

Royal Borough of Windsor and Maidenhead Local Development Framework

Sustainability Appraisal: Sustainable Design and Construction Supplementary Planning Document (SPD)



June 2009

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Contents

Foreword

Foreword

The purpose of the Sustainable Design and Construction Supplementary Planning Document (SPD) is to provide additional information to support existing policy and guidance on the sustainability performance of buildings and spaces. It extends to all forms of development types, whether new build, the refurbishment of an existing property or the spaces between buildings. More information can be found at http://www.rbwm.gov.uk/web/pp_sustainable_design_and_construction_spd.htm

One of the aims of the Council in producing the SPD has been to meet the highest possible standards of sustainability. The emerging SPD has therefore been subjected to a thorough scrutiny through the process of Sustainability Appraisal (SA).

This SA Report is being published alongside the SPD and seeks to

- Consider different options of providing information on Sustainable Design and Construction.
- Assess and predict the sustainability effects of relevant saved Local Plan Policies and the different options.
- Maximise beneficial effects and reduce adverse effects of the saved Local Plan Policies and the SPD.
- Develop proposals for monitoring the SPD.

Further information and details on the SA process can be found on the Councils website at http://www.rbwm.gov.uk/web/pp_sustainability_appraisal.htm

Glossary

Glossary

Adverse Impact	Where a development / policy would result in harmful effects.
Baseline Data	The data used as a reference with which to compare future observations or results.
Biodiversity	The richness and variety of living things (i.e. plants, birds, animals, fish and insects etc.), which exist in a given area, and the habitats that support them.
Consultation Body	Authorities which, because of their environmental responsibilities, are likely to be concerned by effects of implementing plans and programmes and must be consulted at specific stages of the SEA. The Consultation Bodies designated in the SEA regulations are English Heritage, Natural England and the Environment Agency.
Core Strategy DPD	The Development Plan Document within the Council's Local Development Framework which sets the long-term vision and objectives for the area. It contains a set of strategic policies that are required to deliver the vision including the broad approach to development.
Cumulative Effects	These effects can be caused by a number of developments which, individually and in themselves, may have insignificant effects, but together combine to create a significant effect.
Development Plan	Consists of the South East Plan and Development Plan Documents contained within the Council's Local Development Framework. Until the LDF is fully in place it will also include 'saved' policies from the Council's Local Plan.
Development Plan Document (DPD)	A spatial planning document within the Council's Local Development Framework which set out policies for development and the use of land. Together with the Regional Spatial Strategy they form the development plan for the area. They are subject to independent examination.
Environmental Report	A document required by the SEA Directive, as part of an environmental assessment, that identifies, describes and evaluates the likely effects on the environment of implementing a plan or programme.
Habitat	A site or areas inhabited by wild flora and fauna upon which they are reliant for their continued free existence.
Habitat Regulations Assessment	The name given to the evaluation of potential effects of a proposed project or plan on a Natura 2000 site (a site designated for its international importance to nature conservation).
Indicator	Measure of variables over time, often used to measure achievement of objectives.
Local Development Framework (LDF)	Consists of a number of documents which together form the spatial strategy for development and the use of land.
Local Plan	A Borough-wide planning document setting out policies for development and the use of land. It will be replaced by the Local Development Framework.
Mitigate	To alleviate or to moderate a quality or condition that is harmful or unpleasant.
Mitigation Measures	Measures designed and intended to reduce adverse effects that cannot be avoided.

Glossary

Objective	A statement of what is intended, specifying the desired direction of change in trends.
ODPM	Office of the Deputy Prime Minister
Planning Policy Guidance (PPG)	A series of notes issued by the Government, setting out policy guidance on different aspects of planning. They will be replaced by Planning Policy Statements
Planning Policy Statement (PPS)	A series of statements issues by the Government, setting out policy guidance on different aspects of planning. They will replace Planning Policy Guidance Notes.
PPPSIs	Plans, policies, programmes, strategies and initiatives.
Previously Developed Land (PDL)	Land which is or was occupied by a building (excluding those used for agriculture and forestry). It also includes land within the curtilage of the building, for example a house and its garden would be considered to be previously developed land.
RBWM	Royal Borough of Windsor & Maidenhead
SA	Sustainability Appraisal
Scoping	The process of deciding the scope and level of detail of an SA, including sustainability effects and alternatives which need to be considered, the assessment methods to be used, and the structure and contents of the SA Report.
SEA Directive	European Directive 2001/42/EC 'On the assessment of the effects of certain plans and programmes on the environment.'
SEA Regulations	<i>The Environmental Assessment of Plans and Programmes Regulations, 2004</i>
Soundness (of the plan)	A judgement of quality and procedure based upon key elements of the plan-making process as set out in the Government publication 'Planning Policy Statement 12: Local Development Frameworks'.
South East Plan (SEP)	The regional plan produced by the South East England Regional Assembly which forms part of the Development Plan for the borough.
Strategic Environmental Assessment (SEA)	A tool for integrating environmental considerations into decision-making by ensuring that significant environmental effects of the decision are taken into account.
Supplementary Planning Document (SPD)	Provides supplementary guidance to policies and proposals contained within Development Plan Documents. They do not form part of the development plan, nor are they subject to independent examination.
Sustainability Appraisal (SA)	Appraisal of plans, strategies and proposals to test them against broad sustainability objectives.
Sustainable Development (SD)	Development that meets the needs of the present without compromising the ability of future generations to meet their own needs (Brundtland 1987). Four priorities are <ul style="list-style-type: none"> • Climate change and energy • Sustainable consumption and production • Natural resource protection and environmental enhancement • Sustainable communities

Glossary

Target	Provide a guide to the speed and direction in which indicators should move to achieve objectives.
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Background

1

1 Background

The Sustainable Design and Construction SPD

1.1 This Supplementary Planning Document (SPD) has been produced to provide additional information to support existing policy and guidance on the sustainability performance of buildings and spaces. It supports the overall commitments to address the causes of climate change and prepare for its impacts. The guidance set out in the SPD extends to all forms of development types, whether new build, an extension, the refurbishment of an existing property or the spaces between buildings.

1.2 All developments (except for minor alternations to dwellings) are expected to make improvements, however, in line with the principles of reasonableness and proportionality, major developments are expected to achieve a higher level of sustainability performance to reflect the greater opportunity they present.

1.3 The SPD does not seek to cover all aspects of sustainability with issues such as location, land use and transport considered by alternative planning documents.

Purpose of the Sustainability Appraisal

1.4 The SA⁽¹⁾ encourages sustainable development by making sure that environmental, social and economic considerations are taken into account throughout the preparation of a plan. Sustainable development is the core principle underpinning planning. At the heart of sustainable development is the simple idea of ensuring a better quality of life for everyone, now and for future generations. A widely used definition was drawn up by the World Commission on Environment and Development in 1987: "*development that meets the needs of the present without compromising the ability of future generations to meet their own needs.*"

1.5 The Government set out four aims for sustainable development in its 1999 strategy.⁽²⁾ These are:

- social progress which recognises the needs of everyone;
- effective protection of the environment;
- the prudent use of natural resources; and,
- the maintenance of high and stable levels of economic growth and employment.

1.6 These aims should be pursued in an integrated way through a sustainable, innovative and productive economy that delivers high levels of employment, and a just society that promotes social inclusion, sustainable communities and personal well being, in ways that protect and enhance the physical environment and optimise resource and energy use. The aims of this SA are to:

- Make the SPD as sustainable as possible by ensuring the principles of sustainable development are integrated into the strategy making process, influencing all stages of policy process;
- Use consultation to challenge and confirm professional judgment.

1.7 It is not the role of the SA to determine which requirements should be progressed but it should help identify the most sustainable plan overall. In this way the local authority can be more informed about the choices it has when deciding which requirements are most appropriate to take forward.

1.8 The main stages in the SA process and how they are aligned with the production of the plan are shown in table 1.⁽³⁾ The Revised Scoping Report⁽⁴⁾ documents Stage A of the SA process. This SA Report documents stages B - E of the SA process.

1 A requirement under the Town and Country Planning (Local Development) (England) (Amendment) Regulations 2008.

2 A Better Quality of Life - A Strategy for Sustainable Development for the UK (May 1999).

3 Source: 'Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents'. ODPM November 2005

4 Revised Scoping Report - Sustainable Design and Construction SPD (September 2008)

http://www.rbwm.gov.uk/web/pp_sustainable_design_and_construction_spd.htm

Background

Table 1 Stages of Sustainability Appraisal within the SPD Process

Stages of Sustainability Appraisal within the SPD Process	
SPD STAGE 1: PRE-PRODUCTION - EVIDENCE GATHERING	
SA Stage A – Setting the context and objectives, establishing the baseline and deciding on scope;	
<ul style="list-style-type: none"> A1: Identifying other relevant policies, plans and programmes, and sustainability objectives. A2: Collecting baseline information. A3: Identifying sustainability issues and problems. A4: Developing the SA framework. A5: Consulting on the scope of the SA. 	
SPD STAGE 2: PRODUCTION - Prepare Draft SPD	
SA Stage B – Developing and refining options and assessing effects	
<ul style="list-style-type: none"> B1: Testing the SPD objectives against the SA framework. B2: Developing the SPD options. B3: Predicting the effects the draft SPD. B4: Evaluating the effects of the draft SPD. B5: Considering ways of mitigating adverse effects and maximising beneficial effects. B6: Proposing measures to monitor the significant effects of implementing the SPD. 	
SA Stage C – Preparing the SA Report	
<ul style="list-style-type: none"> C1: Prepare the SA Report. 	
SA Stage D – Consultation on the draft SPD and Sustainability Appraisal Report;	
<ul style="list-style-type: none"> D1: Public participation on the draft SPD and the SA Report. D2: Appraising significant changes. 	
SPD STAGE 3: ADOPTION	
<ul style="list-style-type: none"> D3: Making decisions and proving information. 	
SA Stage E – Monitoring the significant effects of the SPD.	
<ul style="list-style-type: none"> E1: Finalising aims and methods for monitoring. E2: Responding to adverse effects. 	

Compliance with the SEA Directive/Regulations

1.9 A requirement of SA is to comply with the Strategic Environmental Assessment (SEA) Directive and UK Regulations stipulate that Sustainability Appraisal of Local Development Frameworks should meet the requirements of the SEA Directive.⁽⁵⁾ The purpose 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. It also aims to promote sustainable development, by ensuring that an environmental assessment is carried out of certain plans which are likely to have significant effects on the environment. This came into force in the UK in July 2004.⁽⁶⁾ This SA Report incorporates the requirements for a Strategic Environmental Assessment (SEA).⁽⁷⁾

5 EU Directive 2001/42/EC (the Strategic Environmental Assessment (SEA) Directive)

6 Environmental Assessment of Plans and Programmes Regulations 2004

7 A Practical Guide to the Strategic Environmental Assessment Directive ODPM, September 2005.

Background

1

Habitats Regulations Assessment

1.10 Any plan or programme not directly connected with or necessary to the management of a European site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to an Habitats Regulations Assessment of its implications for the site in view of the sites conservation objectives.⁽⁸⁾ The potential effects of the Sustainable Design and Construction SPD on international conservation sites have been evaluated. It is not considered that the integrity of the these sites will be affected by the developments arising directly from this SPD.

8 Under the requirements of Article 6 of European Directive 92/43/EEC and Regulation 48 of the Conservation (Natural Habitats, &c.) Regulations 1994.

Appraisal Methodology

2 Appraisal Methodology

Approach Adopted to the SA

2.1 The SA process is carried out by the Borough's Senior Projects Officer in the RBWM Planning Policy Team, working with other members of the team, development control officers, key officers throughout the Council and the Council's LDF Member Working Group. The SA process is also being continually shaped and improved by responses to public consultations.

Who was Consulted, When and How?

2.2 The consultation details for the preparation of the SA for the SPD are set out in the table below.

Table 2 Consultation on the SA Report: Sustainable Design and Construction SPD

Consultation Document	Form of Consultation	Consultation Period	Who was Consulted?
Scoping Report: Sustainable Design and Construction SPD (May 2008)	Reports sent out and available on the website.	23rd May – 27th June 2008	Statutory consultees* and local groups and organisations with a particular interest in Sustainable Design and Construction. The wider public had the opportunity to take part in the consultation through the website.
Draft SA Report: Sustainable Design and Construction SPD (November 2008)	Draft SA Reports sent out with the SPD and made available on the website.	7th November - 19th December 2008	Statutory consultees* and local groups and organisations with a particular interest in Sustainable Design and Construction. The wider public has the opportunity to take part in the consultation through the website.

* Statutory consultees include English Heritage, Natural England and the Environment Agency.

2.3 There were 15 responses to the Scoping Report consultation. The Scoping Report was amended in the light of these responses. A Revised Scoping Report was issued in September 2008 and can be found on the Council's website at http://www.rbwm.gov.uk/web/pp_sustainable_design_and_construction_spd.htm.

2.4 There were 4 responses to the consultation on the Draft SA Report which can be found in the Consultation Report.⁽⁹⁾

Difficulties Encountered During the Appraisal

- The Council is reliant on other organisations for data. This is sometimes difficult to obtain and assumptions in the SA are only as good as the data on which they are based.
- Consultation fatigue and the capacity of stakeholders to respond to the many consultations.
- It is a challenge to comply with legislation whilst at the same time make the documents easy to read and understand.

Developing and Refining Options and Assessing Effects

3 Developing and Refining Options and Assessing Effects

Assessing Effects of Saved Local Plan Policies

3.1 Sustainability appraisal guidance states that where an SPD is prepared on the basis of saved policies⁽¹⁰⁾ which have not been subject to SA, the SA of that policy will need to be carried out and reported on.⁽¹¹⁾ Current Local Plan policies which are relevant to sustainable design and construction are listed below. The summary concerns only those aspects of the policy relevant to the Sustainable Design and Construction SPD.

Table 3 RBWM Local Plan Policy Links

Local Plan Policy	Summary
N6 Trees and Development	Development should retain existing suitable trees and include tree planting and landscaping scheme.
N7 Hedgerows	Development should retain existing hedgerows. Where unavoidable replacement planting and improved planting is required.
N9 Wildlife Heritage Sites	Particular regard will be had to protect natural features of Local Nature Reserves and Wildlife Heritage Sites. Measures to safeguard and enhance such sites within any development proposal.
DG1 Design Guidelines	Development should include landscaping. It should form an integral part of the overall layout and design, utilising existing vegetation where possible. Adequate access should be provided for refuse collection.
F1 Development Within Areas Liable to Flood	Development in itself, or cumulatively with other developments, should not impede the flow of flood water, reduce the capacity of the floodplain to store flood water or increase the number of people or properties at risk from flooding.
NAP1 Road / Rail Noise and Development	Noise sensitive developments will not be permitted in areas subject to specified road traffic related noise levels.
NAP2 Aircraft Noise and Housing Development	Housing developments will not be permitted in areas subject to specified aircraft related noise levels.
NAP3 Polluting Development	Permission will not be given for developments likely to emit unacceptable levels of noise, smells or fumes beyond the site boundary.
NAP4 Pollution of Groundwater and Surface Water	Development proposals should not adversely affect groundwater or the quality of surface water.
E10 Design and Development Guidelines	Development should be neighbourly and allow adequate facilities for servicing
H10 Housing Layout and Design	Residential development should make arrangements for the maintenance of open spaces and landscaping, provide for safe movement, and provide adequate sound insulation.
H14 House Extensions	House extensions should not cause unacceptable loss of light to adjoining properties.
T7 Cycling	Provision should be made for cyclists, including secure parking.

10 For more information on saved Local Plan policies see the RBWM Local Plan on-line at http://www.rbwm.gov.uk/web/pp_adopted_local_plan_online_version.htm

11 The Design and Construction SPD is also based on the South East Plan (May 2009) which has already been subject to SA.

Developing and Refining Options and Assessing Effects

3.2 An assessment of these policies was therefore undertaken against the SA objectives.⁽¹²⁾ The full assessment is recorded in Appendix 2. The findings are summarised as follows:

Table 4 The Effects of Saved Local Plan Policies on Achieving the SA Objectives.

Saved Local Plan Policies	Effects
N6 & N7	Contribute very positively to biodiversity and the protection and enhancement of the borough's countryside, natural and historic environment. These policies also help to ensure that distinctive communities are maintained, there is a high quality townscape, the effects of noise are reduced, the creation of more on-site waste is avoided and the chance of affecting water quality is reduced.
N9	Contributes very positively to biodiversity and the protection and enhancement of the borough's countryside, natural and historic environment. Could restrict the land available for housing development.
DG1	Positive effects on eight of the SA objectives concerning sustainable construction, health and well-being, social exclusion, distinctive communities, biodiversity, historic environment and transport. No effect on flood risk, investment in new technologies, air and noise pollution, climate change, sustainable product use, reducing and recycling waste, reducing water consumption and improving water quality, increasing energy efficiency and encouraging renewable energy.
F1	Very positive effects on reducing the risk of flooding and preparing for the impacts of climate change. Positive effect on decent homes for everyone, although this policy could reduce the area of land available for housing development.
NAP1, NAP2	These policies score very positively against the SA objectives for reducing the proportion of the local population subject to noise pollution and ensuring that everyone has a decent home. Positive effects are also recorded for health and well-being.
NAP3	Same positive effects on the SA objectives recorded as for NAP1 and NAP2. Negative effects are however recorded for the economic objectives and reuse of previously developed land.
NAP4	Very positive effect on maintaining groundwater quality, positive effects also recorded for health and protection of the natural environment. Negative effects are however recorded for the economic objectives and reuse of previously developed land.
E10	Positive effects recorded for providing decent homes, protecting health and well-being, protecting the natural environment and promoting public transport. Negative effects are however recorded for the economic objectives and reuse of previously developed land.
H10	Scores very positively against all the social SA objectives on decent housing, health and well-being, social exclusion and recognising the contributions of all individuals. No effect on the other SA objectives.
H14	Scores positively against providing decent homes, providing a high quality townscape, health and well-being and reducing pollution.
T7	Scores very positively against providing sustainable transport and positively against health and well-being.

3.3 The saved local plan policies above have no effect on SA objective 20 (the use of sustainably and ethically produced, local or low impact products), part of SA objective 22 (water consumption) and SA objective 23 (energy efficiency and renewable energy). The saved local plan policies make no direct reference to climate change.

¹² SA objectives relevant to the Sustainable Design and Construction SPD were agreed following consultation. See Revised Scoping Report: Sustainable Design and Construction SPD (September 2008).

Developing and Refining Options and Assessing Effects

3.4 The saved Local Plan Policies listed above will eventually be superseded by new policies in the Delivery and Development Principles DPD. These findings have been considered during the development of emerging the SPD and will be considered when carrying out a full SA and updating the policies in the new DPD.

Main Strategic Options Considered

3.5 There are two different options that could be implemented at the present time in order to provide additional information to support existing policy and guidance on the sustainability performance of buildings and spaces. These are:

- Option A. **'Business as usual'** - continued use of the saved Local Plan Policies N6, N7, N9, DG1, F1, NAP1, NAP2, NAP3, NAP4, E10, H10, H14, and T7 until they are updated in the Delivery and Development Principles DPD.
- Option B. **Develop a new Sustainable Design and Construction SPD.**

3.6 These options are shown in the table below with the assumptions and reasons for selection.

Table 5 Options Selected and Reasons for Selection

	Options Selected	Assumptions for Selecting Options
A.	'Business as usual' - continued use of the saved Local Plan Policies N6, N7, N9, DG1, F1, NAP1, NAP2, NAP3, NAP4, E10, H10, H14, and T7 until they are updated in the Delivery and Development Principles DPD.	Resources could be diverted to the production of other DPDs and SPDs.
B.	Develop a new Sustainable Design and Construction SPD.	Sustainable design and construction practices have progressed significantly in recent years. The SPD could provide more up to date information and requirements.

Choosing the Preferred Option

3.7 Appendices 2 and 3 show the environmental, economic and social effects of options A & B in detail. The preferred option is option B – to develop a new Sustainable Design and Construction SPD. This is because

- there is currently no up to date local guidance or requirements for sustainable design and construction in the borough. A SPD would be able provide this.
- a SPD would provide greater opportunity to enhance the positive effects identified in the SA than the saved Local Plan policies.
- a SPD would allow the Council to address the lack of local guidance on areas such as the use of local, ethical or low impact products and addressing the causes and adaptation to climate change.

3.8 The following section therefore reports on the SA of the SPD (the preferred option) in more depth.

Development of the SPD

4 Development of the SPD

Development of the SPD Objectives

4.1 SPD objectives have been identified as follows;

1. To promote the sustainable use and disposal of resources.
2. To raise awareness of sustainable design.
3. To raise awareness of renewable energy technologies.
4. To mitigate against the causes and adapt to the consequences of climate change.
5. To promote the consideration of sustainability early within the design process.
6. To make the Royal Borough a more attractive, well designed and sustainable place.
7. To promote clear understanding, transparency, inclusiveness and consistency for all parties throughout the decision making process.

4.2 In order to ensure that the SPD objectives are in accordance with sustainability principles, they were assessed for their compatibility with the SA objectives. The detailed results of the assessment are contained in the table in Appendix 4. A summary of the findings are described below:

Positive Effects

- As might be expected, most of the SPD objectives showed a high degree of compatibility with the SA objectives.

Negative Effects

- Although SPD objectives 1, 2, 3 and 4 follow the principles of smart growth,⁽¹³⁾ there is a possible conflict with economic growth if this objective means substantially increased costs for the construction industry. This could lead to some developments becoming uneconomic.
- SPD objective 3 shows a possible conflict with SA objective 13 (high quality townscape) and SA objective 18 (protecting the natural environment). This is due to possible visual intrusion from equipment such as wind turbines and solar panels.

4.3 The effect on local economic growth of any sustainable design and construction requirements has been carefully considered when drawing up the SPD. Also, it is recommended that requirements for renewable energy technologies should not be prescriptive as different sorts of technologies may be appropriate for developments depending on type and location.

Significant Social, Environmental and Economic Effects of the SPD

4.4 The first step in ensuring that the principles of sustainable development are integrated into the SPD is to establish how far the SPD requirements go in achieving the SA objectives. See Appendix 3. The results are summarised below:

Table 6 The Effects of SPD Requirements on Achieving the SA Objectives.

SPD Requirement	The effect of the SPD requirement on achieving the SA objectives.
1: Measuring and Demonstrating Sustainability	Unsurprisingly this requirement has very positive effects on most of the SA objectives. There could however be a negative effect on economic growth and competitiveness if the requirements are difficult for developers to meet, thereby making some developments uneconomic.
2: Energy Consumption	In general, this requirement has very positive effects on many SA objectives. Negative effects are however recorded against economic growth and competitiveness if the

¹³ Achieving higher prosperity without increasing the ecological footprint by strengthening the interplay between productivity drivers (enterprise, skills, innovation, competition and investment, employment and quality of life).

Development of the SPD

SPD Requirement	The effect of the SPD requirement on achieving the SA objectives.
	requirements are difficult for developers to meet, thereby making some developments uneconomic. There could also be a negative effect on townscape, the countryside, natural and historic environment, if energy efficiency measures lead to eyesores or adverse changes in the character of buildings or spaces.
3: On-Site Renewable Energy Generation	Overall, this requirement has very positive effects on many SA objectives. Negative effects are however recorded against economic growth and competitiveness if the requirements are difficult for developers to meet, thereby making some developments uneconomic. There could also be a negative effect on townscape, the countryside, natural and historic environment, if renewable energy measures lead to eyesores or adverse changes in the character of buildings or spaces.
4: Water Resource Management	This requirement has very positive effects on sustainable construction, a dynamic and diverse economy, preparing for the impacts of climate change, use of sustainable resources and water resource management. Negative effects are however recorded against economic growth and competitiveness if the requirements are difficult for developers to meet, thereby making some developments uneconomic.
5: Flood Risk Management	This requirement generally has positive effects on the SA objectives. Negative effects are however recorded against economic growth and competitiveness if the requirements are difficult for developers to meet, thereby making some developments uneconomic. There could also be a negative effect on townscape and enhancing the countryside, natural and historic environment if flood risk measures lead to adverse changes in the character of buildings or spaces.
6: Biodiversity	This requirement has mostly positive effects on the SA objectives. No negative effects have been recorded for this requirement.
7: Waste, Recycling and Composting Facilities	This requirement has mostly positive effects on the SA objectives. Negative effects are however recorded against economic growth and competitiveness if the requirements are difficult for developers to meet, thereby making some developments uneconomic. A potential negative effect on townscape, the countryside, natural and historic environment has been avoided by requiring storage and collection facilities to be secure and discreet.
8: Cyclist Facilities	This requirement has mostly positive effects on the SA objectives. Negative effects are however recorded against economic growth and competitiveness if the requirements are difficult for developers to meet, thereby making some developments uneconomic.
9: Air, Noise and Light Pollution	This requirement has mostly positive effects on the SA objectives. Negative effects are however recorded against economic growth and competitiveness if the requirements are difficult for developers to meet, thereby making some developments uneconomic. There could also be a potential negative effect on townscape, if air, noise and light pollution measures lead to adverse changes in the character of buildings or spaces.
10: Responsibly Sourced and Recycled Materials	This requirement has mostly positive effects on the SA objectives. Negative effects are however recorded against economic growth and competitiveness if the requirements are difficult for developers to meet, thereby making some developments uneconomic.
11: Site Waste Management	This requirement has mostly positive effects on the SA objectives. Negative effects are however recorded against economic growth and competitiveness if the requirements are difficult for developers to meet, thereby making some developments uneconomic.

Development of the SPD

SPD Requirement	The effect of the SPD requirement on achieving the SA objectives.
12: Pollution	This requirement has mostly positive effects on the SA objectives. Negative effects are however recorded against economic growth and competitiveness if the requirements are difficult for developers to meet, thereby making some developments uneconomic.

4.5 As a result of this exercise, any potentially negative effects have been considered when developing the SPD to ensure that these are reduced. Positive effects have been enhanced where possible.

Cumulative Effects

4.6 Cumulative effects arise where several requirements of the SPD each have insignificant effects but together have a combined significant effect. Cumulative effects can be positive or negative. The SA has identified cumulative effects of the SPD on the following:

- potential positive cumulative effects on decent homes, health and well-being, social inclusion, a more diverse economy, flood risk, air and pollution, climate change, biodiversity, cycling, consumption of resources, waste reduction, water use, energy efficiency and the use of renewable energy.
- potential negative cumulative effects on economic growth and competitiveness. Where developers have to meet several requirements, this has the potential to make a development uneconomic and could lead to less developments being completed in the borough.
- potential negative cumulative effects on townscape, the countryside, natural and historic environment. The requirements of the SPD relating to energy efficiency, renewable energy, flood risk and air, noise and light pollution could lead to a negative effect on the character of towns, the countryside and historic areas.

Mitigation

4.7 The term 'mitigation' encompasses any approach, which is aimed at preventing, reducing or offsetting significant adverse sustainability effects that have been identified. In addition, it is also important to consider measures aimed at enhancing positive effects. Mitigation measures in the SPD include:

1. Making sure that the SPD requirements are not so onerous that the number of development completions is reduced as a result of these. Different levels of sustainability performance are required according to the scale of the development. A statement has also been added to the SPD recognising that in some circumstances not all developments may be able to meet all best practice requirements.
2. Making sure that that townscape, and the natural and historic environments are not being compromised by sustainable design and construction requirements unless there is very good justification for this. The SPD recognises the advantages and disadvantages of various technologies and does not seek to prescribe any particular approach. Additionally, the SPD expects applicants to consider technologies in light of individual impacts. Requirement 6 expects that biodiversity will be maintained or enhanced.

Implementation

5

5 Implementation

Proposals for Monitoring

5.1 The SEA Directive requires the significant effects of the SPD to be monitored to identify unforeseen adverse effects and to be able to undertake appropriate remedial action. The table below sets out the significant effect indicators.

Table 7 Monitoring the Significant Effects

Significant Effect	Significant Effect Indicators	Target	Data Source and Reference	When should remedial action be considered?	What remedial action should be taken?
Level of housing, retail and employment development.	Housing, retail and employment development completions.	346 net dwellings p.a to 2026.	South East Plan (May 2009)	If development completions are slowing significantly due to the SPD requirements being too stringent.	Possibly revise the SPD to make the requirements less stringent.
				If development completions are not affected by the SPD requirements.	Possibly revise the SPD to make the requirements more stringent.

5.2 These indicators are already being monitored by the Council in the RBWM Annual Monitoring Report.⁽¹⁴⁾

14 See http://www.rbwm.gov.uk/web/pp_annual_monitoring_report.htm

Conclusions and Recommendations

6 Conclusions and Recommendations

6.1 To summarise, the findings of the SA Report are:

- The SPD is able to provide up to date guidance on Sustainable Design and Construction which would have been lacking if the 'business as usual' option had been selected. The guidance goes as far as it can at this stage, however, under current development plan policy.
- The SPD is able to 'plug the gap' in local guidance on the use of local, ethical or low impact products and addressing the causes and adaptation to climate change.
- The SPD is likely to have very positive effects on most of the SA objectives.
- If the SPD requirements are found to be too stringent, causing developments to become uneconomic, this could potentially have a negative effect on local economic growth and the number of development completions. The SPD has considered this by expecting different levels of sustainability performance according to the scale of the development. The SPD also recognises that not all developments may be able to meet all best practice requirements.
- The SPD could adversely affect the character of towns, the countryside and historic environment if technology is not used / sited appropriately. The SPD, however, recognises the advantages and disadvantages of various technologies and does not seek to prescribe any particular approach. Additionally, the SPD expects applicants to consider technologies in light of individual impacts. Requirement 6 expects that biodiversity will be maintained or enhanced.
- The SPD will need to be carefully monitored to ensure that its requirements are not so onerous so as to cause a reduction in the number of development completions.

Appendix 1: SEA Requirements for Environmental Report

Appendix 1: SEA Requirements for Environmental Report

Table 8 SEA Requirements for Environmental Report

SEA Requirements for Environmental Report	Where covered in SA Report?
Preparation of an environmental / SA report in which the likely significant effects on the environment of implementing the plan or programme, and reasonable alternatives taking into account the objectives and geographical scope of the plan or programme, are identified, described and evaluated; The information to be given is (Art.5 and Annex 1)	This report includes the requirements of the Environmental Report.
a) An outline of the contents, main objectives of the plan or programme, and relationship with other relevant plans or programmes;	Section 1 - Background
b) The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme;	Section 3 - discussion of option A. 'Business as Usual'
c) The environmental characteristics of areas likely to be significantly affected;	Sustainable Design and Construction SPD Revised Scoping Report (September 2008) section 3.2.
d) Any existing environmental protection 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 the Directives 79/409/EEC and 92/43/EEC;	Sustainable Design and Construction SPD Revised Scoping Report (September 2008) section 3.3.
e) The environmental protection objectives, established at international, Community or national 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;	Sustainable Design and Construction SPD Revised Scoping Report (September 2008), sections 3.1 and 3.2.
f) 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; (These effects should include secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects);	Appendix 3. Summarised in section 4.
g) 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;	Section 4 - Mitigation.
h) An outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties encountered in compiling the required information;	Table 5.
i) A description of measures envisaged concerning monitoring accordance with Article 10;	Section 5 - Proposals for Monitoring
j) A non-technical summary of the information provided under the above headings	Not considered necessary for this level of report.
Consultation: Authorities with environmental responsibility, when deciding on the scope and level of detail of the information which must be included in the environmental report (Art. 5.4)	Section 2, table 2.
Authorities with environmental, social or economic responsibility and the public, shall be given an early and effective opportunity within appropriate	Section 2.

Appendix 1: SEA Requirements for Environmental Report

SEA Requirements for Environmental Report	Where covered in SA Report?
time frames to express their opinion on the draft plan or programme and the accompanying environmental report before the adoption of the plan or programme (Art. 6.1, 6.2)	
Other EU Member states, where the implementation of the plan or programme is likely to have significant effects on the environment of that country (Art. 7).	Not applicable.
Taking the environmental report and the results of the consultations into account in decision-making (Art.8)	The SA process has been iterative. As a result of the SA process, changes to the Sustainable Design and Construction SPD have been made at several stages of the plan's development. See section 6 Conclusions and Recommendations.
Provision of information on the decision: When the plan or programme is adopted, the public and any countries consulted under Art. 7 shall be informed and the following should be made available to those so informed: <ul style="list-style-type: none"> the plan or programme as adopted a statement summarising how environmental considerations have been integrated into the plan or programme and how the environmental report pursuant to Article 5, the opinions expressed pursuant to Article 6 and the results of consultations entered into pursuant to Article 7 have been taken into account according to Article 8, and the reasons for choosing the plan or programme as adopted, in the light of the other reasonable alternatives dealt with; and; the measures decided concerning monitoring (Art. 9 and 10). 	Sustainability Appraisal Adoption Statement (June 2009)
Monitoring of the significant environmental effects of the plan's or programme's implementation (Art. 10)	Section 5 - Proposals for Monitoring

Appendix 2: Sustainability Effects of the Saved Local Plan Policies

Appendix 2: Sustainability Effects of the Saved Local Plan Policies

The effect of the saved Local Plan policies⁽¹⁵⁾ on achieving the SA objectives.

Table 9 Sustainability Effects of Saved Local Plan Policies

	RBWM SA Objectives ⁽¹⁶⁾	N6	N7	N9	DG1	F1	NAP1	NAP2	NAP3	NAP4	E10	H10	H14	T7
1	Ensure that everyone has the opportunity to live in a decent, sustainably constructed and affordable home.	-	-	X	√	√X	√√	√√	√√	-	√	√√	√√	-
2	Improve the health and well-being of the population and reduce inequalities in health.	-	-	-	√	-	√	√	√	√	√	√√	√	√
3	Reduce poverty and social exclusion and close the gap between the most deprived areas and the rest.	-	-	-	√	-	-	-	-	-	-	√√	-	-
6	Create and sustain vibrant and distinctive communities which recognise the needs and contributions of all individuals.	√	√	√	√	-	-	-	-	-	-	√√	-	-
10	Sustain economic growth and competitiveness and a buoyant, sustainable tourism sector by focusing on the principles of smart growth.	-	-	-	-	-	-	-	X	X	X	-	-	-
12	Develop a dynamic, diverse and knowledge-based economy that excels in innovation with higher value, lower impact activities.	-	-	-	-	-	-	-	X	X	X	-	-	-
13	Re-use previously developed land and existing materials from buildings, and ensure that there is a high quality townscape.	√	√	-	√	-	-	-	X	X	X	-	√√	-

¹⁵ See table 3.

¹⁶ The SA objectives relevant to the Sustainable Design and Construction SPD were agreed following consultation. See Revised Scoping Report: Sustainable Design and Construction SPD (September 2008).

Appendix 2: Sustainability Effects of the Saved Local Plan Policies

	RBWM SA Objectives ⁽¹⁶⁾	N6	N7	N9	DG1	F1	NAP1	NAP2	NAP3	NAP4	E10	H10	H14	T7
14	Reduce the risk of flooding and the resulting detriment to public well-being, the economy and the environment.	-	-	-	-	√√	-	-	-	-	-	-	-	-
15	Reduce air pollution and the proportion of the local population subject to noise pollution.	√	√	-	-	-	√√	√√	√√	-	-	-	√	-
16	Address the causes of climate change through reducing emissions of greenhouse gases and ensure that the borough is prepared for its impacts.	-	-	-	-	√√	-	-	-	-	-	-	-	-
17	Conserve and enhance the borough's biodiversity.	√√	√√	√√	√	-	-	-	-	-	-	-	-	-
18	Protect and enhance the borough's countryside, natural and historic environment.	√√	√√	√√	√	-	-	-	√√	√	√	-	-	-
19	Improve the efficiency of transport networks by enhancing the proportion of travel by sustainable modes and by promoting policies which reduce the need to travel.	-	-	-	√	-	-	-	-	-	√	-	-	√√
20	Reduce the global social and environmental impact of consumption of resources by using sustainably and ethically produced, local or low impact products.	-	-	-	-	-	-	-	-	-	-	-	-	-
21	Reduce waste generation and disposal, and achieve the sustainable management of waste.	√	√	-	-	-	-	-	-	-	-	-	-	-
22	Maintain and improve the water quality of the borough's rivers and ground waters, and	√	√	-	-	√	-	-	-	√√	-	-	-	-

16 The SA objectives relevant to the Sustainable Design and Construction SPD were agreed following consultation. See Revised Scoping Report: Sustainable Design and Construction SPD (September 2008).

Appendix 2: Sustainability Effects of the Saved Local Plan Policies

	RBWM SA Objectives ⁽¹⁶⁾	N6	N7	N9	DG1	F1	NAP1	NAP2	NAP3	NAP4	E10	H10	H14	T7
	achieve sustainable water resources management.													
23	Increase energy efficiency, and the proportion of energy generated from renewable sources in the borough.	-	-	-	-	-	-	-	-	-	-	-	-	-

Scale of effect: √√ (very positive), √ (positive), √X (positive and negative impacts), X (negative), XX (very negative), - (no effect).

¹⁶ The SA objectives relevant to the Sustainable Design and Construction SPD were agreed following consultation. See Revised Scoping Report: Sustainable Design and Construction SPD (September 2008).

Appendix 3: Sustainability Effects of the Sustainable Design and Construction SPD

Appendix 3: Sustainability Effects of the Sustainable Design and Construction SPD

The effect of the SPD requirements on achieving the SA objectives.

Table 10 Sustainability Effects of the Sustainable Design and Construction SPD

	RBWM SA Objectives ⁽¹⁷⁾	SPD Requirements											
		1	2	3	4	5	6	7	8	9	10	11	12
1	Ensure that everyone has the opportunity to live in a decent, sustainably constructed and affordable home.	√√	√√	√√	√√	√√	√√	√√	√√	√√	√√	√√	√√
2	Improve the health and well-being of the population and reduce inequalities in health.	√	√√	-	-	√	-	-	√	√√	-	√	√
3	Reduce poverty and social exclusion and close the gap between the most deprived areas and the rest.	√	√√	-	-	-	-	√√	-	-	-	-	-
6	Create and sustain vibrant and distinctive communities which recognise the needs and contributions of all individuals.	√	√	-	-	-	-	-	-	-	-	-	-
10	Sustain economic growth and competitiveness and a buoyant, sustainable tourism sector by focusing on the principles of smart growth.	√X	√X	√X	√X	√X	√	√X	√X	√X	√X	√X	√X
12	Develop a dynamic, diverse and knowledge-based economy that excels in innovation with higher value, lower impact activities.	√√	√√	√√	√√	√√	√√	√√	√√	√√	√√	√√	√√
13	Re-use previously developed land and existing materials from buildings, and ensure that there is a high quality townscape.	√√	X	X	-	√X	√√	√√	√	√X	√√	√√	√
14	Reduce the risk of flooding and the resulting detriment to public well-being, the economy and the environment.	√√	-	-	√	√√	√	-	-	-	-	-	-
15	Reduce air pollution and the proportion of the local population subject to noise pollution.	√√	-	-	-	-	√	-	-	√√	-	√√	√√
16	Address the causes of climate change through reducing emissions of greenhouse gases	√√	√√	√√	√√	√√	√	-	√	-	√√	√√	-

17 The SA objectives relevant to the Sustainable Design and Construction SPD were agreed following consultation. See Revised Scoping Report: Sustainable Design and Construction SPD (September 2008).

Appendix 3: Sustainability Effects of the Sustainable Design and Construction SPD

	RBWM SA Objectives ⁽¹⁷⁾	SPD Requirements											
		1	2	3	4	5	6	7	8	9	10	11	12
	and ensure that the borough is prepared for its impacts.												
17	Conserve and enhance the borough's biodiversity.	√√	-	-	√	√	√√	-	-	√	√	-	-
18	Protect and enhance the borough's countryside, natural and historic environment.	√√	√X	√X	√	√X	√√	√	√	√	√	√√	√
19	Improve the efficiency of transport networks by enhancing the proportion of travel by sustainable modes and by promoting policies which reduce the need to travel.	√	-	-	-	-	-	-	√√	-	-	√	-
20	Reduce the global social and environmental impact of consumption of resources by using sustainably and ethically produced, local or low impact products.	√√	√√	√√	√√	√√	√√	-	-	-	√√	√√	-
21	Reduce waste generation and disposal, and achieve the sustainable management of waste.	√√	-	-	-	-	-	√√	-	-	√√	√√	-
22	Maintain and improve the water quality of the borough's rivers and ground waters, and achieve sustainable water resources management.	√√	-	-	√√	√	-	-	-	-	-	√	√
23	Increase energy efficiency, and the proportion of energy generated from renewable sources in the borough.	√√	√√	√√	-	-	√	-	-	√	-	-	-

Scale of effect: √√ (very positive), √ (positive), √X (positive and negative impacts), X (negative), XX (very negative), - (no effect).

¹⁷ The SA objectives relevant to the Sustainable Design and Construction SPD were agreed following consultation. See Revised Scoping Report: Sustainable Design and Construction SPD (September 2008).

Appendix 4: Compatibility of SPD Objectives with SA Objectives

Appendix 4: Compatibility of SPD Objectives with SA Objectives

The effect of the SPD objectives on achieving the SA objectives. The list of SPD objectives can be found at the start of section 4 of this document.

Table 11 Compatibility of SPD Objectives with SA Objectives

	RBWM SA Objectives ⁽¹⁸⁾	SPD Objectives						
		1	2	3	4	5	6	7
1	Ensure that everyone has the opportunity to live in a decent, sustainably constructed and affordable home.	√	√	√	√	√	√	√
2	Improve the health and well-being of the population and reduce inequalities in health.	√	√	-	√	√	√	√
3	Reduce poverty and social exclusion and close the gap between the most deprived areas and the rest.	-	√	-	-	√	√	√
6	Create and sustain vibrant and distinctive communities which recognise the needs and contributions of all individuals.	-	√	-	-	√	√	√
10	Sustain economic growth and competitiveness and a buoyant, sustainable tourism sector by focusing on the principles of smart growth.	√X	√X	√X	√X	√	√	√
12	Develop a dynamic, diverse and knowledge-based economy that excels in innovation with higher value, lower impact activities.	√	√	√	√	√	√	√
13	Re-use previously developed land and existing materials from buildings, and ensure that there is a high quality townscape.	√	√	X	√	√	√	√
14	Reduce the risk of flooding and the resulting detriment to public well-being, the economy and the environment.	-	√	-	√	√	√	√
15	Reduce air pollution and the proportion of the local population subject to noise pollution.	√	√	√	-	√	√	√
16	Address the causes of climate change through reducing emissions of greenhouse gases and ensure that the borough is prepared for its impacts.	√	√	√	√	√	√	√
17	Conserve and enhance the borough's biodiversity.	-	√	-	√	√	√	√
18	Protect and enhance the borough's countryside, natural and historic environment.	√	√	X	√	√	√	√
19	Improve the efficiency of transport networks by enhancing the proportion of travel by sustainable	√	√	-	√	√	√	√

18 The SA objectives relevant to the Sustainable Design and Construction SPD were agreed following consultation. See Revised Scoping Report: Sustainable Design and Construction SPD (September 2008).

Appendix 4: Compatibility of SPD Objectives with SA Objectives

RBWM SA Objectives ⁽¹⁸⁾		SPD Objectives						
		1	2	3	4	5	6	7
	modes and by promoting policies which reduce the need to travel.							
20	Reduce the global social and environmental impact of consumption of resources by using sustainably and ethically produced, local or low impact products.	√	√	√	√	√	√	√
21	Reduce waste generation and disposal, and achieve the sustainable management of waste.	√	√	√	√	√	√	√
22	Maintain and improve the water quality of the borough's rivers and ground waters, and achieve sustainable water resources management.	√	√	-	√	√	√	√
23	Increase energy efficiency, and the proportion of energy generated from renewable sources in the borough.	√	√	√	√	√	√	√

Key: √ positive compatibility, X possible conflict, - neutral

¹⁸ The SA objectives relevant to the Sustainable Design and Construction SPD were agreed following consultation. See Revised Scoping Report: Sustainable Design and Construction SPD (September 2008).