

Essex County Council

Parking Standards Design and Good Practice

**Sustainability Appraisal
and
Strategic Environmental Assessment**

**Environmental Report
and
Non-Technical Summary**

September 2009



The information contained in this document can be made available in alternative formats: large print, braille, audio tape or on disc.

CONTENTS

PART A: NON-TECHNICAL SUMMARY

Introduction	i
Methodology	ii
Stage A – Preparation of the Scoping Report.....	iii
Stage B - Appraisal of the Document.....	iv
Stage C - Preparation of the draft Report	v
Stage D - Consulting on the draft Parking Standards document and the draft Environmental Report.....	v
Appraisal of the Parking Standards Document September 2009	vi
Conclusions arising from the Consultation Draft.....	vi
Changes between the Consultation Draft and Final Document	vi
Overall Assessment of Long-term Effects.....	vii
Assessment of Parking Standards.....	vii
Appraisal of Options	viii
Significant and Cumulative Effects	x
Significant Effects	x
Cumulative Effects.....	x
Monitoring and Indicators	xi
Monitoring.....	xi
Indicators	xi
Conclusion and Recommendations	xiv

PART B: ENVIRONMENTAL REPORT

1 Introduction	1
1.1 Background.....	1
1.2 Sustainability Appraisal / Strategic Environmental Assessment.....	1
1.3 The aim and structure of this report.....	2
2 Methodology	5
2.1 Stages of SA/SEA	5
2.2 Stage A – Preparation of the Scoping Report	6
2.3 Stage B - Appraisal of the Document	9
2.4 Stage C - Preparation of the draft Report.....	21
2.5 Stage D - Consulting on the draft Parking Standards document and the draft Environmental Report.....	21

3	Appraisal of the Parking Standards Document September 2009	23
3.1	Conclusions arising from the Consultation Draft	23
3.2	Changes between the Consultation Draft and Final Document.....	23
3.3	Overall Assessment of Long-term Effects	45
3.4	Assessment of Parking Standards	46
3.5	Appraisal of Options	50
4	Significant and Cumulative Effects	53
4.1	Significant Effects.....	53
4.2	Cumulative Effects	53
5	Monitoring and Indicators	55
5.1	Monitoring	55
5.2	Indicators.....	55
6	Conclusion and Recommendations	59

List of Tables and Figures

Table 1: The Environmental Report Requirements.....	2
Table 2: Sustainability Objectives	6
Table 3: Summary of Consultee Comments	7
Table 4: Sustainability Framework.....	10
Table 5: Schedule of Changes to Key Statements	24
Table 6: Appraisal of the September 2009 Parking Standards document	47
Table 7: Appraisal of Options.....	50
Table 8: Indicators	56
Figure 1: Stages of the Sustainability Appraisal and Outputs	5
Figure 2: Long-term Effects of the Key Statements	45

Annexes

Annex A: Plans and Programmes

Annex B: Sustainability Baseline Information

Glossary of Acronyms

EPOA	Essex Planning Officers Association
EU	European Union
GFA	Gross Floor Area
LPA	Local Planning Authority
NTS	Non-Technical Summary
PTWs	Powered Two-Wheeled Vehicles
SA	Sustainability Appraisal
SAC	Special Areas of Conservation
SA/SEA	Sustainability Appraisal incorporating the Strategic Environmental Assessment
SEA	Strategic Environmental Assessment
SPD	Supplementary Planning Document

PART A: NON-TECHNICAL SUMMARY

INTRODUCTION

Essex County Council, on behalf of Essex Planning Officers Association (EPOA), have reviewed their Parking Standards. The current standards are set out in the document “Vehicle Parking Standards, EPOA, August 2001” but will be replaced by “Parking Standards: Design and Good Practice Guide, September 2009” – (hereafter referred to as ‘the document’) once it is adopted.

A draft Sustainability Appraisal, incorporating Strategic Environmental Assessment (SA/SEA) was produced alongside the consultation draft Parking Standards document in March 2009. The draft SA/SEA should be read in conjunction with the consultation draft document.

It is intended that the Parking Standards should be applied throughout Essex. The document will be recommended to Essex planning authorities and others as providing quality advice and guidance on the provision and role of parking within residential and commercial areas in Essex. The revised standards will be used by Essex County Council, as Highway Authority, in consideration of development proposals. They will also be commended for adoption as a Supplementary Planning Document by district councils in Essex and, if they wish, by the unitary authorities of Southend-on-Sea and Thurrock.

The Parking Standards will be used to assess the merits of development proposals that come forward through the statutory planning process. As a consequence, the Parking Standards document has been subject to a SA/SEA and should be read in conjunction with the September 2009 document.

This report is the Non-Technical Summary of the SA/SEA that has been undertaken for the September 2009 document. It highlights the key matters arising from the Appraisal.

The Sustainability Appraisal of the document has been produced by the Spatial Planning Group of Essex County Council.

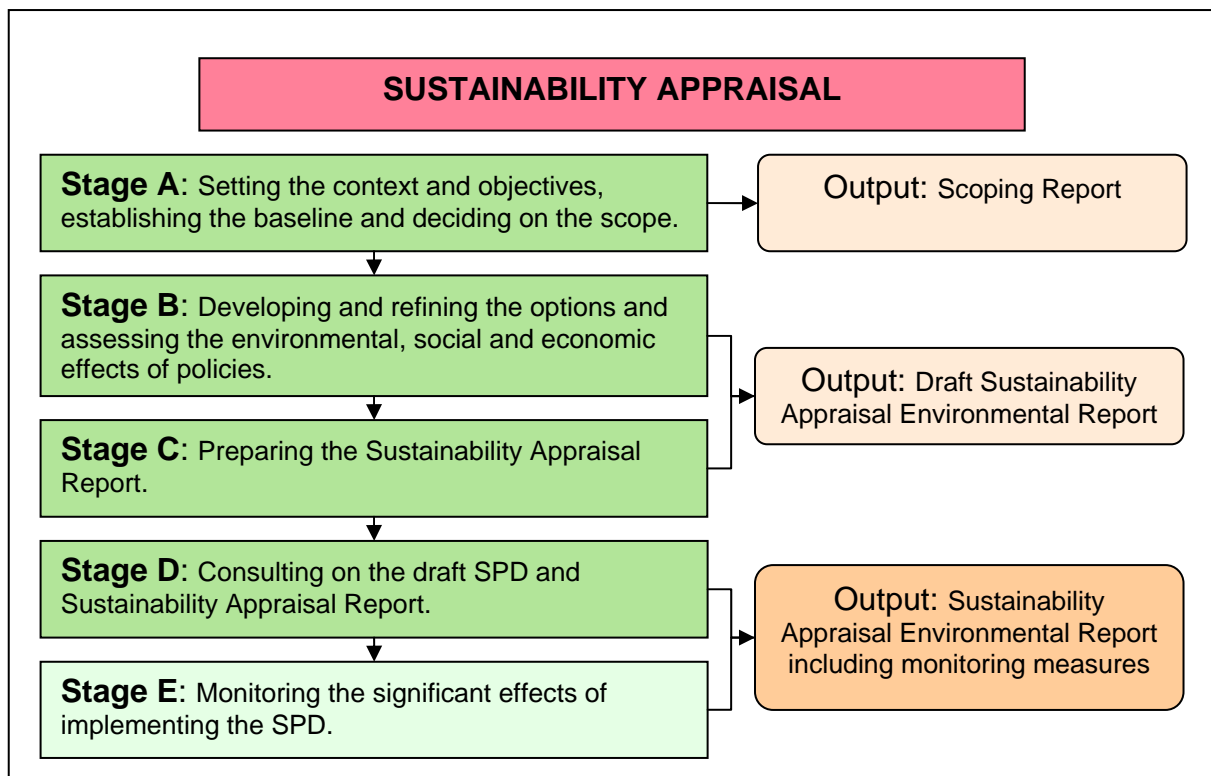
METHODOLOGY

The methodology adopted for this appraisal of the document seeks to meet the requirements of both SA and SEA for the environmental assessment of plans. It has been prepared in accordance with the following documents,

- The European Directive 2001/42/EC (EC, 2001)
- A Practical Guide to the Strategic Environmental Assessment Directive (ODPM, 2005)
- Sustainability Appraisal of Regional Spatial Strategies and Local Development Frameworks (ODPM, 2005)

The appraisal of the document has been conducted in accordance with the guidance as part of a five stage process as outlined below.

STAGES OF THE SUSTAINABILITY APPRAISAL AND OUTPUTS



To date the SA/SEA process is through to Stage D and the following outputs have been prepared:

- A Scoping Report which set out the context and objectives, established the baseline and decided on the scope for the SA/SEA was produced. The Scoping Report was subject to consultation in October and November 2008.
- A draft SA/SEA Environmental Report was published alongside the Parking Standards Consultation Draft to inform the consultation exercise which was published in March 2009.

Stage A – Preparation of the Scoping Report

Stage A culminated in the preparation of a Scoping Report which identified relevant plans, programmes and environmental protection objectives; baseline information; and sustainability objectives, to be used during the SA/SEA.

The review of relevant plans and programmes and baseline information highlighted key sustainability issues. The identification of sustainability issues, particularly those which are significant provides the opportunity to define sustainability objectives which directly relate to the document. Seventeen objectives were identified to appraise the document. The sustainability objectives are listed in the table below, with an indication of their contribution to social, economic and environmental factors.

SUSTAINABILITY OBJECTIVES

	Economic	Social	Environment
1) Create Safe Environments which do not undermine the quality of life or community cohesion		✓	✓
2) To provide everyone with the opportunity to live in a decent home	✓	✓	✓
3) To promote a healthy and active lifestyle		✓	✓
4) To promote accessibility	✓	✓	✓
5) To maximise the education and skills of the population and ensure safe and inclusive access to educational facilities	✓	✓	
6) To achieve sustainable levels of prosperity and economic growth	✓	✓	
7) To promote safe, sustainable and inclusive access to non-residential facilities	✓	✓	✓
8) To promote sustainable forms of transport	✓	✓	✓
9) To minimise the potential noise pollution		✓	✓
10) To improve air quality	✓	✓	✓
11) To minimise the cumulative effects of climatic change		✓	✓
12) To minimise the risk of flooding			✓
13) To preserve existing water quality		✓	✓
14) To conserve, enhance and create biodiversity and geodiversity		✓	✓
15) To maintain and enhance the quality of	✓	✓	✓

	Economic	Social	Environment
existing townscape and landscape			
16) To maintain and enhance cultural heritage and assets			✓
17) To make the most efficient use of previously developed land and avoid unnecessary development of the countryside	✓		✓

The Scoping Report was subject to a 5-week consultation period with the 3 statutory consultees:

- Environment Agency,
- Natural England, and
- English Heritage.

Responses received from the consultees have been incorporated into the SA/SEA.

Stage B - Appraisal of the Document

An appraisal of the document was undertaken which assessed the contents against each of the sustainability objectives. There are three key components that inform the appraisal process:

- Review of Plans & Programmes
- Baseline Information
- SEA Objectives and Sustainability Framework

Twenty key statements were selected from the document to appraise their sustainability performance. The statements were selected to cover the scope of matters included within the document. This approach was adopted because the document does not set out specific policies for Parking Standards.

The sustainability performance of each of the statements was assessed. The potential sustainability impact of each of these statements was individually appraised against each of the seventeen sustainability objectives.

The Appraisal informs:

- The extent to which the document and each selected statement may contribute to achieving the sustainability objectives;
- Any change in the degree of impact over time;
- Measures that could improve contribution of the document to sustainability;
- Any linkage with, or impact on, other statements or matters that could have broader implications and may be defined within one of 3 types of effect,
- Secondary effect – not a direct result of the statement, but occur away from the original effect or as a result of a complex pathway,

- Cumulative effect – whereby several statements each have insignificant effects but together have a significant effect, or where several individual effects have a combined effect,
- Synergistic effect – effects that interact to produce a total effect greater than the sum of the individual effects;
- Any other factors to consider during future work on the document.

A Sustainability Framework was produced which shows the relationship between,

- each of the SA/SEA objectives;
- where each of the objectives has been sourced from;
- which topics refer to each objective;
- what key questions have to be asked of each policy objective to assess it's relationship with each of the objectives; and,
- what data sources can be monitored to see if policies accord with the objectives?

Stage C - Preparation of the draft Report

A draft Environmental Report was produced alongside the March 2009 Consultation Draft Parking Standards Document. This draft Environmental Report set out the appraisal of the options for Parking Standards. The sustainability performance of the proposed revised approach to parking standards (March 2009) was assessed against retention of the existing standards produced in 2001 and against having no parking standards at all. These Options were not presented in the draft document, but were devised for the purpose of SA/SEA and were deemed to be reasonable alternatives. The Options which were considered to constitute reasonable alternatives for this document were therefore identified as:

- Option 1: No parking standards
- Option 2: Retention of the 2001 Vehicle Parking Standards
- Option 3: Proposed Parking Standards

Each option was appraised individually.

The document does not set out specific policies. Therefore the document was divided into 20 key statements which were deemed to constitute the basis for guidance contained within the document. The draft Environmental Report outlined the SA/SEA of 20 Statements contained within the consultation draft Parking Standards document.

Stage D - Consulting on the draft Parking Standards document and the draft Environmental Report

This document represents the tasks required for stage D. The final Parking Standards document, prepared following public consultation and the findings of the draft Environmental Report, underwent an additional SA/SEA, the results of which are incorporated into this Report.

This final Environmental Report should therefore be read alongside the draft Environmental Report to document fully the SA/SEA undertaken for this document.

APPRAISAL OF THE PARKING STANDARDS DOCUMENT SEPTEMBER 2009

Conclusions arising from the Consultation Draft

The Parking Standards Design and Good Practice consultation draft was published for public consultation from the 13th March 2009 to 24th April 2009. A draft Environmental Report was prepared at that time.

The draft Environmental Report appraised three reasonable alternatives or options for the rationale of the Parking Standards document (Options 1, 2 and 3) together with twenty key statements identified within the consultation draft document.

The draft Environmental Report concluded that the further stages of preparation of the Parking Standards document should take the opportunity to consider:

- more precise terminology;
- the potential impacts of parking areas on risk of flooding, water quality and noise;
- the importance of linking increased parking controls to provision of sustainable transport options and designated parking areas;
- the circumstances in which reduction of any parking standards or the acceptance of a s106 contribution would be considered;
- the provision of lifetime parking provision and standards in residential development;
- access and security measures for off-curtilage parking in residential areas; and
- the need to consider the local context of individual proposals for parking areas;

Changes between the Consultation Draft and Final Document

Following the public consultation, and in light of recommendations within the draft Environmental Report an amended version of the document has been produced.

The amendments within the September 2009 Parking Standards document have been reviewed. The changes were reviewed and categorised as follows:

- 1) Changes to the 20 key statements - those changes which impact upon the appraisal of the twenty key statements
- 2) Substantive changes to other text in the document – Substantive changes to the document which did not effect the twenty key statements were examined.
- 3) Minor editorial changes – for example page and paragraph numbering.

Following a review of all of the changes, the 20 key statements were re-appraised where necessary.

There were no substantive changes to the remainder of the document, which changed the document in order to warrant separate appraisal. There were also a number of editorial changes made to the Parking Standards document which did not effect the appraisal of the document.

Overall Assessment of Long-term Effects

The September 2009 Parking Standards document covers a broad range of issues. The long term effects of implementation of the Parking Standards document are summarised as follows:

- Sixteen of the seventeen sustainability objectives are positively impacted upon in the long-term by at least one or more of the twenty key statements in the document.
- The impact of the document on sustainability objective 9 (to minimise the potential noise pollution) is uncertain.
- Twelve of the key statements have only positive long-term impacts on the sustainability objectives. These statements are concerned with:
 - The application of parking standards
 - Flooding
 - Calculation of parking requirements
 - Extensions and change of use
 - Commercial vehicles
 - Coaches
 - Provision for cycle parking
 - Transport assessments
 - Travel plans
 - Pedestrians
 - Parking bay sizes
 - Residential parking design
- The remaining key statements within the document have either a negative or uncertain long-term impact on one or more of the sustainability objectives.
 - Statements 2, which relates to design considerations has uncertain impacts on environmental considerations including noise, air and water quality all of which would be determined at the site specific scale.
 - Statements 6 (main urban areas) and 14 (developer contributions) are likely to have negative long-term impacts on providing everyone with the opportunity to live in a decent home and to promote accessibility. This is due to the possible reduction in parking standards which could be applied through the use of these statements. Further guidance on the application of these statements should be provided.
- Statement 3 which relates to the use of sustainable drainage systems and pollutant filtration within parking design will have a significantly positive impact on minimising the risk of flooding and preserving existing water quality

Assessment of Parking Standards

This final appraisal assesses the predicted impact of the Parking Standards document as a whole. Undertaking an appraisal of the document as a whole outlines how the document performs against Sustainability Objectives. The key statements appraised would not be expected to satisfy all of the Sustainability Objectives, however, taken

together the document should seek to satisfy the requirements of all of the Sustainability Objectives.

The Parking Standards document has a generally positive impact on the sustainability objectives with minimising the flood risk and preserving the water quality experiencing significant positive effects through the inclusion of SUDS and pollutant filtration in parking design. However, there is uncertainty regarding the impact of the document on four of the sustainability objectives. An uncertain impact on noise pollution is due to this issue not being discussed within the document, while the impacts on safe environments, provision of decent homes and accessibility are uncertain due to the potential for a reduction in parking provision in residential areas to be permitted at sustainable locations or main urban areas. Such a reduction conflicts with the introduction of minimum parking standards at origin sites and the rationale for making this change from the 2001 Vehicle Parking Standards.

Appraisal of Options

The Options which were considered to constitute reasonable alternatives for this document were identified as:

- Option 1: No parking standards
- Option 2: Retention of the 2001 Vehicle Parking Standards
- Option 3: Proposed Parking Standards

Each option was appraised individually, and the outcome of this appraisal is summarised below.

Option	Outcome of Appraisal
Option 1: No Parking Standards	The absence of parking standards would have either a significant adverse impact or an adverse impact on each of the sustainability objectives. A situation that led to a lack of adequate parking provision would particularly raise safety and environmental concerns through increased road congestion and inappropriate parking that would also restrict economic performance by limiting accessibility of sections of the community and by non-motorised means of travel. A situation whereby excess parking provision resulted would raise similar concerns by promoting the use of motorised vehicles and, in addition, cause increased impacts on air quality, noise pollution and climatic change. The absence of parking standards would also mean that a contribution would not be made to other policy initiatives, such as, sustainable transport, environmental improvement, and safe and healthy communities.
Option 2: Retention of the 2001 Vehicle Parking Standards	Retention of the 2001 Vehicle Parking Standards, through the application of maximum parking standards, would have an adverse impact on achievement of sustainability objectives within residential areas. Use of maximum parking standards within residential areas, by restricting parking availability, will lead to safety concerns and cause deterioration of the residential environment with inappropriate parking on footpaths and open spaces also restricting access to locally available facilities and recreational opportunities by sustainable means and for sections of the community. However, the use of maximum parking standards for non-residential uses would have a

	<p>positive impact on social and environmental objectives by limiting access to facilities by motorised traffic and thereby encouraging use of other means of transport. The inclusion within the parking standards for accommodation of vehicles other than the car would enhance these positive impacts, especially if associated with other initiatives to promote and encourage non-car use.</p>
<p>Option 3: Proposed Parking Standards</p>	<p>The Proposed Parking Standards, through use of minimum parking standards in residential areas, would have a generally positive impact on the sustainability of residential areas. Integrating sufficient designated parking spaces into the design of residential areas would reduce traffic hazards and improve residential amenities, thereby enabling travel to local facilities by a variety of means by all sections of the community and retention of open spaces and amenity areas for their intended purpose. The ready availability of vehicles in residential areas could cause an increase in vehicle use but this tendency would be mitigated by the proposed use of maximum parking standards for non-residential uses which would limit access to facilities by motorised traffic. The inclusion within the parking standards for accommodation of vehicles other than the car would further enhance these positive impacts, especially where associated with other initiatives to promote and encourage non-car use.</p>

The proposed parking standards are therefore viewed to be the most sustainable option of those appraised.

SIGNIFICANT AND CUMULATIVE EFFECTS

Significant Effects

The Parking Standards Design and Good Practice document is unlikely to lead to large scale significant adverse effects beyond those identified in the appraisal. The key areas with potential for likely significant effects are:

- Accessibility, provision of decent homes and safe environments
- noise pollution

Any significant adverse effects arising to accessibility, provision of decent homes and safe environments would be due to the reduction of residential parking in main urban areas or sustainable locations. Such scenarios adopt a similar approach set out in the 2001 Vehicle Parking Standards of maximum residential parking standards which has since been revised in this document. The previous approach was found to contribute to problems associated with inappropriate parking in residential areas. Any reductions to parking standards as a result of development in urban areas and the application of planning obligations would be against the rationale of the September 2009 document. Therefore further guidance on this is required to provide clarification as to the circumstances when a reduction would be acceptable.

Significant adverse effects that may arise to noise levels would be due directly to the location and design of parking area. Addressing noise pollution as an environmental consideration in the design of parking areas would assist mitigation of this potentially significant effect. Again additional guidance on how the impact of noise will be dealt with in parking areas would assist in clarifying this point.

The Parking Standards Design and Good Practice document is intended to be applied across the County of Essex. It does not identify the scale and location of parking areas. These will be determined through development of spatial planning policies and applications for planning permission. Consideration of individual proposals for parking areas should set the potential sustainability impacts that generally apply to parking areas into the local context. This may give rise to local specific impacts that would need to be addressed by project if the sustainability effects are to be reduced. They should also consider whether individual proposals for parking areas are likely to have a significant effect on environmental and heritage designations and features.

Cumulative Effects

The Parking Standards Design and Good Practice document is unlikely to lead to significant adverse cumulative effects. The appraisal of the document showed that its implementation will have predominantly positive impacts on all sustainability objectives. However it should be noted that proposals for parking areas at certain locations and sites may have specific adverse impacts. Where a number of parking areas are proposed in close proximity the cumulative impacts of these should be considered at that stage.

MONITORING AND INDICATORS

Monitoring

The SEA Directive requires monitoring of the significant environmental effects that the implementation of the Parking Standards document could give rise to. Article 10.1 states:

“Member States shall monitor the significant environmental effects of the implementation of plans and programmes in order, inter alia, to identify at an early stage unforeseen adverse effects, and to be able to undertake appropriate remedial action.”

Monitoring should consider both positive and adverse effects across a full range of sustainability issues examining cumulative, secondary, and synergistic effects for the life of the Parking Standards document and beyond.

The proposed monitoring framework, as detailed in ‘A Practical Guide to the Strategic Environmental Assessment Directive, 2005’, should focus on significant sustainability effects:

- that indicate a likely breach of international, national or local legislation, recognised guidelines or standards;
- that may give rise to irreversible damage, with a view to identifying trends before such damage is cause; and
- where there is uncertainty over possible adverse effects, and where monitoring would enable mitigation measures to be taken.

Monitoring of the Parking Standards document is the final stage of the SA/SEA process, which does not end upon publication of the document. Ongoing monitoring allows for the success of the document against Sustainability Objectives to be evaluated. Monitoring also provides key baseline information for any later reviews of the document. This chapter of the Environmental Report gives “a description of the measures envisaged concerning monitoring” (Annex 1 (i) of the SEA Directive).

Indicators

The monitoring framework consists of proposed indicators that are designed to assess the effectiveness of proposals in the document to meet parking needs, contribute to increased use of sustainable forms of travel, and address potential significant effects which have been identified in the SA/SEA. Consideration of the sustainability objectives, the key sustainability issues and likely significant effects identified will help in this process along with the mitigation measures proposed during the appraisal of the 20 key statements.

The table below outlines the most appropriate indicators identified to monitor the success of the proposals outlined within the document against Sustainability Objectives. These indicators have been selected and where appropriate modified from those identified early in the SA/SEA process.

INDICATORS

Sustainability Objectives	Indicators
Create Safe environments which do not undermine the quality of life or community cohesion	<ul style="list-style-type: none"> - Public perception of crime - Adult and Child KSIs
To provide everyone with the opportunity to live in a decent home	<ul style="list-style-type: none"> - Car/ van ownership per household - Residential housing survey - Public satisfaction with street scene
To promote a healthy and active lifestyle	<ul style="list-style-type: none"> - Percentage of residents living within 20 minutes travelling time of 3 different leisure facilities (of which one has been awarded a Quality Mark) - Trips per person per year by walking as main mode of travel
To promote accessibility	<ul style="list-style-type: none"> - Resident perception of accessibility of facilities - Travel to work flows and methods - Travel to school methods
To maximise the education and skills of the population and ensure safe and inclusive access to educational facilities.	<ul style="list-style-type: none"> - Travel to school methods - Adult and Child KSIs - Take up of School Travel Plans
To achieve sustainable levels of prosperity and economic growth	<ul style="list-style-type: none"> - Number of footfalls in commercial facilities within close proximity to new parking provision. - Travel to work flows and methods - Use of parking area survey
To promote safe, sustainable and inclusive access to non-residential facilities	<ul style="list-style-type: none"> - Adult and Child KSIs - Proportion of parking spaces assigned to the different types of sustainable transport - Barriers sub-domain: geographical barriers to services (IMD)
To promote sustainable forms of transport	<ul style="list-style-type: none"> - Proportion of parking spaces assigned to the different types of sustainable transport. - Take up of cycle parking provision - Daily and weekly cycle flows
To minimise potential noise pollution	<ul style="list-style-type: none"> - Number of planning permissions subject to a noise minimisation condition. - Number of complaints / incidents reported to

Sustainability Objectives	Indicators
	<p>health officers.</p> <ul style="list-style-type: none"> - Resident opinion on noise levels.
To improve air quality	<ul style="list-style-type: none"> - Recorded traffic flows (in proximity to and including major new schemes) - Number of AQMAs and Potentially Significant junctions (Nitrogen Dioxide)
To minimise the cumulative effects of climate change	<ul style="list-style-type: none"> - Planning permissions involving parking facilities approved contrary to EA advice (flood risk) - Percentage of energy used in the car park derived from renewable sources.
To minimise the risk of flooding	<ul style="list-style-type: none"> - Number of planning permissions granted subject to the inclusion of SUDS - Planning permissions granted involving parking facilities approved contrary to EA advice (flood risk)
To preserve existing water quality	<ul style="list-style-type: none"> - Number of planning permissions granted subject to the inclusion of pollutant filtration schemes - River water quality - Chemical composition of surface water runoff
To conserve, enhance and create biodiversity and geodiversity	<ul style="list-style-type: none"> - Number and condition of international, national and local designated sites. - Trends in plant and animal species. - Condition of areas of conservation in proximity to sites
To maintain and enhance the quality of the existing townscape and landscape	<ul style="list-style-type: none"> - Public perception of quality of open space. - Public perception of built environment. - Number of planning permissions granted subject to a landscaping condition
To maintain and enhance cultural heritage and assets	<ul style="list-style-type: none"> - Condition of heritage features - Number of parking areas allowed in Conservation Areas
To make the most efficient use of PDL and to avoid unnecessary development of the countryside	<ul style="list-style-type: none"> - Proportion of vacant previously developed land

CONCLUSION AND RECOMMENDATIONS

The Parking Standards Design and Best Practice document sets out a range of guidance that is unlikely to lead to large scale significant and cumulative adverse effects beyond those identified in this appraisal.

The review of Parking Standards to incorporate minimum parking standards for residential areas should contribute to improved amenity and environmental quality in residential areas. Any tendency for this approach to stimulate increased use of motorised vehicles could be mitigated by continuing use of maximum parking standards at non-residential locations, parking provision for vehicles other than cars, and improved safety and reduced congestion encouraging use of more sustainable forms of transport. The inclusion of design and best practice guidance alongside the proposed parking standards further enhance the potential benefits of the revisions to the Parking Standards.

Additional guidance should be provided to clarify the following outstanding issues identified through the SA/SEA for this document:

- Guidance outlining the circumstances where reduced parking standards would be deemed acceptable.
- Guidance outlining how the impact of noise should be dealt with in parking areas.

PART B: ENVIRONMENTAL REPORT

1 INTRODUCTION

1.1 Background

Essex County Council, on behalf of Essex Planning Officers Association (EPOA), have reviewed their Parking Standards. The current standards are set out in the document "Vehicle Parking Standards, EPOA, August 2001" but will be replaced by "Parking Standards: Design and Good Practice Guide, September 2009" – (hereafter referred to as 'the document') once it is adopted.

A draft Sustainability Appraisal, incorporating Strategic Environmental Assessment (SA/SEA) was produced alongside the consultation draft Parking Standards document in March 2009. The draft SA/SEA should be read in conjunction with the consultation draft document.

It is intended that the Parking Standards should be applied throughout Essex. The document will be recommended to Essex planning authorities and others as providing quality advice and guidance on the provision and role of parking within residential and commercial areas in Essex. The revised standards will be used by Essex County Council, as Highway Authority, in consideration of development proposals. They will also be commended for adoption as a Supplementary Planning Document by district councils in Essex and, if they wish, by the unitary authorities of Southend-on-Sea and Thurrock.

The Parking Standards will be used to assess the merits of development proposals that come forward through the statutory planning process. As a consequence, the Parking Standards document has been subject to a SA/SEA and should be read in conjunction with the September 2009 document.

This report is the Environmental Report of the SA/SEA that has been undertaken for the September 2009 document. The Non-Technical Summary which highlights the key matters arising from the Appraisal precedes this section.

The Sustainability Appraisal of the document has been produced by the Spatial Planning Group of Essex County Council.

1.2 Sustainability Appraisal / Strategic Environmental Assessment

The requirement for Sustainability Appraisal (SA) and Strategic Environmental Assessment (SEA) emanates from a high level national and international commitment to sustainable development. The most commonly used definition of sustainable development is that drawn up by the World Trade Commission on Environment and Development in 1987 which states that sustainable development is:

'development that meets the needs of the present without compromising the ability of future generations to meet their own needs.'

The European Directive 2001/42/EC "on the assessment of the effects of certain plans and programmes on the environment" (the 'SEA Directive') was adopted in June 2001 with a view to increase the level of protection for the environment, integrate environmental considerations into the preparation and adoption of plans and programmes and to promote sustainable development.

The Directive was transposed into English legislation by the Environmental Assessment of Plans and Programmes Regulations 2004 (the 'SEA Regulation'),

which came into force on 21 July 2004. It requires a Strategic Environmental Assessment to be carried out for all plans and programmes

‘which are subject to preparation and/or adoption by an authority at national, regional or local level or which are prepared by an authority for adoption, through a legislative procedure by Parliament or Government, and required by legislative, regulatory or administrative provisions’.

The few exceptions are detailed in Article 3 (8, 9) of the SEA Directive. The aim of the SEA is to identify potentially significant environmental effects created as a result of the implementation of the plan or programme 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’* as specified in Annex 1(f) of the Directive.

Sustainability Appraisals examine the effects of proposed plans and programmes in a wider context, taking into account economic, social and environmental considerations in order to promote sustainable development. They are mandatory for all Development Plan Documents and Regional Spatial Strategies in accordance with the “Planning and Compulsory Purchase Act 2004” as amended.

Whilst the requirements to produce a Sustainability Appraisal and Strategic Environmental Assessment are distinct, Government guidance considers that it is possible to satisfy the two requirements through a single approach providing that the requirements of the SEA Directive are met.

1.3 The aim and structure of this report

The Parking Standards will be used to assess the merits of development proposals that come forward through the statutory planning process. As a consequence, the document has been subject to a Sustainability Appraisal, incorporating Strategic Environmental Assessment (SA/SEA).

This report is the Environmental Report of the SA/SEA that has been undertaken for the September 2009 version of the document. It highlights the key matters arising from the SA/SEA. A Non-Technical Summary of the SA/SEA precedes this section. The required elements of the Environmental Report are signposted in Table 1.

TABLE 1: THE ENVIRONMENTAL REPORT REQUIREMENTS

SEA Regulations – required content of Environmental Report	Covered in this Report
An outline of the contents and main objectives of the plan or programme, and of its relationship with other relevant plans and programmes.	Section 1.1 and 3 Annex A
The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme.	Annex B
The environmental characteristics of areas likely to be significantly affected.	Annex B

SEA Regulations – required content of Environmental Report	Covered in this Report
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.	Annex B
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.	Annex A
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 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 issues.	Section 3, 4 and 6
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 3, 4 and 6
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.	Section 2 and 3
A description of the measures envisaged concerning monitoring.	Section 5
A non-technical summary of the information provided under the above headings.	See NTS included within this report

2 METHODOLOGY

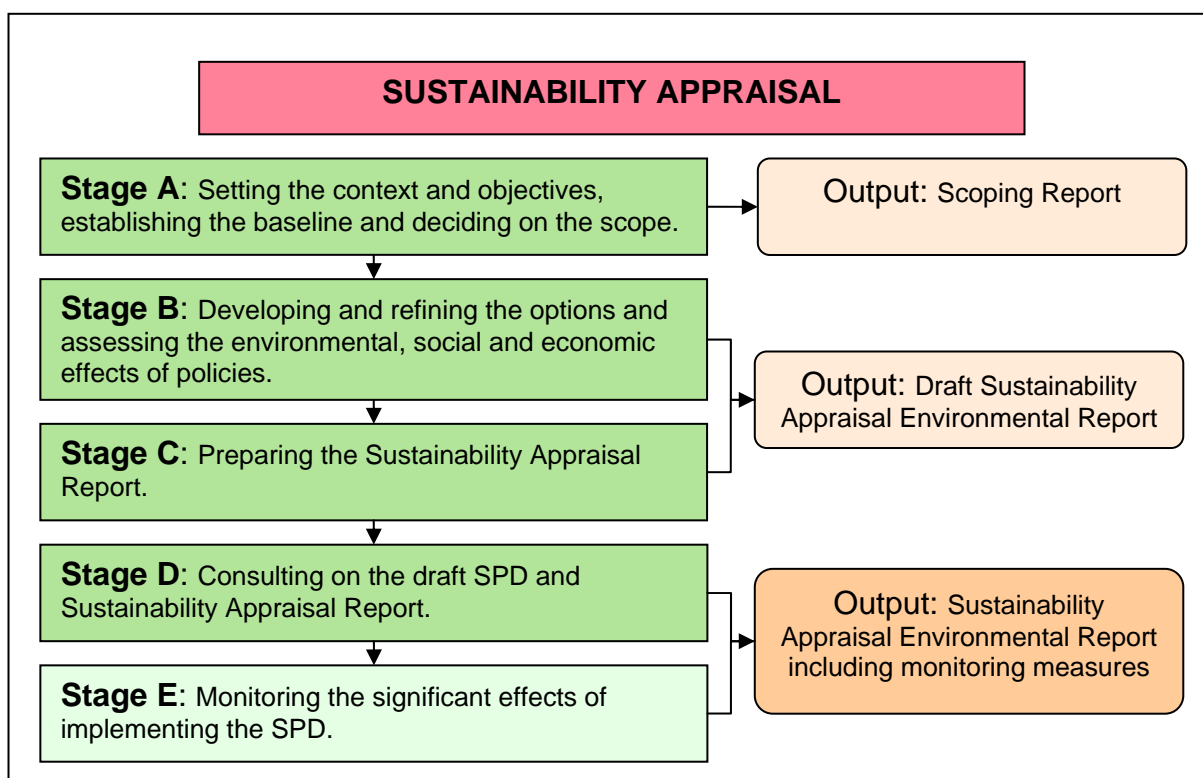
2.1 Stages of SA/SEA

This section of the report sets out the methodology which has been adopted for conducting the SA/SEA of the document. The methodology adopted for this appraisal of the document seeks to meet the requirements of both SA and SEA for the environmental assessment of plans. It has been prepared in accordance with the following documents,

- The European Directive 2001/42/EC (EC, 2001)
- A Practical Guide to the Strategic Environmental Assessment Directive (ODPM, 2005)
- Sustainability Appraisal of Regional Spatial Strategies and Local Development Frameworks (ODPM, 2005)

The appraisal of the document has been conducted in accordance with the guidance as part of a five stage process as outlined in Figure 1.

FIGURE 1: STAGES OF THE SUSTAINABILITY APPRAISAL AND OUTPUTS



To date the SA/SEA process is through to Stage D and the following outputs have been prepared:

- A Scoping Report which set out the context and objectives, established the baseline and decided on the scope for the SA/SEA was produced. The Scoping Report was subject to consultation in October and November 2008.
- A draft SA/SEA Environmental Report was published alongside the Parking Standards Consultation Draft to inform the consultation exercise which was published in March 2009.

2.2 Stage A – Preparation of the Scoping Report

Stage A culminated in the preparation of a Scoping Report which identified relevant plans, programmes and environmental protection objectives; baseline information; and sustainability objectives, to be used during the SA/SEA.

The review of relevant plans and programmes and baseline information highlighted key sustainability issues. The identification of sustainability issues, particularly those which are significant provides the opportunity to define sustainability objectives which directly relate to the document. Seventeen objectives were identified to appraise the document. The sustainability objectives are listed in Table 2, with an indication of their contribution to social, economic and environmental factors.

TABLE 2: SUSTAINABILITY OBJECTIVES

	Economic	Social	Environment
1) Create Safe Environments which do not undermine the quality of life or community cohesion		✓	✓
2) To provide everyone with the opportunity to live in a decent home	✓	✓	✓
3) To promote a healthy and active lifestyle		✓	✓
4) To promote accessibility	✓	✓	✓
5) To maximise the education and skills of the population and ensure safe and inclusive access to educational facilities	✓	✓	
6) To achieve sustainable levels of prosperity and economic growth	✓	✓	
7) To promote safe, sustainable and inclusive access to non-residential facilities	✓	✓	✓
8) To promote sustainable forms of transport	✓	✓	✓
9) To minimise the potential noise pollution		✓	✓
10) To improve air quality	✓	✓	✓
11) To minimise the cumulative effects of climatic change		✓	✓
12) To minimise the risk of flooding			✓
13) To preserve existing water quality		✓	✓
14) To conserve, enhance and create biodiversity and geodiversity		✓	✓
15) To maintain and enhance the quality of existing townscape and landscape	✓	✓	✓

	Economic	Social	Environment
16) To maintain and enhance cultural heritage and assets			✓
17) To make the most efficient use of previously developed land and avoid unnecessary development of the countryside	✓		✓

The Scoping Report was subject to a 5-week consultation period with the 3 statutory consultees:

- Environment Agency,
- Natural England, and
- English Heritage.

Responses received from the consultees are outlined in Table 3 and have been incorporated into the SA/SEA.

TABLE 3: SUMMARY OF CONSULTEE COMMENTS

Consultee Name: Environment Agency	
Comment Received	Response
Advise that the guidance encourages the use of Sustainable Drainage Systems	Noted and agreed.
Advise that the design of any proposed car parks and parking areas include the use of Sustainable Drainage Systems	Noted.
Parking areas are often susceptible to oil contamination and this should be considered in the design of the car park. All surface water drainage from parking areas and hard standings susceptible to oil contamination shall be passed through an oil separator	Noted.
Consultee Name: Natural England	
Comment Received	Response
The following two documents should be added to Appendix 2 (Plans and Programs): Maldon District Replacement Local Plan (November 2005) and “Strategic Environmental Assessment and Biodiversity: Guidance for Practitioners”	Agreed, both documents have been included.
We are pleased to note that climate change is captured in Objective 12.	Noted

With respect to Objective 6 significant biodiversity interest can exist on previously developed sites. Such interest is known to include 'priority species' (rare and scarce species identified in the UK Biodiversity Action Plan). These species are identified in both PPS9 (sections 3 & 14) and RSS14 (Policy ENV3 biodiversity & earth heritage).	Noted, however objective 6 is dealing primarily with economic and social issues. Biodiversity present on the site would be reflected by the outcome of the response to objective 14.
In considering the Parking Standards Design and Good Practice Guide, the County Council should ensure that objective criteria based policies are applied in order to assess and evaluate the biodiversity importance of land under consideration, irrespective of whether that land is 'previously developed' or 'undeveloped'.	Noted and agreed.
While there is no overt repetition, there is synergy between some Objectives, for example 4 & 12 – sustainable transport options will cut CO2 thereby assisting with climate change reduction.	Noted and agreed.
Objective 5: Information on statutory designated sites may be found on our website www.naturalengland.org.uk , which will assist ECC in identifying the number and condition of sites (detailed indicators).	Noted.
Objective 15 (Air Quality): This is of particular concern to us as levels of NOx are at a level which greatly exceeds the critical level for the protection of vegetation. Natural England is, therefore, of the opinion that the integrity of designated sites, such as Epping Forest, in terms of its ability to support the features for which the SAC was selected, is already being adversely affected. Consequently, any increase in traffic through the Forest which is regarded as being likely to have a significant effect in terms of increased air pollution may well also constitute an additional adverse affect on the integrity of the European site.	Noted.
Consultee Name: English Heritage	
Comment Received	Response
None Received	

2.3 Stage B - Appraisal of the Document

An appraisal of the document was undertaken which assessed the contents against each of the sustainability objectives. There are three key components that inform the appraisal process:

- Review of Plans & Programmes
- Baseline Information
- SEA Objectives and Sustainability Framework

Twenty key statements were selected from the document to appraise their sustainability performance. The statements were selected to cover the scope of matters included within the document. This approach was adopted because the document does not set out specific policies for Parking Standards.

The sustainability performance of each of the statements was assessed. The potential sustainability impact of each of these statements was individually appraised against each of the seventeen sustainability objectives.

The Appraisal informs:

- The extent to which the document and each selected statement may contribute to achieving the sustainability objectives;
- Any change in the degree of impact over time;
- Measures that could improve contribution of the document to sustainability;
- Any linkage with, or impact on, other statements or matters that could have broader implications and may be defined within one of 3 types of effect,
- Secondary effect – not a direct result of the statement, but occur away from the original effect or as a result of a complex pathway,
- Cumulative effect – whereby several statements each have insignificant effects but together have a significant effect, or where several individual effects have a combined effect,
- Synergistic effect – effects that interact to produce a total effect greater than the sum of the individual effects;
- Any other factors to consider during future work on the document.

Table 4 shows the Sustainability Framework which shows the relationship between,

- each of the SA/SEA objectives;
- where each of the objectives has been sourced from;
- which topics refer to each objective;
- what key questions have to be asked of each policy objective to assess it's relationship with each of the objectives; and,
- what data sources can be monitored to see if policies accord with the objectives?

The Sustainability Framework contains a revised order of sustainability objectives which will better assist in the SA/SEA of the document.

TABLE 4: SUSTAINABILITY FRAMEWORK

Sustainability Objective	Source	Topics	Key Questions	Indicator
1) Create Safe environments which do not undermine the quality of life or community cohesion	CLG (2005) Planning Policy Statement (PPS) 1 – Delivering Sustainable Development	SEA Directive: Cultural Heritage Population & Human health Other relevant issues: Townscape Social	Can the parking area be overlooked by users and / or pedestrians? Will the parking area be well lit? Will the parking area be covered by CCTV? Will the parking provision be in close proximity to use? Will the parking area display adequate road markings / signs and incorporate tactile surfaces? How many access points will the parking area have? Do landscaping proposals accord with designing out crime initiatives? Does the design incorporate traffic calming measures? Is there an adequate provision of car parking bays for the disabled?	Crime rates. Public perception of crime. Proportion of applications paying heed to designing out crime initiatives. Number of disabled car parking bays provided for.
2) To provide everyone with the opportunity to live in a decent home	CLG (2006) Planning Policy Guidance (PPG) 3 – Housing	SEA Directive: Cultural Heritage Population & Human health Other relevant	Will new developments have self-sufficient parking provision? Is there an adequate provision of car parking bays for the disabled? Will the parking area potentially impinge on the street scene?	Cars per household existing and projected. Comparison between average vehicle size and parking provision. Sight lines from house to car.

Sustainability Objective	Source	Topics	Key Questions	Indicator
		issues: Townscape Social Economy Housing Transport	Are properties built to provide sufficient storage? Do size of newly developed parking spaces accord with new standards? Will people feel that their vehicle is safe in their residential parking bay?	Public satisfaction with street scene.
3) To promote a healthy and active lifestyle	CLG (2005) Planning Policy Statement (PPS) 1 – Delivering Sustainable Development	SEA Directive: Population & Human Health Other relevant issues: Social	Will it encourage travel by foot or bicycle? Will it increase access to open space and recreational facilities? Will it improve air quality? Will it improve the public realm? Will it improve noise pollution?	Number of car parking spaces assigned to leisure facilities. Resident opinion on amount of open space / leisure facilities. Percentage of residents living within 20 minutes travelling time of 3 different leisure facilities (of which one has been awarded a Quality Mark) Number of days where WHO objectives were not met. P ₁₀ emissions. Spatial extent of AQMA and potentially significant junctions in the area. Number of coronary heart disease mortalities.

Sustainability Objective	Source	Topics	Key Questions	Indicator
				<p>Number of car parking spaces assigned to hospitals.</p> <p>Number of car parking spaces assigned to GP practices.</p>
4) To promote accessibility			<p>Is parking provision for the disabled incorporated into the development?</p> <p>Does the proposal promote multi-purpose, multi-use spaces?</p> <p>Will cycling storage provision be covered, lit, secure, monitored, and accessible?</p> <p>Will the parking areas be accessible to emergency and HGV vehicles?</p> <p>Does the scale of the parking areas reflect the size of the road network and site?</p> <p>Is access to the park safe for pedestrians and vehicle users?</p> <p>Are individual bays sufficiently sized to be fit for purpose?</p> <p>Does proposed development conform to CABI's designing out crime initiatives?</p> <p>Are parking provisions sufficient for current and proposed growth for all employment, commercial, leisure and</p>	<p>Number of parking spaces per vehicle type.</p> <p>Number of disabled spaces</p> <p>Resident perception of accessibility of facilities.</p> <p>Number of long stay / short stay car parks.</p> <p>Crime statistics</p> <p>Car ownership per household.</p> <p>Adult and Child KSIs</p> <p>Recorded traffic flows.</p> <p>Existing car park facilities proximity to services.</p> <p>Proximity to development the car park is designed to serve.</p> <p>Air quality in proximity to site.</p> <p>Emergency response times to car park.</p>

Sustainability Objective	Source	Topics	Key Questions	Indicator
			<p>health uses?</p> <p>Will parking development reduce the need to travel?</p> <p>Will the parking areas display adequate road markings / signs and incorporate tactile surfaces?</p>	
5) To maximise the education and skills of the population and ensure safe and inclusive access to educational facilities.	CLG (2005) Planning Policy Statement (PPS) 1 – Delivering Sustainable Development	<p>SEA Directive: Population and Human health</p> <p>Other relevant issues: Economy Transport</p>	<p>How many schools have a travel plan?</p> <p>Does the school contribute to congestion during its hours of use?</p> <p>Will the proposed policy contribute to off-site parking?</p> <p>Does the parking area provide for multiple use?</p> <p>Does the car park provide for disabled access?</p> <p>Will the parking area display adequate road markings / signs and incorporate tactile surfaces?</p> <p>Will the parking area benefit from natural surveillance?</p> <p>Will the parking area incorporate CCTV monitoring?</p>	<p>Number of schools with a travel plan.</p> <p>Adult and Child KSIs</p> <p>Capacity for multiple vehicular use</p> <p>Number of disabled spaces?</p> <p>Number of car parks with natural or monitored surveillance.</p>
6) To achieve sustainable levels of prosperity and economic growth	CLG (2005) PPS 1 – Delivering Sustainable	SEA Directive: Population and Human health	<p>Will provision encourage business development?</p> <p>Will parking provision encourage</p>	Number of footfalls in commercial facilities within close proximity to new

Sustainability Objective	Source	Topics	Key Questions	Indicator
	Development	Other relevant issues: Economy Transport	<p>people to the area?</p> <p>Will the parking provision enhance townscape?</p> <p>Will provision reduce road congestion and pollution?</p> <p>Will the parking area provide for a number of different vehicle options?</p> <p>Could new parking provision become an overspill for existing facilities and therefore contribute to additional car use?</p> <p>Would provision of new parking adversely effect economic growth elsewhere?</p>	<p>parking provision.</p> <p>Travel to work flows</p> <p>% change in the number of VAT registered businesses.</p> <p>Employment status by resident and job type.</p> <p>Gross weekly pay.</p> <p>Amount of vacant floor space.</p>
7) To promote safe, sustainable and inclusive access to non-residential facilities			<p>Does the development contribute to congestion during its hours of use?</p> <p>Will the proposed policy contribute to off-site parking?</p> <p>Does the car park provide for multiple use?</p> <p>Does the car park provide for disabled access?</p> <p>Will the car park display adequate road markings / signs and incorporate tactile surfaces?</p> <p>Will the parking area benefit from natural surveillance?</p>	<p>Adult and Child KSIs</p> <p>Capacity for multiple vehicular use</p> <p>Number of disabled spaces?</p> <p>Number of car parks with natural or monitored surveillance.</p>

Sustainability Objective	Source	Topics	Key Questions	Indicator
			Will the parking area incorporate CCTV monitoring?	
8) To promote sustainable forms of transport	CLG (1999) PPG 13 – Transport	SEA Directive: Population and Human Health Air Quality Climatic Factors Cultural Heritage Other relevant issues: Transport	Will it promote the use of sustainable modes of transport? Will there be an adequate provision of disabled parking bays? Will there be adequate parking provision for cycles and motorcycles? Will the parking bays be in close proximity to the development they are supposed to serve?	Number of parking spaces assigned to the different types of sustainable transport.
9) To minimise potential noise pollution	CLG (2005) Planning Policy Statement (PPS) 1 – Delivering Sustainable Development	SEA Directive: Biodiversity, fauna and flora Air Soil / Minerals & Waste Population & Human Health Other relevant issues: Transport Water Quality Social	Will existing sensitive areas be screened from noise generated by the car park? Will the level of noise generated in the surrounding area by the use of the car park be detrimental to the surrounding area? What would be the envisaged hours of use of the car park? What type of development would the car park serve? Will the car park be adequately managed?	Number of planning applications with screening considerations. Number of complaints from health officers. Resident opinion on noise levels. Hours of use of the car park. Land use map showing surrounding area.

Sustainability Objective	Source	Topics	Key Questions	Indicator
10) To improve air quality	EU Air Quality Framework Directive (1996/62/EC)	SEA Directive: Air Quality Population and Human Health Climatic Factors	<p>Will it have a detrimental impact on air quality?</p> <p>Will it be in close proximity to AQMA or potentially significant junctions?</p> <p>Will it increase traffic congestion to the surrounding road network?</p> <p>Will it provide access to more sustainable modes of transportation?</p> <p>Will it lead to an increase in proportion of energy needs being met from renewable sources?</p>	<p>Number of AQMAs in the County.</p> <p>P₁₀ emissions.</p> <p>Number of says where WHO objectives were not met.</p> <p>Recorded network traffic flows before and after development.</p> <p>Change in greenhouse gas emissions before and after development.</p>
11) To minimise the cumulative effects of climate change	CLG (2004) PPS 22 – Renewable Energy	SEA Directive: Air Quality Climatic Factors Soils, Minerals & Waste Material Assets (Flooding) Other relevant issues: Water Quality	<p>Does the car park have sufficient access in and out of the site to reduce traffic congestion?</p> <p>Does the car park aid in reducing greenhouse gas emissions by encouraging sustainable transport?</p> <p>Will it increase the potential to make use of renewable energy sources?</p> <p>Will planning contributions be sought to reduce climate change?</p> <p>Will building materials be derived from local and sustainable sources?</p>	<p>Recorded network traffic flows before and after development.</p> <p>Change in greenhouse gas emissions before and after development.</p> <p>Change in P₁₀ emissions.</p> <p>Proximity of development to AQMAs and potentially significant junctions.</p> <p>Percentage of energy used in the car park derived from renewable sources.</p> <p>Amount of building waste to</p>

Sustainability Objective	Source	Topics	Key Questions	Indicator
				landfill. Number of parking bays for sustainable forms of transport.
12) To minimise the risk of flooding	CLG (2006) PPG25 – Development and Flood Risk	SEA Directive: Material Assets (Flooding)	<p>Will the proposed development have a effect on existing natural drainage patterns?</p> <p>Will the development be in areas designated as floodplains or at risk of flooding?</p> <p>How will potential floodrisk be managed and mitigated against, and what impact will this have on the surrounding environment?</p> <p>How will flood risk areas change with impact of climate change?</p> <p>Will the development increase surface runoff?</p> <p>Will Sustainable Urban Drainage systems be incorporated to reduce flooding?</p>	<p>Spatial extent of all floodzones.</p> <p>Location of main rivers and coast.</p> <p>Number of residential properties flooded in close proximity to the developed site.</p> <p>Number of planning permissions granted in flood zones in contravention of Environment Agency advice.</p>
13) To preserve existing water quality	Water Framework Directive (England and Wales) Regulations 2000/60/EC	SEA Directive: Climatic Factors Population and Human Health Other relevant	<p>Will it have a detrimental effect on the quality of inland water?</p> <p>Will new proposals increase the amount of surface water runoff?</p> <p>Will the proposal promote the use of Sustainable Drainage Systems?</p>	<p>River Ecosystem Classification results.</p> <p>Chemical composition of surface water runoff.</p> <p>GQA Chemistry results both in close proximity and</p>

Sustainability Objective	Source	Topics	Key Questions	Indicator
		issues: Water Flooding		downstream of site. GQA Biology results both in close proximity and downstream of site Spatial extent of all floodzones.
14) To conserve, enhance and create biodiversity and geodiversity	CLG (2005) PPS 9 – Biological and Geological Conservation	SEA Directive: Biodiversity, fauna and flora Landscape Climatic Factors Cultural Heritage Soils, Minerals and Waste Material Assets (Flooding) Other relevant issues: Water	Will it conserve and enhance national / semi-natural habitats? Will it conserve and enhance species diversity, and in particular avoid harm to protected species? Will it maintain and enhance sites designated for their nature conservation interest? Will an interesting diverse community be established to add value to an areas character? Will it maintain and enhance sites designated for their nature conservation interest? Will new or expanded sites encroach into or be in close proximity to SSSIs, SPAs, CWSs, areas of conservation or the Lee Valley Regional Park? Will new features of biodiversity or geodiversity be incorporated into parking? Will proposed development prohibit	Number and condition of designated sites within Essex. Trends in plant and animal species. Achievement of Biodiversity Action Plan targets. Condition of MGB in proximity to sites Condition of SSSIs in proximity to sites Condition of SPAs in proximity to sites Condition of areas of conservation in proximity to sites Condition of CWSs in proximity to sites Number of car parking proposals including landscaping concerns

Sustainability Objective	Source	Topics	Key Questions	Indicator
			the safe guarding of mineral sites for future use?	
15) To maintain and enhance the quality of the existing townscape and landscape	CLG (2005) Sustainable Communities Plan	SEA Directive: Landscape Biodiversity Cultural Heritage Other relevant issues: Social Townscape	Will new development protect and enhance sites, features and areas of value in both urban and rural areas? Does it seek to enhance the range and quality of the public realm and open spaces? Will it reduce the amount of derelict, degraded and underused land? Will the proposed development obstruct desirable vistas? Will the proposal ensure high quality inclusive design? Will it protect existing street scene?	Damage to buildings resulting from use. Change in the amount of derelict land. Change in the number of derelict buildings. Number of applications designed to be sympathetic to natural environment. Public perception of quality of open space. Public perception of built environment. Does the proposed car park include adequate landscaping and screening?
16) To maintain and enhance cultural heritage and assets	CLG (1994) PPG 15 – Planning and Historic Environment	SEA Directive: Landscape Cultural Heritage Other relevant issues: Townscape	Will new development protect and enhance sites, features and areas of historical, archaeological and cultural value in both urban and rural areas? Does it seek to enhance the range and quality of the public realm and open spaces? Will it reduce the amount of derelict, degraded and underused land?	Spatial proximity to areas designated as having a heritage or cultural value. Damage to historical buildings resulting from use. Change in the amount of derelict land. Number of allowed in conservation areas.

Sustainability Objective	Source	Topics	Key Questions	Indicator
			Will the proposed development obstruct historic vistas?	Number of applications designed to be sympathetic to natural environment.
17) To make the most efficient use of PDL and to avoid unnecessary development of the countryside	CLG (1995) PPG 2 – Green Belts	SEA Directive: Biodiversity, fauna and flora Landscape Climatic Factors Cultural Heritage Material Assets	<p>Will proposed development be on PDL?</p> <p>Will it reduce the amount of vacant, derelict, degraded or underused land?</p> <p>Is there another more viable alternative site in the urban environment?</p> <p>Is there another more viable alternative site in the countryside environment?</p> <p>Will it conserve the natural / semi natural environment?</p> <p>Will it reduce the amount of best / most viable agricultural land?</p> <p>Does the proposal include landscaping concerns?</p>	<p>Amount of vacant land developed.</p> <p>Amount of agricultural land lost.</p> <p>Proximity to designated conservation sites.</p> <p>Public perception of local area before / after development.</p> <p>Public perception of availability of open space.</p> <p>Amount of open space / footpaths lost by development.</p> <p>Amount of development occurring in the greenbelt.</p> <p>Number of proposals incorporating landscape features.</p> <p>Number of incorporated landscape features.</p>

2.4 Stage C - Preparation of the draft Report

A draft Environmental Report was produced alongside the March 2009 Consultation Draft Parking Standards Document. This draft Environmental Report set out the appraisal of the options for Parking Standards. The sustainability performance of the proposed revised approach to parking standards (March 2009) was assessed against retention of the existing standards produced in 2001 and against having no parking standards at all. These Options were not presented in the draft document, but were devised for the purpose of SA/SEA and were deemed to be reasonable alternatives. The Options which were considered to constitute reasonable alternatives for this document were therefore identified as:

- Option 1: No parking standards
- Option 2: Retention of the 2001 Vehicle Parking Standards
- Option 3: Proposed Parking Standards

Each option was appraised individually, and the outcome of this is outlined in section 3.5 of this report.

The document does not set out specific policies. Therefore the document was divided into 20 key statements which were deemed to constitute the basis for guidance contained within the document. The draft Environmental Report outlined the SA/SEA of 20 Statements contained within the consultation draft Parking Standards document. The outcome of this appraisal is outlined in Table 5 in the following chapter.

2.5 Stage D - Consulting on the draft Parking Standards document and the draft Environmental Report

This document represents the tasks required for stage D. The final Parking Standards document, prepared following public consultation and the findings of the draft Environmental Report, underwent an additional SA/SEA, the results of which are incorporated into this Report.

This final Environmental Report should therefore be read alongside the draft Environmental Report to document fully the SA/SEA undertaken for this document.

3 APPRAISAL OF THE PARKING STANDARDS DOCUMENT SEPTEMBER 2009

3.1 Conclusions arising from the Consultation Draft

The Parking Standards Design and Good Practice consultation draft was published for public consultation from the 13th March 2009 to 24th April 2009. A draft Environmental Report was prepared at that time.

The draft Environmental Report appraised three reasonable alternatives or options for the rationale of the Parking Standards document (Options 1, 2 and 3) together with twenty key statements identified within the consultation draft document.

The draft Environmental Report concluded that the further stages of preparation of the Parking Standards document should take the opportunity to consider:

- more precise terminology;
- the potential impacts of parking areas on risk of flooding, water quality and noise;
- the importance of linking increased parking controls to provision of sustainable transport options and designated parking areas;
- the circumstances in which reduction of any parking standards or the acceptance of a s106 contribution would be considered;
- the provision of lifetime parking provision and standards in residential development;
- access and security measures for off-curtilage parking in residential areas; and
- the need to consider the local context of individual proposals for parking areas;

3.2 Changes between the Consultation Draft and Final Document

Following the public consultation, and in light of recommendations within the draft Environmental Report an amended version of the document has been produced.

The amendments within the September 2009 Parking Standards document have been reviewed. The changes were reviewed and categorised as follows:

- 4) Changes to the 20 key statements - those changes which impact upon the appraisal of the twenty key statements
- 5) Substantive changes to other text in the document – Substantive changes to the document which did not effect the twenty key statements were examined.
- 6) Minor editorial changes – for example page and paragraph numbering.

Following a review of all of the changes, the 20 key statements were re-appraised where necessary and the outcome of this is displayed in Table 5.

There were no substantive changes to the remainder of the document, which changed the document in order to warrant separate appraisal. There were also a number of editorial changes made to the Parking Standards document which did not effect the appraisal of the document.

TABLE 5: SCHEDULE OF CHANGES TO KEY STATEMENTS

SA/SEA Appraisal Statement	Paragraph and page no ¹ .	Original wording (Consultation Draft March 2009) (changes in bold)	Parking Standards Design and Good Practice September 2009 (changes in bold)	March 2009 SA/SEA Appraisal Summary	September 2009 SA/SEA Appraisal Summary (in the light of any changes)
Statement 1	Paragraph 2.1.1, Page 11	2.1.1 Whilst this document has grouped parking standards into Planning Use Classes, there will inevitably be some developments that will not fall into any of these categories. In such cases parking provision will be considered on the developments own merit. However the onus will fall to the developer to demonstrate that the level of parking provided is appropriate and will not lead to problems of on-street parking on the adjacent highway network. This will usually be demonstrated through a Transport Assessment (TA) or Transport Statement	[Add paragraph] 2.1.2 If it is proven by the developer that the provision of parking according to the standard will be insufficient for the development (destination), then provision over the maximum should be considered by the LPA.	The use of parking standards related to the scale and nature of activity at proposed developments would have a generally positive impact on sustainability objectives. Also, provision of parking for more sustainable forms of transport and for specific categories of user would promote safe and inclusive accessibility as well as economic prosperity. The use of Transport Statements or Transport Assessments would further ensure that parking provision was appropriate to the needs of the proposed use and could be linked to other sustainable transport initiatives.	This additional paragraph does not alter the Appraisal of Statement 1.

¹ (As per the Consultation Draft Document, March 2009)

SA/SEA Appraisal Statement	Paragraph and page no ¹ .	Original wording (Consultation Draft March 2009) (changes in bold)	Parking Standards Design and Good Practice September 2009 (changes in bold)	March 2009 SA/SEA Appraisal Summary	September 2009 SA/SEA Appraisal Summary (in the light of any changes)
		(TS).			
Statement 2	Paragraphs 2.2.1 to 2.2.4, Page 11	These four paragraphs highlight design considerations for parking areas, including: suitably screened and landscaped; good design and materials; location, context of public realm and environmental considerations; and, 'parking' and its relationship to the built environment	No changes to wording	Attention to design considerations for parking areas would have a positive impact by enhancing the visual appearance of parking areas and contributing to improved townscapes and landscapes. Adoption of good design principles can also assist to improve safety and economic prosperity by stimulating visits to the area. These benefits could be further enhanced by the Parking Standards document identifying examples of good practice advice and implementation.	No change to Appraisal
Statement 3	Paragraph 2.2.5, Page 11	Flooding is becoming an important consideration when planning development. Whilst this is a planning issue, in terms of parking standards, in a	Flooding is becoming an important consideration when planning development. Whilst this is a planning issue, in terms of parking standards, in a	Parking areas, within or beyond designated flood zones, can have an adverse impact on water quality and risk of flooding. Flooding events increase	Changes to Appraisal which reflect outcome of March 09 Appraisal. Parking areas that are

SA/SEA Appraisal Statement	Paragraph and page no ¹ .	Original wording (Consultation Draft March 2009) (changes in bold)	Parking Standards Design and Good Practice September 2009 (changes in bold)	March 2009 SA/SEA Appraisal Summary	September 2009 SA/SEA Appraisal Summary (in the light of any changes)
		<p>flood risk area underground parking is not advised, and undercroft parking may be considered in residential developments to elevate the living area. Further guidance can be sought in Planning Policy Statement 25 (PPS25) and its companion documents.</p>	<p>flood risk area underground parking is not advised, and undercroft parking may be considered in residential developments to elevate the living area.</p> <p>Sustainable drainage systems (SUDS) and pollutant filters should be designed into parking areas to help address flooding and water quality issues. Further guidance can be sought in Planning Policy Statement 25 (PPS25) and its companion documents.</p> <p>[Add Paragraph]</p> <p>2.2.6 In light of emerging legislation and the existing GPDO, consideration should be given to permeable surface material. Essex</p>	<p>safety hazards and restrict access, and cause damage to property. Inadequate drainage or flooding of parking areas can harm water quality and biodiversity due to the accumulation of pollutants from vehicles. The Parking Standards document should emphasise the need for sustainable drainage systems and pollutant filters to be designed into parking areas as well as highlighting more clearly the need to fully address flooding and water quality impacts.</p>	<p>designed to include sustainable drainage systems and pollutant filtration would have a significantly positive impact on the risk of flooding and water quality and consequently address the impacts of climatic change. Sustainable drainage systems reduce the risks of localised flooding and flooding of areas downstream thereby ensuring safe access for all users and transport modes and a reduced risk of damage to property and loss of life. Flood prevention and pollutant filtration would also positively impact on the natural environment by preserving water quality through preventing the release of solids and other pollutants into the rivers by surface water run-off.</p>

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			County Council is currently working on a 'Street Furniture and Materials' guide (summer 2009). In the interim period advice should be sought from the LPA		The changes to the document therefore positively address the findings of the draft Environmental Report with the inclusion of reference to SUDs.
Statement 4	Paragraph 2.2.6, Page 12	Consideration may need to be given to some form of parking control during working hours to discourage inappropriate parking.	No changes to wording	Inappropriate and long-term day-time parking by workers, increases safety hazards, reduces amenity, (especially in residential areas) and limits the ability of sections of the community to access facilities by obstructing footpaths and access points and causing traffic congestion. A form of parking control during working hours would have a positive impact on addressing these matters. However, implementation of any control could transfer the impacts to other areas or reduce economic prosperity by	No changes to Appraisal

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				restricting accessibility to workplaces and facilities. Therefore, parking controls during working hours should be linked to measures to secure provision of sustainable means of transport and designated parking areas.	
Statement 5	Paragraph 2.4.1, Page 13	For trip destinations, parking requirement is calculated on Gross Floor Area (GFA), or the number of visits (where the final employee/visitor number can be estimated). As a rule, business and commercial use vehicle parking requirements are calculated by GFA, whilst leisure uses are based on the estimated number of vehicle visits. For trip origins, the size of the dwelling is taken into account (by way of the number of bedrooms) and spaces are allocated on a	No changes to wording	Parking standards based on the proposed type and volume of use would generally have a positive impact on sustainability objectives. Ensuring adequate designated parking provisions for all forms of transport would enable safe access for all sections of the community whilst supporting economic growth and not encouraging excessive use of motorised vehicles.	No changes to Appraisal

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		per dwelling basis.			
Statement 6	Paragraph 2.5.1 Page 13	For main urban areas a reduction to the parking standard may be considered. Main urban areas are defined as those having frequent and extensive public transport and cycling and walking links, accessing education, healthcare, food shopping and employment.	For main urban areas a reduction to the vehicle parking standard may be considered, particularly for residential development . Main urban areas are defined as those having frequent and extensive public transport and cycling and walking links, accessing education, healthcare, food shopping and employment.	A reduction to the parking standard would generally have an uncertain impact on sustainability objectives. It would confer a positive benefit to sustainability, provided that main urban areas have effective and efficient networks for all forms of sustainable transport. However, if implemented without benefit of supporting sustainable transport networks a reduction in the parking standard would have an adverse impact on environmental quality, economic prosperity, residential amenity and accessibility to facilities. Further, a reduction in parking provision for all forms of transport would adversely impact on initiatives to improve accessibility and promote	Changes to Appraisal which does not reflect the outcome of the March 09 Appraisal. A reduction in parking standards for residential development would be conflicting with the rationale for introducing minimum parking standards at origin sites. It could therefore have an adverse impact on accessibility within residential areas and the provision of decent homes. A reduction to the parking standard would generally have an uncertain impact on the remaining sustainability objectives. It would confer a positive benefit to sustainability, provided that main urban areas have effective and efficient networks for all forms of sustainable transport. However, there could be an adverse impact on

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				<p>sustainable forms of transport with consequential adverse impacts on economic prosperity and environmental quality. Therefore, the Parking Standards document should clearly state,</p> <ul style="list-style-type: none"> - the circumstances in which reduction in parking standard may be considered; - the forms of transport to which a reduction to the parking standard would apply; - the approach to be adopted for residential areas, given the intent of the document to revise residential parking from a maximum to a minimum standard. 	<p>accessibility and the promotion of sustainable forms of transport if the reduction in parking provision represented all forms of transport, including cycles as well as blue badge holders.</p> <p>Therefore, the Parking Standards document should:</p> <ul style="list-style-type: none"> - clearly state the forms of transport to which a reduction to the parking standard would apply; - reconsider the approach to be adopted for residential areas, given the intent of the document to revise residential parking from a maximum to a minimum standard. - Provide more detailed advice and guidance on the circumstances

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Statement 7	Paragraph 2.6.2, Page 14	Shared use of parking areas is highly desirable, provided this works without conflict and that car parking provision is within the standard that requires the most number of car spaces applicable.	No changes to wording	The shared use of parking areas would have a generally positive impact on sustainability by encouraging a single trip to a number of facilities, thereby assisting economic prosperity and reducing need to travel, and making more efficient use of land. However, shared use which extends the period of use of the parking area, particularly to serve evening activities, could have an adverse impact on adjacent residential areas due to increased noise pollution. The Parking Standards document should note the importance of this factor in consideration of shared use/extended use of parking areas for non-residential activities close to homes.	No changes to Appraisal

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Statement 8	Paragraph 2.7.1, Page 14	Prior to any extension or change of use, the developer must demonstrate that adequate parking provision will be provided.	Prior to any extension or change of use, the developer must demonstrate that adequate parking will be provided. It is especially important to ensure that there is adequate parking provision should the change of use be from a garage into a habitable room for a residential dwelling.	A review of parking provisions prior to any extension or change of use of premises, by allowing evaluation of impacts of the proposal, would have a positive impact on sustainability objectives by ensuring that any alteration to parking provisions could be accommodated without adverse impact.	No changes to Appraisal The removal of the word 'provision' and the additional paragraph do not alter the Appraisal of Statement 8, however the inclusion of the additional text positively supports sustainability objectives.
Statement 9	Paragraph 2.8.2, Page 15	The onus is placed with the developer, who should analyse their development's own requirements in terms of the numbers and types of commercial vehicles visiting their premises and should demonstrate to the LPA that any development proposal includes sufficient commercial vehicle provision to meet normal requirements such as	No changes to wording	Sufficient provision for commercial vehicles within premises, by making their access and manoeuvring easier, would contribute positively to economic prosperity, safety of travellers, traffic congestion, and environmental quality.	No changes to Appraisal

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		provision for loading, unloading and turning.			
Statement 10	Paragraph 2.9.1, Page 15	Developments likely to generate coach traffic should provide appropriate off-street parking facilities for the stopping, setting down and picking up of passengers as well as appropriate turning facilities (avoiding the requirement for coaches to reverse in and out of a site where possible, taking into consideration pedestrian safety).	No changes to wording	Appropriate provision for coaches that makes their access and manoeuvring easier would have a positive impact on safety of travellers, reduction in car use, increased accessibility to facilities by all sections of the community, economic prosperity and environmental quality.	No changes to Appraisal
Statement 11	Paragraph 2.10.1, Page 16	Cycle Parking Standards should be applied by Local Authorities to all applications for new or extended development. They are expressed as minimum standards to reflect the sustainable nature of this mode of travel.	Cycle Parking Standards should be applied by Local Authorities to all applications for new or extended development. They are expressed as minimum standards to reflect the sustainable nature of this mode of travel. It is essential that cycle parking is	Cycling contributes a significant positive impact by promoting healthy and active lifestyles and contributing to improved environmental quality. Use of a minimum Cycle Parking Standard by not placing a limit on cycle parking would continue to promote this sustainable	No changes to Appraisal The additional paragraph does not alter the Appraisal of Statement 11. The original appraisal for Statement 11 was positive, therefore no changes to the summary needs to be made, however the inclusion of this of this

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			designed into a development at an early stage, prior to the granting of planning permission to ensure it relates well to the development.	transport option, thereby increasing travel choice and encouraging reduced car use.	further contributes towards sustainability objectives
Statement 12	Paragraph 2.11.2 Page 17	Parking standards for PTWs [Powered Two-Wheeled Vehicles] are represented as the minimum provision required, which reflects the advantages they have over the car and single occupancy vehicles in particular.	No changes to wording	Powered two wheelers, compared with other forms of transport, are more sustainable and contribute to improved environmental quality by producing lower vehicle emissions and noise pollution, contributing to less traffic congestion, and using less space. Use of a minimum Parking Standard for powered two-wheelers, by not placing a limit on their parking provision, would continue to promote this transport option, thereby increasing travel choice and encouraging reduced car use.	No changes to Appraisal

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Statement 13	Paragraph 2.12.1, Page 19	Under the Disability Discrimination Act 2005 it is the responsibility of site occupiers to ensure that adequate provision is made for the needs of disabled people . Parking for disabled people will be required for their exclusive use at all sites.	Under the Disability Discrimination Act 2005 it is the responsibility of site occupiers to ensure that adequate provision is made for the needs of people with disabilities . Parking for people with disabilities will be required for their exclusive use at all sites. Use of these spaces will usually require a Blue Badge to be displayed.	Provision of parking at non-residential facilities for the exclusive use of disabled people contributes positively to improving the accessibility to services and facilities that would otherwise be difficult or not possible by this section of the community. The ability to travel enables disabled people to participate in the community and contribute and benefit from economic prosperity whilst promoting their ability to engage in healthy and active lifestyles. However, for these benefits to be delivered, the Parking Standards document should clarify that there is a range of recommended maximum distances between a disabled parking space and the entrance to premises, related to the differing effects of disabilities (see Traffic	Changes to Appraisal Provision of parking at non-residential facilities for the exclusive use of people with disabilities contributes positively to improving the accessibility to services and facilities that would otherwise be difficult or not possible by this section of the community. The ability to travel enables people with disabilities to participate in the community and contribute and benefit from economic prosperity whilst promoting their ability to engage in healthy and active lifestyles. However, the document focuses on provision of blue badge parking spaces at non-residential facilities and does not appear to provide guidance on provision within residential areas. Parking within or adjacent to the

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				<p>Advisory Leaflet 5/95, Department for Transport).</p> <p>Further, the document focuses on provision of disabled parking spaces at non-residential facilities and does not appear to provide guidance on provision in residential areas. The provision of a decent home for disabled people may be adversely affected by lack of appropriate disabled parking provision in residential areas.</p> <p>Provision of standard in-curtilage parking spaces may not be of adequate dimension for access by disabled people and designated disabled parking spaces may become inappropriately located due to residential mobility. The document should mitigate this potential impact by incorporating guidance on</p>	<p>dwelling curtilage should consider the requirements of an ageing population. The size and layout of parking spaces should be to a Lifetime Homes Standard which allows access to all areas of the vehicle by all types of people with disability.</p>

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				lifetime parking provision to meet changing mobility requirements of residents.	
Statement 14	Paragraph 2.13.1, Page 20	There may be opportunities to accept a S106 contribution in lieu of the full parking standard in sustainable locations. Further guidance on developer contributions may be included in the relevant district planning documents.	Origin sites – In exceptional circumstances there may be opportunities to accept a commuted sum in lieu of the full residential vehicle parking standard in sustainable locations. [Add Paragraphs] Destination sites – In exceptional circumstances it may be appropriate for the Local Authority to accept a commuted sum in lieu of on site vehicle parking spaces Further guidance on developer contributions may be included in the relevant district planning	The acceptance of a S106 contribution in lieu of the full parking standard in sustainable locations would contribute positively to promoting sustainable forms of transport, improving environmental quality and economic prosperity where it assisted concentration of services and facilities. However, such an approach could have adverse impact on safety, traffic congestion and air quality if not supported by effective choice of sustainable means of transport. Also, if the reduction were applied equally to all types of vehicle parking provision it would reduce the accessibility of disabled people and use of	Changes to Appraisal A reduction of full residential parking standards in sustainable locations would be conflicting with the rationale for changing this parking standard from that which was introduced in the 2001 Vehicle Parking Standard document. It would therefore have an adverse impact on accessibility within residential areas and the provision of decent homes. There is uncertainty as to the impacts a reduction in parking spaces at destination sites would have on the environment, access to facilities and services, and the promotion of sustainable transport. This is due to the absence of detail on the

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			documents.	sustainable forms of transport such as cycles. The document should therefore clarify the definition of sustainable locations, and how a lower parking standard will be assessed in relation to total provision, provision for specific types of user, and necessary safety considerations.	provision of alternative, sustainable transport options, the availability of parking spaces off site and the type of vehicle parking spaces to be reduced. Further guidance on circumstances and definition of 'sustainable locations' should be provided.
Statement 15	Paragraphs 2.14.1 to 2.14.3, Page 21	The three paragraphs contain three related statements which are appraised together, developers will be required to submit a Transport Assessment to support large-scale development proposals; For smaller scale developments a Transport Statement may suffice; and For educational establishment applications a School Transport	No changes to wording	The use of Transport Assessment and Transport Statements would have a positive impact on sustainability objectives by ensuring that parking provisions for proposed uses were related to the demand created in the context of initiatives and measures designed to manage the demand through provision of safe and sustainable travel by a range of transport choices and inclusive access by all	No changes to Appraisal

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		Statement will be required if there is a proposed increase in pupil numbers		sections of the community.	
Statement 16	Paragraphs 2.15.1 and 2.15.6, Page 21	<p>Vehicle, powered two wheeler or cycle parking provision should not be considered in isolation from Travel Plan measures should complement each other.</p> <p>Annual monitoring of a Travel Plan gives an opportunity to review parking provision for cycle and powered two-wheelers and may result in the requirement for provision to be increased.</p>	<p>Vehicle, powered two wheeler or cycle parking provision should not be considered in isolation from Travel Plan measures should complement each other.</p> <p>Annual monitoring of a Travel Plan gives an opportunity to review parking provision for all sustainable modes e.g. cycle, powered two wheelers and car share spaces, and may result in the requirement for provision to be increased.</p>	<p>The use of Travel Plans would have a positive impact on sustainability objectives by ensuring that parking provisions for proposed uses were related to the demand created in the context of initiatives and measures designed to manage the demand through provision of safe and sustainable travel by a range of transport choices and inclusive access by all sections of the community. The annual monitoring of Travel Plans enhances the positive impacts of this approach by allowing for upward adjustment in parking provision for cycles and powered two-wheelers, which would facilitate future increased</p>	<p>No changes to Appraisal</p> <p>The additional wording does not alter the Appraisal of Statement 16 however, the inclusion of 'for all sustainable modes' and 'car share spaces' into the statement supports the positive impact that the original wording of the statement had on the sustainability objectives.</p>

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				use of more sustainable forms of travel.	
Statement 17	Paragraphs 3.1.2 and 3.1.3 (part), Page 22	Pedestrian access to the development should be considered and pedestrian desire lines identified. Pedestrian access should then be provided along these routes rather than simply relying on the vehicular access .	Pedestrian access to the development should be considered and pedestrian desire lines identified. Pedestrian access, segregated or shared surface , should then be provided along these routes rather than simply relying on the vehicular route .	Consideration of pedestrian access in the design and layout of parking areas would improve safety for those using them and for those merely walking through. Such an approach would also contribute to environmental amenity, assist promotion of sustainable means of transport and contribute to economic prosperity by making the premises more attractive to visit.	No changes to Appraisal The additional wording does not alter the Appraisal of Statement 17 however the inclusion of 'segregated or shared surface' into the statement supports the positive impact that the original wording of the statement had on the sustainability objectives.
Statement 18	Paragraph 3.2.3, Page 23	The location and overall design should encourage maximum use of the parking areas in order to minimise the risk of on-street parking problems. ..., adequate bay sizes that are easy to enter and exit and clear directional markings	No changes to wording	Parking areas well located to businesses and facilities would positively assist economic prosperity, allow access by all sections of the community and encourage use of sustainable forms of transport. These benefits	No changes to Appraisal

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		such as exit signs,...		would be enhanced by the use of design principles which maximised use of available spaces and facilitated easy entry and exit by assisting improvement in safety within the parking area, reducing on-street parking, environmental quality and making efficient use of land.	
Statement 19	Paragraph 3.3.1, Page 25	Spaces for disabled people should be located adjacent to entrances, where possible, should be convenient to use and the dimension conform to the relevant regulations. At the very most disabled parking spaces should be located no more than 150m from the site.	Spaces for people with disabilities should be located adjacent to entrances, where possible, should be convenient to use and the dimension conform to the relevant regulations.	Provision of parking at non-residential facilities for the exclusive use of disabled people contributes positively to improving the accessibility to services and facilities that would otherwise be difficult or not possible by this section of the community. The ability to travel enables disabled people to participate in the community and contribute and benefit from economic prosperity whilst promoting their ability to engage in	Changes to Appraisal Provision of parking at non-residential facilities for the exclusive use of people with disabilities contributes positively to improving the accessibility to services and facilities that would otherwise be difficult or not possible by this section of the community. The ability to travel enables people with disabilities to participate in the community and

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				<p>healthy and active lifestyles. However, for these benefits to be delivered, the Parking Standards document should clarify that there is a range of recommended maximum distances between a disabled parking space and the entrance to premises, related to the differing effects of disabilities (see Traffic Advisory Leaflet 5/95, Department for Transport).</p> <p>Further, the document focuses on provision of disabled parking spaces at non-residential facilities and does not appear to provide guidance on provision in residential areas. The provision of a decent home for disabled people may be adversely affected by lack of appropriate disabled parking provision in residential areas.</p>	<p>contribute and benefit from economic prosperity whilst promoting their ability to engage in healthy and active lifestyles. However, the document focuses on provision of blue badge parking spaces at non-residential facilities and does not appear to provide guidance on provision within residential areas. Parking within the dwelling curtilage should consider the requirements of an ageing population. The size and layout of parking spaces should be to a Lifetime Homes Standard which allows access to all areas of the vehicle by all types of people with disability.</p>

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				Provision of standard in-curtilage parking spaces may not be of adequate dimension for access by disabled people and designated disabled parking spaces may become inappropriately located due to residential mobility. The document should mitigate this potential impact by incorporating guidance on lifetime parking provision to meet changing mobility requirements of residents.	
Statement 20	Paragraph 3.4.1, Page 27	When planning residential parking, consideration of the type and scale of the development should be taken into account. Safe and secure parking can be achieved where cars can be seen by owners and neighbours. Layouts must accommodate the safe passage of emergency, delivery and refuse	No changes to wording	Adequate designated parking provision, integrated into the overall design of residential areas, would positively assist improvements in amenity and environmental quality of residential areas. By increasing safety and reducing inappropriate parking and congestion it could also encourage use	No changes to Appraisal

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		<p>collection vehicles.</p> <p>This statement was appraised with reference to the types of parking in residential discussed on pages 27 to 42 of the Parking Standards document.</p>		<p>of other forms of transport. However, where parking areas are provided beyond natural surveillance from within the home (particularly in underground, underdeck or undercroft areas) additional consideration should be given to access and security measures to ensure maximum use of available spaces and minimise potential for inappropriate parking or anti-social behaviour. Also, consideration of lifetime parking provision is required to ensure that the changing mobility requirements of residents may be accommodated.</p>	

3.3 Overall Assessment of Long-term Effects

Figure 2 presents a summary of the long term effects from the appraisal of the twenty key statements, for the September 2009 Parking Standards document. It contains the effects of the unchanged statements as per the draft Environmental Report together with the re-appraised effects of the statements outlined in Table 5.

FIGURE 2: LONG-TERM EFFECTS OF THE KEY STATEMENTS

		Sustainability Objective																
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Statement	1	+	+	0	+	0	+	+	+	0	0	0	0	0	0	0	0	0
	2	+	+	0	+	0	+	+	+	/	/	/	/	/	/	+	+	+
	3	+	+	0	+	0	0	0	0	0	0	+	++	++	+	0	0	0
	4	+	+	0	/	0	/	+	0	0	0	0	0	0	0	+	0	0
	5	+	+	0	+	+	+	+	+	0	0	0	0	0	0	+	0	0
	6	/	-	+	-	/	/	/	/	0	/	/	0	0	0	0	0	0
	7	+	0	+	+	0	+	+	+	/	+	+	0	0	0	+	0	+
	8	+	+	0	+	0	+	+	+	0	0	0	0	0	0	+	0	+
	9	+	0	0	+	+	+	+	0	0	+	+	0	0	0	0	0	0
	10	+	0	0	+	+	+	+	0	0	+	+	0	0	0	0	0	0
	11	0	+	+	+	+	+	+	+	0	+	+	0	0	+	0	0	0
	12	+	0	0	+	0	+	+	+	/	+	+	0	0	+	0	0	+
	13 & 19	+	/	+	+	+	+	+	0	0	0	0	0	0	0	0	0	0
	14	/	-	0	-	/	+	/	/	0	/	/	0	0	0	0	0	0
	15	+	0	0	+	+	+	+	+	0	0	0	0	0	0	0	0	0
	16	0	0	0	+	+	0	+	+	0	0	0	0	0	0	0	0	0
	17	+	+	0	+	+	+	+	+	0	0	0	0	0	0	0	0	0
	18	+	+	0	+	+	+	+	+	0	0	0	0	0	0	+	0	+
	20	+	+	0	+	0	0	0	+	0	0	0	0	0	0	+	0	+

The September 2009 Parking Standards document covers a broad range of issues. The long term effects of implementation of the Parking Standards document are summarised as follows:

- Sixteen of the seventeen sustainability objectives are positively impacted upon in the long-term by at least one or more of the twenty key statements in the document.
- The impact of the document on sustainability objective 9 (to minimise the potential noise pollution) is uncertain.
- Twelve of the key statements have only positive long-term impacts on the sustainability objectives. These statements are concerned with:
 - The application of parking standards
 - Flooding
 - Calculation of parking requirements
 - Extensions and change of use
 - Commercial vehicles
 - Coaches
 - Provision for cycle parking
 - Transport assessments
 - Travel plans
 - Pedestrians
 - Parking bay sizes
 - Residential parking design
- The remaining key statements within the document have either a negative or uncertain long-term impact on one or more of the sustainability objectives.
 - Statements 2, which relates to design considerations has uncertain impacts on environmental considerations including noise, air and water quality all of which would be determined at the site specific scale.
 - Statements 6 (main urban areas) and 14 (developer contributions) are likely to have negative long-term impacts on providing everyone with the opportunity to live in a decent home and to promote accessibility. This is due to the possible reduction in parking standards which could be applied through the use of these statements. Further guidance on the application of these statements should be provided.
- Statement 3 which relates to the use of sustainable drainage systems and pollutant filtration within parking design will have a significantly positive impact on minimising the risk of flooding and preserving existing water quality

3.4 Assessment of Parking Standards

This final appraisal assesses the predicted impact of the Parking Standards document as a whole. Undertaking an appraisal of the document as a whole outlines how the document performs against Sustainability Objectives. The key statements appraised would not be expected to satisfy all of the Sustainability Objectives,

however, taken together the document should seek to satisfy the requirements of all of the Sustainability Objectives.

TABLE 6: APPRAISAL OF THE SEPTEMBER 2009 PARKING STANDARDS DOCUMENT

Sustainability Objective	Comment
<p>Objective 1: Create Safe Environments which do not undermine the quality of life or community cohesion</p>	<p>Comment: The inclusion of a design guidance for parking area layouts and parking spaces tailored to certain vehicles assists in creating a safe environment by ensuring secure parking spaces and safe access for all users both on foot and in their vehicles, including people with disabilities. Minimum parking standards at residential areas will also positively assist in the creation of a safe environment. The provision of parking within residential areas would help to reduce the amount of inappropriate parking which obstructs footways, cycle routes and the main roadway thus improving accessibility to pedestrians and other road users including service and emergency vehicles. However planning obligations in Statement 14 and parking standards in urban areas in Statement 6 which permit reduction in residential vehicle parking standards could negate the benefits of having minimum parking standards in residential areas as they conflict with the rationale for introducing them.</p>
<p>Objective 2: To provide everyone with the opportunity to live in a decent home</p>	<p>Comment: The use of minimum parking standards for residential developments would positively impact upon the provision of a decent home by ensuring sufficient parking that is designed to encourage maximum use by residents. However, the benefits that this document has on this objective are negated by the inclusion of statements 6 and 14 which permit reductions in parking standards at residential areas in main urban areas or in exceptional circumstances. These two statements conflict with the minimum parking provision to be adopted at trip origin locations and the rationale for changing this parking standard from that which was introduced in the 2001 Vehicle Parking Standard document. Further guidance or clarification on the circumstances in which reduced parking standards would be considered should be produced.</p>
<p>Objective 3: To promote a healthy active lifestyle</p>	<p>Comment: Improved access for all users and encouraging cycling and walking through the use of minimum Cycle Parking Standards and ensuring safe, unobstructed footways would positively impact on the promotion of healthy and active lifestyles. Encouraging the use of sustainable transport would benefit human health through improvements to air quality.</p>
<p>Objective 4: To promote accessibility</p>	<p>Comment: The document generally promotes accessibility by encouraging good design principles with regards to the layout and safe access for all users including people with disabilities. Parking standards for a number of vehicles in addition to the private car will also promote accessibility. However there is a possibility that accessibility within residential areas will be adversely affected where a reduction of residential parking standards in sustainable locations and in exceptional circumstances is permitted. Such a reduction would conflict with the rationale for a minimum parking standard in residential areas.</p>
<p>Objective 5: To maximise the education and skills of the</p>	<p>Comment: Sufficient parking provision for all vehicle types would help ensure safe and inclusive access to educational facilities. Blue badge parking for the exclusive use of people with disabilities and designated pedestrian routes through the parking area would also promote safe</p>

Sustainability Objective	Comment
population and ensure safe and inclusive access to educational facilities	access to educational facilities.
Objective 6: To achieve sustainable levels of prosperity and economic growth	Comment: Parking provisions based on the number of potential visits to the premises or by the gross floor area would positively assist in achieving levels of prosperity and economic growth by ensuring that there is an adequate parking provision for a range of vehicles and users. Shared use parking would support economic growth by facilitating visits to several businesses on the same trip and by maximising the amount of business floorspace. Provision of suitable commercial vehicle access and loading/unloading areas would improve business operations. Furthermore, good design could make areas more attractive to investment and encourage greater footfall.
Objective 7: To promote safe, sustainable and inclusive access to non-residential facilities	Comment: Sufficient parking provision for all vehicle types, including cycles and PTWs, would help ensure sustainable and inclusive access to non-residential facilities. Blue badge parking for the exclusive use of people with disabilities and designated pedestrian routes through the parking area would promote safe access. Parking areas located close to the development it serves and designed for ease of use would further promote access to non-residential facilities.
Objective 8: To promote sustainable forms of transport	Comment: The inclusion of parking standards for cycles and PTWs in new developments and ensuring secure parking for these vehicles would assist promoting sustainable forms of transport. Good design and layout which improves safety for pedestrians walking through the parking area and on footways would also positively impact on this objective.
Objective 9: To minimise the potential noise pollution	Comment: There is uncertainty as to the impact the Parking Standards document will have on minimising potential noise pollution as it is not discussed within the document. Good design principles and encouraging the use of more sustainable modes of transport, such as cycling, could positively impact this objective. The document should refer specifically to this environmental consideration.
Objective 10: To improve air quality	Comment: Encouraging the use of more sustainable forms of transport through the provision of secure parking for cycles and PTWs and ensuring safe pedestrian access both through the parking area and along footways would assist in improving air quality. Shared use parking would also have a positive impact on this objective by encouraging cross visitation per individual trip thus reducing the number of vehicle trips.
Objective 11: To minimise the cumulative effects of climatic change	Comment: Encouraging the use of more sustainable forms of transport through the provision of secure parking for cycles and PTWs and ensuring safe pedestrian access both through the parking area and along footways would help contribute to reduced vehicle emissions thereby positively impacting upon climate change. Reducing the risk of flooding would also help minimise the cumulative effects of climate change.
Objective 12: To minimise the	Comment: The inclusion of sustainable drainage systems (SUDS) in the design of parking areas and guidance on the type of design layouts appropriate to areas prone to flooding would have a significantly positive

Sustainability Objective	Comment
risk of flooding	impact of minimising the risk of flooding.
Objective 13: To preserve existing water quality	Comment: The inclusion of pollutant filters within the design of parking areas would have a significantly positive impact on preserving existing water quality. Minimising the flood risk would also have a positive influence on preserving existing water quality by preventing the release of solids and other pollutants into watercourses by surface water run-off during times of flood.
Objective 14: To conserve, enhance and create biodiversity and geodiversity	Comment: Positive impacts on air quality would subsequently have a positive impact on conserving biodiversity and the implementation of SUDS and pollutant filters would have a positive impact by maintaining water quality. Consideration on landscaping and screening and SUDS could also enhance and create new wildlife and habitats if they include blue and green infrastructure. Additional detail regarding these design considerations should be included to support this objective further.
Objective 15: To maintain and enhance quality of existing townscape and landscape	Comment: Good design and parking controls that reduces inappropriate parking, improves the visual appearance of the parking area and positively impacts upon the streetscape should improve the quality of the existing townscape and landscape.
Objective 16: To maintain and enhance cultural heritage and assets	Comment: Consideration of the relationship of parking areas to the built environment and maintaining sense of place should have a positive impact on preserving heritage features. The positioning of parking areas to improve their visual appearance would minimise their impact on the setting and integrity of sites, buildings and areas designated for their heritage value.
Objective 17: To make the most efficient use of previously developed land and avoid unnecessary development of the countryside	Comment: Ensuring that the design and layout of all parking areas encourage maximum use would positively impact this objective as would shared use parking and undercroft, underground and underdeck parking.

	Sustainability Objective																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
S	/	/	+	/	+	+	+	+	/	+	+	++	++	+	+	+	+
/M	/	/	+	/	+	+	+	+	/	+	+	++	++	+	+	+	+
L	/	/	+	/	+	+	+	+	/	+	+	++	++	+	+	+	+

Summary: The Parking Standards document has a generally positive impact on the sustainability objectives with minimising the flood risk and preserving the water quality experiencing significant positive effects through the inclusion of SUDS and pollutant filtration in parking design. However, there is uncertainty regarding the impact of the document on four of the sustainability objectives. An uncertain impact on noise pollution is due to this issue not being discussed within the document, while the impacts on safe environments, provision of decent homes and accessibility are uncertain due to the potential for a reduction in parking provision in residential areas to be permitted at sustainable locations or main urban areas. Such a reduction conflicts with the introduction of minimum parking standards at origin sites and the rationale for making this change from the 2001 Vehicle Parking Standards.

3.5 Appraisal of Options

The Options which were considered to constitute reasonable alternatives for this document were identified as:

- Option 1: No parking standards
- Option 2: Retention of the 2001 Vehicle Parking Standards
- Option 3: Proposed Parking Standards

Each option was appraised individually, and the outcome of this appraisal is summarised in Table 7.

TABLE 7: APPRAISAL OF OPTIONS

Option	Outcome of Appraisal
Option 1: No Parking Standards	The absence of parking standards would have either a significant adverse impact or an adverse impact on each of the sustainability objectives. A situation that led to a lack of adequate parking provision would particularly raise safety and environmental concerns through increased road congestion and inappropriate parking that would also restrict economic performance by limiting accessibility of sections of the community and by non-motorised means of travel. A situation whereby excess parking provision resulted would raise similar concerns by promoting the use of motorised vehicles and, in addition, cause increased impacts on air quality, noise pollution and climatic change. The absence of parking standards would also mean that a contribution would not be made to other policy initiatives, such as, sustainable transport, environmental improvement, and safe and healthy communities.
Option 2: Retention of the 2001 Vehicle Parking Standards	Retention of the 2001 Vehicle Parking Standards, through the application of maximum parking standards, would have an adverse impact on achievement of sustainability objectives within residential areas. Use of maximum parking standards within residential areas, by restricting parking availability, will lead to safety concerns and cause deterioration of the residential environment with inappropriate parking on footpaths and open spaces also restricting access to locally available facilities and recreational opportunities by sustainable means and for sections of the community. However, the use of maximum parking standards for non-residential uses would have a

	<p>positive impact on social and environmental objectives by limiting access to facilities by motorised traffic and thereby encouraging use of other means of transport. The inclusion within the parking standards for accommodation of vehicles other than the car would enhance these positive impacts, especially if associated with other initiatives to promote and encourage non-car use.</p>
<p>Option 3: Proposed Parking Standards</p>	<p>The Proposed Parking Standards, through use of minimum parking standards in residential areas, would have a generally positive impact on the sustainability of residential areas. Integrating sufficient designated parking spaces into the design of residential areas would reduce traffic hazards and improve residential amenities, thereby enabling travel to local facilities by a variety of means by all sections of the community and retention of open spaces and amenity areas for their intended purpose. The ready availability of vehicles in residential areas could cause an increase in vehicle use but this tendency would be mitigated by the proposed use of maximum parking standards for non-residential uses which would limit access to facilities by motorised traffic. The inclusion within the parking standards for accommodation of vehicles other than the car would further enhance these positive impacts, especially where associated with other initiatives to promote and encourage non-car use.</p>

The proposed parking standards are therefore viewed to be the most sustainable option of those appraised.

4 SIGNIFICANT AND CUMULATIVE EFFECTS

4.1 Significant Effects

The Parking Standards Design and Good Practice document is unlikely to lead to large scale significant adverse effects beyond those identified in the appraisal. The key areas with potential for likely significant effects are:

- Accessibility, provision of decent homes and safe environments
- noise pollution

Any significant adverse effects arising to accessibility, provision of decent homes and safe environments would be due to the reduction of residential parking in main urban areas or sustainable locations. Such scenarios adopt a similar approach set out in the 2001 Vehicle Parking Standards of maximum residential parking standards which has since been revised in this document. The previous approach was found to contribute to problems associated with inappropriate parking in residential areas. Any reductions to parking standards as a result of development in urban areas and the application of planning obligations would be against the rationale of the September 2009 document. Therefore further guidance on this is required to provide clarification as to the circumstances when a reduction would be acceptable.

Significant adverse effects that may arise to noise levels would be due directly to the location and design of parking area. Addressing noise pollution as an environmental consideration in the design of parking areas would assist mitigation of this potentially significant effect. Again additional guidance on how the impact of noise will be dealt with in parking areas would assist in clarifying this point.

The Parking Standards Design and Good Practice document is intended to be applied across the County of Essex. It does not identify the scale and location of parking areas. These will be determined through development of spatial planning policies and applications for planning permission. Consideration of individual proposals for parking areas should set the potential sustainability impacts that generally apply to parking areas into the local context. This may give rise to local specific impacts that would need to be addressed by project if the sustainability effects are to be reduced. They should also consider whether individual proposals for parking areas are likely to have a significant effect on environmental and heritage designations and features.

4.2 Cumulative Effects

The Parking Standards Design and Good Practice document is unlikely to lead to significant adverse cumulative effects. The appraisal of the document showed that its implementation will have predominantly positive impacts on all sustainability objectives. However it should be noted that proposals for parking areas at certain locations and sites may have specific adverse impacts. Where a number of parking areas are proposed in close proximity the cumulative impacts of these should be considered at that stage.

5 MONITORING AND INDICATORS

5.1 Monitoring

The SEA Directive requires monitoring of the significant environmental effects that the implementation of the Parking Standards document could give rise to. Article 10.1 states:

“Member States shall monitor the significant environmental effects of the implementation of plans and programmes in order, inter alia, to identify at an early stage unforeseen adverse effects, and to be able to undertake appropriate remedial action.”

Monitoring should consider both positive and adverse effects across a full range of sustainability issues examining cumulative, secondary, and synergistic effects for the life of the Parking Standards document and beyond.

The proposed monitoring framework, as detailed in ‘A Practical Guide to the Strategic Environmental Assessment Directive, 2005’, should focus on significant sustainability effects:

- that indicate a likely breach of international, national or local legislation, recognised guidelines or standards;
- that may give rise to irreversible damage, with a view to identifying trends before such damage is cause; and
- where there is uncertainty over possible adverse effects, and where monitoring would enable mitigation measures to be taken.

Monitoring of the Parking Standards document is the final stage of the SA/SEA process, which does not end upon publication of the document. Ongoing monitoring allows for the success of the document against Sustainability Objectives to be evaluated. Monitoring also provides key baseline information for any later reviews of the document. This chapter of the Environmental Report gives “a description of the measures envisaged concerning monitoring” (Annex 1 (i) of the SEA Directive).

5.2 Indicators

The monitoring framework consists of proposed indicators that are designed to assess the effectiveness of proposals in the document to meet parking needs, contribute to increased use of sustainable forms of travel, and address potential significant effects which have been identified in the SA/SEA. Consideration of the sustainability objectives, the key sustainability issues and likely significant effects identified will help in this process along with the mitigation measures proposed during the appraisal of the 20 key statements.

Table 8 outlines the most appropriate indicators identified to monitor the success of the proposals outlined within the document against Sustainability Objectives. These indicators have been selected and where appropriate modified from those identified early in the SA/SEA process, and highlighted in Table 4 of this Environmental Report.

TABLE 8: INDICATORS

Sustainability Objectives	Indicators
Create Safe environments which do not undermine the quality of life or community cohesion	<ul style="list-style-type: none"> - Public perception of crime - Adult and Child KSIs
To provide everyone with the opportunity to live in a decent home	<ul style="list-style-type: none"> - Car/ van ownership per household - Residential housing survey - Public satisfaction with street scene
To promote a healthy and active lifestyle	<ul style="list-style-type: none"> - Percentage of residents living within 20 minutes travelling time of 3 different leisure facilities (of which one has been awarded a Quality Mark) - Trips per person per year by walking as main mode of travel
To promote accessibility	<ul style="list-style-type: none"> - Resident perception of accessibility of facilities - Travel to work flows and methods - Travel to school methods
To maximise the education and skills of the population and ensure safe and inclusive access to educational facilities.	<ul style="list-style-type: none"> - Travel to school methods - Adult and Child KSIs - Take up of School Travel Plans
To achieve sustainable levels of prosperity and economic growth	<ul style="list-style-type: none"> - Number of footfalls in commercial facilities within close proximity to new parking provision. - Travel to work flows and methods - Use of parking area survey
To promote safe, sustainable and inclusive access to non-residential facilities	<ul style="list-style-type: none"> - Adult and Child KSIs - Proportion of parking spaces assigned to the different types of sustainable transport - Barriers sub-domain: geographical barriers to services (IMD)
To promote sustainable forms of transport	<ul style="list-style-type: none"> - Proportion of parking spaces assigned to the different types of sustainable transport. - Take up of cycle parking provision - Daily and weekly cycle flows
To minimise potential noise pollution	<ul style="list-style-type: none"> - Number of planning permissions subject to a noise minimisation condition. - Number of complaints / incidents reported to health officers.

Sustainability Objectives	Indicators
	<ul style="list-style-type: none"> - Resident opinion on noise levels.
To improve air quality	<ul style="list-style-type: none"> - Recorded traffic flows (in proximity to and including major new schemes) - Number of AQMAs and Potentially Significant junctions (Nitrogen Dioxide)
To minimise the cumulative effects of climate change	<ul style="list-style-type: none"> - Planning permissions involving parking facilities approved contrary to EA advice (flood risk) - Percentage of energy used in the car park derived from renewable sources.
To minimise the risk of flooding	<ul style="list-style-type: none"> - Number of planning permissions granted subject to the inclusion of SUDS - Planning permissions granted involving parking facilities approved contrary to EA advice (flood risk)
To preserve existing water quality	<ul style="list-style-type: none"> - Number of planning permissions granted subject to the inclusion of pollutant filtration schemes - River water quality - Chemical composition of surface water runoff
To conserve, enhance and create biodiversity and geodiversity	<ul style="list-style-type: none"> - Number and condition of international, national and local designated sites. - Trends in plant and animal species. - Condition of areas of conservation in proximity to sites
To maintain and enhance the quality of the existing townscape and landscape	<ul style="list-style-type: none"> - Public perception of quality of open space. - Public perception of built environment. - Number of planning permissions granted subject to a landscaping condition
To maintain and enhance cultural heritage and assets	<ul style="list-style-type: none"> - Condition of heritage features - Number of parking areas allowed in Conservation Areas
To make the most efficient use of PDL and to avoid unnecessary development of the countryside	<ul style="list-style-type: none"> - Proportion of vacant previously developed land

6 CONCLUSION AND RECOMMENDATIONS

The Parking Standards Design and Best Practice document sets out a range of guidance that is unlikely to lead to large scale significant and cumulative adverse effects beyond those identified in this appraisal.

The review of Parking Standards to incorporate minimum parking standards for residential areas should contribute to improved amenity and environmental quality in residential areas. Any tendency for this approach to stimulate increased use of motorised vehicles could be mitigated by continuing use of maximum parking standards at non-residential locations, parking provision for vehicles other than cars, and improved safety and reduced congestion encouraging use of more sustainable forms of transport. The inclusion of design and best practice guidance alongside the proposed parking standards further enhance the potential benefits of the revisions to the Parking Standards.

Additional guidance should be provided to clarify the following outstanding issues identified through the SA/SEA for this document:

- Guidance outlining the circumstances where reduced parking standards would be deemed acceptable.
- Guidance outlining how the impact of noise should be dealt with in parking areas.

