additional written comments were also received by them and a number of other organisations. Details of every response received, together with actions taken to address them, are given at Appendix D. In general, comments focused on the following issues:

- **Objectives**: A number of consultees requested minor changes to some of the SA Objectives. These have been taken on board wherever possible.

- **Baseline information**: Many consultees usefully pointed to areas where data used to define the current and future state of the environment could be improved, or where a relevant policy, plan or programme had been omitted from the review. These have been amended accordingly.
- **Profile**: Some consultees felt that issues of pertinence to their organisations had not been granted the high-profile they deserve. Where appropriate, steps have been taken to highlight those issues in the relevant text.
- **Monitoring**: Useful suggestions were received regarding the use of indicators and targets for the monitoring framework, and these have been incorporated wherever possible.
- **Methodology**: Some minor suggestions were made regarding the proposed assessment methodology. Amendments have been made where suggestions were deemed to improve the process.

2.2.2 Scoping: Influence on Longbridge AAP

As a preliminary stage in sustainability appraisal, the Scoping Report does not actively seek to influence the content or outcomes of the AAP. Scoping is carried out in parallel with the evidence gathering phase of AAP preparation, and as such provides as important level of background and context data on the environmental, social and economic conditions, and the prevailing quality of life with the AAP area and its environs. For the Longbridge AAP, in pursuit of best practice, a series of supporting studies have been prepared which augment the baseline published as part of the SA (see Chapter Three and Appendix I). The following topics were addressed:

- Accessibility and Transport Strategy, including Travel Demand Report, Travel Management Strategy, Bus Strategy, Rail Strategy, and Infrastructure Strategy;
- Baseline Ecological Appraisal;
- Built Form and Rural Landscape Appraisal;
- Community Needs and Infrastructure Assessment incorporating Educational Needs and Capacity Review and Retail Capacity, Need and Centre Strategy Assessment;
- Cultural Heritage Report;
- Delivery and Viability Study;
- Employment Land Capacity Study
- Existing Services, Utilities and Infrastructure Report;
- Geo-Environmental and Site Investigation Report;
- Housing Baseline Study;
- Retail Impact Study;
- River Rea Study of Options;
- Socio Economic Baseline Study; and
- Sports, Recreation, Open Space, Footpath and Cycleway Assessment.

This additional information forms a crucial part of the evidence base for decision-making in the AAP and has been used to refine the SA process and findings.

2.3 Issues and Options

The Issues and Options document for the AAP set out the vision and objectives of the plan (see section 1.7), together with five key themes to address: employment and economy, housing, retailing and community services, environment, and transport. Analysis of the themes, results of consultation, and the requirements of other relevant policies led to the identification of four strategic land use options and various infrastructure options:

- Option 1: Employment led
- Option 2: Mixed use, employment led
- Option 3: Mixed use, town centre led
- Option 4: Mixed use, housing led
- Infrastructure: options focused on road and public transport alternatives, walking and cycling, environmental enhancement and the Rivers Rea and Arrow

2.3.1 Issues and Options: Consultation

The output of these activities was summarised and presented in an Issues and Options paper, which was consulted on in October / November 2006. Each option underwent an assessment against the SA framework and baseline to highlight important information on the key sustainability matters. The initial Sustainability Appraisal report was published for consultation alongside the Issues and Options Report in October 2006.

2.3.2 Issues and Options Assessment: Influence on Longbridge AAP

The initial SA provided a high-level summary assessment of the environmental, social and economic effects associated with the Issues and Options, reviewed the main areas of concern from a sustainability perspective and proposed ways of refining the options to reduce negative effects and maximise positives. The appraisal provided a commentary on each of the five themes, assessed every option identified and was supported by an in depth analysis of the strategic spatial and infrastructure options.

The findings (including an assessment of the 'business as usual' scenario and summarised in matrix form at Appendix E) suggested that Option 1 would help to provide much needed economic regeneration in Longbridge but would not necessarily address social infrastructure or environmental enhancement, while Option 2 would benefit the economy and provide for some community needs but would also carry some environmental effects. Options 3 and 4 were identified as more balanced options, leading to social and environmental benefits, but where the potential of the area to stimulate the economy was limited. The initial SA also set out a series of strategic, site-level and infrastructure measures to improve the environmental, social and economic performance of all options.

2.4 Preferred Options

The Preferred Option for the Longbridge AAP, together with detailed options for transport and infrastructure proposals, were chosen in accordance with the findings of the initial SA, consultation with stakeholders and the public, conformity with national, regional and local policy, and further technical and feasibility studies. The sustainability appraisal, running in parallel, provided input on the potential effects of the emerging Preferred Options.

The Preferred Options Document refined the vision and objectives of the AAP, and set out the preferred land use proposals in broad terms, together with a series of choices for infrastructure and environmental improvements. The Preferred Options were based on Option 2 (mixed use, employment led) from the Issues and Options document, but providing a higher level of residential and retail provision than originally proposed in order to maximise the associated benefits, as well as a number of environmental initiatives.

2.4.1 Preferred Options: Consultation

The Preferred Options document was published in February 2007 and consulted on for a period of six weeks. A Sustainability Appraisal Report was consulted on during the same period; this report summarised the process, findings and recommendations of the SA for the Preferred Options for the AAP. Comments received during this consultation period have been taken into account during the appraisal of the AAP submission document, and a summary of these can be found at Appendix D.

2.4.2 Preferred Options Assessment: Influence on Longbridge AAP

The Preferred Options SA built on the findings of the Initial SA and provided an in-depth analysis of proposals for each of the seven development zones within the AAP area (summarised in matrix form at Appendix F). An interactive and iterative process, it sought to direct proposals included in the Preferred Options toward the least damaging and most beneficial outcomes in environmental, social and economic terms. Results of the appraisal were illustrated by a series of radar analyses, and recommendations were provided along strategic, land development and infrastructure lines, many of which were incorporated into the final document.

Appendix G provides further detail on how the SA (and other factors) influenced the choice of Preferred Options, while Table 2.1 describes how the AAP submission document has incorporated the recommendations proposed by the appraisal of Preferred Options. In Table 2.1, the left hand column lists the SA recommendations made during the assessment of the Preferred Options document, while the right hand column explains how the AAP submission document has reacted to these recommendations. Further recommendations for the submission document, based on new evidence, changes in policy emphasis or additional detail, are provided in Chapter Six.

Table 2.1: SA influence over the AAP

Sustainability Appraisal Recommendation (Feb 2007)	Submission AAP Response
• Consider marketing development as a landmark sustainable community, with new homes meeting	The Sustainability Strategy in the AAP sets out building standards (including

Sustainability Appraisal Recommendation (Feb 2007)	Submission AAP Response
EcoHomes 'Excellent' and other buildings meeting equivalent BREEAM standards. • As a minimum condition of development, all buildings should be designed and built to the highest standards of environmental sustainability. Proposed standards are Code for Sustainable Homes 4 star rating or above, or BREEAM EcoHomes 'Very Good' or above, with other buildings (including educational, leisure, retail and transport facilities) meeting equivalent BREEAM standards.	requirement for Code for Sustainable Homes Level 4 minimum, moving to Level 6 by 2016, and a BREEAM target of 'Excellent' - unless accompanied by a robust justification) (AAP Proposal S1). Detailed implementation will take place via applications submitted.
• Installation of a combined heat and power (CHP) facility and/or microgeneration and renewables to provide cheap, efficient and reliable heat and energy with significantly reduced carbon emissions should be pursued. This may also have positive effects on deprivation by lowering household bills, stimulate demand for advanced technologies and/or renewable fuels elsewhere, and could achieve a positive synergy with High Technology land uses. • As a minimum, new buildings should maximise the use of daylight, natural ventilation (passive solar design), be effectively insulated and employ other energy saving measures. • Buildings should be designed to withstand storms of greater intensity and be naturally cooler (without air conditioning) during the summer, in order to prepare for the effects of climate change.	The Sustainability Strategy in the AAP sets out requirements for a site-wide energy and climate change strategy to test the feasibility of CHP an other renewable energy measures (proposal S2). Also, proposal EZ1 addresses biomass plant / sustainable energy. Detailed implementation of design requirements will take place via applications submitted.
• Water efficiency measures should include: rain water harvesting, grey water recycling, metered intakes and low consumption equipment (eg, toilets). An appropriate consumption target would be a reduction to 100 litres per capita per day which equates to a 25% cut on current regional average, comparable with targets in other regions.	The Sustainability Strategy in the AAP sets out building standards, including requirement for Code for Sustainable Homes which contains requirements for water efficiency (AAP Proposal S1). Detailed implementation will take place via applications submitted.
• Construction waste arisings should be re-used or recycled wherever possible. Exploit the opportunity to use sustainable materials and recycled aggregates, locally sourced where possible.	The Sustainability Strategy in the AAP sets out requirements for a site wide materials strategy and waste strategy to address these issues (AAP Proposal S2). Detailed specification will be made through applications submitted.
• Provide opportunities for on-site re-use of waste and separation of recyclable and compostable materials during operation.	The Sustainability Strategy in the AAP sets out requirements for site wide waste strategy to address these issues (AAP Proposal S2). Detailed specification will be made

Sustainability Appraisal Recommendation (Feb 2007)	Submission AAP Response
	through applications submitted.
• Strictly limit the amount of parking provision associated with new homes and work places in order to encourage greater use of nearby public transport.	Maximum Car Parking standards are set out in the AAP to limit car parking provision (AAP Appendix 2).
• While the ultimate aim for the site will be to have an overarching Travel Plan, with overall targets and objectives, there is also the need to develop specific Travel Plans for each aspect of the development including; workplace, educational and residential Travel Plans.	The AAP Movement Strategy requires Sustainable Travel Plan including Travel Plan coordinator, which will address the implementation and enforcement of specific aspects of travel behaviour (Proposal T11).
• Ensure all new workplaces have installed showering facilities. Provide secure cycle storage at all workplaces, residential developments and public transport nodes.	Facilities to be addressed through planning conditions on new developments. Storage addressed through the Movement Strategy, proposal T1.
• Consider ways of utilising the rail infrastructure for freight distribution, such as a small intermodal site at the Cofton Centre, bearing in mind the possible nature of final land uses.	This has not been taken forward in the final AAP – reasons include competing demand on land, impact on viability of development, impact on green belt. CROSS-REF TO RELEVANT BASELINE PAPER
• Make accessibility and walking / cycling infrastructure improvements across and within the site.	Proposals are set out in the AAP Movement Strategy for accessible waking and cycling within the site and improved links to wider network (Proposal T1).
• To maximise positive effects of redevelopment for local community ensure that appropriate re-training is provided to encourage people to adjust to new job opportunities, and that the proposed college provides flexible courses (part-time, evenings, weekends, on-job) and offers grant schemes. Ensure there are strong links between local employers, the Technology Park and the campus.	The AAP requires training agreements (included in the Community Infrastructure Levy (CIL)).
• Specific efforts should be made to employ the local labour supply during construction and operation.	The AAP requires local employment and training agreements (included in CIL).
• Take specific steps to encourage environmental technologies industries to locate in the redevelopment's employment areas.	The RIS management and delivery body will encourage high technology industries and could encourage environmental technologies industries to locate in area.
• Provide training in environmental management systems and encourage every business associated with the	The RIS management and delivery body will encourage high technology

Sustainability Appraisal Recommendation (Feb 2007)	Submission AAP Response
development to devise an EMS plan, as well as adopting other positive business practices that benefit and value staff and the local community. Specifically target these at any new business incubation centre	industries and could promote training in environmental management systems. The CIL could also fund training in environmental management systems.
• Develop community training and engagement programmes to address community ownership of environmental initiatives.	The AAP proposes to retain and develop existing groups / develop new groups, e.g. Future Forum, Northfield LSP, that will develop ownership of key projects. The CIL could also support these programmes.
• Ensure provision of a full range of facilities, as identified in the Community Needs Study.	The AAP proposes some new on site facilities, improvements to existing facilities and contributions to off site facilities using CIL. These include community rooms, library, health centre, open space, sport and recreation facilities (AAP proposals LC4, H1, H2, OS1, OS2, OS3, OS4, and OS8). Specific detail will be sought via applications for development.
• Arrange for provision of sufficient additional school capacity to accommodate the needs of new housing. If new schools are to be provided ensure improvement and funding schemes are initiated for existing institutions.	The AAP proposes contributions to improving off site education facilities through the CIL.
• Support schemes such as farmer's markets to promote sustainable production and consumption.	The plan proposes specific management of the Local Centre and this could promote initiatives such as a farmers market.
• Exploit the opportunity to provide a Heritage Centre to preserve and disseminate an understanding of the industrial heritage of the area.	The AAP proposes a Heritage Centre (LC1, LC4).
• Explore innovative measures to design-out crime including street design, natural surveillance, street lighting (and CCTV if necessary).	AAP Design Principles seek to maximise natural surveillance, good quality design to promote sense of place and other measures (e.g. CCTV, local centre management) to promote safety and perception of safety (AAP Proposal DS1).
• The Accessible Natural Greenspace Standards (ANGSt) suggest that, in addition to appropriate levels of open and play space, there should be provision for 1ha of Local Nature Reserve land per thousand of population (approximately 3.3ha for 1,400 new dwellings), and all	Several open space and ecological measures are stipulated as part of masterplanning including: - site wide Biodiversity Strategy (proposal S2)

Sustainability Appraisal Recommendation (Feb 2007)	Submission AAP Response
homes should be within 300 metres of a natural area.	- protection and enhancement of existing SLINC in Cofton Park - new open spaces and River Rea and Arrow designed for biodiversity (Proposal OS9) - Proposal OS15 also proposes off site mitigation funded through the CIL. Detailed implementation will be via applications for development and consultation with Natural England, as required.
• Ensure that open space incorporates biodiversity value such as links to green infrastructure and hedgerows. Steps should be taken to avoid any adverse impact on adjacent natural or protected areas.	Several open space and ecological measures are stipulated as part of masterplanning including: - site wide Biodiversity Strategy (proposal S2) - protection and enhancement of existing SLINC in Cofton Park - new open spaces and River Rea and Arrow designed for biodiversity (Proposal OS9) - Proposal OS15 also proposes off site mitigation funded through the CIL. Detailed implementation will be via applications for development and consultation with Natural England, as required.
• Avoid building on Greenbelt and open space; make use of previously developed land first.	Options involving building on green belt (adjacent to Groveley Lane/Cofton Centre) were considered at the Issues and Options stage but rejected on grounds that it is not sustainable, is contrary to government advice and has landscape/ecological impacts. The AAP therefore avoids any development of the green belt.
• Building design should be consistent with surrounding urban form but with environmental considerations in mind (eg green roofs, bird boxes and bat roosts	The Sustainability Strategy Proposal S2 sets out requirements for site wide biodiversity strategy to address these issues. Proposal OS9 requires a nature conservation management plan and a landscape strategy.

Sustainability Appraisal Recommendation (Feb 2007)	Submission AAP Response
• Opportunities should be sought to enhance and create indigenous habitats to the benefit of priority Biodiversity Action Plan (BAP) species (including the use of fruit-bearing species) and enhance the nature conservation interest of existing sites. This should include an overall nature conservation management strategy.	The Sustainability Strategy Proposal S2 sets out requirements for a site-wide biodiversity strategy to address these issues. There is also an open space strategy proposal OS13.
• Sustainable urban drainage systems (SUDS) can reduce the quantity of, and speed with which storm water reaches waterways, as well as reducing surface flooding, improving water quality and providing new habitats. They can also help to intercept any residual or newly generated pollutants from past or future industrial activities.	Sustainability Strategy Proposal S2 sets out requirements for site wide water strategy to address these issues, including a specific reference to SUDS.
• Ensure site is fully remediated and validated, based on an assessment and risk-based strategy.	To be addressed through submission of planning application for remediation and planning conditions. There is also an open space strategy proposal OS13.
• With regard to local water quality, land contamination is a major factor that remediation will help to ameliorate, but other steps should be taken to improve it including separation of all surface and foul water sewers, and monitoring of water quality at Bittell Reservoirs.	To be addressed through submission of planning application for remediation and planning conditions. Site wide water strategy (Proposal S2) will also address this issue.
• Investigative trenching and sample analysis for buried archaeology.	To be addressed through Sustainability Strategy and OS11.
• Address construction impacts eg dampening construction-related dust with water (preferably grey or rain harvested to avoid effects on water resources) and restrictions on idling time for plant and machinery to avoid air quality impacts.	To be addressed through submission of planning applications and environmental impact assessments.
• Vehicles (eg, buses) will have to comply with current emissions standards, however the AAP should seek to better the standards through available, reliable and proven technology such as hydrogen fuel cells or LPG buses. At a minimum, low emission technology should be promoted (buses would need to be at least Euro 5 standard).	These issues will be addressed through the green travel plan.
• Ensure that extra services related to the Park and Ride make stops in less well connected areas, or provide shuttle services to the Park and Ride for those without access to a car.	Proposal T4 includes new services linking the site with the public transport interchange.
• Consider options for prioritising road space for sustainable modes (bus, foot and cycle), emissions management of low performing vehicles and active management of road network such as contraflow, congestion charging, speed bumps and restricted parking.	These issues will be addressed through the green travel plan.

Sustainability Appraisal Recommendation (Feb 2007)	Submission AAP Response
• Ensure there is effective through ticketing between bus and rail services.	These issues will be addressed through the green travel plan.
• Ensure there are appropriate opportunities to access and enjoy the River Rea at West Works, such as walking routes and cycles ways. Ensure continuous walking and cycling routes are provided along the River Rea.	The AAP open space strategy Proposal OS2 requires major linear open spaces along the River Rea.
• Provide accompanying environmental improvements (landscaping, appropriate indigenous habitats, park benches, etc) to maximise the benefits from a restored River Rea at West Works.	The AAP open space strategy requires West Works park to incorporate measures to enhance its nature conservation, recreational and landscape value (Proposal OS2, 3 and 4).
• Ensure that land is adequately remediated prior to re-modelling the Rea and that ground and surface waters are protected from contaminants and/or contaminated surface water run-off. Ensure continued separation of surface and foul water sewers to further improve water quality.	Proposal S2 sets out a site-wide water strategy and proposal OS13 which requires a remediation strategy to address this issue. Detailed implementation will be via applications for development.
• Exploit opportunity to utilise the Rea as a wildlife corridor and create as many links as possible to other green spaces throughout and adjacent to the site.	The AAP open space strategy requires major greenway/linear open spaces along River Rea incorporating measures to enhance its nature conservation value (Proposal OS2, 3 and 4).
• Ensure appropriate design of the Rea's new river channel (ie, natural) to the benefit of species. Employ suitable planting strategy to maximize indigenous habitats to the benefit of BAP species such as water voles. Ensure proper management of the waterway, and maintenance of an appropriate corridor between it and other development which could include recreational uses.	The Sustainability Strategy in the AAP (Proposal S2) sets out requirements for site wide biodiversity strategy to address these issues.
• To deliver a continuous wildlife corridor throughout the site (albeit not one that can be used by amphibious ecology) develop a continuous green link from the point of the River Rea's entry to the culvert to the existing wildlife corridor along the mainline railway. This could potentially double as the required foot/cycle link to the outfall at Daffodil Park.	Part of the River Rea through the new urban park will be opened up with provision for wildlife. Also, the AAP open space strategy requires a new greenway/linear open space along River Rea incorporating measures to enhance its nature conservation value (Proposals OS2, 3 and 4). The Sustainability Strategy (Proposal S12) requires a site-wide biodiversity strategy.
• Open up the River Arrow through the East Works part of	The AAP open space strategy requires

Sustainability Appraisal Recommendation (Feb 2007)	Submission AAP Response
the site if practicable, incorporating appropriate mitigation measures proposed for the Rea.	removal of the culverted section of the River Arrow and laying out of the walkway along the river (OS2, OS4).

2.5 Ongoing Consultation

The submission document for the Longbridge AAP is also subject a six week consultation period, as is this Sustainability Appraisal Report which assesses it. After this period, there will be an independent Examination in Public conducted by a Planning Inspector to ensure that the plan is sound. The Inspector can make binding recommendations for change to the plan before it is adopted. Once the plan is adopted, due to be in late 2008 or early 2009, an Environmental Statement will be released by Birmingham City and Bromsgrove District Councils explaining how the SA has helped to shape the plan, how consultation responses have been taken into account, which mitigation measures were adopted and which were not, and setting out a final framework for monitoring of the plan's effects.

Please see the representations form within the AAP submission document for further details on the consultation period for the submitted Longbridge AAP and SA report.

3 Relevant Policies, Plans and Programmes and the Baseline Review

3.1 Introduction

Section 2.2 talked about establishing the scope of the SA and introduced the concept of other Policies, Plans and Programmes, and investigating the Baseline situation. These areas were first researched in early 2006 and have been updated at each stage along the way, so a simple summary has been provided in this chapter to provide an overview of the key considerations. Further information can be found in Appendices H and I.

3.2 Policies, Plans and Programmes

The AAP sets out new planning policy and proposals for Longbridge, and is influenced by other policies, plans, programmes and sustainability objectives. Most immediately, it needs to be consistent with national guidance, regional policy, strategic and local planning policies. In addition, it needs to contribute to the goals of a wide range of other programmes and strategies, such as those relating to social policy, culture or heritage. It must also conform to environmental protection legislation and sustainability objectives established at international, European and national levels.

This combination of legislation, plans and programmes can impose constraints on, and present opportunities to development and regeneration in Longbridge. A review of relevant policy documents is therefore an essential component of establishing baseline conditions. It also helps clarify the role of the plan and the context within which it will be operating. Chapter Three of the Scoping Report provided an extensive review of other policies, plans and programmes. Appendix H to this report lists all of the programmes reviewed, including those highlighted by responses to the various consultation periods.

3.3 Baseline Information

Baseline data provides the basis for forecasting and monitoring of environmental effects, social and economic effects of the AAP. It also assists with the identification of sustainability issues. The volume and quality of data available for different topics varies greatly. This section draws heavily on Chapter Four of the Scoping Report (May 2006) and Chapter Three of the SA Report for the AAP Preferred Options (February 2007), but the information has been revised in light of more recent data and comments from consultees.

Schedule 2.3 of the SEA Regulations (see section 1.6 and Appendix C) require the baseline to examine issues including biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage, including architectural and archaeological heritage, landscape and the interrelationship between these factors. In order to broaden the

assessment in sustainability terms, a greater emphasis has been afforded to social and economic considerations than would normally be the case for a strategic environmental assessment.

3.3.1 Selection of Data

During collation of the baseline, the following considerations were taken into account in the selection of data:

- Is the data helpful for undertaking an SA of the AAP?
- Is the data the most recent available?
- Is the dataset fully validated by relevant professional parties?
- Is the data easily available within the timescales dictated by the process of AAP development?
- Is the data easily accessible and does it exist in a format that may be used in the SA?
- Is the data easy enough to understand?

If baseline data does not fall within the above principles, it is generally omitted from the baseline report. However, where there is no information available at the appropriate resolution for the study area, other comparable information has been included as a descriptor.

3.3.2 Data Limitations

The area straddles the administrative boundaries of Birmingham City Council and Bromsgrove District Council. This has presented some challenges in gathering accurate data relating to the area in question; in some cases the data presented are limited to Longbridge or Northfield ward, in others it has only been possible to describe conditions in terms of Birmingham and Bromsgrove data.

Furthermore, in some instances data is historical (for example, 2001 Census data) and may not give a true reflection of the current situation, particularly with regard to the closure of the MG Rover plant in spring 2005. It is recognised that data gathering as part of an SA should make best use of existing information, highlighting gaps where they exist, rather than attempting to generate new data. To this end, the SA baseline contains secondary data and no primary data has been collected. It has been supplemented by information contained in the supporting background studies listed in section 2.2.2, all of which have been updated in 2007.

The baseline was updated and re-issued alongside the Preferred Options SA Report, and has been updated again for use during the assessment of the AAP submission document. Nevertheless, difficulties have been encountered in establishing an accurate evolution of the environment were the plan not to be implemented, due to data gaps and cross-boundary issues. Despite this, baseline chapters identify trends in data where possible and the final section discusses some of the broader trends affecting sustainability issues in the area.

3.3.3 Baseline Summary

The full SA baseline was published in print within the Scoping Report, and an updated and amended version provided on CD at the rear of the SA Report for the Preferred Options. Additional minor amendments have been made, incorporating new or refreshed data, to enable

an accurate assessment of the submission document for the Longbridge AAP. This can be found at Appendix I, while Table 3.1 provides a brief summary by topic.

Table 3.1: Baseline summary

Air
Air quality in major urban areas continues to be a problem. Birmingham is no exception and has been declared an Air Quality Management Area (AQMA) to address issues with nitrogen dioxide. Bromsgrove also has an AQMA for nitrogen dioxide which covers a much smaller area, the vicinity of the A38 / M42 junction. Pollution was moderate or higher 11 days in Birmingham centre in 2004. The annual mean for nitrogen dioxide at Longbridge within Birmingham city was 21.5 in 2004 and 20.2 in 2005 (μg/m3). In the Bromsgrove part of the area it was 18.1 in 2004 and 17.8 in 2005 (μg/m3). Actual air quality is likely to have changed following the closure of the MG Rover factory but more recent data are not available. Although there are increasing levels of road transport, both passenger and freight, it is noteworthy that there has been a decrease in nitrogen oxide emissions contributed by traffic within the AAP area from 79% in 2001 to 74% in 2005. It is anticipated that with improved technology in vehicles this downward trend will continue to 2010. There has also been a decline in the emissions from industry as a result of increasingly stringent regulation. Implementation of the EU Large Combustion Plant Directive in 2007 will lead to further reductions in sulphur emissions. At Longbridge pollution levels are likely to undergo a significant decrease due to the closure of the MG Rover works, although continued industrial activity and increasing road transport will offset this to some degree. Within the wider area point source emitters of carbon monoxide, particulate matter and volatile organic compound pollution from commercial, industrial and residential sources still exist. Gas protection measures may be required in the AAP area as ground gas monitoring undertaken in the North and South Works areas indicates the presence of carbon dioxide at concentrations above the CIRIA Report 149 threshold level of 0.5%. *Relevant SA Objective(s) (see Chapter Four): 13*
Biodiversity, Flora and Fauna
There are no European sites with 5km of the study area, the nearest being Fen Pools Special Area of Conservation (SAC) in Dudley, which is approximately 15km to the north-west. Within the 2km consultation area outside the study area there are two Sites of Special Scientific Interest (SSSI) and one Local Nature Reserve (LNR). **Bittell Reservoirs SSSI**, located to the southeast of the area, together forms the largest area of open water in Worcestershire and consequently represents one of the most important sites in the West Midlands for on-passage and wintering waders (over 200 species recorded including great crested grebe, little ringed plover and grasshopper warbler. The condition of all the units of the SSSI is listed as unfavourable, with particular mention of algal blooms within the surface water features. Originally the Upper Reservoir was used to feed the Worcester and Birmingham Canal; the Lower Reservoir and Mill Shrub Pool were established to feed the needs of mill owners downstream from the Canal. **Hopwood Dingle SSSI** is located immediately to the east of the area and comprises a series of steep-sided inter-connecting valleys supporting blocks of ancient woodland. The site supports a diverse flora, formerly characterised by an ash and wych elm canopy. The damp and sheltered valley bottoms support important assemblages of ferns, with eight species having been recorded. Favourable

condition.

Rubery Cutting and Leach Green Quarries LNR is approximately 1km to the west of the area. The LNR is comprised of a former quarry face designated for its geological interest, with gorse and scrub obscuring much of the rock faces.

Consultation confirmed the presence of 14 non-statutory wildlife sites within the 2km area of search (not including Bittell Reservoirs SWS and Hopwood Dingle SWS which are afforded statutory protection): The River Rea and adjoining land SLINC runs for part of its length through the Longbridge works site, and will need to be taken into consideration by the AAP proposals so as to avoid damage or destruction of features of interest.

The habitats within the study area are generally of limited ecological significance.

Black poplar is a species of conservation concern known to be present in the area. While parts of the study area have the potential to support protected species there is little evidence of occurrence. Historical records show sightings of smooth newt, pipistrelle, soprano pipistrelle, natterer's bat, noctule and brown long-eared bat, water vole, badgers, viviparous lizard, grass snake, house sparrow, skylark, house martin, lapwing, bullfinch, linnet, song thrush and starling.

The southern and western parts of the study area fall within the Black Country to Lickey Hills Biodiversity Enhancement Area, a designation stemming from the RSS aiming to protect and enhance biodiversity across protected sites and the wider environment.

Relevant SA Objective(s): 8, 14

Climatic Factors

There is evidence to show that the climate of the West Midlands changed in the 20th century. Most notably the annual average temperature rose by 0.6°C, the growing season lengthened by 30 days, summer rainfall decreased and winter rainfall increased. Climate change in the West Midlands has potential effects on biodiversity, weather patterns and severity, water quality and resources, agriculture, and health, particularly with regards to an ageing population.

DBERR has forecast continuing increases in carbon emissions, making it increasingly difficult to meet greenhouse gas targets. On average, each person in the West Midlands creates 8.7 tonnes of carbon dioxide emissions per year (2005), up from 8.1t in 2003. In Birmingham, each person averaged 6.8 tonnes of carbon emissions in 2005, up from 6.2t in 2003, while in Bromsgrove each person emitted 11.5t in 2005, up from 10.7t in 2003. Industrial and commercial energy use totalled nearly 8,400GWh in Birmingham in 2003, residential use over 9,200GWh and transport nearly 5,000GWh. In Bromsgrove, industrial and commercial energy use totalled over 500GWh in 2003, residential use over 1,100GWh and transport over 2,000GWh.

Energy consumption continues to grow in the UK and the trend is likely to be similar in Longbridge. The domestic and transport sectors are the key growth areas. The West Midlands generated a total of 753.9 GWh of electricity from renewable sources in 2002. This fell to 581.1 of 32,966 GWh in 2003, 5th of nine national regions.

On average, each dwelling in the West Midlands creates 5.7 tonnes of carbon dioxide emissions per year (2003). A household with fewer people uses much more energy per person. Evidence suggests that if average occupancy levels are as low as two by 2021, as predicted by WWF Ecobudget, there would be a 13 per cent increase in energy demand. Even as builders seek to introduce sustainability into design, housing will continue to have a major impact on CO_2 emissions.

Per unit used in the UK, gas produces less CO_2 than electricity. While gas represents 66 per cent of all the energy used in the West Midlands, it accounts for only 54 per cent of its CO_2 emissions from consumption.

Relevant SA Objective(s): 9, 10, 16

Cultural Heritage (including Architectural and Archaeological Heritage)

Longbridge is associated with an illustrious industrial heritage due to car manufacturing and MG Rover. Historical recording of buildings in the AAP area has been carried out and completed on behalf of BCC. There are two Grade II listed buildings in the locality (the Chapel and the Water Tower at Hollymore Hospital), and one conservation area (Austin Village). Archaeological features have been identified at the North Works Car Park, in the North Works area and the West Works area.

It is possible there may be more buried archaeology in the AAP area, as has been suggested by investigative trenching already carried out. Activity in the study area could date back to medieval, Roman or prehistoric times, with the River Rea yielding paleoenvironmental remains.

The pertinent issue is whether there is any surviving paleoenvironmental evidence for human activity associated with the River Rea which appears to have meandered or braided during the past. Work at the former North Works Car Park has revealed potential modification of channels which clearly indicates that humans were attempting to modify the land – most likely draining a marshy area for future cultivation. The extent of this activity is difficult to assess as is its significance. At the time of writing a programme of radiocarbon dating is being carried out on material from the former North Works Car Park: the results will greatly assist in defining this more clearly.

Relevant SA Objective(s): 11

Economic Factors

The former MG Rover Plant at Longbridge accounted for approximately 6.5% of total car production in UK during 2004. This figure had been decreasing since the year 2000. The Plant employed approximately 6,000 people, and spent around £835m in the supply chain of the UK, of which £410m was in the West Midlands Region.

Since the closure significant progress has been made in limiting the economic impact and helping people get back to work. According to its final report (March, 2006) the MG Rover Taskforce estimates that of 6,300 Job Seekers Allowance claimants recorded, 66% are back in employment, with the remainder retired, on incapacity benefit, in training or seeking employment. Between 2005 and 2006 around 100 individuals a week were helped back into employment, over 4,000 received individual skills advice and over 2,000 received skills assessment or training provision.

Despite this an economic downturn is occurring in the study and wider area as a result of MG Rover closure and challenges posed by globalisation processes. The West Midlands economy has grown more slowly than some other regions in recent years. Over the last decade the region's gross value added (GVA) expanded by 64%, below the English average of 70%. Between 2000 and 2005, employment expanded to a smaller degree in the AAP area compared to the West Midlands, by 2.9% and 3.9% respectively.

Public administration, education and health account for more than 32% of the Longbridge travel-to-work-area's (TTWA) employment. This is much higher than the national average. Conversely, employment in other service sectors such as transport and communication and banking, finance and insurance sectors are underrepresented in the Longbridge TTWA. Longbridge TTWA has a strong specialisation for manufacturing but this sector appears to be declining at a faster rate than nationally.

According to 2001 Census data, 75.1% of residents in Longbridge Ward are economically active. Unemployment amongst the resident population aged 16-74 was high in 2001 at 5.7%, in England it was 3.4% and in Birmingham 5.7. The closure of the Rover Works is expected to have increased the figure for Longbridge, at least in the short-term. In August 2005 unemployment in the Longbridge Ward increased to 7.7% (11.4% for men, 3.4% for women), although compared favourably against Birmingham as a whole (8.4%).

There is generally a low level of skills and qualifications; in 2003-04, 22% of people in Birmingham, and 13.8% in Bromsgrove had no qualifications.

Gross weekly earnings in Birmingham were £400.80, and £379.40 in Bromsgrove in 2005, compared with the UK average of £433.10. Longbridge TTWA appears to have a low and declining entrepreneurial culture, and the actual stock of small businesses in the area has also declined.

Relevant SA Objective(s): 4, 5, 6

Landscape and Townscape

The study area is predominantly urban (residential and industrial) in nature, but gives way to open countryside and greenbelt land in the south within the Bromsgrove District. This rural-urban fringe is under particular pressure from development.

Due to its topography, parts of the AAP area are visible from the Lickey Hills and large parts of North Worcestershire. The wider area makes up part of the 'Arden' Countryside Character area.

The wider area is well served by public open space provision, particularly towards the west including the popular Lickey Hills Country Park, Waseley Hills Country Park and large areas of public open space around Bartley Green, Frankley reservoirs and Cofton Park. It should also be noted that the Bromsgrove wards contain large areas of Greenbelt that in many places may be accessible, although informally.

The study area suffers from neglected townscapes and amenity spaces, hampered by major transport routes cutting through the AAP area, such as the A38 and two railway lines.

Relevant SA Objective(s): 12

Material Assets

The ecological footprints of both Birmingham and Bromsgrove exceed sustainable capacity in terms of resource consumption and production. Environmental and economic inputs and outputs can be measured in terms of ecological footprint. The world average ecological footprint is 2.2 global hectares (gha) per capita. In contrast, dividing the total biologically productive surface area of the planet by the current population gives us our maximum budget for sustainable living: 1.8gha per capita. Birmingham's ecological footprint is 5.3gha per capita; Bromsgrove's is 5.6gha per capita. Food and drink, energy, capital investment, travel and consumables and are the biggest challenges.

Per capita waste production was 452.9kg in Birmingham, 346.7kg in Bromsgrove and 438.5kg in the UK. Waste production continues to grow at around 3% per annum nationally.

Household waste (9%) continues to be dwarfed by other waste streams with industry and commercial waste (25%) mining and quarrying waste (29%) and construction and demolition arisings (32%) posing more significant challenges.

Household recycling rates in Birmingham and Bromsgrove are both lower than regional and UK averages although a much smaller percentage of waste is landfilled from Birmingham. Birmingham and Bromsgrove recycled 10.4 and 10.8% of household waste in 2003/04 respectively, in comparison to the 13.2% UK average.

Despite Birmingham's poor recycling rates, only 25.7% of household waste is sent to landfill, compared to a national average of 71.9% (2003/4), with a large proportion of household waste undergoing energy recovery (68.3%).

Relevant SA Objective(s): 7, 8, 17, 18

Social Considerations (including Population and Human Health)

Longbridge has a population of 30,964 of which a small proportion is made up of ethnic minority groups (93.2% white). 47.6% of the population is male and 52.4% female; 24.6% of the population is

aged 16 years or under. The proportion of Longbridge ward's population with mixed race origins (2.7%) appears to be more than twice the averages for West Midlands (1.4%) and England (1.3%). Conversely, the proportion of residents in Longbridge with African and Caribbean origin (1.3%) is low when compared with the regional (2.0%) and national (2.3%) averages.

The unemployment rate is high (7.7%). The Longbridge ward has an index of multiple deprivation score of 44.2% which compares unfavourably with those of Birmingham (37.5%) and Bromsgrove (10.1%).

In the 2001 Census 11% of Longbridge residents were described as not having good health and only 66% of residents were described as having good health. The remaining 23% were of fairly good health. These figures compare unfavourably with those of England and Wales (69% and 9% respectively).

Health services are skewed towards the northern section of the study area. Doctor's surgeries are fairly evenly distributed, though appear to be located in pairs. Dentists are also evenly dispersed within the Birmingham wards of the study area, however there is very little provision of either doctors surgeries or dentists within the Bromsgrove wards.

Life expectancies in the West Midlands are below the national averages for both males and females.

In England 8.37% of accommodation does not have central heating; the West Midlands has a greater proportion without central heating at 11.12% and Longbridge even higher at 15.78%. In Birmingham 59.6% of households are owner occupied. For the Longbridge ward 57.9%. A total of 35% were rented from the local authority, housing association or other registered social landlord, which compares to a figure of 27.8% for Birmingham.

Longbridge has a relatively high population density and generally has more people per room than the England average. Despite this, the proportion of households within the Birmingham part of the study area that are described as overcrowded (6.8%) is below the Birmingham City average (9.6%) and similar to the England average (7.1%). In addition, the average number of persons per household in Longbridge is 2.30 which is lower than England (2.36) and Birmingham (2.46). The number of residents per household looks set to fall, in line with UK trends, presenting buildings, energy and resource challenges.

The 2005 average house price in the Longbridge Ward was £118,675. This presents a 60.1% increase from 2001-2005 against a City average increase during the same period of 53.3%. The increase in property prices in the study area has not been accompanied by a similar increase in household incomes.

The Longbridge ward has an index of multiple deprivation score of 44.2% which compares unfavourably with those of Birmingham (37.5%) and Bromsgrove (10.1%). However, the general trend is a reduction in the number of people claiming benefits (Jobseekers Allowance) in Birmingham and Bromsgrove since 1998.

Violence against the person and theft from a vehicle are the two most recorded crimes in Bromsgrove and Birmingham, in line with national trends.

The 2001 census revealed that people in the West Midlands, Birmingham and Longbridge are generally less qualified than the English average and in Bromsgrove. In Longbridge 39.9% of the population aged between 16 and 74 have no qualifications, which is significantly higher than the figure for England at 28.85% and higher than the figure for Birmingham at 37.09%. Bromsgrove has a lower proportion of its 16 - 74 year olds with no qualifications at 26.09%.

The density of education provision is greater towards the north-eastern part of the study area, particularly in and around Bourneville ward. There only two primary, and no secondary schools in the Bromsgrove wards that are contained within the context area. These trends may be explained by the

fact that population density increases towards Birmingham City Centre.

Relevant SA Objective(s): 1, 2, 3, 9

Soil and Contaminated Land

There are evidently large quantities of derelict land at the former MG Rover site that would benefit from regeneration and ground contamination will be a complex issue.

Ongoing investigation works are being undertaken in the study area. Contamination generally comprises elevated levels of hydrocarbons, which appear to be associated with spillages. Chlorinated hydrocarbons and PCB's have also been reported at specific locations within the AAP boundary. Localised elevated metal concentrations have also been recorded, generally associated with fill materials used historically. The hydrocarbon-based contamination is of concern because of its mobility potential and could impact on groundwater quality, within the underlying aquifer, or nearby surface water quality.

Relevant SA Objective(s): 8, 18

Transport

In Birmingham, 58.5% of economically active people travel to work by private car (driver or passenger) or taxi; 22.8% travel by public transport, 10.2% walk or cycle and 7.5% work from home. In Bromsgrove 74.6% travel by car, 5.8% by public transport, 8.1% walk or cycle and 10.4% work from home. In the West Midlands and England and Wales the numbers travelling to work by car are 67.6% and 62.0% respectively.

Car ownership is lower than the regional and national average in Birmingham, although Bromsgrove's figure is significantly higher, reflecting its more rural character. The study area is well served by all forms of transport. There are several local and longer distance bus services, Longbridge rail station, the A38, M5 and M42. Despite these characteristics, perceived problems focus on the lack of attractive orbital infrastructure and services; congestion at key junctions and along key routes into and out of the AAP area; and a low level of service on important links to national and regional infrastructure.

Traffic levels in Longbridge have fallen since 1992. Between 1992 and 1998 traffic levels in Longbridge decreased by approximately 40%, probably due to a 30% reduction in staff numbers at MG Rover's Longbridge works from 16,250 to 11,500. Between 1998 and 2001 traffic flows on the network increased by approximately 10%, probably due to increases in background traffic and developments on the A38 including Great Park.

Relevant SA Objective(s): 7

Water

The River Rea and the River Arrow pass through the AAP area, the Rea to the north and the Arrow to the south. The Rea is within the catchment of the River Tame, and Arrow within the Avon catchment. There are no records of any significant flood risks posed by the River Arrow.

There is a history of flooding associated with the River Rea, part of which is culverted through the area, although hydrological modelling suggests that this is not significant. There are a total of 93 properties at risk of flooding from the Rea; 85 in Flood Zone 3 and a further 8 in Flood Zone 2. Climate change is likely to increase the number of future flood incidents in West Midlands.

The River Arrow, also partly culverted, compares favourably against the River Rea in terms of all General Quality Assessment criteria, with Very Good ratings under River Biology and River Chemistry. Water quality of the Rea in Longbridge is generally poor, possibly due to contamination from the MG Rover plant. The River Rea has failed to meet its Environment Agency River Quality Objective (RQO), due to a significant failure to meet the necessary levels of biochemical oxygen demand and alkalinity.

The Rea flows through a deep culvert which places engineering constraints on opportunities for improvement. Both the River Rea and River Arrow have very high levels of phosphates.

The AAP area sits partially above a major sandstone aquifer and adjacent to a minor alluvium aquifer. Groundwater is also threatened by contamination.

Per capita water consumption in the region has gradually reduced since 2000 and is below the national average, but nevertheless remains high (132 litres per capita per day in 2004-05, against an industry average of 150). The trend towards lower housing occupancy combined with climate change and increasing incidence of drought threaten water resources.

Relevant SA Objective(s): 15, 16

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4 Appraisal Objectives

4.1 Introduction

Section 2.2 talked about the development of a Sustainability Appraisal Framework when setting out the scope of the assessment. The SA Framework is the basis for assessing the Longbridge AAP, the results of which are discussed in the next chapter. The Framework has been widely consulted upon, was agreed during the scoping phase, and is briefly described in this chapter. Further information can be found in Appendix J.

The SA Framework is made up of a series of Sustainability Objectives, together with indicators which can be used to measure performance toward these objectives. An objectives-led approach is a recognised method for considering the environmental and sustainability effects of a plan, and comparing the impacts of various options. They are used in conjunction with the baseline to predict environmental, social and economic effects. Objectives of the SA are sometimes similar to, but distinct from, those identified in the AAP (see Table 1.3).

4.2 Derivation of SA Objectives

SA objectives should take account of environmental protection and sustainability objectives identified in other plans, programmes and legislation such as European Directives, the Regional Sustainable Development Framework and others identified in Appendix H. The results of baseline data collection and identification of opportunities and constraints also feed into the development of objectives, as well as informing indicators. Indicators are designed to measure the likely effectiveness and efficiency of AAP options in contributing to the improvement of local environmental, social and economic conditions.

Schedule 2(6) of the SEA Regulations (see Appendix C) lists a number of environmental topic s that should be addressed by the assessment. For sustainability appraisal, the following topics are added:

- Economic factors, including employment, unemployment, income, skills and qualifications, and employment sectors; and
- Social considerations, including housing, crime, education, social deprivation, accessibility, recreation, leisure and sport, and demographics (there is significant overlap here with the population and human health aspects of the SEA Regulations).

Once sustainability topics are identified, objectives and indicators relating to each topic can be prepared. Objectives are presented in Table 4.1 while indicators can be viewed at Appendix J. Some of the objectives have been updated in response to comments from consultees. Some of them are also now quite complex, addressing a number of issues at once. This can lead to a degree of uncertainty or opaqueness creeping into the assessment process. In order to alleviate this, a series of sub-criteria, phrased as questions, has been devised in order to focus the assessment. These can be viewed at Appendix K.

Table 4.1: The Longbridge SA Objectives *(with key source derivation in brackets)*

	SA Objectives
1	Reduce poverty and social exclusion, promote a strong community where people feel they have a say in the future, and encourage equitable accessibility to services. *(SEA Directive: population; RSDF: participation, poverty, access)*
2	Improve health and reduce health inequalities by encouraging and enabling healthy lifestyles and protecting health, as well as providing equitable access to health services and high quality open spaces, sports and recreational facilities. *(SEA Directive: human health; RSDF: health)*
3	Improve community safety, and reduce crime, antisocial behaviour and the fear of crime. *(SEA Directive: population; RSDF: crime)*
4	Support the local community by maximising use of local labour and support adaptation to changing employment circumstances. Encourage investment and engagement to support learning and raise levels and diversity of skills. *(RSDF: skills, employment, investment)*
5	Encourage regeneration and economic growth in and around Longbridge that does not compromise the ability of future generations to meet their needs, and improve equitable access to job opportunities. *(RSDF: growth, employment, urban development)*
6	Promote and support the development of new technologies, particularly those with high value and low impact, to encourage enterprise and innovation with a sense of environmental and social responsibility. *(RSDF: technology, innovation, responsibility)*
7	Make efficient use of the existing road network and reduce dependence on private vehicular travel. Prioritise modal shift to equitable, accessible, sustainable, and integrated forms of public transport, cycling and walking, and increase the provision of public transport networks and passenger facilities. Avoid adverse impacts on the motorway network by providing access appropriate to the required levels of growth. *(SEA Directive: material assets; RSDF: transport, planning)*
8	Optimise the use of previously developed land and buildings where possible and practical, remediate contaminated land and create high quality built environments that incorporate a network of accessible interconnected sites[i] and green spaces, enhance biodiversity and maximise opportunities for achieving BAP targets, and promote local distinctiveness and sense of place. *(SEA Directive: material assets, soil; RSDF: land use, urban development)*
9	Provide high quality affordable housing, ensuring that all new buildings are environmentally sound and meet BREEAM standards. *(SEA Directive: population, material assets; RSDF: housing, standards)*
10	Use renewable sources of energy and encourage energy efficiency, use resources prudently, making the most of local availability, and reduce contributions to climate change. *(SEA Directive: climatic factors; RSDF: climate change, energy, conservation, local sourcing)*

[i] Interconnected sites should include protected sites and nature reserves.

11	Conserve and, where appropriate, enhance the historic, industrial and cultural heritage of Longbridge and the surrounding area. *(SEA Directive: cultural heritage; RSDF: environmental assets, culture and recreation)*
12	Maintain and enhance the quality and character of landscape and townscape. *(SEA Directive: landscape; RSDF: environmental assets, land use, stewardship)*
13	Reduce air pollution and improve air quality. *(SEA Directive: air; RSDF: pollution)*
14	Protect, enhance and increase the biodiversity of Longbridge and the surrounding area. *(SEA Directive: biodiversity; RSDF: biodiversity)*
15	Protect water resources and improve water quality. *(SEA Directive: water; RSDF: conservation)*
16	Avoid increasing, and take opportunities to reduce flood risk, and prepare for other impacts of climate change. *(SEA Directive: climatic factors; RSDF: climate change)*
17	Minimise waste creation and optimise the re-use and recycling of waste. *(SEA Directive: material assets; RSDF: waste)*
18	Use local supply sources and support the sustainable extraction, re-use and recycling of minerals and aggregates resources. *(SEA Directive: material assets, soil; RSDF: local sourcing, conservation)*

4.3 Compatibility between Objectives

Best practice and Government guidance (ODPM, 2005a, b) recommend testing the different sets of objectives to explore any potential conflicts that might affect the sustainability of plan options. The SA objectives were tested for internal compatibility in the Scoping Report; compatibility between the SA objectives and AAP objectives is illustrated by the matrix in Figure 4.1, with a commentary given below.

4.3.1 Commentary

The objectives for the Longbridge AAP (see section 1.7) have continued to evolve as the planning process has progressed and now number 14. Sustainable development, as a theme with five objectives, now tops the list as opposed to being represented by a singular objective at the bottom of the table. The objectives still seek to deliver economic regeneration and social renewal, and emphasis on employment remains, but promotion of sustainable communities is much more evident than in the previous set. The drive for environmental sustainability in building, varied open spaces and sustainable transport should all help to ensure a series of high-quality outcomes for the AAP.

Accordingly the assessment illustrated in Figure 4.1 demonstrates that there is a high level of compatibility between the two sets of objectives in the social and economic realms, and a lesser degree of tension between the SA Objectives and AAP Objectives that seek economic transformation; this is illustrated by a noticeable lack of red. Although the revised objectives are positive in their adherence to the principles of sustainable development, it is inevitable that large scale redevelopment and subsequent economic activity will lead to some negative

environmental effects, relating primarily to implementation of the plan, unless appropriate mitigation measures are adopted. Several recommendations have been made in earlier phases of assessment and it is encouraging to see many of these included in the plan.

The key areas of concern for earlier assessments were resource use and efficiency, for example, high energy and water efficiency in new housing and employment buildings. The challenging sustainability standards sought by the new objectives will go some way to achieving this while other more local effects, such as those on biodiversity, will need to be borne in mind as more detailed plans, planning applications and environmental impact assessment are being prepared. Some uncertainty still exists with regard to effects on environmental objectives, as illustrated by the amber cells in Figure 4.1, and this will scrutinised in greater details by the assessment described in the next chapter.

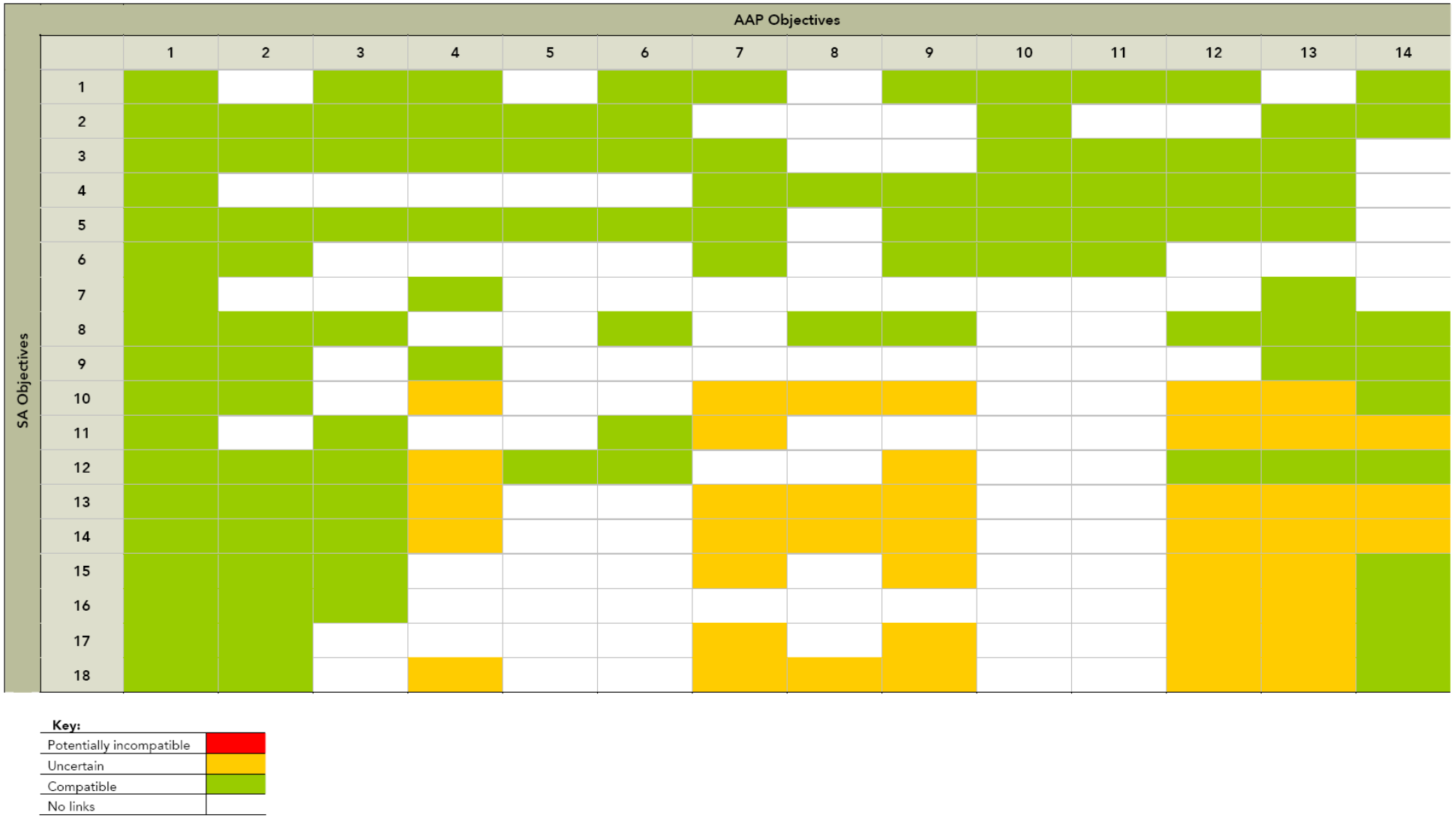

Figure 4.1: Compatibility between objectives

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5 Assessment of the Longbridge Area Action Plan Submission Document

5.1 Introduction

This chapter summarises the outcome of the sustainability appraisal and explains what the likely effects will be of implementing the submission document for the Longbridge AAP. The assessment is based upon the SA Framework set out in the previous chapter and baseline information described Chapter Three and Appendix I.

The assessment has been an iterative process, as explained in Chapter Two, employing a number of levels of appraisal and methods. Readers interested in how the findings of the alternatives assessed have affected the progression of the AAP are directed to Chapter Two, and also Appendices E and F where the results of previous rounds of assessment are recorded to illustrate how the AAP has progressed in terms of reducing negative effects and maximising positive effects. The results of these assessments have aided the plan-makers in selecting the best options to take forward in the final AAP.

5.2 Significant Effects Assessment

Every proposal in the plan is assessed with a view to gauging sustainability effects in detail and identifying further mitigation measures where appropriate. Each has been analysed using a Detailed Assessment Matrix (presented in Appendix L) which tests the effect it will have on each of the SA Objectives and associated baseline component in turn. These tables identify information relating to Schedule 1 of the SEA Regulations and assess effects in terms of:

- Duration;
- Frequency;
- Whether the effect is temporary or permanent;
- Geographic significance;
- Magnitude;
- Level of Certainty;
- Significance; and
- Nature of effect: positive or adverse.

The results of the assessment are presented at the bottom of each table in terms of the overall environmental effect of the proposal and mitigation measures that can help to eliminate identified impacts. Limitations in terms of the level of detail and confidence of assessment are cited; where uncertainty exists, the worse case scenario has been assumed in accordance with

the precautionary principle. Significance has been measured using the orders of magnitude identified in Table 5.1.

Table 5.1: Severity of significance: identified through Impact Magnitude and Geographic Significance

Geographic Significance	Impact magnitude								
	Negative				Neutral	Positive			
	High	Medium	Low	Negligible		Negligible	Low	Medium	High
International	Acute	Acute	Major	Moderate		Moderate	Major	Acute	Acute
National	Acute	Major	Moderate	Minor		Minor	Moderate	Major	Acute
Regional	Major	Moderate	Minor	Negligible		Negligible	Minor	Moderate	Major
Local	Moderate	Minor	Negligible	Negligible		Negligible	Negligible	Minor	Moderate

5.3 Radar Analysis

A graphic representation of the results of each detailed assessment, known as radar analysis, has been prepared for each proposal (see Appendix M). Within these diagrams the numbers refer to each SA Objective. The diagram should be viewed holistically; the tighter the circle of red, the more sustainable the option is likely to be. If there is a particular spur which extends a long way into the red it means that the baseline characteristics associated with that objective are likely to experience negative effects.

For example, with regards to proposal LC1, the spur for Objective 13 extends a long way into the red (see Appendix L). This means that, without mitigation, the number of car trips generated by new development has the potential to lead to a significant negative effect on air quality. Conversely the spur for Objectives 9 and 10 are very green because the proposal aims make significant carbon savings through energy efficiency, use of renewables and CHP. To assist in reading these analyses it is useful to know that the objectives relating to socio-economic outcomes are on the right-hand of each diagram, while the objectives for environmental outcomes are on the left-hand side.

Table 5.2 presents the conclusions from each Detailed Assessment Matrix.

Table 5.2: Summary of the effects of proposals for the Longbridge AAP

Proposal	Summary of Effect (from Appendix L)
Sustainability Strategy	**Positive:** The sustainability strategy for the Longbridge AAP incorporates many of the recommendations made during earlier phases of sustainability appraisal and as such will provide far grater benefits, in environmental, social and economic terms, than would have otherwise been experienced. Virtually all SA objectives are promoted, with some major benefits anticipated. In some cases more detail would help to secure maximum gains; for example

Proposal	Summary of Effect (from Appendix L)
	with regards to biodiversity, flood risk, waste, energy and materials a further 'strategy' is proposed but the details are not made clear.
Design Principles	**Positive:** The design principles for the Longbridge AAP are positive and forward thinking, incorporating some of the recommendations made in earlier phases of sustainability appraisal. Particular advantages relate to a vastly improved quality of townscape and reduced visual impact, improved security and reduced fear of crime, and a greener Longbridge.
Local Centre 1	**Mixed:** Significant benefits will be achieved through this proposal, particularly given its commitment to sustainable development. Economic growth, employment and provision of social facilities will be major wins, while sustainable design and transport measures will ensure these can be achieved at lowest expense to the environment in terms of carbon emissions, reductions in flood risk, waste and resource management, and biodiversity enhancements. Cultural heritage and landscape/townscape quality objectives will also be advanced. Conversely, some issues remain: the traffic impacts of development are unclear and the Local Centre is expected to be a significant trip generator, while air pollution related to construction and construction traffic, as well as operational buildings and commuters to the development cannot be ruled out.
Local Centre 2	**Mixed:** Significant direct and indirect positive effects will be experienced as a result of this proposal through raising the skills profile of the local population and helping to re-train people to access the re-structured employment environment associated with other AAP proposals. In addition, the college is an appropriate use of previously developed land that will greatly improve the visual amenity of the area, and its active frontages will help to provide natural surveillance and rectify the safety environment. Air pollution remains a concern: the traffic impacts of development are unclear and the college is expected to be a significant trip generator, while air pollution related to construction and construction traffic, as well as operational buildings and commuters to the development cannot be ruled out. All other environmental issues are addressed through other aspects of the AAP and as a result of recommendations made in earlier phases of sustainability appraisal.
Local Centre 3	**Mixed:** Minor benefits are associated with this proposal in relation to the provision of relatively small -scale (yet important) employment provision. Significant benefits will be experienced with regards to improving the visual amenity of the area and helping to create a locality that is attractive to new businesses, thereby helping to make the plan as a whole more viable. Air pollution remains a concern: the traffic impacts of development are unclear and the retail quarter is expected to be a significant trip generator, while air pollution related to construction and construction traffic, as well as operational buildings and commuters to the development cannot be ruled out. All other environmental issues are addressed through other aspects of the AAP and as a result of recommendations made in earlier phases of sustainability appraisal.
Local Centre 4	**Mixed:** Significant benefits will be achieved through this proposal, particularly

Proposal	Summary of Effect (from Appendix L)
	given its commitment to sustainable development. Economic growth, employment and provision of social facilities will be major wins, while sustainable design measures will ensure these can be achieved at lowest expense to the environment in terms of carbon emissions, waste and resource management. Cultural heritage and landscape/townscape quality objectives will also be advanced. Conversely, some issues remain: air pollution and the traffic impacts of development are unclear and the mixed use quarter is expected to be a significant trip generator, while air pollution related to construction and construction traffic, as well as operational buildings and commuters to the development cannot be ruled out.
Employment Zone 1	**Mixed:** Significant benefits can be achieved through this proposal with regards to the local employment and economic situation through the diverse range of employment uses proposed. Specifically, live/work units and micro-business facilities, combined with support for skills and training and business development programmes will help to renew and enliven the local economy and foster innovative and entrepreneurial activities; this could be further encouraged by proximity to the Technology Park and college. Proximity to public transport links makes this a sustainable location. Significant positive effects are also expected in visual impact terms, and by reducing crime and the fear of crime, as the proposal will contribute to a revived and active urban centre. Important strategic environmental benefits will be gained by delivering a CHP/biomass plant and a recycling facility; CHP is strongly recommended as it can deliver significant social (in terms of affordable heat and energy) and environmental gains area-wide. Air pollution remains a concern: the traffic impacts of development are unclear and the employment zone is expected to be a significant trip generator, while air pollution related to construction and construction traffic, as well as operational buildings and commuters to the development cannot be ruled out.
Employment Zone 2	**Mixed:** Benefits can be achieved through this proposal with regards to local employment through continued employment of some automotive professionals. Proximity to public transport links makes this a sustainable location. Redevelopment will make appropriate use of previously developed land, while positive effects may be experienced in landscape and visual impact terms with enhanced screening. Air pollution remains a concern: the traffic impacts of development are unclear and the Nanjing site is expected to be a significant trip generator for both cars and goods vehicles, while air pollution related to operational buildings and commuters to the development cannot be ruled out. There is a risk of further land and surface and ground water contamination when car production resumes.
Employment Zone 3	**Mixed:** Significant benefits can be achieved through this proposal with regards to local employment through the employment uses proposed. Proximity to public transport links makes this a sustainable location. Redevelopment will make appropriate use of previously developed land, while positive effects are also expected in landscape and visual impact terms with enhanced screening that will also benefit biodiversity. Air pollution remains a

Proposal	Summary of Effect (from Appendix L)
	concern: the traffic impacts of development are unclear and the Cofton Centre is expected to be a significant trip generator for both cars and goods vehicles, while air pollution related to construction and construction traffic, as well as operational buildings and commuters to the development cannot be ruled out.
Regional Investment Site 1	**Mixed:** The Regional Investment Site is the major source of economic regeneration associated with the Longbridge AAP. It meets regional and local economic policy objectives, is an appropriate land use and will secure thousands of new jobs in the area. Many of the significant negative effects potentially associated with the proposal have been successfully removed by adopting recommendations made in earlier phases of sustainability appraisal. Provision of jobs will help to alleviate social deprivation and exclusion in the local community, particularly as measures will be taken to ensure opportunities will be available to all. Active lifestyles are promoted through sustainable travel measures and provision of fitness centre. Significant benefits will be experienced with regards to improving the visual amenity of the area and helping to create a locality that is attractive to new businesses, thereby helping to make the plan as a whole more viable. Buildings standards and other sustainable energy and resource initiatives will help to ensure that these benefits can be delivered at the lowest cost to the environment in terms of carbon emissions, waste and resource management, and biodiversity enhancements. Re-engineering of the River Rea will also deliver significant biodiversity enhancements as well as reducing flood risk and helping to secure water quality improvements. Conversely, some issues remain: the traffic impacts of development are unclear and the RIS is expected to be a significant trip generator, while air pollution related to construction and construction traffic, as well as operational buildings and commuters to the development cannot be ruled out.
Housing 1	**Mixed:** The proposal delivers significant and important benefits in terms of helping to renew the local housing market and providing additional affordable homes in a sustainable location, while ensuring that this can be achieved with minimum cost to the environment by adopting challenging building standards (particularly with regards to energy, water, waste and resources) and achieving a greater provision of open space. In addition, the proposal will help to improve townscape and landscape character, utilising significant areas of previously developed land, while flood risk is effectively managed through engineering modifications to the River Rea, which will also have biodiversity benefits. Care home accommodation will help tend to the needs of an ageing population. Conversely, some issues remain: air pollution and the traffic impacts of development are unclear and the residential area is expected to be a significant trip generator, while air pollution related to construction and construction traffic, as well as operational buildings and commuters to the development cannot be ruled out.
Housing 2	**Mixed:** The proposal delivers significant and important benefits in terms of helping to renew the local housing market and providing additional affordable homes in a sustainable location, while ensuring that this can be achieved with

Proposal	Summary of Effect (from Appendix L)
	minimum cost to the environment by adopting challenging building standards (particularly with regards to energy, water, waste and resources) and achieving a greater provision of open space with significant improvements for biodiversity. In addition, the proposal will help to improve townscape and landscape character, utilising significant areas of previously developed land and creating landscape buffers. Care home accommodation will help tend to the needs of an ageing population, while new local services including community/library facilities will meet local needs. Conversely, some issues remain: air pollution and the traffic impacts of development are unclear and the residential area is expected to be a significant trip generator, while air pollution related to construction and construction traffic, as well as operational buildings and commuters to the development cannot be ruled out.
Transport 1	**Positive**: the proposal will deliver small-scale but significant benefits to accessibility, health and sustainable transport, with indirect benefits for air quality as a result. No negative effects identified.
Transport 2	**Positive**: this proposal makes best use of existing road infrastructure in relation to the strategic network. Although no further measures are given to minimise adverse effects, other proposals in the movement framework seek to address these areas.
Transport 3	**Positive**: a hierarchical network of routes within the area, including a dedicated/priority route to Frankley, will have significant benefits for accessibility and the road network, and support regeneration in general, while provision for pedestrians and cyclists will have indirect health benefits. No adverse effects are identified.
Transport 4	**Positive**: an improved network of bus routes within the area, including a high quality route to Frankley, will have significant benefits for accessibility and the road network, and support regeneration in general. No adverse effects are identified.
Transport 5	**Positive**: a new public transport interchange will have significant positive effects for the area as a whole, improving accessibility from, to and within the area, and supporting wider regeneration aims. Less significant indirect effects include minor health benefits due to the longer final walking distances associated with public transport use, and slight improvements in air quality. No adverse effects are identified.
Transport 6	**Positive**: an improved Longbridge station will contribute to significant benefits for accessibility and sustainable transport, and support regeneration in general. No adverse effects are identified.
Transport 7	**Mixed**: in theory a Park and Ride development is a sustainable form of public transport which helps to reduce car use over wide areas of the strategic road network, while improving accessibility, supporting economic regeneration and reducing congestion. However, P&R sites on suburban rail networks can have very intense traffic peaks, which can overload local road networks, reducing the overall effectiveness of the public transport service and

Proposal	Summary of Effect (from Appendix L)
	increasing air pollution and carbon emissions. Travel demand and traffic assessments were unavailable when the SA was being carried out and so the effect of this proposal is uncertain.
Transport 8	**Mixed**: local highway improvements can be seen to be benefiting the local area as well as supporting wider regeneration aims of the AAP through increased accessibility. However, highway improvements can also increase the attraction of using the private car with consequent impacts on air quality and carbon emissions.
Transport 9	**Mixed**: the multi-storey car park can be seen to form an essential part of redevelopment, providing access to the Local Centre, however the centre will be in a high-accessibility location with trains, buses and a new interchange plus Park and Ride adjacent. As a result the need for parking seems low and should be restricted to further encourage the use of sustainable transport modes. In addition, a multi-storey could have significant visual impacts, depending on design and location. Restricted parking standards are required to further discourage unsustainable travel patterns, and ameliorate carbon emissions and air quality; presently, although proposed standards are more stringent than national policy requires, their reasoned justification remains unclear.
Transport 10	**Positive:** the proposal will have minor positive effects on accessibility.
Transport 11	**Positive**: sustainable travel measures, together with substantial improvements to public transport, will help to ensure that trips generated by redevelopment become more sustainable and encourage modal shift. The measure will support accessibility, regeneration in general, and contribute to minor improvements in air quality and carbon emissions.
Transport 12	**Positive**: improved local rail services will help to ensure that trips generated by redevelopment become more sustainable and encourage modal shift. The measure will support accessibility, regeneration in general, and contribute to minor improvements in air quality and carbon emissions.
Transport 13	**Mixed**: local highway improvements can be seen to be benefiting the local area as well as supporting wider regeneration aims of the AAP through increased accessibility. However, highway improvements can also increase the attraction of using the private car with consequent impacts on air quality and carbon emissions.
Transport 14	**Mixed**: strategic road network improvements can be seen to be benefiting the local area as well as supporting wider regeneration aims of the AAP through increased accessibility. However, highway improvements can also increase the attraction of using the private car with consequent impacts on air quality and carbon emissions.
Transport 15	**Positive**: traffic management measures can be seen to be benefiting the local area as well as supporting wider regeneration aims of the AAP through increased accessibility, as well as providing a disincentive for using the private car.

Proposal	Summary of Effect (from Appendix L)
Open Space 1	**Positive**: Protection of, and improvements to, Cofton Park will lead to only positive effects. Specific benefits will be achieved in relation to human health, biodiversity, landscape, open space provision and waste.
Open Space 2	**Positive**: re-opening of the water courses and provision of green spaces with biodiversity value produces only positive effects, mainly in terms of environmental quality, but with indirect benefits for socio-economics in providing a positive and welcoming environment for new businesses and communities. There are risks associated with these proposals, including the release of contaminants into surface and ground waters, and the disruption and possible damage to archaeological remains. However, the process of considering options for the rivers has taken land contamination, water quality and cultural heritage issues into account, while other aspects of the AAP secure further protection for these receptors.
Open Space 3	**Positive**: re-opening of the water course and provision of green spaces with biodiversity value produces only positive effects, mainly in terms of environmental quality, but with indirect benefits for socio-economics in providing a positive and welcoming environment for new businesses and communities. There are risks associated with these proposals, including the release of contaminants into surface and ground waters, and the disruption and possible damage to archaeological remains. However, the process of considering options for the river has taken land contamination, water quality and cultural heritage issues into account, while other aspects of the AAP secure further protection for these receptors.
Open Space 4	**Positive**: re-opening of the water courses and provision of green spaces with biodiversity value produces only positive effects, mainly in terms of environmental quality, but with indirect benefits for socio-economics in providing a positive and welcoming environment for new businesses and communities. There are risks associated with these proposals, including the release of contaminants into surface and ground waters, and the disruption. However, the process of considering options for the rivers has taken land contamination, water quality and cultural heritage issues into account, while other aspects of the AAP secure further protection for these receptors.
Open Space 5	**Mixed**: this proposal secures important benefits for the local population in ensuring continued provision of sports and recreational facilities, with significant indirect benefits to health. Minor negative effects are possible due to alterations to car parking when the Sports and Social Club is situated in an essentially sustainable position adjacent to public transport services.
Open Space 6	**Positive**: the proposal will lead to only positive effects being realised, particularly in relation to townscape character, biodiversity and use of previously developed land, but also indirectly to health. The Nature Conservation Management Plan (NCMP, contained in OS9) will help to ensure benefits to biodiversity are maximised. No negative effects are identified.
Open Space 7	**Positive**: the proposal is only expected to generate positive effects, particularly with regard to the quality of townscape. No negative effects are

Proposal	Summary of Effect (from Appendix L)
	identified.
Open Space 8	**Positive**: the proposal will lead to only positive effects being realised, particularly in relation to townscape character, biodiversity and indirectly to health. The NCMP (contained in OS9) will help to ensure benefits to biodiversity are maximised. No negative effects are identified.
Open Space 9	**Positive**: significant positive effects for landscape / townscape character and biodiversity are expected as a result of this proposal. No negative effects are identified.
Open Space 10	**Positive**: minor indirect positive effects on townscape character are expected as a result of this proposal. No negative effects are identified.
Open Space 11	**Positive**: significant positive effects for cultural heritage are expected as a result of this proposal. No negative effects are identified.
Open Space 12	**Positive**: significant positive effects on townscape character are expected as a result of this proposal. No negative effects are identified.
Open Space 13	**Mixed**: the proposal will deliver significant and necessary benefits to allow re-development to go ahead, specifically with regard to health and the re-use of land, but also for townscape and biodiversity. Significant negative effects are possible if large amounts of material have to be transported off-site and disposed of to landfill. Risks remain regarding the possibility of contaminants entering surface and ground waters during remediation, although the strategy will be designed to minimise this risk.
Open Space 14	**Positive**: the proposal will deliver significant benefits to flood risk and health and safety. No negative effects identified.
Open Space 15	**Positive**: the proposal will deliver significant benefits to open space, landscape character and biodiversity. No negative effects identified.
Open Space 16	**Positive**: the proposal will deliver significant benefits to open space and landscape character. No negative effects identified.
Open Space 17	**Positive**: the proposal will help preserve open space and landscape character. No negative effects identified.

5.4 Cumulative, Secondary and Synergistic Effects

Preliminary and detailed assessment have scrutinised the AAP proposals for adverse effects and suggested ways of making each proposal more sustainable or, where this is not possible, provided mitigation measures to offset such impacts. Collectively however, there may be cumulative effects.

Many environmental problems result from the accumulation of multiple, small and often indirect effects, rather than a few large and obvious ones. These effects are difficult to deal with on a project-by-project basis through EIA. It is at the strategic level that they are most effectively

identified and addressed. Schedule 1 of the SEA Regulations requires that the assessment of effects include secondary, cumulative and synergistic effects.

Secondary or indirect effects are effects that are not a direct result of the plan, but occur away from the original impact or as a result of a complex pathway. Examples of secondary effects include a development that changes the water table and thus affects the ecology of a nearby wetland; and construction of one project (such as a road) that facilitates or attracts other developments.

Cumulative effects arise where several developments each have insignificant effects but together have a significant effect, for example carbon emissions leading to climate change; or where several individual effects of the plan (e.g. noise, dust and visual) have a combined effect.

Synergistic effects interact to produce a total effect greater than the sum of the individual effects. Synergistic effects often happen as habitats, resources or human communities get close to capacity. For instance a wildlife habitat can become progressively fragmented with limited effects on a particular species until at last fragmentation makes the areas too small to support the species at all.

These terms are not mutually exclusive. Often the term cumulative effects is taken to include secondary and synergistic effects, and all three variants are considered in the cumulative effects matrix presented in Appendix N. Cumulative effects assessment is based on the following factors:

- Current baseline conditions, together with the sensitivities and trends therein;
- Emerging future strategies or nearby development projects, whether proposed, under construction or operational; and
- The likely scale and duration of predicted effects.

These factors are considered with regard to each proposal within the AAP and an indicative assessment is given against each component of the baseline. The accumulation of effects from each proposal and their associated factors provides an indication of the cumulative effect. There are many uncertainties surrounding the assessment of cumulative effects and it is possible that unexpected effects will occur. For this reason the monitoring framework outlined in Chapter Seven has been designed with cumulative effects in mind. Appendix N illustrates the cumulative effects that the AAP proposals are likely to have on environmental receptors. The results of this assessment are presented in the summary box for each topic in Boxes 5.1 – 5.11, while section 5.6 discusses the interrelations between these effects.

5.5 Assessment of Significant Effects by Environmental Receptor

It is evident from the assessment results that the majority of AAP proposals will lead to socioeconomic benefits, but may also come with significant negative environmental effects. Boxes 5.1 – 5.11 briefly describe the effects of the proposals by environmental receptor. They address the problems and issues identified at the scoping stage and from baseline investigations and give details of how the plan addresses them, but should be read in

conjunction with the assessment matrices in Appendices L and N. For each topic, further mitigation and recommended monitoring action is made in subsequent chapters (see Chapters Six and Seven respectively).

Box 5.1

Air	
Problems / Issues	**AAP Measures / Opportunities**
Consistently high levels of nitrogen dioxide levels in the Birmingham area and adjacent to M42 Junction 1. Increasing levels of road transport, both passenger and freight.	The Longbridge AAP includes several local public transport improvements to help encourage modal shift away from private transport, as well as a number of walking and cycling initiatives. The level of jobs and housing to be provided will doubtless generate extra car trips, although the mixed use nature of the development will help to mitigate this to an extent. Travel demand assessments were unavailable at the time of assessment and, despite major improvements including a new transport interchange, upgraded Longbridge station, enhanced bus routes including a new link to Frankley, and a Park and Ride, the effect of redevelopment is unclear at present. In accordance with the precautionary principle, the conclusion is that the target number of new jobs and a new local centre will generate large amounts of additional traffic, contributing to worsening local air quality. Opportunities for improvement include employing zero/low emissions technology on new buses to be used in conjunction with the Park & Ride and Frankley link, and tight restrictions on parking at employment locations and residences (taking advantage of the good public transport links). Parking standards proposed in the AAP's second appendix appear to be more stringent than national standards though their reasoned justification is contained in other unavailable documents and remains unclear.
Carbon monoxide, particulate matter and volatile organic compound pollution from commercial, industrial and residential sources.	Several point source emitters still exist (eg, Cadbury Trebor Basset, Frankley Services) but the reduction of car manufacturing in Longbridge should lead to moderate improvements in localised pollution to air associated with the sector.
Negative	The cumulative effect of AAP proposals on air quality, in combination with other known programmes and projects in the area, is likely to be adverse. In particular, problems with the declared pollutant NO_2 are likely to persist, most immediately as a result of continued reliance on private car transport.

Box 5.2

Biodiversity, Flora and Fauna	
Problems / Issues	**AAP Measures / Opportunities**
Presence of, and proximity to Sites of Local Importance to Nature Conservation and Special Wildlife Sites.	The AAP avoids damage to existing locally designated areas, while specific proposals seek to implement enhancements. Notable examples are the re-engineering of the River Rea to deliver increased biodiversity value and reduced flood risk, and protection, management and enhancement of Cofton Park SLINC. The Detailed Assessment Matrices reveal that delivery of 1,400 new homes has the potential to increase the population by approximately 3,360. A population of this size requires access to 3.4ha of Local Nature Reserve land according to Natural England's Accessible Natural Greenspace Standards. The AAP does not seek to provide this, instead promoting an urban park, greenways, neighbourhood parks, pocket parks and informal open space; measures within the AAP could seek accessibility and quality enhancements at nearby Rubery Cutting and Leach Green Quarries LNR, and/or accessibility, enhancement and expansion opportunities at Balaam's Wood proposed LNR. Currently, the CIL includes funding proposals for off site enhancements at Balaams Wood and Rubery Hill SINC (Cock Hill Lane).
Relative proximity to the Bittell Reservoirs SSSI, a water dependant site of national importance for various bird species.	The site is currently in unfavourable condition largely as a result of diffuse pollution. Remediation of land at the former MG Rover factory will have a positive effect on the quality of groundwaters emanating from the area. A study was commenced in November 2006 to record and monitor water quality at locations along the River Arrow, which will provide data on the hydrological inputs to Bittell Reservoirs and the potential for impacts from development, the findings of which will feedback into development plans.
Low biodiversity value of the AAP area and restricted wildlife corridors. Potential to support BAP priority species, for example badgers, otters, pipistrelle bats, song thrushes, tree sparrows and water voles.	Re-engineering of the Rivers Rea and Arrow will result in significant improvements to their function as wildlife corridors, but unfortunately the submission document does not deliver a continuous corridor along the Rea as it will remain culverted in places as it traverses the area. A site-wide biodiversity strategy is to be developed, together with other proposals to seek habitat and biodiversity enhancements within the AAP area to increase overall nature conservation interest. A Nature Conservation Management Pan is also to be developed to ensure that locally important resources are protected during redevelopment, including the black poplar, a species of conservation concern. The NCMP should also promote the use of indigenous and fruit-bearing species for landscaping, linking up existing green areas,

	improving wildlife corridors, bat boxes, bird roosts and green roofs.
Uncertain	The cumulative effect of AAP proposals on biodiversity, in combination with other known programmes and projects in the area, is uncertain. While the plan will make a significant contribution to improving local biodiversity value from its current low, not enough is known at present about biodiversity measures planned for other programmes and projects, and what the combined effects might be.

Box 5.3

Climatic Factors	
Problems / Issues	**AAP Measures / Opportunities**
Continued rise in energy consumption from transport, industry and domestic sources. Difficulty in meeting greenhouse gas emissions targets.	Development promoted by the AAP will encourage energy use in all three sectors, however building standards promoted in the plan will help reduce energy demand, with residential developments meeting Code for Sustainable Homes 4 star, rising to 6 star requirements, and other buildings targeting a BREEAM rating of 'Excellent'. Furthermore, pursuance of an area-wide CHP facility and on-site renewables and micro-generation capacity will secure significant progress toward low carbon developments.
Actual climate change in the West Midlands resulting in effects on biodiversity, weather patterns and severity, water quality and resources, agriculture, and health, particularly with regard to an ageing population.	Carbon emissions as a direct consequence of redevelopment at Longbridge (both construction and operation) will contribute to climate change. Design principles within the AAP embrace the main elements of passive solar design by seeking orientation and design that maximises the use of natural light and seeks to reduce the need for artificial heating and cooling.
Uncertain	Until a national shift to a low carbon economy is achieved and unsustainable patterns of travel are mitigated, all new development incorporating housing, employment and retail will lead to climate changing carbon emissions. The AAP makes important progress toward delivering a low carbon redevelopment, but in combination with other known programmes and projects in the area the cumulative effect remains uncertain. Not enough is known at present about climate change measures planned for other programmes and projects, and what the combined effects might be.

Box 5.4

Cultural Heritage (including Architectural and Archaeological Heritage)	
Problems / Issues	**AAP Measures / Opportunities**
Rich industrial heritage.	Redevelopment at Longbridge has already required the demolition of factory buildings. An architectural record of these was made prior to demolition on behalf of Birmingham City Council. In addition, the AAP proposes development of the Austin Heritage Centre to preserve the areas industrial heritage.
Parts of the area date back to medieval, Roman or prehistoric times and it is possible there will be undiscovered archaeological remains, particularly near the present and original courses of the River Rea.	Ground works associated with the development could uncover, and possibly damage buried archaeology. Investigative trenching and analysis is required by the plan within its open space strategy, while other measures seek to ensure heritage stories are brought to life around the area through the use of walking trails and interpretation boards.
Neutral	The AAP seeks to improve knowledge and understanding of the area's history and association with manufacturing, while pursuing measures to protect unknown archaeological resources. The impact other projects or programmes may have on archaeology is largely unknown.

Box 5.5

Economic Factors	
Problems / Issues	**AAP Measures / Opportunities**
Significant economic downturn in the study and wider area as a result of MG Rover closure. High unemployment, particularly after MG Rover closure, and lower than average incomes of those in work.	A primary aim of the AAP is to initiate economic regeneration and its objective to deliver 10,000 new jobs will be a major benefit in this respect. Co-ordination with the A38 High Technology Corridor strategy will help to safeguard economic growth into the future. Diversification of the local job market will provide employment opportunities for people of all skills levels, while B1/B2 land uses should offer opportunities at higher wage levels.
Potential business survival issues for companies with significant proportion of their income coming from MG Rover.	The MG Rover Taskforce final report (2006) demonstrated that supply chain companies had moved to diversify their offer and protect themselves from the effects of re-scaled operations at MG. Only eleven companies faced closure, largely as a result of actions taken in response to earlier difficulties at MG in 2000. The resumption of car manufacturing, albeit on a smaller scale, thanks to Nanjing's presence and activities on site will help ensure survival for companies in the MG Rover supply chain. AAP proposals seek to deliver business incubation facilities and smaller

	units to help new business start-up ventures to succeed.
Generally low level of skills and qualifications. Historical reliance on car manufacturing sector and related businesses, and consequent mismatch between skills and potential job opportunities as economy realigns.	The development of a new college provides significant re-training opportunities for the local population (and beyond). Delivery and implementation plans, and Community Infrastructure Levy (CIL) will ensure strong links are developed between businesses that occupy new development and training providers, to help align the skills of the local population with the needs of employers. Furthermore, specific training schemes and agreements to employ locally are promoted. The college should provide flexible courses (part-time, evenings, weekends, on-job) and offer grant schemes. Training in environmental managements systems is to be funded through the CIL.
Positive	The cumulative effect of AAP proposals on the local and regional economy, in combination with other known programmes and projects in the area, is expected to be positive. In particular, employment opportunities offered by the development, and others in the area such as Birmingham Great Park (although currently vacant) and developments at Pebble Mill and Selly Oak will help to revive the local economy.

Box 5.6

Landscape and Townscape	
Problems / Issues	**AAP Measures / Opportunities**
Pressure for development at the rural-urban fringe threatens to encroach on the countryside. This is a particular problem in relation to the greenbelt land within Bromsgrove District.	Longbridge AAP, by protecting greenfield and greenbelt land from development while re-using significant amounts of contaminated brownfield land, will help to relieve pressure for development in the greenbelt.
The study area suffers from neglected townscapes and amenity spaces, with poor cross-site accessibility.	A major driver of redevelopment is to significantly improve urban form and function, opening the area up and transforming the townscape from imposing industrial buildings to more modern appearances. Redevelopment provides the opportunity to improve the townscape and quality of the street environment, and provide a flagship example of urban regeneration.
The wider area is well served by public open space provision, particularly towards the west, including the Lickey Hills Country Park, Waseley Hills Country Park and large areas of public open space around Bartley Green and	See also biodiversity section (Box 5.2). Land use proposals incorporate requirements for an urban park, neighbourhood parks, pocket parks, and improved walkways and cycle routes. CIL will secure off-site improvements to the quality, quantity and accessibility of green space and play spaces in the study area.

Frankley reservoirs.	
The topography of the study area amplifies the visual impact of the current industrial buildings, particularly from the Lickey Hills.	The AAP provides the opportunity to improve the quality of landscape and views by employing high quality design, reflecting existing local character and attractive in the long-term. This is stipulated in the plan's design principles, while other measures seek to limit the visual impact of retained buildings such as South Works and the Cofton Centre.
Positive	The cumulative effect of AAP proposals on landscape and townscape, in combination with other known programmes and projects in the area, is expected to be beneficial particularly in relation to whole scale regeneration in Longbridge, but also housing renewal schemes in neighbouring areas.

Box 5.7

Material Assets	
Problems / Issues	**AAP Measures / Opportunities**
The ecological footprints of both Birmingham and Bromsgrove exceed sustainable capacity in terms of resource consumption and production. Food and drink, consumables, energy, land travel and capital investment are the biggest challenges.	Redevelopment (construction and operation) is expected to require large quantities of resources and energy, and to continue to promote consumptive activities. Conversely, the AAP's sustainability strategy and proposed site-wide materials strategy promotes the use of secondary aggregates, and locally sourced and sustainable materials and construction techniques. Provision should be made for weekly farmers markets and other activities that promote more sustainable patterns of consumption.
Household recycling rates in Birmingham and Bromsgrove are both lower than regional and UK averages although a much smaller percentage of waste is landfilled from Birmingham.	The AAP's sustainability strategy and proposed site-wide waste strategy will ensure provision of integral waste segregation facilities to enable better recycling in homes and businesses. Recycling facilities should also be provided on new transport infrastructure and in the public realm (for newspapers, magazines, drinks containers, etc.).
Household waste (9%) continues to be dwarfed by other waste streams with industry and commercial waste (25%) mining and quarrying waste (29%) and construction and demolition arisings (32%) posing more significant challenges.	The site wide waste strategy and the materials strategy will seek to ensure that construction arisings are recycled and re-used on site, and that other sources of recycled aggregates and sustainable materials are used where this is not possible. Site remediation has the potential to generate significant amounts of ground waste to be landfilled, but the risk-based remediation strategy should help to minimise this.
Waste continues to grow at around 3% per annum nationally.	The AAP will struggle to influence this; approaches could be made to local supermarkets and businesses to reduce packaging.
Positive	The cumulative effect of AAP proposals on material assets, in

	combination with other known programmes and projects in the area, is positive. Redevelopment is expected to lead to significant improvement in the local land stock. Waste and materials strategies will help to ensure that resource use is lowered and opportunities for re-use / recycling are maximised.

Box 5.8

Social Considerations (including Population and Human Health)	
Problems / Issues	**AAP Measures / Opportunities**
Longbridge's population has a small proportion of ethnic minority groups (93.2% white), while 24.6% of the population is aged 16 years or under. 2.7% are from mixed race origins, more than twice the averages for West Midlands (1.4%) and England (1.3%), while the proportion of residents in Longbridge with African and Caribbean origin (1.3%) is low when compared with the regional (2.0%) and national (2.3%) averages.	A full Equality Impacts and Needs Assessment (EINA) was conducted alongside the AAP process. As part of the EINA a review was undertaken of the existing consultation reports and responses to the AAP. Although the Council had commissioned an extensive programme of consultation, the focus was on understanding the common needs and hopes for the future of the area. It successfully engaged a wide array of community representatives, but some groups had clearly been more apprehensive in coming forward, including: young people; black and minority ethnic (BME) groups; women; and lesbians, gays, bisexuals and transgender (LGBT). Specific further measures were taken to consult these groups on options for the AAP which generated some useful opinion (see full EINA report). BME and LGBT groups proved the hardest to consult further, though no evidence exists to suggest significant adverse effects on these groups from the AAP. Primarily, outcomes associated with the AAP were found to be neutral or positive. The purpose of the EINA was not only to fulfil the Councils' obligation but to highlight ways in which equality of opportunity and social and economic inclusion can be promoted through its development. Several recommendations for achieving this were made (see the full EINA report) and these have been fed into the plan preparation process. One key issue was found to be of concern; the engagement of young people in the development process. As young people and the facilities on offer to them was found to be of major concern to everybody it could, if not suitably addressed, lead to a worsening situation in the area.
Health figures are broadly in line with the England and Wales average, slightly higher proportion of people recording not good health and slightly lower than average life expectancy in Birmingham. Health services are skewed towards the northern section of the study area. Doctor's surgeries are fairly evenly distributed, though appear to be located in pairs. Dentists are also evenly dispersed within the Birmingham wards of the study area, however there is very little	The provision of new sports and recreational facilities and upgraded play spaces both on- and off-site, together with improvements to open space (such as Cofton Park) and walking and cycling routes (links to Cofton Park and Daffodil Park) will enable healthier lifestyles for the residents of Longbridge. The provision of new community facilities in the new centre for Longbridge, including a new health centre, will help to improve accessibility to health services. This should be accompanied by a dentist,

provision of either doctors surgeries or dentists within the Bromsgrove wards.	pharmacy and optician.
Longbridge residents generally have more people per room than the England average (overcrowding) and twice as many households (16%) do not have central heating. Across the West Midlands, the number of residents per household is falling, in line with UK trends, presenting buildings, energy and resource challenges.	The provision of new housing, together with significant amounts of affordable housing (expected to total at least 490 homes) will improve the housing situation in Longbridge. Homes will be built to high sustainability standards, which will improve the affordability of services to the home (such as energy), while an area-wide CHP facility will further reduce the cost of heating.
Violence against the person is the most often recorded crime in Birmingham.	Urban design will include measures to improve natural surveillance to contribute to a safer urban environment, as well as street lighting, local centre management and CCTV.
In Longbridge 39.9% of the population aged between 16 and 74 has no qualifications, which is significantly higher than the figure for England at 28.8%.	The provision of a new college will enable local residents to improve their skills levels. The college should provide flexible courses (part-time, evenings, weekends, on-job) and offer grant schemes.
Almost a quarter of all families are single parent households in the study area in comparison to 16% regionally and nationally.	The provision of new crèche facilities in the local centre will better enable single parents to play an active part in the economy.
The Longbridge ward has an index of multiple deprivation score of 44.2% which compares unfavourably with those of Birmingham (37.5%) and Bromsgrove (10.1%).	Regeneration of the area, including new jobs and community facilities, will help to reduce levels of deprivation in the area.
The density of education provision is greater towards the north-eastern part of the study area, particularly in and around Bourneville ward. There only two primary, and no secondary schools in the Bromsgrove wards that are contained within the context area. These trends may be explained by the fact that population density increases towards Birmingham City Centre.	The level of new housing provision (1,400 new homes) could be expected to result in over 500 more children of compulsory education age. CIL will help to augment the capacity of nearby schools, to better enable them to absorb the effects of new development.
Positive	The cumulative effect of AAP proposals on social conditions, in combination with other known programmes and projects in the area, is expected to be beneficial. Significant amounts of new housing will be provided, particularly in combination with other known developments. The new local centre for Longbridge, while providing much need services for the existing and proposed

	community, is not expected to have a detrimental effect on existing neighbouring centres such as Northfield and Kings Norton.

Box 5.9

Soil and Contaminated Land	
Problems / Issues	**AAP Measures / Opportunities**
There is significant ground contamination on parts of the former MG Rover works due to industrial activity.	An assessment, risk-based and validated remediation strategy will return land to the required quality for its new use. This will be carefully implemented and monitored in order to avoid negative impacts on surface and ground water quality, particularly at the Rivers Rea and Arrow and Bittell Reservoirs.
Large quantities of derelict land within the AAP area.	The AAP will bring a significant amount of derelict brownfield land back into use. According to previous ecological assessments, the area currently has low biodiversity value (which presents further opportunities), although urban wasteland is recognised as having potential to provide important habitat. New open space provision will seek to enhance local biodiversity.
Positive	The cumulative effect of AAP proposals on soil, in combination with other known programmes and projects in the area, is expected to be beneficial. The development and other neighbouring developments are focused on previously developed land.

Box 5.10

Transport*	
Problems / Issues	**AAP Measures / Opportunities**
58.5% of Birmingham residents, and 74.2% of Bromsgrove residents travel to work by car, in comparison to 62.0% in England and Wales. 38.5% of Birmingham households, and 13.3% of Bromsgrove households do not have access to a car, compared to 23.5% in England and Wales.	Significant improvements to the public transport network are integral to the AAP proposals, including a remodelled bus/rail interchange at an upgraded Longbridge station with Park and Ride, a new high quality bus link connecting to Rubery and Frankley and a new quality bus network. This will improve accessibility between Longbridge and the city centre and help to discourage car use, providing benefits in terms of improved air quality and reduced carbon emissions. Improvements to foot and cycle ways and the general permeability of the study area for those not travelling by car will also be delivered.

Accessibility *Bus and rail strategies were available during assessment of the AAP submission document, but travel demand assessments and travel management strategies were not.* The addition of a new employment location in the north east of the AAP area greatly improves the accessibility index for residents in the wider local area wishing to reach employment destinations both by public transport and on foot. The provision of a new local centre in the north west of the area provides local residents with a greater degree of choice in terms of the number of local centres that are accessible to them. While most communities already fall within comfortable walking distance of a centre, the further facility proposed as part of the plan will significantly increase the accessibility index for the area, making it one of the best served districts across the wider area. Improvements to bus services and the provision of a new medical facility in the north west of the area are noted to have an impact further a field, with communities such as Cofton Hackett benefiting from the potential increased proximity to such a facility.	
Longbridge is well served by road and rail links, although the study area was prone to congestion when MG Rover was operational and is likely to become so again if the level of employment in the area is regained. Land uses, particularly employment, retail and housing, will generate significant amounts of traffic. The strategic Park and Ride will also attract extra car trips to Longbridge, although it is expected to divert some traffic away from the A38 northbound into Birmingham.	*Bus and rail strategies were available during assessment of the AAP submission document, but travel demand assessments and travel management strategies were not.* Although the AAP contains many proposals designed to improve sustainable transport options and encourage modal shift, land uses within the redevelopment are significant trip generators, including the employment zones, shopping and the supermarket, Park and Ride, the college and residential areas. The combined effect is likely to be an increase in peak time traffic and associated air quality issues. Parking standards should also be set to further encourage sustainable travel; those proposed in the AAP's second appendix appear to be more stringent than national standards though their reasoned justification is contained in other unavailable documents and remains unclear.
Mixed:	The mixed use nature of the development should help to reduce the need to travel and the AAP provides much needed local and strategic improvements to the transport network. However, traffic generating uses, in combination with other known projects and programmes, will have negative effects on the local and strategic road network.

Box 5.11

Water	
Problems / Issues	**AAP Measures / Opportunities**
There is a flood risk and history associated with the River Rea, possibly due to its culverted nature restricting natural flooding capabilities.	The preferred option for the River Rea will remove some of the constraints that contribute to the cause of flooding, as well as providing extra flood storage capacity and biodiversity enhancements to the Rea in the West Works and North Works part of the AAP area. The current option has been derived as a result of reviews and analysis of all options outlined in the AAP Issues and Options and Preferred Options report, which includes several years of previous work, detailed consultations, including with BCC and the Environment Agency, site investigations, site surveys, review of land uses, and consideration of the urban form and transport aspirations around the AAP area, as well as overall sustainability of the project. The Arrow will also be removed from its culvert, providing open space and biodiversity benefits to the East Works part of the area. SUDS will also be incorporated into development.
Current water quality of the Rea is not good, partly due to contamination from former industrial activities. Water quality of the Arrow is better. Longbridge sits partially above a major sandstone aquifer and adjacent to a minor alluvium aquifer. Groundwater is also threatened by contamination.	Assessment, risk-based and validated ground remediation, together with river enhancements will help to improve water quality. A study was commenced in November 2006 to record and monitor water quality at locations along the River Arrow, which will provide data on the hydrological inputs to Bittell Reservoirs and the potential for impacts from development, the findings of which will feedback into development plans.
Per capita water consumption in the region has gradually reduced since 2000 and is below the national average, but nevertheless remains high (132 litres per capita per day). The trend towards lower housing occupancy combined with climate change and increasing incidence of drought threaten water resources.	The sustainability strategy and proposed site-wide water strategy incorporate stringent water efficiency standards into new buildings.
Uncertain	The Longbridge AAP makes significant progress toward water efficiency in new buildings primarily through Code for Sustainable Homes and BREEAM 'Excellent' targets. The effect is uncertain in combination with other known projects, particularly housing developments, as the building standards being sought are not clear.

5.6 The Interrelationship between Effects

The proposals outlined in the Longbridge AAP have undergone two primary methods of assessment; each proposal has been assessed against every SA Objective to determine a specific and detailed statement of significance, while the cumulative effects of the plan and other known plans and projects has been examined on each of eleven receptors. In addition, the plan's objectives have been assessed for compatibility with the SA Objectives. However, certain complex issues remain which are not fully revealed by any of these assessment processes.

Notably, air quality is an outstanding and recurring issue. The AAP has several public transport improvement measures and proposes to make positive changes to the highway network to further promote walking and cycling in the area. In addition, low carbon energy generation and CHP will reduce the net amount of pollutants being emitted to air from residential and commercial sources, while the switch from manufacturing to high technology employment uses can also be expected to reduce air pollution in comparison to the historical situation. Nonetheless land uses associated with the AAP are expected to generate significant additional trips on the local and strategic road networks. Although the outcome of travel demand assessments were unavailable when the SA was being carried out, certain elements of the plan such as the Park and Ride, Regional Investment Site, college and supermarket, can all be expected to increase traffic and consequently air pollution.

Without pre-supposing the outcome of travel demand assessments and transport studies, it can be said that further information is required to examine the actual effect of, and need for a strategic Park and Ride in this suburban location. Parking standards are outlined in the second appendix to the AAP and, while they are rather more ambitious than the national maximum standards set out in PPG13 (Transport, ODPM, 2001) and the now superseded PPG3 (Housing; PPS3 (DCLG, 2006) does not contain detail on parking), it is hard to anticipate whether they are stringent enough to catalyse a significant shift in modal choice without examining the basis on which they were chosen; this was not available when the SA was being carried out.

Issues of climate change and water resources also look fuzzy in places. The AAP has taken on several stringent measures to reduce carbon emissions and water consumption, and increase energy and water efficiency, largely in response to recommendations made as part of the sustainability appraisal. However, while these changes to the plan must be given their due credit in the assessment, net energy use and water consumption will unavoidably increase as a result of the plan. Wider take-up of the recommendations made, including within the implementation of other known programmes and projects in the surrounding area, will further reduce negative effects on these receptors. Similarly, the AAP has taken on many positive measures with regards to biodiversity. These will help transform the area from a biodiversity poor urban wasteland to a functioning mixed-use development with green spaces and open areas that benefit both people and wildlife. If similar measures can be incorporated into other programmes and projects further benefits will be achieved.

Water quality, land contamination and waste share another complicated relationship. Significant parts of the area suffer from contamination due to previous activities under MG

Rover, and some parts require remediation in order to satisfy the requirements of their proposed new use. Meanwhile, water quality in local rivers the Rea and Arrow, and crucially in the nearby Bittell Reservoirs SSSI are poor. Both of these are positive reasons to proceed with an assessment, risk-based and validated remediation strategy. However, it is possible that contaminants disturbed during remediation could enter both surface and groundwaters, resulting in short-term depreciation of water quality. Furthermore, if it becomes necessary to dispose of large volumes of surface waste to landfill further sustainability concerns will arise related to air pollution and carbon emissions from transporting the waste, as well as diminishing landfill capacity both locally and nationally.

Finally, the closure of MG Rover marks the end of an important chapter for local and regional industrial heritage interests, and the loss of factory buildings could be viewed as a negative effect in this way. Conversely, a photographic record of the facility has been secured by BCC and the plan proposes to develop a local heritage centre to secure a communal understanding of importance of car production to the area for so many years. Meanwhile, river re-engineering and redevelopment in general has the potential to uncover and possibly damage paleoenvironmental records associated with the river Rea; it also provides an opportunity to investigate the existence of such records, and provide heritage trails and interpretation boards to enliven the appreciation of passers by in the new development.

5.7 Limitations to the Assessment

A number of factors have posed constraints to the sustainability appraisal in addition to the data limitations outlined in section 3.3.2.

The level of interaction between assessors and planning officers has not been as extensive as it could be, nevertheless the majority of SA recommendations at the Preferred Options stage have been incorporated in the Submission Document, as shown in Table 2.1. This has partly been a product of the joint working arrangement between the planning authorities and landowners, and the diversity of opinion thereof.

In addition, and partly as a product of this, detailed information regarding the plan proposals has often come to light very late in the process, requiring significant and rapid changes to the appraisal findings. Furthermore, information on transport strategies was only available at the eleventh hour, with travel demand assessments still outstanding. Therefore the level of confidence that can be attached to statements of effect in this respect is low.

Finally, the SA Report itself has become somewhat unwieldy as a result of the several iterations of development that the AAP has undergone, and the depth of assessments that have accompanied these. The original intention of presenting increasingly concise reports to accompany the AAP as it neared finality was revised in response to requests from validation consultations which suggested that all available information should be re-published. Notwithstanding these considerations, it has been possible to arrive at a credible assessment of effects using the best available knowledge at the time of assessment.

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6 Recommendations

6.1 Introduction

In order to address the effects identified in Chapter Five, to remove or reduce the negative effects and maximise the positive effects, a number of recommendations can be made. Several of the recommendations made during earlier stages of the SA have already been incorporated within the AAP (see Chapter Two). This chapter describes what other measures could be pursued during implementation of the Longbridge AAP.

6.2 Air

Potential exists to support the development and uptake of clean transport technologies, for example hydrogen propelled buses. The Councils should seek to influence service providers through operating agreements so that, as a minimum, low emissions technology will be used in conjunction with the Park & Ride and Frankley link.

6.3 Biodiversity, Flora and Fauna

A Nature Conservation Management Plan and site wide biodiversity strategy will be developed to ensure that locally important features are protected during redevelopment (proposal OS9 and S2). This should include the black poplar, a species of conservation concern. The NCMP should also promote the use of indigenous and fruit-bearing species for landscaping, linking up existing green areas, improving wildlife corridors, and promoting bat boxes, bird roosts and green roofs. The aim is to enable tree planting and landscaping to ensure green links such as hedgerows and scrub are incorporated into design to maximise the ecological benefits from green space, creating indigenous habitat to the benefit of BAP species, despite to lack of an unbroken wildlife corridor through the area.

6.4 Climatic Factors

No further recommendations identified.

6.5 Cultural Heritage

No further recommendations identified.

6.6 Economic Factors

Ensure there are strong links between local employers, the Technology Park and the campus.

6.7 Landscape and Townscape

Landscape enhancements should follow a masterplanned approach which incorporates structural landscaping of the site both at its edges and internally and that is designed having regard to the site and its context.

The multi-storey car park adjacent to the local centre will be designed according to BCC's Design Guide; in addition to this, explore potential to locate some parking levels underground to limit visual impact. This requirement can be incorporated into the brief for the Landscape strategy required by proposal OS9.

6.8 Material Assets

The AAP does not seek to provide the level of Local Nature Reserve provision recommended in Natural England's Accessible Natural Greenspace Standards, instead promoting an urban park, greenways, neighbourhood parks, pocket parks and informal open space; measures within the AAP could also seek accessibility and quality enhancements at nearby Rubery Cutting and Leach Green Quarries LNR, and/or accessibility, enhancement and expansion opportunities at Balaam's Wood proposed LNR. The CIL provides funding for off site ecological mitigation measures at various sites including Balaams Wood LNR and Rubery Hill SINC. Other sites could also be considered.

Recycling facilities should also be provided on new transport infrastructure and in the public realm (for newspapers, magazines, drinks containers, etc.). The AAP's waste strategy will require commercial recycling in the local centre.

6.9 Social Considerations

With regards to long-term Job Seekers Allowance claimants and economically inactive groups within the AAP area, the Community Infrastructure Levy will help to ensure that the new college provides suitable (and if appropriate, subsidised) re-training to offer the opportunity to adjust to a new employment environment through re-skilling, run flexible courses (part-time, evenings, weekends, on-job) and offers grant schemes.

Training agreements to be delivered through the Community Infrastructure Levy (CIL) include provision for training in environmental managements systems (for new businesses in the area), as well as wider environmental management and sustainability considerations.

Ensure provision of full range of facilities identified in Community Needs Study in accordance with Proposal S2.

The AAP needs to promote an inclusive approach to all sections of the community through the design of buildings and spaces, housing types, range of facilities and ongoing consultation with the community throughout the implementation of the plan. See the Equalities Impact Needs Assessment report for full details.

The provision of new community facilities in the new centre for Longbridge, including a new health centre, will help to improve accessibility to health services. This should be accompanied by a dentist, pharmacy and optician.

6.10 Soil and Contaminated Land

The remediation strategy should be risk-based but also incorporate measures to validate and monitor the success of remediation. Site remediation has the potential to generate significant amounts of ground waste to be landfilled; the risk-based strategy should aim to minimise this through use of on-site treatment techniques wherever possible to reduce the amount being transported. Where this is not possible, controlled traffic movements will help to minimise effects on the local area.

Ongoing management of hazardous substances, surface water and effluent will be required to prevent further contamination.

6.11 Transport

Restrictions on parking standards are required to further discourage unsustainable travel patterns, and ameliorate carbon emissions and air quality, while further encouraging the use of sustainable transport and offering a disincentivise to the use of the private car. The proposed standards are rather more ambitious than the national maximum standards set out in PPG13 (Transport, ODPM, 2001) and the now superseded PPG3 (Housing; PPS3 (DCLG, 2006) does not contain detail on parking), but it is hard to anticipate whether they are stringent enough to catalyse a significant shift in modal choice without examining the basis on which they were chosen; this was not available when the SA was being carried out.

Further benefits could be gained by providing a high quality foot/cyclepath between Cofton Centre and the Local Centre between Nanjing and the rail corridor (which should also serve to enhance the existing wildlife corridor). AAP proposal EZ2 states that continued working with Nanjing will be encouraged to consider whether improved linkages around the site are feasible.

Enhancements to car parking facilities at the sports and social club could focus on environmental quality and safety, or potentially converting a proportion of parking areas to playing surfaces, given the levels of parking to be provided elsewhere in the area, most notably on the other side of Longbridge Lane adjacent to the local centre.

6.12 Water

No further recommendations identified.

6.13 Site-wide Considerations

Site-wide strategies are promoted in the AAP's sustainability strategy. In some cases more detail would help to secure maximum gains; for example with regards to biodiversity, flood risk, waste, energy and materials.

The monitoring proposals made as part of the SA process should be incorporated into the monitoring framework established as part of the AAP.

7 Monitoring

7.1 Introduction

The effects identified in Chapter Five, as well as the measures recommended for addressing them in Chapter Six, are the result of predictions based on empirical evidence and professional judgement. But they are not infallible. This chapter will briefly describe the steps that should be taken to monitor the actual effects of the Longbridge AAP, to ensure that unanticipated adverse effects do not go unnoticed.

7.2 Approach to Monitoring

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, or where the impact is uncertain. The proposed monitoring programme aims to give a flavour of progress against each objective. It will be possible (and may be necessary) to amend the proposed framework in accordance with, for example, the information requirements of Environmental Impact Assessments related to implementation of the AAP or unanticipated negative effects. Monitoring is particularly useful in answering the following questions:

- Were the assessment's predictions of environmental effects accurate?
- Is the plan 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?

The purpose of monitoring is to measure the sustainability 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 which are already in place, such as Annual Monitoring Reports. To this end, many of the indicators of progress chosen for the SA require data that is already being routinely collected by the LPAs or other organisations. It should also be noted that monitoring can provide useful information for future plans and programmes.

The LPAs will need to ensure that monitoring information is appropriate to their needs and is up to date and reliable, and that sources of information are referenced. Moreover, they will need to decide in advance any action that is required to correct unforeseen effects that are highlighted by monitoring results, i.e. what will trigger an alternative course of action or new mitigating measure.

The monitoring proposals will also identify any gaps in monitoring undertaken at present so that consideration might be given to how these could be addressed in the longer term. The inclusion of the initial monitoring proposals for consultation in the SA is a useful mechanism for obtaining views and feedback from a range of quarters, including those agencies who will potentially contribute to the monitoring process. Several other indicators could be used and may be added before monitoring commences. Monitoring reports should be published periodically as new information becomes available. The suggested monitoring framework is given at Appendix J.

8 Consultation on this Report

8.1 Introduction

Chapter One described the various consultation activities centred on the Longbridge AAP to date, while Chapter Two explained the consultation requirements of the Sustainability Appraisal which have been fulfilled so far. This chapter outlines the current consultation opportunity for the AAP and SA.

Public involvement through consultation is a key element of SA. Consultation also takes place with statutory consultees (English Heritage, the Environment Agency and Natural England)). Regulation 13 of the SEA Regulations (see Appendix B) states that the Environmental / Sustainability Report will be made available to the public for their views and comments. This Sustainability Report is a Public Consultation Document and provides the basis for public consultation on the content of the SA, also fulfilling the requirements of an Environmental Report under the SEA Regulations.

8.2 Consultation Activities

Birmingham City Council and Bromsgrove District Council welcome comments on the soundness of the AAP, and accompanying documents such as the Sustainability Report.

The Sustainability Report is to be issued for consultation alongside the AAP for a period of six weeks. Please see the representations form for more details.

Representations on the Sustainability Report must be made on the form that can be obtained on the Councils websites or from the address below. Completed forms should be sent to the address below:

www.birmingham.gov.uk/longbridgeaap

www.bromsgrove.gov.uk

South Development Planning and Regeneration Team
17th Floor Alpha Tower
Suffolk Street
Queensway
Birmingham
B1 1TR

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CEC: Commission of the European Communities (1979): Council Directive 79/409/EEC on the conservation of wild birds.

CEC (1985): Council Directive 85/337/EEC on the assessment of the effects of certain private and public projects on the environment.

CEC (1992): Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora.

CEC (1997): Council Directive 97/11/EC amending Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment.

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DCLG (2006a): *Planning for the Protection of European Sites: Appropriate Assessment*

DCLG (2006b): *PPS3: Housing*

English Nature (1995): *Accessible Natural Greenspace in Towns and Cities*

Entec (2007): *Technical Note: Longbridge Area Action Plan Habitats Regulations Assessment*

Halcrow (November 2006): *Technical Note: Key Sustainability Concerns: Summary of Output from Initial Longbridge Sustainability Appraisal*

MG Rover Taskforce (2005): *Closure of MG Rover: Economic Impact Assessment, Stage 2 Report*

MG Rover Taskforce (2006): *Final Update: The Work Goes On*

ODPM (2001): *PPG13: Transport*

ODPM (2004): *PPS12: Local Development Frameworks*

ODPM (2005a): *A Practical Guide to the Strategic Environmental Assessment Directive*

ODPM (2005b): *Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents*

Sustainable Development Commission (2005): *Securing the Future: the UK Sustainable Development Strategy.*

Appendix A: The Study Area

Please see insert.

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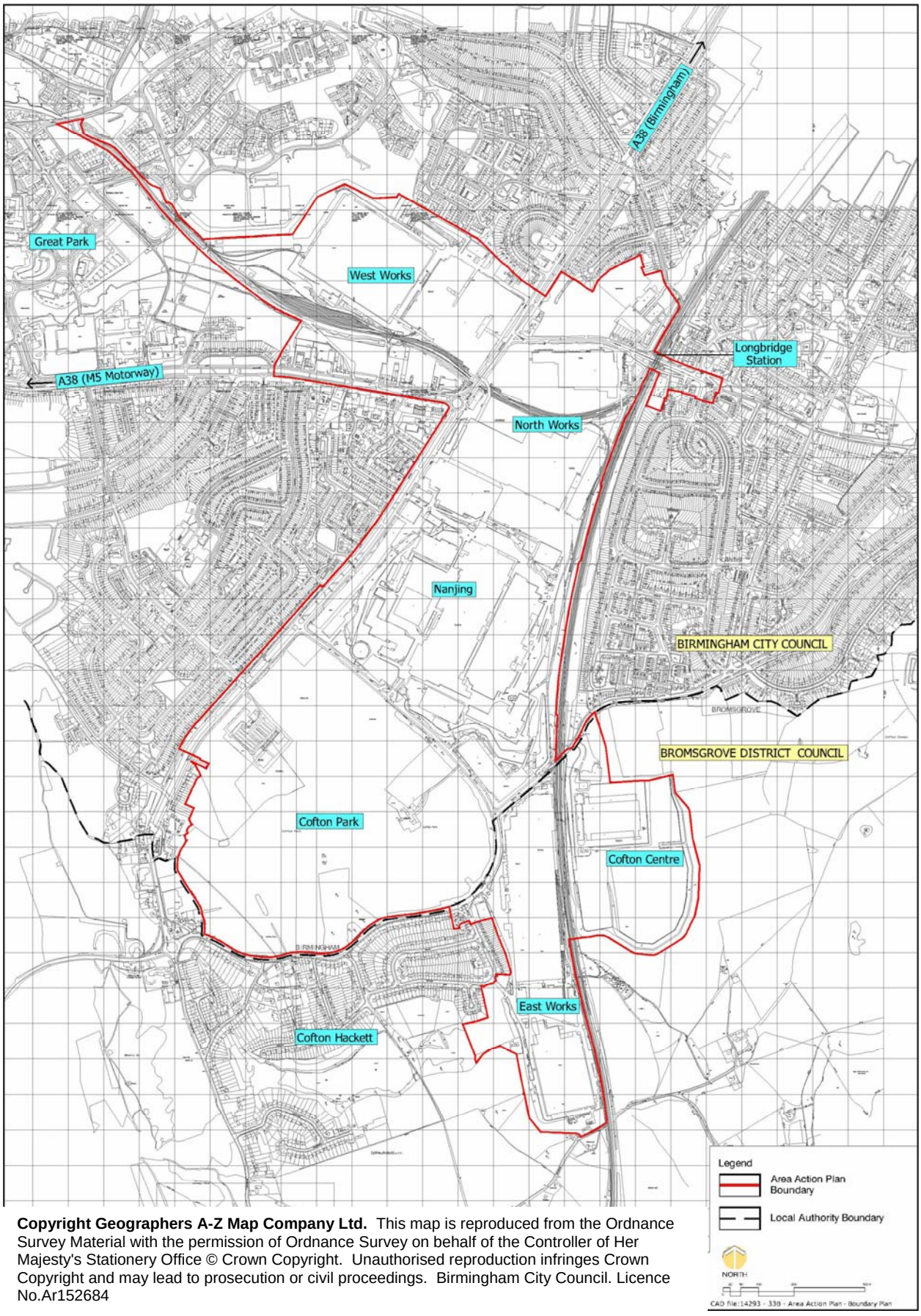

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Appendix B: Statement of Compliance

Sustainability Appraisal

Sustainability Appraisal (SA) is a process that looks at the extent to which plans contribute to the achievement of a set of objectives that address environmental, social and economic considerations.

In relation to Local Development Documents, including Area Action Plans, the Planning and Compulsory Purchase Act (2004) states that:

> *The person or body* [preparing the plan] *must exercise the function with the objective of contributing to the achievement of sustainable development.'* (Section 39(2))
>
> *'The local planning authority must also-*
>
> *(a) carry out an appraisal of the sustainability of the proposals in each document;*
>
> *(b) prepare a report of the findings of the appraisal. (Section 19(5))*

Strategic Environmental Assessment

The SEA Regulations provide the legislative mechanism for transposing European Directive 2001/42/EC 'on the assessment of the effects of certain plans and programmes on the environment' (the SEA Directive) into UK law.

The objective of the SEA Directive is to:

> *Provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development.* (**Article 1**)

SEA provides plan-making authorities with a process to incorporate environmental considerations into decision-making at an early stage and in an integrated way. It allows the likely significant environmental effects of implementing the plan or programme, and reasonable alternatives, to be identified, evaluated and compared. The Regulations stipulate that:

> ***Regulation 5****(1) [A] competent authority shall carry out, or secure the carrying out of, an environmental assessment… during the preparation of [a] plan or programme and before its adoption or submission to the legislative procedure.*
>
> *(2) The description is a plan or programme which-*
>
> *(a) is prepared for agriculture, forestry, fisheries, energy, industry, transport, waste management, water management, telecommunications, tourism, town and country planning or* ***land use,*** *and*
>
> *(b) sets the framework for future development consent of projects listed in Annexes I or II to Council Directive 85/337/EEC* [the EIA Directive, as amended]*, or*

(3) The description is a plan or programme which, in view of the likely effect on sites, has been determined to require an assessment pursuant to Article 6 or 7 of the Habitats Directive.

Compliance

The Sustainability Report conforms to the SEA Regulation 12:

***12**. - (1) Where an environmental assessment is required by any provision of Part 2 of the Regulations, the responsible authority shall prepare, or secure the preparation of, an environmental report in accordance with paragraphs (2) and (3) of this regulation.*

(2) The report shall identify, describe and evaluate the likely significant effects on the environment of -

(a) implementing the plan or programme; and

(b) reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme.

(3) The report shall include such of the information referred to in Schedule 2 to the Regulations as may reasonably be required, taking account of -

(a) current knowledge and methods of assessment;

(b) the contents and level of detail in the plan or programme;

(c) the stage of the plan or programme in the decision-making process; and

(d) the extent to which certain matters are more appropriately assessed at different levels in that process in order to avoid duplication of the assessment.

(4) Information referred to in Schedule 2 may be provided by reference to relevant information obtained at other levels of decision-making or through other Community legislation.

(5) When deciding on the scope and level of detail of the information that must be included in the report, the responsible authority shall consult the consultation bodies.

(6) Where a consultation body wishes to respond to a consultation under paragraph (5), it shall do so within the period of 5 weeks beginning with the date on which it receives the responsible authority's invitation to engage in the consultation.

and Schedule 2 of the SEA Regulations (see Appendix C).

Consultation

Regarding consultation, the SEA Regulations require the Scoping Report to be made available to statutory consultees – but not necessarily the public – for comment. Regulation 12 states that:

(5) When deciding on the scope and level of detail of the information that must be included in the report the responsible authority shall consult the consultation bodies.

(6) Where a consultation body wishes to respond to a consultation under paragraph (5), it shall do so within the period of five weeks beginning with the date on which it receives the responsible authority's invitation to engage in the consultation.

The Environmental Report, the requirements for which are met within this Sustainability Report, must be made available to the statutory consultees and the public:

> ***13.***—*(1) Every draft plan or programme for which an environmental report has been prepared in accordance with regulation 12 and its accompanying environmental report ("the relevant documents") shall be made available for the purposes of consultation in accordance with the following provisions of this regulation.*
>
> *(2) As soon as reasonably practicable after the preparation of the relevant documents, the responsible authority shall—*
>
> > *(a) send a copy of those documents to each consultation body;*
> >
> > *(b) take such steps as it considers appropriate to bring the preparation of the relevant documents to the attention of the persons who, in the authority's opinion, are affected or likely to be affected by, or have an interest in the decisions involved in the assessment and adoption of the plan or programme concerned, required under the Environmental Assessment of Plans and Programmes Directive ("the public consultees");*
> >
> > *(c) inform the public consultees of the address (which may include a website) at which a copy of the relevant documents may be viewed, or from which a copy may be obtained; and*
> >
> > *(d) invite the consultation bodies and the public consultees to express their opinion on the relevant documents, specifying the address to which, and the period within which, opinions must be sent.*
>
> *(3) The period referred to in paragraph (2)(d) must be of such length as will ensure that the consultation bodies and the public consultees are given an effective opportunity to express their opinion on the relevant documents.*
>
> *(4) The responsible authority shall keep a copy of the relevant documents available at its principal office for inspection by the public at all reasonable times and free of charge.*
>
> *(5) Nothing in paragraph (2)(c) shall require the responsible authority to provide copies free of charge; but where a charge is made, it shall be of a reasonable amount.*

Post Adoption

Following the consultation stages and when the AAP is due for adoption, a statement summarising how environmental considerations have been integrated into the plan will be prepared. Details for this procedure are identified in SEA Regulation 16:

> ***16. -*** *(2) As soon as reasonably practicable after the adoption of a plan or programme -*
>
> > *(a) the responsible authority shall inform -*
> >
> > > *(i) the consultation bodies;*
> > >
> > > *(ii) the persons who, in relation to the plan or programme, were public consultees for the purposes of regulation 13; and*
> > >
> > > *(iii) where the responsible authority is not the Secretary of State, the Secretary of State; and*

(b) the Secretary of State shall inform the Member State with which consultations in relation to the plan or programme have taken place under regulation 14(4),

of the matters referred to in paragraph (3).

(3) The matters are -

(a) that the plan or programme has been adopted;

(b) the date on which it was adopted; and

(c) the address (which may include a website) at which a copy of -

(i) the plan or programme, as adopted,

(ii) its accompanying environmental report, and

(iii) a statement containing the particulars specified in paragraph (4),

may be viewed, or from which a copy may be obtained.

(4) The particulars referred to in paragraphs and (3)(c)(iii) are -

(a) how environmental considerations have been integrated into the plan or programme;

(b) how the environmental report has been taken into account;

(c) how opinions expressed in response to -

(i) the invitation referred to in regulation 13(2)(d);

(ii) action taken by the responsible authority in accordance with regulation 13(4), have been taken into account;

(d) how the results of any consultations entered into under regulation 14(4) have been taken into account;

(e) the reasons for choosing the plan or programme as adopted, in the light of the other reasonable alternatives dealt with; and

(f) the measures that are to be taken to monitor the significant environmental effects of the implementation of the plan or programme.

Quality Assurance Checklist

Quality Assurance can be used to help ensure that the requirements of the SEA Directive are met, highlight any problems with the SA Report and show how effectively the appraisal has integrated sustainability considerations into the plan-making process.

The Quality Assurance checklist covers both the technical and procedural steps of the appraisal process and can be applied at any stage of the appraisal to check the quality of work carried out up to that point. It is taken from Appendix 4 of ODPM Guidance (2005b).

Quality Assurance Checklist	Completed?
Objectives and Context	
• The plan's purpose and objectives are made clear.	Y – Section 1.7
• Sustainability issues, including international and EC objectives, are	Y – Section 4.2 and

considered in developing objectives and targets. • SA objectives are clearly set out and linked to indicators and targets where appropriate. • Links with other related plans, programmes and policies are identified and explained. • Conflicts that exist between SA objectives, between SA and plan objectives, and between SA and other plan objectives and identified and described.	Appendix H Y – Section 4.2 and Appendix J Y – S.3.2, App H & Scoping Report Y – Section 4.3
Scoping • The environmental consultation bodies are consulted in appropriate ways and at appropriate times on the content and scope of the SA Report. • The appraisal focuses on significant issues. • Technical, procedural and other difficulties encountered are discussed; assumptions and uncertainties are made explicit. • Reasons are given for eliminating issues from further consideration.	Y – Section 2.2 Y - Scoping Report & section 5.5 Y – s.3.3.2 & 5.7 N/A
Options/Alternatives • Realistic alternatives are considered for key issues, and the reasons for choosing them are documented. • Alternatives include 'do nothing' and/or 'business as usual' scenarios wherever relevant. • The sustainability effects (both adverse and beneficial) of each alternative are identified and compared. • Inconsistencies between the alternatives and other relevant plans, programmes or policies are identified and explained. • Reasons are given for selection or elimination of alternatives.	Y – Section 2.3 and Appendix G Y – Section 2.3 and Appendices E Y – Appendix G Y – Appendix G Y – Appendix G
Baseline Information • Relevant aspects of the current state of the environment and their likely evolution without the plan are described. • Characteristics of areas likely to be significantly affected are described, including areas wider than the physical boundary of the plan area where it is likely to be affected by the plan where practicable. • Difficulties such as deficiencies in information or methods are explained.	Y – Section 3.3 and Appendix I Y – Section 3.3 and Appendix I Y – Section 3.3 and Appendix I
Prediction and Evaluation of Likely Significant Effects • Likely significant social, environmental and economic effects are identified, including those listed in the SEA Directive (biodiversity, population, human health, fauna, flora, soil, water, air, climate factors, material assets, cultural heritage and landscape), as relevant. • Both positive and negative effects are considered, and where practicable, the duration of effects (short, medium or long-term) is addressed. • Likely secondary, cumulative and synergistic effects are identified where	Y – Chapter 5 and Appendix L Y – Chapter 5 and Appendix L Y – Chapter 5 and Appendix N

practicable. • Inter-relationships between effects are considered where practicable. • Where relevant, the prediction and evaluation of effects makes use of accepted standards, regulations and thresholds. • Methods used to evaluate the effects are described.	 Y – Section 5.6 Y – Chapter 5 and Appendix L Y – Section 5.2
Mitigation Measures • Measures envisaged to prevent, reduce and offset any significant adverse effects of implementing the plan are indicated. • Issues to be taken into account in development consents are identified.	 Y – Chapter 6 Y – Chapter 6
The Sustainability Appraisal Report • Is clear and concise in its layout and presentation. • Uses simple, clear language and avoids or explains technical terms. • Uses maps and other illustrations where appropriate. • Explains the methodology used. • Explains who was consulted and what methods of consultation were used. • Identifies sources of information, including expert judgement and matters of opinion. • Contains a non-technical summary.	 Y Y Y Y Y Y Y
Consultation • The SA is consulted on as an integral part of the plan-making process. • The consultation bodies, other consultees and the public are consulted in ways which give them an early and effective opportunity within appropriate time frames to express their opinions on the draft plan and SA report.	 Y – Chapters 2 & 8 Y – Chapters 2 & 8
Decision-making and Information on the Decision • The SA Report and the opinions of those consulted are taken into account in finalising and adopting the plan. • An explanation is given of how they have been taken into account. • Reasons are given for choices in the adopted plan, in the light of other reasonable options considered.	 TBC (see Post Adoption Statement)
Monitoring Measures • Measures proposed for monitoring are clear, practicable and linked to the indicators and objectives used in the SA. • Monitoring is used, where appropriate, during implementation of the plan to make good deficiencies in baseline information in the SA. • Monitoring enables unforeseen adverse effects to be identified at an early stage. (These effects may include predictions which prove to be incorrect.) • Proposals are made for action in response to significant adverse effects.	 Y – Chapter 7 and Appendix J Y – Chapter 7 and Appendix J Y – Chapter 7 and Appendix J Y – Chapter 7 and Appendix J

Appendix C: Schedule Two of the SEA Regulations

The Environmental Assessment of Plans and Programmes Regulations 2004 (SI No. 1633)

INFORMATION FOR ENVIRONMENTAL REPORTS

1. An outline of the contents and main objectives of the plan or programme, and of its relationship with other relevant plans and programmes.

2. The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme.

3. The environmental characteristics of areas likely to be significantly affected.

4. Any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Council Directive 79/409/EEC on the conservation of wild birds and the Habitats Directive.

5. The environmental protection objectives, established at international, Community or Member State level, which are relevant to the plan or programme and the way those objectives and any environmental considerations have been taken into account during its preparation.

6. The likely significant effects on the environment, including short, medium and long-term effects, permanent and temporary effects, positive and negative effects, and secondary, cumulative and synergistic effects, on issues such as –

(a) biodiversity;

(b) population;

(c) human health;

(d) fauna;

(e) flora;

(f) soil;

(g) water;

(h) air;

(i) climatic factors;

(j) material assets;

(k) cultural heritage, including architectural and archaeological heritage;

(l) landscape; and

(m) the inter-relationship between the issues referred to in sub-paragraphs (a) to (l).

7. The measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan or programme.

8. An outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information.

9. A description of the measures envisaged concerning monitoring in accordance with regulation 17.

10. A non-technical summary of the information provided under paragraphs 1 to 9.

Appendix D: Analysis of Consultation Responses

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Appendix E: Issues and Options Assessment

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Preliminary Assessment

Strategic Spatial Land Use Options

SA Objective	No.	Description	Do Nothing: continuation of current land use allocations; retention, re-occupation or redevelopment of existing industrial buildings where feasible, subject to market demand.	1: Do minimum - Employment Led: develop site according existing planning policies, the Longbridge Development Framework (LDF) and current planning permissions. Includes: High Technology Park, Regional Investment Site (up to 50ha), light and general industrial and warehousing uses on remaining areas, small neighbourhood centre, Park and Ride.	2: Mixed Use - Employment Led: including High Technology Park plus regional Investment Site (up to 30ha), up to 700 dwellings on East Works, mixed use centre including retail, leisure, education and commercial uses, light and general industrial and warehousing uses on remaining areas, Park and Ride and transport interchange.	3: Mixed Use - Town Centre Led: including High Technology Park, up to 700 dwellings on East Works plus 300 on North/West Works, mixed use centre including office, retail, leisure, education and commercial uses, light and general industrial and warehousing uses on remaining areas, Park and Ride and transport interchange.	4: Mixed Use - Residential Led: including High Technology Park, up to 700 dwellings on East Works plus 650 on North/West Works, mixed use centre including office, retail, leisure, education, housing and commercial uses, light and general industrial and warehousing uses on remaining areas, Park and Ride and transport interchange, mixed use zone (residential and leisure) at Cofton Centre.
	1	Reduce poverty and social exclusion, promote a strong community where people feel they have a say in the future, and encourage equitable accessibility to services.	Likely to have a positive impact on poverty through employment generation, but will not address issues of social exclusion, community participation or access to services.	Likely to have a positive impact on poverty through employment generation, but will not address issues of social exclusion, community participation or access to services.	Likely to have a positive impact on poverty through employment provision and economic diversification. Provision of enhanced community and retail facilities will improve access to services.	Likely to have a positive impact on poverty through employment provision and economic diversification. Provision of enhanced community and retail facilities will improve access to services. Focus on those services less available in the area or identified through consultation.	Likely to have a positive impact on poverty through employment provision and economic diversification. Provision of enhanced community and retail facilities will improve access to services.
	2	Improve health and reduce health inequalities by encouraging and enabling healthy lifestyles and protecting health, as well as providing equitable access to health services and high quality open spaces, sports and recreational facilities.	No effect anticipated. Unlikely to lead to any improvements to health or provision, inequalities or lifestyles. May maintain or worsen environmental health (eg, air quality).	Minimal effect anticipated: unlikely to lead to any improvements to health provision or inequalities but promote slight improvement in lifestyles by better enabling access via foot or cycle.	Will improve access to health facilities and may encourage healthy lifestyles through provision of POS and improved public transport and walking corridors (increased final walking distances). Uncertain effect on health inequalities.	Will improve access to health facilities and likely to encourage healthy lifestyles through provision of POS, leisure facilities, walking and cycling routes and improved public transport. May reduce health inequalities, particularly if service provision extends to opticians and pharmacies.	Will improve access to health facilities and may encourage healthy lifestyles through provision of POS and improved public transport and walking corridors (increased final walking distances). Uncertain effect on health inequalities.
	3	Improve community safety, and reduce crime, antisocial behaviour and the fear of crime.	Will not lead to any improvements of safety or the safety environment, crime or the fear of crime, unless specific arrangements are specified through planning permissions.	Unlikely to result in major changes to community safety or safety environment, but accessibility improvements may help reduce crime and the fear of crime.	New community centre and sensitively designed walking and cycling routes will reduce crime and the fear of crime, as well as the safety environment. These gains can be further maximised if the centre is separated from traffic and/or pedestrianised by realigning the highway network.	New community centre and sensitively designed walking and cycling routes will reduce crime and the fear of crime, as well as the safety environment. These gains can be further maximised if the centre is separated from traffic and/or pedestrianised by realigning the highway network.	New community centre and sensitively designed walking and cycling routes will reduce crime and the fear of crime, as well as the safety environment. These gains can be further maximised if the centre is separated from traffic and/or pedestrianised by realigning the highway network.
	4	Support the local community by maximising use of local labour and support adaptation to changing employment circumstances. Encourage investment and engagement to support learning and raise levels and diversity of skills.	Is likely to make use of some local labour but it is highly uncertain whether employment uses will match skills availability, particularly as large scale car manufacturing is not likely to resume. Will not lead to skills diversification or increased participation in learning.	Will make use of some local labour, but focus on High Technology industries may result in mismatch between employment opportunities and available local skills. The LDF does encourage links with local colleges but does not specifically address re-training for adults or the long-term unemployed. Immediate opportunity to employ local residents in demolition and reconstruction.	Will help to support local community by providing a range of employment opportunities including those associated with B1, B2 and B8 uses and a High Technology business park, but also the employment needs of a local centre. Educational facilities (such as a college campus) will promote the long-term development of skills and should be combined with adult education initiatives. Immediate opportunity to employ local residents in demolition and reconstruction.	Will help to support local community by providing a range of employment opportunities including those associated with B1, B2 and B8 uses and a High Technology business park, but also an increased proportion based on the employment needs of a local centre. Educational facilities (such as a college campus) will promote the long-term development of skills and should be combined with adult education initiatives. Immediate opportunity to employ local residents in demolition and reconstruction.	Will help to support local community by providing a range of employment opportunities including those associated a High Technology business park, but also an increased proportion based on the employment needs of a local centre and a lesser focus on B1, B2 and B8 which may exclude some workers. Educational facilities (such as a college campus) will promote the long-term development of skills and should be combined with adult education initiatives. Immediate opportunity to employ local residents in demolition and reconstruction.
	5	Encourage regeneration and economic growth in and around Longbridge that does not compromise the ability of future generations to meet their needs, and improve equitable access to job opportunities.	Expected to reduce unemployment to a limited degree but is not likely to offer a sustainable solution to this challenge. Similarly, continuation of current uses may not deliver greater business competitiveness, resilience or productivity. Will not promote growth in target sectors.	Will reduce unemployment to an extent but unlikely to provide opportunities to those most in need of employment, particularly with focus on High Technology. May deliver improvements in business development and competitiveness and will promote growth in key sectors.	Will reduce unemployment (including long-term) and will offer opportunities to those most in need of employment. Will encourage business development and competitiveness and promote growth in key sectors. Likely to improve productivity and GVA.	Will reduce unemployment (including long-term) and will offer opportunities to those most in need of employment. Will encourage business development and competitiveness and promote growth in key sectors. Likely to improve productivity and GVA.	Will reduce unemployment (including long-term) and will offer opportunities to those most in need of employment. Will encourage business development and competitiveness and promote growth in key sectors. Likely to improve productivity and GVA. May not directly promote same degree of economic growth.
	6	Promote and support the development of new technologies, particularly those with high value and low impact, to encourage enterprise and innovation with a sense of environmental and social responsibility.	Unlikely to encourage industrial diversification or development of new technologies, but could generate inward investment. Uncertain effect on environmental or social responsibilities.	Will encourage limited industrial diversification with the High Technology business park, and generate inward investment. Uncertain effect on environmental or social responsibilities - this may be improved if there is a deliberate focus on businesses developing environmental technologies.	Likely to promote extensive industrial diversification, and generate inward investment. Uncertain effect on environmental or social responsibilities - this may be improved if there is a deliberate focus on businesses developing environmental technologies.	Likely to promote extensive industrial diversification, and generate inward investment. Uncertain effect on environmental or social responsibilities - this may be improved if there is a deliberate focus on businesses developing environmental technologies.	Likely to promote extensive industrial diversification, and generate inward investment. Uncertain effect on environmental or social responsibilities - this may be improved if there is a deliberate focus on businesses developing environmental technologies.
	7	Make efficient use of the existing road network and reduce dependence on private vehicular travel. Prioritise modal shift to equitable, accessible, sustainable, and integrated forms of public transport, cycling and walking, and increase the provision of public transport networks and passenger facilities. Avoid adverse impacts on the motorway network by providing access appropriate to the required levels of growth.	Could maintain long-term growth in traffic conditions and is unlikely to encourage any degree of modal shift, although the site is well served by a choice of public transport. Will not improve accessibility to work or services by more sustainable modes and may increase the effect of traffic congestion on the wider network. Proximity to rail line offers options for sustainable and efficient freight distribution depending on preferred infrastructure options.	Development related traffic will increase in the short-term. Long-term growth in traffic conditions might also be expected, although some proposed infrastructure options and accessibility improvements may encourage modal shift. An increase in residential land uses will increase the population within walking distance of the employment opportunities provided. Focus on High Technology uses is likely to decrease the intensity of freight activities, and proximity to rail line offers options for sustainable and efficient freight distribution depending on preferred infrastructure options.	Development related traffic will increase in the short-term. Long-term growth in traffic conditions are possible, but improvements to accessibility and the provision of significant new residential units on site may mean that a greater proportion of visitors to the site can travel by sustainable means with consequent reductions in carbon emissions, particularly as the site is well served by public transport. Variety of land uses may lead to decreases in the intensity of freight activities.	Development related traffic will increase in the short-term. Long-term growth in traffic conditions are possible, but improvements to accessibility and the provision of significant new residential units on site may mean that a greater proportion of visitors to the site can travel by sustainable means with consequent reductions in carbon emissions, particularly as the site is well served by public transport. Variety of land uses may lead to decreases in the intensity of freight activities, however it is likely that a greater proportion of this will be carried by road (for retail purposes for example) than might be carried by existing rail infrastructure.	Development related traffic will increase in the short-term. Long-term growth in traffic conditions are possible, but improvements to accessibility and the provision of significant new residential units on site may mean that a greater proportion of visitors to the site can travel by sustainable means with consequent reductions in carbon emissions, particularly as the site is well served by public transport. Variety of land uses may lead to decreases in the intensity of freight activities, however it is likely that a greater proportion of this will be carried by road (for retail purposes for example) than might be carried by existing rail infrastructure.
	8	Optimise the use of previously developed land and buildings where possible and practical, remediate contaminated land and create high quality built environments that incorporate a network of accessible interconnected sites* and green spaces, enhance biodiversity and maximise opportunities for achieving BAP targets, and promote local distinctiveness and sense of place.	Provided appropriate regeneration can be achieved that results in reuse of derelict parts of the site, significant benefit can be gained in terms of reuse of previously developed land, but this will not necessarily involve remediation. Current biodiversity value of the site is low, but this option will not address any measures to enhance the quality or character of on-site environment, nor will it improve the site's role in allowing the passage or genetic transfer of species. Unlikely to deliver sense of place or improvements to environmental colour or quality of life for local residents. There is no provision for protected sites of nature conversation interest.	Development according to the LDF will lead to significant benefits in terms of land remediation and reuse of derelict land, and urban design and environmental issues are addressed that should brings benefits to both the local environment and local community. However, it should be noted that the LDF does not extend to all currently available land on site and may result incoherent development both in terms of ecological function and urban form. There is no provision for protected sites of nature conservation interest.	Has the potential to lead to significant improvements in terms of remediation and reuse of previously used land. Some environmental benefits can be expected, for example with regard to the functioning of the River Rea wildlife corridor and accessibility. Intensification of industrial uses not will contribute to the urban landscape, nor improve the satisfaction of the local population with their neighbourhood.	Significant benefits will be achieved in terms of land remediation and reuse of previously developed land, reducing the amount of derelict land. Urban design measures to improve neighbourhood environments should be delivered, together with significant enhancements to neighbourhood facilities for the local population. Important environmental improvements will also be achieved which, through delivery, have the potential to greatly increase the site's role in both providing habitat for, and passage and genetic transfer of species; this could involved the creation and management of sites for nature conservation importance.	Significant benefits will be achieved in terms of land remediation and reuse of previously developed land, reducing the amount of derelict land. Urban design measures to improve neighbourhood environments should be delivered, together with significant enhancements to neighbourhood facilities for the local population. Important environmental improvements will also be achieved which, through delivery, have the potential to greatly increase the site's role in both providing habitat for, and passage and genetic transfer of species; this could involved the creation and management of sites for nature conservation importance.
	9	Provide high quality affordable housing, ensuring that all new buildings are environmentally sound and meet BREEAM standards.	Will not provide any new homes or affordable housing and does not guarantee that any new buildings will be built to high environmental standards.	Will not provide any new homes or affordable housing and does not guarantee that any new buildings will be built to high environmental standards. Brief recommendations for improving the sustainability and environmental soundness of new buildings are given, including on energy efficiency.	Depending of final format of land use options, around 700 new dwellings can be provided, possibly incorporating a minimum of 35% affordable housing. Specific requirements on quality and environmental standards should be observed, including those on improving affordability of essential services to the home, energy efficiency and sustainable design measures.	Depending of final format of land use options, around 1,000 new dwellings can be provided, possibly incorporating a minimum of 35% affordable housing. Specific requirements on quality and environmental standards should be observed, including those on improving affordability of essential services to the home, energy efficiency and sustainable design measures.	Depending of final format of land use options, around 1,400 new dwellings can be provided, possibly incorporating a minimum of 35% affordable housing. Specific requirements on quality and environmental standards should be observed, including those on improving affordability of essential services to the home, energy efficiency and sustainable design measures.
	10	Use renewable sources of energy and encourage energy efficiency, use resources prudently, making the most of local availability, and reduce contributions to climate change.	Could (but will not necessarily) increase the proportion of energy needs being met from renewable sources. May encourage demand for locally produced products and services.	Encourages energy efficiency in new buildings but does not specify a need for renewable energy generation. May encourage demand for locally produced products and services.	A sustainable mix of land uses will encourage local residents to purchase local products and services that are not currently available, particularly if a farmer's market is provided. There is the opportunity to significantly increase renewable energy provision by incorporating a CHP installation across the site, possibly in combination with micro-generation opportunities for individual units. Sustainable building design can reduce the necessary amount of cooling (and heating) thereby reducing emissions of ozone depleting substances and carbon.	A sustainable mix of land uses will encourage local residents to purchase local products and services that are not currently available, particularly if a farmer's market is provided. There is the opportunity to significantly increase renewable energy provision by incorporating a CHP installation across the site, possibly in combination with micro-generation opportunities for individual units. Sustainable building design can reduce the necessary amount of cooling (and heating) thereby reducing emissions of ozone depleting substances and carbon.	A sustainable mix of land uses will encourage local residents to purchase local products and services that are not currently available, particularly if a farmer's market is provided. There is the opportunity to significantly increase renewable energy provision by incorporating a CHP installation across the site, possibly in combination with micro-generation opportunities for individual units. Sustainable building design can reduce the necessary amount of cooling (and heating) thereby reducing emissions of ozone depleting substances and carbon.
	11	Conserve and, where appropriate, enhance the historic, industrial and cultural heritage of Longbridge and the surrounding area.	Will not necessarily deliver any enhancements to heritage features, though unlikely to lead to any further loss. Will not improve understanding of historical development. Much of the work required by the LDF is already complete.	The LDF specifies the need for archaeological excavation and recording prior to development, as well as comprehensive recording of the buildings and structures associated with car manufacturing. These requirements will both protect and record the heritage features of the site. Much of this work is already completed.	Much of the work required by the LDF to protect and record heritage features is already complete. In addition, this option provides the opportunity to include a heritage centre on site to further improve understanding of the historical development of the area.	Much of the work required by the LDF to protect and record heritage features is already complete. In addition, this option provides the opportunity to include a heritage centre on site to further improve understanding of the historical development of the area.	Much of the work required by the LDF to protect and record heritage features is already complete. In addition, this option provides the opportunity to include a heritage centre on site to further improve understanding of the historical development of the area.
	12	Maintain and enhance the quality and character of landscape and townscape.	Likely to maintain the current poor quality of landscape and townscape character, and may not deliver enhancements to functionality, form or ecological value.	Likely to maintain the current poor quality of townscape form and functionality, and may not deliver enhancements. Could potentially decrease quality if industrialisation increases, particularly with B8 uses although environmental enhancements imply this will not be the case.	Focus on improvements for quality of business environment, including retention of industrial and warehousing land uses. Will include some improvements.	A driver of redevelopment will be to enhance townscape and landscape character in terms of form and functionality, as well as quality. Also offers significant opportunities for environmental enhancements through design, lighting, sensitive planting and landscaping and River Rea improvements.	A driver of redevelopment will be to enhance townscape and landscape character in terms of form and functionality, as well as quality. Also offers significant opportunities for environmental enhancements through design, lighting, sensitive planting and landscaping and River Rea improvements.
	13	Reduce air pollution and improve air quality.	Not likely to have any significant effect in the short term, but continuation of uses will not reduce air pollution and may allow it to increase in the long term. In addition, traffic generation (both land use related and base flow) may further worsen air pollution.	Not likely to have any significant effect in the short term, but continuation of uses will not reduce air pollution and may allow it to increase in the long term. In addition, traffic generation (both land use related and base flow) may further worsen air pollution.	Not likely to have an effect in the short term unless there is significant re-formatting of the site for altered uses. Continuation and possible intensification of industrial uses will not reduce air pollution and may allow it to increase in the long term. In addition, traffic generation (both land use related and base flow) may further worsen air pollution, particularly with regard to B8 use.	Building works and traffic associated with redevelopment will worsen air quality in the short term through dust, noise and pollutants, although this can be mitigated. In the long term, diversified land uses and possible transport infrastructure improvements should reduce pollution to air from traffic and industrial sources.	Building works and traffic associated with redevelopment will worsen air quality in the short term through dust, noise and pollutants, although this can be mitigated. In the long term, diversified land uses and possible transport infrastructure improvements should reduce pollution to air from traffic and industrial sources.

Preliminary Assessment

Strategic Spatial Land Use Options

No.	Description	Do Nothing: continuation of current land use allocations; retention, re-occupation or redevelopment of existing industrial buildings where feasible, subject to market demand.	1: Do minimum - Employment Led: develop site according existing planning policies, the Longbridge Development Framework (LDF) and current planning permissions. Includes: High Technology Park, Regional Investment Site (up to 50ha), light and general industrial and warehousing uses on remaining areas, small neighbourhood centre, Park and Ride.	2: Mixed Use - Employment Led: including High Technology Park plus regional investment Site (up to 30ha), up to 700 dwellings on East Works, mixed use centre including retail, leisure, education and commercial uses, light and general industrial and warehousing uses on remaining areas, Park and Ride and transport interchange.	3: Mixed Use - Town Centre Led: including High Technology Park, up to 700 dwellings on East Works plus 300 on North/West Works, mixed use centre including office, retail, leisure, education and commercial uses, light and general industrial and warehousing uses on remaining areas, Park and Ride and transport interchange.	4: Mixed Use - Residential Led: including High Technology Park, up to 700 dwellings on East Works plus 650 on North/West Works, mixed use centre including office, retail, leisure, education, housing and commercial uses, light and general industrial and warehousing uses on remaining areas, Park and Ride and transport interchange, mixed use zone (residential and leisure) at Cofton Centre.
14	Protect, enhance and increase the biodiversity of Longbridge and the surrounding area.	This option does not deliver any benefits to natural or semi-natural habitats or species diversity, nor will it enhance the integrity or interconnectivity of sites designated for nature conservation importance.	The LDF makes brief recommendations on increasing the nature conservation aspects of the site, including landscape design that contributes to wildlife habitats and enhances the interconnectivity of natural areas with benefits to species migration, dispersal and genetic exchange. It does not specifically extend to improvement of existing natural or semi-natural areas, species diversity or protected species.	Environmental enhancements such as opening up the River Rea wildlife corridor are likely to improve the interconnectivity of natural areas, bringing benefits relating to species migration, dispersal and genetic exchange. Other improvements are implied but do not specifically address existing natural or semi-natural areas, species diversity or protected species as they are directed at improving the quality of the business environment.	Environmental enhancements such as opening up the River Rea wildlife corridor are likely to improve the interconnectivity of natural areas, bringing benefits relating to species migration, dispersal and genetic exchange. Improving open space, both in terms of environment and amenity, is a driver of this option. There is significant opportunity through sensitive landscaping, design and planting, to create further areas of natural habitat and link these to existing areas. In addition, habitat creation can focus on protected species and include designation of SLINCs, although none of these measures are yet stipulated.	Environmental enhancements such as opening up the River Rea wildlife corridor are likely to improve the interconnectivity of natural areas, bringing benefits relating to species migration, dispersal and genetic exchange. Improving open space, both in terms of environment and amenity, is a driver of this option. There is significant opportunity through sensitive landscaping, design and planting, to create further areas of natural habitat and link these to existing areas. In addition, habitat creation can focus on protected species and include designation of SLINCs, although none of these measures are yet stipulated.
15	Protect water resources and improve water quality.	Unlikely to lead to any improvements in water quality, either on site or further afield. No guarantee that continued uses will be efficient in terms of water consumption, although efficiency gains are possible.	The LDF implies a desire for resource efficiency but does not specify this in relation to water resources or measures to achieve it. Water quality is not mentioned although improvements may be delivered through ground remediation.	Industrial employment led regeneration may place a strain on water resources, although there is no reason that it cannot be achieved without efficiency measures, recycling or harvesting. Addressing the River Rea will require ground investigations, remediation and possible engineering measures in order to ensure that contaminants do not enter the water course or groundwaters.	A sustainable mixed use development will ensure that water (and other) resource efficiency measures are incorporated throughout, including rain water harvesting, grey water recycling, low flush mechanisms and water meters. Significant land remediation will be required before permission can be granted for many of the proposed uses, and this should seek to remove and eliminate all sources of potential pollution to surface or groundwaters. None of these measures are yet stipulated.	A sustainable mixed use development will ensure that water (and other) resource efficiency measures are incorporated throughout, including rain water harvesting, grey water recycling, low flush mechanisms and water meters. Significant land remediation will be required before permission can be granted for many of the proposed uses, and this should seek to remove and eliminate all sources of potential pollution to surface or groundwaters. None of these measures are yet stipulated.
16	Avoid increasing, and take opportunities to reduce flood risk, and prepare for other impacts of climate change.	Current flood risk on site is limited, although localised flooding has been experienced nearby. Any development that further constrains the River Rea or which accelerates the rate and increases the quantity with which surface water run-off joins the water course will increase risk. Generally, industrial land uses generate lower risk of flooding to people than residential uses. No preparations are likely to be made for other impacts of climate change.	The LDF states that a comprehensive flood risk assessment will be required with any planning application, and promotes consideration of SUDS together with the opening of the River Rea to a specification able to withstand peak flows during flood events and the effect of climate change. Change of land uses has limited potential to increase the number of people at risk from flooding. It does not promote habitat planting or building design (such as passive solar deign) to prepare for climate change.	Current flood risk on site is limited, although localised flooding has been experienced nearby and comprehensive flood risk assessment will be required with any planning application. Any development that further constrains the River Rea or which accelerates the rate and increases the quantity with which surface water run-off joins the water course will increase risk. Generally, industrial land uses generate lower risk of flooding to people than residential uses. No preparations are likely to be made for other impacts of climate change. Opening up of the River Rea will need to be able to withstand peak flows during flood events and the effect of climate change.	Current flood risk on site is limited, although localised flooding has been experienced nearby and comprehensive flood risk assessment will be required with any planning application. Any development that further constrains the River Rea or which accelerates the rate and increases the quantity with which surface water run-off joins the water course will increase risk. Change of land uses has limited potential to increase the number of people at risk from flooding. The plan should promote habitat planting or building design (such as passive solar deign) to prepare for climate change, and promote SUDS. Opening up of the River Rea will need to be able to withstand peak flows during flood events and the effect of climate change.	Current flood risk on site is limited, although localised flooding has been experienced nearby and comprehensive flood risk assessment will be required with any planning application. Any development that further constrains the River Rea or which accelerates the rate and increases the quantity with which surface water run-off joins the water course will increase risk. Change to residential land uses has the potential to increase the number of people at risk from flooding. The plan should promote habitat planting or building design (such as passive solar deign) to prepare for climate change, and promote SUDS. Opening up of the River Rea will need to be able to withstand peak flows during flood events and the effect of climate change.
17	Minimise waste creation and optimise the re-use and recycling of waste.	Continued use is unlikely to significantly reduce waste creation, although provision could be made for re-use and recycling. Unlikely to lead to reduced consumption of materials.	The LDF specifies that opportunities for recycling should be explored. Unlikely to lead to reduced consumption of materials.	Industrial use is unlikely to significantly reduce waste creation, although provision could be made for re-use and recycling. Unlikely to lead to reduced consumption of materials.	Significant opportunities exist to promote recycling facilities, including composting, particularly for residential uses. Unlikely to lead to reduced consumption of materials. Plan could promote use of more sustainable packaging in retail outlets.	Significant opportunities exist to promote recycling facilities, including composting, particularly for residential uses. Unlikely to lead to reduced consumption of materials. Plan could promote use of more sustainable packaging in retail outlets.
18	Use local supply sources and support the sustainable extraction, re-use and recycling of minerals and aggregates resources.	Continuation of existing uses, if it does not involve demolition and reconstruction, constitutes a sustainable use of buildings and conservation of construction resources.	The LDF encourages redevelopment and provides an opportunity to stimulate markets of local providers of goods and services, as well as the recycled aggregate market. Demolition waste is unlikely to be suitable for recycling due to contamination.	Redevelopment provides an opportunity to stimulate markets of local providers of goods and services, as well as the recycled aggregate market. Demolition waste is unlikely to be suitable for recycling due to contamination.	Redevelopment provides an opportunity to stimulate markets of local providers of goods and services, as well as the recycled aggregate market. Demolition waste is unlikely to be suitable for recycling due to contamination.	Redevelopment provides an opportunity to stimulate markets of local providers of goods and services, as well as the recycled aggregate market. Demolition waste is unlikely to be suitable for recycling due to contamination.

Key:

	Potentially significant negative effects expected.
	Uncertain or mixed effect.
	Likely to lead to mainly positive effects.

* Interconnected sites should include protected sites and nature reserves.

Interim Assessment of Issues and Options

Key:

Potentially negative effects

Uncertain effects

Positive effects

No links

Employment and Economy

Issue / Option	Assumptions of implementation	Indicative Effect on SA Objectives	Comments
Ensure the proposals are employment led and meet the 10,000 job target.	Assumes there is less room for community facilities, residential and open space.		Take measures to accelerate decoupling of economic growth and environmental degradation, eg energy efficiency, renewables, on-site recycling, minimal parking provision, EMS, promotion of environmental technologies industries, etc.
Reflect: (a) the decision by Nanjing to retain the central part of the former MG Rover site (42 hectares) and their relatively low levels of job creation; and (b) a desire for a greater mix and variety of job opportunities on other portions of the site and reduce the 10,000 jobs target.			
Increase the jobs target for the former MG Rover site to above 10,000 jobs.	Assumes there is less room for community facilities, residential and open space.		
Provide jobs through industrial (light and general industrial and warehousing) uses.	Up to 70% of former MG Rover workers may have regained employment elsewhere in the intervening months.		Likely to offer 'best match' employment to workers who have not yet found replacement employment.
Provide jobs through a mix of industrial and other employment generating uses including retail,			Offers wider range of opportunities likely to suit a broader range of skill areas.

Issue / Option	Assumptions of implementation	Indicative Effect on SA Objectives																	Comments
leisure, education and office uses.																			
Allow the market to determine an appropriate scale and mix of jobs.																			Not likely to deliver the type of regeneration optimal to the needs of the local community.
Allocate the whole site for industrial uses in line with UDP.																			Unlikely to deliver sustainable mixed use regeneration.
Allocate the whole site for industrial and other employment uses in line with BDLP policy.																			Unlikely to deliver sustainable mixed use regeneration.
Allocate only part of the site for industrial or other employment/job creating uses.																			Depends on final uses of remainder of site, ie residential? open space? community facilities?
Meet the employment demand requirements through other sites in southern Birmingham or elsewhere.	May be consistent with employment aims of Great Park development.																		Misses opportunity to exploit this essentially sustainable location (ie, good transport links & local labour supply).
Allow the market to determine supply by allowing a mix of uses on the former MG Rover site and not allocating sites for specific uses.																			Not likely to deliver the type of regeneration optimal to the needs of the local community.
Allocate areas within the former MG Rover site for specific uses.																			Depends on final uses.
Promote a Regional Investment Site (RIS) of between 25 and 50 hectares at Longbridge to meet the needs of the Regional Spatial Strategy and provide the necessary improvements to public transport, roads and the high quality environment that is	Decreases land available to housing and community facilities.																		

Issue / Option	Assumptions of implementation	Indicative Effect on SA Objectives																	Comments
required for such a designation.																			
Promote Longbridge as a Major Investment Site (MIS) in the West Midlands, namely a site of around 50 hectares suitable for a single user with an international choice of locations.	Decreases land available to housing and community facilities.																		
Allow Major Investment Sites to be provided elsewhere in the region to meet regional and local needs.																			Has little effect on Longbridge objectives so long as appropriate development is achieved on site.
Support the potential for a Regional Logistics Site (RLS) of around 50 hectares at Longbridge to provide opportunities for warehousing and distribution uses well served by rail and highway networks.																			Employment density is likely to be lower than other uses. Not consistent with surrounding residential and may worsen local environmental quality.
Allocate specific employment sites to meet the objectives of the Central Technology Belt as required by the RSS.																			Opportunity to encourage environmental technologies.
Encourage the relocation of the Birmingham Wholesale Markets (currently at Digbeth/central Birmingham) should a decision to relocate these be confirmed.																			
Encourage the relocation of Bournville College and allocate a specific site to meet their requirements.																			
Develop a Materials Recycling Centre to serve the south of the city which could form part of a larger Green Technology Park.																			Could lead to sustainability benefits if it contributes to regional waste self-sufficiency, but may bring

Issue / Option	Assumptions of implementation	Indicative Effect on SA Objectives																	Comments
																			impacts to local environmental quality.
Encourage redirection of Bromsgrove's latent demand for employment sites to site at Longbridge.																			Depends on nature and sustainability credentials of other sites in Bromsgrove.
Protect Nanjing on existing site.																			(As below)
Protect Nanjing on existing site and encourage Nanjing to intensify production to increase jobs and make more efficient use of land.																			Makes efficient use of existing local skills.
Protect Nanjing on existing site but encourage them to release surplus land in order to accommodate other industrial uses.																			Depends on nature of other industrial uses.
Establish specific training programmes/measures to address unemployment levels in the Longbridge area e.g. employment hub.																			
Encourage employment uses to meet the existing skills in the area.																			Does not address future needs of the local population.
Encourage business start-up and growth e.g. incubation/business premises.																			

Housing

Issue / Option	Assumptions of implementation	Indicative Effect on SA Objectives																	Comments
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	

Issue / Option	Assumptions of implementation	Indicative Effect on SA Objectives																		Comments
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
Find sites for housing outside the MG Rover site.	Assumption is that this will happen regardless, and the option means not to allow any housing on site.																			There are surrounding residential areas but it is uncertain whether they are of the appropriate quality and mix to attract target workers.
Allocate some of the former MG Rover site for housing.																				Contributes to sustainable mixed use development.
Allocate significant parts of former MG Rover site for housing to contribute towards Birmingham's growth and respond to out migration.																				Contributes to sustainable mixed use development.
Seek to meet regional housing needs by identifying suitable sites within Bromsgrove for housing including within its portion of the AAP area.	Bromsgrove still has a need for affordable housing despite moratorium.																			Depends on nature of other sites; East Works would seem to be a sustainable location.
Provide affordable housing only developments within the Bromsgrove portion of the former MG Rover site in line with current BDLP policy.																				May not provide suitable mix of household types in relation to the wider area (other types needed may include family homes, homes for elderly).
Provide for non-residential land uses within Bromsgrove's portion of the former MG Rover site.		?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	Depends what other land uses are considered.
Allocate housing on all or part of Bromsgrove's portion of the former MG Rover site.																				
Apply existing policies set out in Birmingham Unitary Development Plan and Bromsgrove District Local Plan.																				Provision of affordable housing is an important opportunity for redevelopment, but so is provision of other housing types (family, elderly, etc.). Must meet high sustainability
Set site-specific standards for affordable housing for different																				

Issue / Option	Assumptions of implementation	Indicative Effect on SA Objectives																	Comments
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
parts of the site relative to local circumstances.																				standards.
Seek to address specific housing needs identified in the Housing Needs Assessments of Birmingham and Bromsgrove and define these in the AAP (e.g. family homes and homes for older people).																				
Allocate specific sites for housing on parts of the former MG Rover site (e.g. East Works, West Works and North Works).																				
Allocate specific sites for housing within areas currently used for open space.																				Will not deliver social or environmental benefits, particularly given the scale of available PDL.
Apply the sequential approach to housing development set out within national planning guidance within the AAP (i.e. development to be started on all identified previously developed sites before permitting development on green field sites).																				
Permit some housing development on open spaces as part of a land swap to return the southern part of the former MG Rover site at East Works to open space.																				Makes little sense to develop greenfield site in order to return brownfield site to greenbelt and may increase pressure for further greenfield development.
Allocate housing sites as part of mixed use site allocations (e.g. including housing as part of a new centre).																				Positive sustainable development (as always dependent on construction standards).

Issue / Option	Assumptions of implementation	Indicative Effect on SA Objectives																		Comments
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
Allow the market to determine the mix by allowing a mix of uses on the site and not specifically allocating sites for different uses.		?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	May not deliver optimum mix of uses for required regeneration.
Encourage housing-led schemes at the expense of employment.		?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	Must be evidence based.
Allow the market to decide appropriate residential densities.																				Policy based densities are likely to be more appropriate to optimise development in relation to location.
Develop strict density criteria associated with urban design aspirations based on density policies in the UDP and Bromsgrove Local Plan.																				As above

Retailing and Community Services

Issue / Option	Assumptions of implementation	Indicative Effect on SA Objectives																		Comments
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
Create a new and accessible community focal point/centre with a range of basic services.																				Improved community facilities are needed; sustainable implementation is necessary.
Provide a new town square as part of the new local centre at Longbridge.																				
Locate a new centre close to the existing neighbourhood centre at Longbridge Lane/ Sunbury Road or other accessible locations.																				

Issue / Option	Assumptions of implementation	Indicative Effect on SA Objectives																	Comments
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
Provide further support to existing centres and facilities by limiting the amount of any new retail and community facilities and locating these adjacent to existing facilities in existing centres.																				Will provide little benefit to Longbridge residents, requiring them to continue to travel further afield for daily needs. Does not contribute to sustainable mixed use development.
Create a new neighbourhood centre in line with the planning consent already given on North Works. This would comprise a new small foodstore (2,500 sq.m. gross) and a limited number of small retail shops (e.g. newsagent, pharmacy, post office, take-away, bank and other services e.g. crèche, health centre).																				All three options will provide much needed improvements to existing facilities but may not deliver to regeneration potential (*subject to findings of retail study*). Must adhere to sustainable design standards.
Create a new local centre in line with the existing planning permission for the foodstore, but extending this to include further small shops, offices and leisure uses.																				
Create a new local centre but with a slightly larger foodstore (2,500 sq.m. to 3,500 sq.m).																				
Create a new local/district centre based on a large superstore (9,300 sq.m. gross) and a range of convenience and comparison shops up to 10,000 sq.m. gross).																				Will provide much needed improvements to existing facilities and may be more likely to deliver optimal regeneration potential (*subject to findings of retail study*). Must adhere to sustainable design standards.
Provide a town centre of up to 45,000 sq.m. This is based upon comparison and convenience																				

Issue / Option	Assumptions of implementation	Indicative Effect on SA Objectives																	Comments
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
retail shops, large superstore of up to 9,300 sq.m., banks, building societies and other financial and professional services, bars, restaurants and cafes, community facilities and services, leisure and other ancillary services all typically focused around a central core and comprising a total of up to 45,000 sq.m. of floorspace. This is subject to it being demonstrated that there will be no adverse impacts on existing centres.																			
Provide a site for non-food bulky goods retail e.g. IKEA or similar.																			Will encourage car-based shopping; explore options for home delivery only.
Provide required local facilities e.g. community hall/meeting area, youth and senior facilities, public library and sites for religious institutions within the former MG Rover site.																			
Allow development to contribute to improvement of existing community facilities where possible/appropriate.																			
Promote the provision of new comprehensive and accessible healthcare facilities, appropriate to the community, within a new centre.																			
Rely on existing facilities and location of provision to meet current and future needs and demands.																			

Issue / Option	Assumptions of implementation	Indicative Effect on SA Objectives																	Comments
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
Protect all existing areas of open space i.e. parks, open fields and other open spaces. Undertake enhancements of existing spaces.																			
Protect the quantity of open space but permit some relocation of uses across the AAP area.																			
Provide new open spaces within new residential developments.																			
Provide improved access to open space and recreation opportunities including the reservoirs and Green Belt land.																			
Identify a site for a new sports academy/sports training centre.																			
Identify a site/s for new commercially run leisure uses e.g. gym, skating, bingo, bowling, and leisure pool.																			
Allow new development to contribute to improving existing community, leisure and recreation facilities.																			
Provide new community, leisure and recreation facilities within the new development including within a new centre.																			
Protect and improve all existing sports pitches.																			
Permit some loss of pitches if suitable compensation is provided within the area for new	Cofton Park is existing facility; assumption is that new and compensatory facilities can be																		

Issue / Option	Assumptions of implementation	Indicative Effect on SA Objectives																	Comments
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
and improved recreation facilities e.g. Cofton Park.	created.																			
Promote the development of existing and new opportunities for community use of school facilities.																				
Protect existing community use arrangements.																				
Identify separate and new community facilities.																				
Protect and enhance existing areas of local play space.																				
Ensure that new play space provided is to a high standard and within any new development.																				
Meet requirements for new places generated by new housing development through extending and improving existing schools.																				
Meet requirements for new places generated by new housing development through providing new schools.																				
Encourage the provision of a wide range of new community facilities as part of any proposal to relocate Bournville College.																				

Environment

Issue / Option	Assumptions of	Indicative Effect on SA Objectives	Comments

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
Develop a set of design policies to guide new development within the Longbridge area.																				Appropriate modern sustainable design policies will be essential to delivering a sustainable development and removing or reducing many of the environmental impacts that development will otherwise bring.
Use existing design policies e.g. Birmingham's Places for All Supplementary Planning Guidance, Bromsgrove's SPG1 Residential Design Guide.																				Existing design guidance is positive but does not go far enough to remove or reduce environmental impacts.
Create new focal points e.g. landmark buildings and piazza/public square.																				
Ensure all places are attractive and safe e.g. with natural surveillance.																				
Create new linkages into and through the site.																				
Re-use any existing buildings and features of quality as part of any redevelopment.																				Mixed results: could restrain extent of regeneration, older buildings can be less resource efficient and current townscape quality is poor. Conversely re-use will preserve industrial heritage and reduce use of building materials.
Promote an Austin Heritage Centre, or other facility, to preserve the history of the former Longbridge plant and identify a site for the centre.																				
Seek to mitigate through demolition of redundant buildings.																				

Issue / Option	Assumptions of implementation	Indicative Effect on SA Objectives																		Comments
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
Seek to mitigate through alternative use of redundant buildings and other improvements e.g. repairs.						?	?	?	?	?	?	?	?			?		?	?	
Accept the place of industrial buildings as part of the character of Longbridge.						?	?	?	?	?	?	?	?			?		?	?	
Undertake a proactive programme of de-contamination of the entire site.			?			?			?	?			?	?	?	?		?	?	Options have a similar end result but proactive remediation is preferred. (Remediation is likely to generate some construction and demolition arisings, but is necessary to achieve efficient use of land and improve environmental quality. Arisings should be re-used or recycled wherever possible.
Decontaminate sites as and when definite end-users appear.			?			?			?	?			?	?	?	?		?	?	
Protect all existing ecological assets.			?			?			?	?			?		?	?				At this level results are similar, but improving existing and creating new habitats is preferable from an environmental point of view – may restrict development in some areas.
Prioritise the protection of ecological habitats and allow selected redevelopment (e.g. along the former Frankley branch line).			?			?			?	?			?		?	?				
Identify opportunities for improving existing and creating new habitats within the Longbridge area.			?			?			?	?			?		?	?				
Develop a comprehensive strategy to make the most of the potential of the rivers through opening up certain culverted sections which are linked with a wider Green Space Strategy.			?			?			?				?		?	?	?			May restrict developable area.

Issue / Option	Assumptions of implementation	Indicative Effect on SA Objectives																	Comments
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
Undertake limited works to protect the existing qualities of the rivers.																				Misses opportunity to improve natural functioning of water courses.
Create new water features within the redevelopment areas.																				As above, but may also lead to unnecessary water usage.
Protect the existing Scheduled Ancient Monuments and other archaeological features within the study area.																				
Encourage greater access to existing features of archaeological interest.																				

Transport

Issue / Option	Assumptions of implementation	Indicative Effect on SA Objectives																	Comments
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
Ensure all development maximises opportunities for access by sustainable modes of transport (walking, cycling and public transport) and reduces the need to travel.																				
Develop new multi storey car park for a Park and Ride facility to the north of Longbridge Lane as currently proposed by Centro.																				Potential loss of playing fields.
Develop a new Park and Ride facility to the south of Longbridge Lane as an integral part of any new centre.																				Degree to which any Park and Ride site will reduce air pollution or transport related carbon emissions is uncertain.
Create a new bus and rail																				

Issue / Option	Assumptions of implementation	Indicative Effect on SA Objectives																	Comments
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
interchange facility.																				
Enhance existing bus and rail infrastructure/services.																				
Improve access to and from Frankley by re-instating the branch line using heavy rail.	Route will result in damage / destruction of Balaam's Wood.																			
Provide bus rapid transit (high quality and high frequency bus which is operated on a dedicated corridor e.g. along rail line or alternative route).	Route *could* result in damage / destruction of Balaam's Wood.																			
Retain the route of the former branch line for potential use in the future.																				Limits developable area of site and decreases cross-site accessibility.
Incorporate the branch line as part of the land available for redevelopment.																				May lead to removal of a wildlife corridor unless replaced with a green link.
Retain rail access and allocate suitable uses to capitalise on the existing rail-head access at West Works.		?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	Depends on nature of activity using rail-head; large scale logistics do not represent a sustainable use in this location, however increased use of railfrieght in distribution is supported.
Redevelop the West Works site without using rail head.		?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	
Re-align A38 through the existing West Works site to permit greater through traffic flow and reduce the impact on existing and new local centre facilities.																				
Improve existing A38 to enhance capacity and accommodate development.																				
Develop a new high quality walking and cycling network.																				Although it constitutes new infrastructure, a new network

Issue / Option	Assumptions of implementation	Indicative Effect on SA Objectives																	Comments
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
Undertake selected modifications and enhancements to allow improved walking and cycling on existing infrastructure.																				brings many benefits including potential wildlife corridors.
Devise land uses and a scale of development within the capacity of the existing highway network.																				The road network that has historically been there to support the MG Rover manufacturing plant is still available for use by new development although it is expected that some improvements will be made to assist with the demands of the AAP.
Upgrade Longbridge Lane to improve access to the site from the A441.																				
Provide new Longbridge Link Road to the A441 through the Green Belt with the alignment to be determined (refer to link road options in Appendix D).																				
Carry out other improvements to the highway network to existing routes and alignments e.g. Junction 4, M5/A38 (Lydiate Ash).																				
Provide appropriate public transport infrastructure and services to support proposed land uses.																				
Retain the railhead facility at West Works to encourage rail freight transport opportunities.																				Large scale logistics do not represent a sustainable use in this location, however increased use of railfrieght in distribution is supported.
Include the provision for a new link road to help connect the former MG Rover site and the M42 (Junction 2).																				

Issue / Option	Assumptions of implementation	Indicative Effect on SA Objectives																	Comments
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
Make access improvements to individual parts of the former MG Rover site and allow an improved transport network to absorb the new development traffic.																			

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Appendix F: Preferred Options Assessment

Please see insert.

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Appendix G: Choosing between Alternatives

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Appendix G: The basis for selection of Preferred Options (options appraisal matrix provided by BCC)

	Employment Led **Option 1**	**Mixed-Use Employment Led** **Option 2**	**Mixed-Use Town Centre Led** **Option 3**	**Mixed-Use Residential Led** **Option 4**	**Implications for Preferred Option**
Conformity with AAP vision and objectives	**Overall inconsistent** although it may allow some economic regeneration that misses the opportunities to provide a sustainable mix use development	**Consistent**, although likely to extend beyond the plan period	**Consistent**, although significantly does not provide a Regional Investment Site	**Overall consistent**, although significantly does not provide a Regional Investment Site and the 10,000 jobs target may not be reached.	Mixed use options with high levels of employment most likely to deliver vision and meet objectives
Conformity with Regional Spatial Strategy	**Generally consistent** with the policies to: - protect industrial and employment land; - support the regional economy; and - develop a Regional Investment Site within Birmingham to Worcester CTB.	**Generally consistent** with the policies to - protect industrial and employment land support the regional economy; - develop a 25ha Regional Investment Site within Birmingham to Worcester CTB; and - development of new retailing/leisure.	**Inconsistent** with some policies, namely to: - protect industrial and employment land; - create a 25ha Regional Investment Site within the Birmingham to Worcester Central Technology Belt; and - policies on retail and the approach to leisure.	**Inconsistent** with some policies, namely to: - protect industrial and employment land; and - create a 25ha Regional Investment Site within the Birmingham to Worcester Central Technology Belt. The level of retail is only acceptable if it meets local need	Considered essential for the preferred option to provide a Regional Investment Site (of at least 25 hectares in an appropriate location and configuration) and to not exceed 10,000m^2 gross of retail floor space (non-food). The preferred option will also need to appropriately justify the loss of industrial and employment land. Proposals for housing in Bromsgrove would need to be considered as within boundary of Major Urban Area.
Conformity with Birmingham	**Consistent** with UDP	Overall **neutral**.	**Inconsistent in part** with	**Inconsistent** in part with	Loss of industrial land to be

	Employment Led Option 1	Mixed-Use Employment Led Option 2	Mixed-Use Town Centre Led Option 3	Mixed-Use Residential Led Option 4	Implications for Preferred Option
Unitary Development Plan	policies to: - protect industrial and employment land; - provide an adequate supply of quality industrial and employment land; - meet the objectives of the High -Technology Corridor (Central Technology Belt); and - protect and enhance existing centres.	**Partly Inconsistent** with UDP policies to protect industrial and employment land. **Generally consistent** with UDP policies to: - provide an adequate supply of quality industrial and employment land; - meet the objectives of the High -Technology Corridor (Central Technology Belt). **Neutral** when assessed against UDP retail policies.	UDP policies to: - protect industrial and employment land; - provide an adequate supply of quality industrial and employment land; - meet the objectives of the High -Technology Corridor (Central Technology Belt); and - protect and enhance existing centres (retail and leisure).	UDP policies to: - protect industrial and employment land - provide an adequate supply of quality industrial and employment land; - meet the objectives of the High -Technology Corridor (Central Technology Belt); and - protect and enhance existing centres (retail and leisure).	fully justified. Scale of retail development should not materially impact on existing centres.
Bromsgrove District Local Plan	**Consistent** with BDLP policies to: - protect industrial and employment land; and - protect and enhance existing centres. **Consistent** with the Council's housing moratorium.	**Inconsistent** with some BDLP policies to protect industrial and employment land. **Consistent** with BDLP policies to protect and enhance existing centres. **Inconsistent** with the Council's housing	**Inconsistent** with some BDLP policies to: - protect industrial and employment land; and - protect and enhance existing centres. **Inconsistent** with the Council's housing moratorium.	**Inconsistent** with BDLP policies to protect industrial and employment land. **Neutral** when assessed against BDLP retail policies (providing it is demonstrated there is no material harm to existing centres – this needs to	Options involving housing and retail uses need to consider implications of housing moratorium and impact on centres in Bromsgrove.

	Employment Led Option 1	Mixed-Use Employment Led Option 2	Mixed-Use Town Centre Led Option 3	Mixed-Use Residential Led Option 4	Implications for Preferred Option
		moratorium.		be validated). **Inconsistent** with the Council's housing moratorium.	
Conformity Birmingham with Community Strategy	**Generally consistent -** supports BCC's objective of creating work opportunities, business development, and a successful and sustainable place in the world economy and providing a supply of suitable industrial land. It does not however create a vibrant urban village, or contribute to population increases, or the supply of affordable housing.	**Generally consistent** - supports BCC's: - objective of creating work opportunities and business development; - successful and sustainable place in the world economy and providing a supply of suitable industrial land; and - strategy to create vibrant urban village and increase the supply of affordable housing.	**Generally consistent -** supports BCC's: - objective of creating work opportunities and business development; - successful and sustainable place in the world economy and providing a supply of suitable industrial land; and - strategy to create vibrant urban villages and increase the supply of affordable housing.	**Generally consistent -** supports BCC's: - objective of creating work opportunities and business development; - successful and sustainable place in the world economy and providing a supply of suitable industrial land; and - strategy to create vibrant urban villages and increase the supply of affordable housing.	The options – particularly mixed-use options 2 to 4 - are generally consistent with BCC's Community Strategy.
Conformity with Bromsgrove Community Plan	**Consistent** with BDC's Community Plan.	**Generally consistent** with BDC's Community Plan although it does less to assist in promoting Bromsgrove District as a business location.	**Generally consistent** with BDC's Community Plan although it does less to assist in promoting Bromsgrove District as a business location.	**Generally consistent** with BDC's Community Plan although it does less to assist in promoting Bromsgrove District as a business location.	The options are generally consistent with BDC's Community Strategy.

	Employment Led Option 1	Mixed-Use Employment Led Option 2	Mixed-Use Town Centre Led Option 3	Mixed-Use Residential Led Option 4	Implications for Preferred Option
Conformity with Sustainability Appraisal	**Inconsistent –** while the option provides substantial regional economic benefits does not fully respond to sustainable advantages of mixed-use development at a local level or address social or environmental considerations. This option is likely to deliver considerable benefits to the area in economic terms together with significant negative environmental effects.	**Generally Consistent** – provides substantial regional and important local benefits. This option is likely to deliver considerable benefits to the area in sustainability terms; including minor local environmental improvements.	**Consistent –** provides the greatest local benefits. The option would impact other centres and this aspect is unsustainable. Likely to deliver the equal greatest benefits to the area in sustainability terms (with option 4), providing the most significant opportunity for environmental improvements.	**Consistent -** provides important regional and substantial local benefits but missed opportunities for the region especially in terms of economic benefits. Likely to deliver the equal greatest benefits to the area in sustainability terms (with option 3), providing the most significant opportunity for environmental improvements.	**Generally consistent**. Mixed use options are likely to deliver the greatest benefits to the area in sustainability terms. Extensive mitigation measures will be required due to lack of detail on sustainability standards with regard to construction and operation of development, particularly in terms of energy and resource efficiency.
Viability & Deliverability	**Not viable or deliverable.** Large RIS will not be delivered until well after Plan period. On site infrastructure / reclamation costs and existing use values significantly exceed values created.	**Minor shortfall** in funding viability.	**Viable and deliverable.**	**Viable and deliverable.**	Mixed use options with a reasonable amount of housing and retail needed to ensure development is viable and deliverable.
Compatibility with	**Moderate support** for this option from the	**Highest level of support** for this option from the	**High level of support** for this option from the	**Low level of support** for this option from the	Option 2 has the highest level of support and the lowest

	Employment Led Option 1	Mixed-Use Employment Led Option 2	Mixed-Use Town Centre Led Option 3	Mixed-Use Residential Led Option 4	Implications for Preferred Option
consultation responses – public views	survey with 44.7% who strongly agree or agree. **Moderate levels of dissatisfaction** for this option from the survey with 36.8% who are against or are strongly against.	survey with 60.3% who strongly agree or agree. **Lowest levels of dissatisfaction** for this option from the survey with 21% who are against or are strongly against.	survey with 51.5% who strongly agree or agree. **Moderate levels of dissatisfaction** for this option from the survey with 29.8% who are against or are strongly against.	survey with 36.3% who strongly agree or agree. **High levels of dissatisfaction** for this option from the survey with 44.9% who are against or are strongly against.	level of dissatisfaction, the second most popular option is Option 3, followed by Option 1, and Option 4. The preferred option should ensure that the 10,000 jobs target is met first, and then consider opportunities for housing and other uses.
Compatibility with consultation – views of statutory and other bodies / groups	**Highest level of support** from statutory consultees in particular from Government Office of the West Midlands (GOWM), Regional Assembly, Worcestershire County Council (WCC). The reasons included: - provides the greatest number of jobs and consistent with planning policies industrial and employment land. and **-** protects existing centres. **Low level of opposition** from statutory consultees and key stakeholders.	**Second highest level of support** from statutory consultees and key stakeholders in particular from Regional Assembly and Central Technology Belt. **Low level of opposition** from statutory consultees and key stakeholders.	**Low level of support** from statutory consultees. Key supporters included Advantage West Midland (AWM). **Highest level of opposition** from statutory consultees and key stakeholders in particular from GOWM, Regional Assembly, WCC, Central Technology Belt and Highways Agency. The reasons include the level of retail development and the lack of a Regional Investment Site.	**Low level of support** from statutory consultees. Key supporters included St Modwen. **Moderate level of opposition** with this option from Regional Assembly, and Highways Agency. The reasons include the level of retail development, the lack of a Regional Investment Site, the lack of job creation, the level of housing.	The preferred option should include significant elements of Option 2 with careful consideration given to additional housing and retail.

	Employment Led **Option 1**	**Mixed-Use Employment Led** **Option 2**	**Mixed-Use Town Centre Led** **Option 3**	**Mixed-Use Residential Led** **Option 4**	**Implications for Preferred Option**
Overall Evaluation of option	Generally consistent with National, regional and local policy. However, not recommended for preferred option for the following reasons: - inconsistent with AAP vision and objective, and - not viable or deliverable	Consistent with: - AAP vision and objectives; - National and regional policy; and most local planning policy; - Community strategies; - Sustainability appraisal; Highest level of overall support from the consultation responses. However, need to improve deliverability and viability.	Large town centre not recommended given: - significant inconsistencies compared to national and regional policy; - inconsistent with local planning policy.	Lack of RIS and loss of employment land. Inconsistent with Regional and local policies and recommended.	The results provide support for a preferred option that is based on option 2, to provide 10,000 jobs and a 25ha Regional Investment Site, but with a greater mix of uses, namely additional housing and retail to support deliverability and viability and provide a wider range of social, economic and environmental benefits.

Appendix H: Policies, Plans and Programmes

List of Policies, Plans and Programmes Reviewed for the SA/SEA

International

European Union **Birds Directive** (79/409/EEC)

European Union **Habitats Directive** (92/43/EEC)

European Union **Water Framework Directive** (2000/60/EC)

European Union **Waste Framework Directive** (2006/12/EC) and derivatives such as the Landfill Directive (99/31/EC)

European Landscape Convention (Council of Europe, 2000)

The **Lisbon Agenda** – European Union Economic Agenda 2004 – 09

Objective 1 and 2 – European Structural and Cohesion Funds 2007 – 13

National

Securing the Future (Defra, 2005)

Air Quality Strategy *for England, Scotland, Wales and Northern Ireland* (Defra, 2007)

Working with the grain of nature*: a biodiversity strategy for England* (Defra, 2002)

Waste Strategy *for England* (Defra, 2007)

Circular 06/2005: Biodiversity and Geological Conservation (ODPM, 2005)

UK Climate Change Programme (DEFRA, 2006)

Energy White Paper ***Meeting the Energy Challenge*** (DTI, 2007)

Barker Review of Housing Supply (ODPM, 2004)

Sustainable Communities*: Building for the Future* (ODPM, 2003)

Urban White Paper: ***Our Towns and Cities****: the Future: Delivering an urban renaissance* (DETR, 2000)

Draft Strategy for Sustainable Construction (DTI, 2007)

Planning Policy Statement (PPS) 1: Delivering Sustainable Development

Planning and Climate Change: *Supplement to Planning Policy Statement 1 (ODPM, 2006)*

Planning Policy Guidance (PPG) 2: Green Belts

PPS3: Housing

PPG4: Industrial, Commercial Development and Small Firms

PPG5: Simplified Planning Zones

PPS6: Planning for Town Centres

PPS7: Sustainable Development in Rural Areas

PPG8: Telecommunications

PPS9: Biodiversity and Geological Conservation

Planning for Biodiversity and Geological Conservation: *A Guide to Good Practice* (ODPM, 2006)

PPS10: Planning for Sustainable Waste Management

PPS11: Regional Spatial Strategies

PPS12: Local Development Frameworks

PPG13: Transport

PPG14: Development on Unstable Land

PPG15: Planning and the Historic Environment

PPG16: Archaeology and Planning

PPG17: Planning for Open Space, Sport and Recreation

PPG18: Enforcing Planning Control

PPG19: Outdoor Advertisement Control

PPG20: Coastal Planning

PPS22: Renewable Energy

Planning for Renewable Energy: *A Companion Guide to PPS22 (ODPM, 2004)*

PPS23: Planning and Pollution Control

PPG24: Planning and Noise

PPS25: Development and Flood Risk

Regional

Regional Sustainable Development Framework: A Sustainable Future for the West Midlands (2006)

Regional Biodiversity Strategy (2005) for the West Midlands

Regional Cultural Strategy (2001 – 2006) for the West Midlands

***Streets for All* (West Midlands)** (English Heritage 2005)

West Midlands Regional Economic Strategy: Connecting to Success (2007)

West Midlands Regional Energy Strategy (2004)

West Midlands Regional Housing Strategy (2005)

Regional Water Resources Strategy (2005)

Sign up for Sport - *a Regional Plan for Sport in the West Midlands* (Sport England, 2004 – 08)

West Midlands Regional Spatial Strategy (2004) (formerly RPG11)

Draft RSS Phase One Revision (The Black Country) (2006)

Draft RSS Phase Two Revision (2007)

Local

Worcestershire County Structure Plan (1996 – 2011)

West Midlands Local Transport Plan (2006)

Worcestershire Local Transport Plan (2006)

Visions: A Transport Strategy for Birmingham (2000)

Twenty Year Public Transport Strategy (Centro, 2003)

Birmingham UDP (2005)

Longbridge Development Framework (BCC Supplementary Planning Guidance, January 2003)

Developing Birmingham – An Economic Strategy for the City (2005 – 2015)

Industrial Land Review (BCC, 2003)

Nature Conservation Strategy for Birmingham (BCC Supplementary Planning Guidance, November 1996)

Archaeology Strategy (BCC Supplementary Planning Guidance, December 2003)

Birmingham and Black Country Biodiversity Action Plan (Wildlife Trust, 2000)

Biodiversity Action Plan for Worcestershire (WCC, 1999)

Black Country to Lickey Hills Biodiversity Enhancement Area Profile (Consultation Draft, 2006)

Birmingham's **Air Quality Action Plan** (2006)

Bromsgrove District Local Plan (2004)

Birmingham City Local Development Scheme 2006 – 09

Bromsgrove District Local Development Scheme 2004 – 07

Birmingham Vision 2026 (2007), the draft Community Strategy for Birmingham

Improving Northfield (2005 – 06), the District Community plan

Bromsgrove Sustainable Community Strategy (2007 – 2010)

Appendix I: Baseline Data

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Appendix J: SA Framework

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No	Objective	Indicators *(and source*)*, with target if applicable	Frequency
1	Reduce poverty and social exclusion, promote a strong community where people feel they have a say in the future, and encourage equitable accessibility to services. *(SEA Directive: population; RSDF: participation, poverty, access)*	a) Numbers of social and community enterprises *(AAP AMR)* b) Lower layer Super Output Areas that rank in the most deprived 10% and 25% in the country *(Neighbourhood Statistics)* c) Households finding it very or fairly difficult to get to a corner shop or supermarket; post office; childcare; doctor or hospital *(AAP AMR/ WMRO)* a) Percentage of people who feel they can influence decisions affecting their own local area *(ONS)*	a) Annual b) Annual c) Annual d) Annual
2	Improve health and reduce health inequalities by encouraging and enabling healthy lifestyles and protecting health, as well as providing equitable access to health services and high quality open spaces. *(SEA Directive: human health; RSDF: health)*	a) Percentage of people walking and cycling to work or school (*ONS*) b) Access to a GP or primary care professional (*DCLG*) c) Participation in sport and cultural activities (*ONS / DCMS)*	a) Annual b) Annual c) Annual
3	Improve community safety, and reduce crime, antisocial behaviour and the fear of crime. *(SEA Directive: population; RSDF: crime)*	*a)* Domestic burglaries per 1,000 households *(Audit Commission)* *b)* Violent offences committed per 1,000 population *(Audit Commission)* c) Percentage of residents who feel 'fairly safe' or 'very safe' after dark while outside in their local area (*ONS*)	a) Annual b) Annual c) Annual
4	Support the local community by maximising use of local labour and support adaptation to changing employment circumstances. Encourage investment and engagement to support learning and raise levels and diversity of skills.	a) Percentage of working age people in workless households (*ONS*) b) Proportion of young people (18 – 24) in full-time education or employment (*Audit Commission*)	a) Annual b) Annual c) Annual

	(RSDF: skills, employment, investment)	c) Business links with local schools, colleges and universities (*AWM*)	
5	Encourage regeneration and economic growth in and around Longbridge that does not compromise the ability of future generations to meet their needs, and improve equitable access to job opportunities. *(RSDF: growth, employment, urban development)*	a) Growth in number employed in local businesses (*ONS*) b) Inward investment as percentage of GVA (*AWM*) c) Growth rates and linkages in A38 High Technology Corridor (*AWM*)	a) Annual b) Annual c) Annual
6	Promote and support the development of new technologies, particularly those with high value and low impact, to encourage enterprise and innovation with a sense of environmental and social responsibility. *(RSDF: technology, innovation, responsibility)*	d) Research and development, and employment in high and medium-high technology industries (*DBERR*) e) Number of new VAT registrations in Longbridge as percentage of total (annual) (*AWM*)	a) Annual b) Annual
7	Make efficient use of existing transport infrastructure, and prioritise modal shift to sustainable, integrated forms of public transport, cycling and walking. Ensure equitable access to public transport. *(SEA Directive: material assets; RSDF: transport, planning)*	a) Annual average traffic flow on local network (*BCC*) b) Journey times between key employment areas and key transport interchanges (*BCC*) c) Percentage increase in use of public transport, reason for and distance travelled (*Audit Commission)*	a) Annual b) Annual c) Annual
8	Optimise the use of previously developed land and buildings, remediate contaminated land and create high quality built environments that incorporate green space, encourage biodiversity, promote local distinctiveness and sense of place. *(SEA Directive: material assets, soil; RSDF: land use, urban development)*	a) Vacant land and properties and derelict land brought back into use (*BCC*). Target: 75% housing by 2005 & 40% by 2011 (BDC Local Plan) b) Achievement of Accessible Natural Greenspace Standards (*NE*). Target: Less than 300 metres (5 minutes walk) from home c) Contribution to improvement in streetscene: furniture, signage, lighting, public art (*BCC* / *AAP AMR*). Target: Identify & protect 5 urban	a) Annual b) Annual c) Annual d) Annual

		wasteland sites of biodiversity importance by 2010 d) Percentage of schemes delivering streetscene improvements (*AAP AMR*)	
9	Provide high quality affordable housing, ensuring that all new buildings are environmentally sound and meet BREEAM standards. *(SEA Directive: population, material assets; RSDF: housing, standards)*	a) Affordable housing: house price / earnings affordability ratio (*Audit Commission*). Target: BCC: 35% affordable housing provision on sites >1ha (46,500 total dwellings, 91-11); BDC 100% b) Percentage new buildings meeting BREEAM Excellent / Code for Sustainable Homes (*AAP AMR*). Target: Longbridge AAP: 100% c) Provision of recycling facilities integral / close to homes (*AAP AMR*)	a) Annual b) Annual c) Annual
10	Use renewable sources of energy and encourage energy efficiency, use resources prudently, making the most of local availability, and reduce contributions to climate change. *(SEA Directive: climatic factors; RSDF: climate change, energy, conservation, local sourcing)*	*a)* Carbon emissions per dwelling (*Ecological Budget UK)* b) Percentage of energy use from renewable sources (*AAP AMR* / *DBERR*) c) Thermal efficiency of housing stock (*DBERR*). Target: 30% increase in domestic energy efficiency by 2011 (BDC Local Plan)	a) Annual b) Annual c) Annual
11	Conserve and, where appropriate, enhance the historic, industrial and cultural heritage of Longbridge and the surrounding area. *(SEA Directive: cultural heritage; RSDF: environmental assets, culture and recreation)*	*a)* Loss or damage to archaeological resource (*AAP AMR* / *BCC)* b) Number of buildings of historic or architectural interest renewed and reused (*EH*) c) Contribution to retaining and promoting the area's industrial heritage (*AAP AMR*)	a) Annual b) Annual c) Annual
12	Maintain and enhance the quality and character of landscape and townscape. *(SEA Directive: landscape;*	a) Condition and extent of landscape features: trees, hedges, ponds (*AAP AMR*)	a) Annual b) Annual

	RSDF: environmental assets, land use, stewardship)	b) Percentage of highways that are either of a high or acceptable level of cleanliness (*BCC*) c) Use of detailed characterisation studies to inform major development proposals (*BCC*)	c) Annual
13	Reduce air pollution and improve air quality. *(SEA Directive: air; RSDF: pollution)*	a) Annual average nitrogen dioxide concentration (*NAEI*). Target: 30 $\mu g/m^3$ b) Number of days per year when PM10 pollution is moderate or higher (*BCC*). Target: Not to exceed 35 times p.a.	a) Annual b) Annual
14	Protect, enhance and increase the biodiversity of Longbridge and the surrounding area. *(SEA Directive: biodiversity; RSDF: biodiversity)*	a) Net change in natural / semi-natural habitats (*NE*) b) Recorded sightings of a selection of priority species: badgers, otters, pipistrelle bats, song thrushes, tree sparrows and water voles (*EcoRecord*) c) Trends in plant biodiversity (*EcoRecord*) d) Change in condition of Bittell Reservoir SSSI (*NE*)	a) Annual b) Annual c) Annual d) Annual
15	Protect water resources and improve water quality. *(SEA Directive: water; RSDF: conservation)*	*a)* Domestic water use and peak demand (*Severn Trent)* b) Water leakage rates from mains and customer pipes (*Audit Commission*) c) Biological and chemical water quality of the River Rea (*EA*). Target: at least RE4	a) Annual b) Annual c) Annual
16	Avoid increasing, and take opportunities to reduce flood risk, and prepare for other impacts of climate change. *(SEA Directive: climatic factors; RSDF: climate change)*	a) Number of people, properties and businesses at risk of flooding (*EA*) b) Damage to property from storm events (*EA*)	a) Annual b) Annual
17	Minimise waste creation and optimise the re-use and	a) Per capita household waste production (*ONS*)	a) Annual

	recycling of waste. *(SEA Directive: material assets; RSDF: waste)*	b) Amount of construction and demolition waste going to landfill (*DEFRA*) c) Percentage household waste recycled, composted, recovered, and landfilled (*ONS*). Target: 18% waste recycled by 2006 (BDC Local Plan)	b) Annual c) Annual
18	Use local supply sources and support the sustainable extraction, re-use and recycling of minerals and aggregates resources. *(SEA Directive: material assets, soil; RSDF: local sourcing, conservation)*	a) Proportion of secondary / recycled aggregates used in new building (*DEFRA*) b) Amount of material / equipment sourced from local and regional suppliers (*AAP AMR*) c) Ecological footprint of Birmingham and Bromsgrove Local Authority Areas (Longbridge ward when data becomes available) (*Ecological Budget UK)*	a) Annual b) Annual c) Annual

***** In this column, information in brackets suggests the body or programme that could generate the data required. AAP AMR denotes the Area Action Plan's Annual Monitoring Report.

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Appendix K: SA Objectives and Supporting Questions

SA Objectives and Questions for Longbridge	
1	Reduce poverty and social exclusion, promote a strong community where people feel they have a say in the future, and encourage equitable accessibility to services. *(SEA Directive: population; RSDF: participation, poverty, access)*
Q	Will it reduce poverty and help improve earnings? Will it address the needs of the most deprived sections of the local community? Will it encourage engagement in community activities and increase the ability of people to influence decisions? Will it improve accessibility to those services least available to the local community?
2	Improve health and reduce health inequalities by encouraging and enabling healthy lifestyles and protecting health, as well as providing equitable access to health services and high quality open spaces, sports and recreational facilities. *(SEA Directive: human health; RSDF: health)*
Q	Will it reduce health inequalities? Will it improve access to high quality health facilities? Will it encourage healthy lifestyles and provide the necessary facilities to promote this, such as open spaces, sports facilities and active travel?
3	Improve community safety, and reduce crime, antisocial behaviour and the fear of crime. *(RSDF: crime)*
Q	Will it improve road safety and reduce the incidence of accidents? Will it improve the safety environment (street lighting, visibility, etc.)? Will it reduce actual levels of crime? Will it reduce the fear of crime?
4	Support the local community by maximising use of local labour and support adaptation to changing employment circumstances. Encourage investment and engagement to support learning and raise levels and diversity of skills. *(RSDF: skills, employment, investment)*
Q	Will it provide appropriate employment opportunities? Will it improve the qualifications and skills of the local community, particularly young people? Will it increase learning participation and adult education?
5	Encourage regeneration and economic growth in and around Longbridge that does not compromise the ability of future generations to meet their needs, and improve equitable access to job opportunities. *(RSDF: growth, employment, urban development)*

SA Objectives and Questions for Longbridge	
Q	Will it reduce unemployment overall as well as long-term unemployment? Will it provide job opportunities to those most in need of employment? Will it improve business development and resilience, and enhance business competitiveness? Will it improve productivity and gross value added, and promote key growth sectors?
6	Promote and support the development of new technologies, particularly those with high value and low impact, to encourage enterprise and innovation with a sense of environmental and social responsibility. *(RSDF: technology, innovation, responsibility)*
Q	Will it encourage industrial diversification and inward investment? Will it encourage good employee relations and management practices? Will it encourage ethical trading?
7	Make efficient use of the existing road network and reduce dependence on private vehicular travel. Prioritise modal shift to equitable, accessible, sustainable, and integrated forms of public transport, cycling and walking, and increase the provision of public transport networks and passenger facilities. Avoid adverse impacts on the motorway network by providing access appropriate to the required levels of growth. *(SEA Directive: material assets; RSDF: transport, planning)*
Q	Will it improve accessibility to work and services by public transport, walking and cycling? Will it reduce the effect of traffic congestion on the economy and the wider road network? Will it facilitate efficiency in freight distribution?
8	Optimise the use of previously developed land and buildings where possible and practical, remediate contaminated land and create high quality built environments that incorporate a network of accessible interconnected sites and green spaces, enhance biodiversity and maximise opportunities for achieving BAP targets, and promote local distinctiveness and sense of place. *(SEA Directive: material assets, soil; RSDF: land use, urban development)*
Q	Will it improve the satisfaction of people with their neighbourhoods as a place to live? Will it reduce the amount of derelict land? Will it improve the landscape and ecological quality and character of the area?
9	Provide high quality affordable housing, ensuring that all new buildings are environmentally sound and meet BREEAM standards. *(SEA Directive: material assets; RSDF: housing, standards)*
Q	Will it increase the range and affordability of housing for all social groups? Will it improve affordability of essential services to the home? Will it reduce homelessness and the number of unfit homes? Will it reduce carbon emissions by reducing energy consumption and incorporating sustainable design measures?

SA Objectives and Questions for Longbridge	
10	Use renewable sources of energy and encourage energy efficiency, use resources prudently, making the most of local availability, and reduce contributions to climate change. *(SEA Directive: climatic factors; RSDF: climate change, energy, conservation, local sourcing)*
Q	Will it lead to an increased proportion of energy needs being met from renewable sources? Will it reduce emissions of ozone depleting substances? Will it encourage demand for locally produced products and services?
11	Conserve and, where appropriate, enhance the historic, industrial and cultural heritage of Longbridge and the surrounding area. *(SEA Directive: cultural heritage; RSDF: environmental assets, culture and recreation)*
Q	Will it protect and enhance sites, features and areas of historical, archaeological and cultural value? Will it improve understanding of the historical development of the area?
12	Maintain and enhance the quality and character of landscape and townscape. *(SEA Directive: landscape; RSDF: environmental assets, land use, stewardship)*
Q	Will it improve the landscape and ecological quality and character of the area? Will it improve the functionality and form of urban spaces?
13	Reduce air pollution and improve air quality. *(SEA Directive: air; RSDF: pollution)*
Q	Will it reduce the number of days where air pollution is moderate or higher? Will it reduce the overall amount of pollution to air?
14	Protect, enhance and increase the biodiversity of Longbridge and the surrounding area. *(SEA Directive: biodiversity, flora and fauna; RSDF: biodiversity)*
Q	Will it conserve and enhance natural / semi-natural habitats? Will it conserve and enhance species diversity, and in particular to avoid harm to protected species? Will it maintain and enhance the integrity and interconnectivity of sites designated for their nature conservation interest?
15	Protect water resources and improve water quality. *(SEA Directive: water; RSDF: conservation)*
Q	Will it reduce water consumption and improve efficiency of consumption? Will it improve the quality of nearby and indirectly affected waters?
16	Avoid increasing, and take opportunities to reduce flood risk, and prepare for other impacts of climate change. *(SEA Directive: climatic factors; RSDF: climate change)*
Q	Will it minimise the risk of flooding from watercourses to people and property? Will it reduce the risk of damage to property from storm events, including surface water flooding and discharges?

SA Objectives and Questions for Longbridge	
17	Minimise waste creation and optimise the re-use and recycling of waste. *(SEA Directive: material assets; RSDF: waste)*
Q	Will it lead to reduced consumption of materials and resources? Will it reduce household waste and increase waste recovery and recycling?
18	Use local supply sources and support the sustainable extraction, re-use and recycling of minerals and aggregates resources. *(SEA Directive: material assets, soil; RSDF: local sourcing, conservation)*
Q	Will it reduce waste in the construction industry? Will it encourage the take-up of recycled and sustainable materials in the construction industry?

Appendix L: Detailed Assessment Matrices

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The following pages should be read in conjunction with the Longbridge AAP Submission Document where the full policy wordings can be found.

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Appendix M: Radar Analyses

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Appendix N: Cumulative Effects Assessment

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