

Draft City Plan Part One

Brighton & Hove City Council's Local Development Framework

May 2012 Updated Report

Appropriate Assessment (Habitats Regulations Assessment Report)



**Brighton & Hove
City Council**

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**Draft Brighton & Hove City Plan Part I
(May 2012)**

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Appropriate Assessment for Draft Brighton & Hove City Plan Part I (May 2012)

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I. Introduction

- 1.1. Article 6 of Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (the Habitats Directive) requires an Appropriate Assessment (AA) to be undertaken to assess the impacts of a plan or project against the conservation objectives of a European Site and to ascertain whether it would adversely affect the integrity of that site. Where significant negative effects are identified, alternative options should be examined to avoid any potential damaging effects, unless there are 'imperative reasons of overriding interest', in which case suitable compensatory measures are required.

- 1.2. Article 6(3) of the European Habitats Directive also states: “*the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public*”.
- 1.3. European sites consist of Special Areas of Conservation (SACs), Special Protection Areas (SPAs) and Offshore Marine Sites (OMS) (there are no OMS designated at present).
- 1.4. Under Regulation 102 of the Conservation of Habitats and Species Regulations 2010, land use plans must be subject to AA where a land use plan is likely to have a significant effect on a European site which is not directly connected with or necessary to the management of the site. AA therefore applies to the City Plan Part I and related Planning Documents.
- 1.5. In August 2006 the Department for Communities and Local Government (DCLG) published draft guidance titled ‘Planning for the Protection of European Sites: Appropriate Assessment - Guidance For Regional Spatial Strategies and Local Development Documents’. The draft guidance is a step towards establishing a national methodology for applying AA. In August 2007 the RSPB published ‘*The Appropriate Assessment of Spatial Plans in England: a guide to why, when and how to do it.*’ which is also a helpful clarification of procedure. This report takes full account of this guidance and of the reports of previously completed AAs in the South East.
- 1.6. European and national guidance on AA promotes a process of up to four stages:
1. *Screening.*
An initial determination of whether the plan is likely to have a significant effect on European sites.
 2. *The AA itself.*
If significant effects cannot be ruled out at the screening stage, a more detailed determination of whether, in view of the site’s conservation objectives, the plan in itself, or in combination with other plans or projects, could have an adverse effect on the site integrity.
 3. *Assessment of alternative solutions*
Where significant effects cannot be ruled out, alternatives are assessed.

4. Assessment where there are no alternative solutions and where adverse impacts remain

1.7. This report describes Stage I of this process. It describes and assesses:

- The European sites that could be affected by the Brighton & Hove draft City Plan Part I, including the qualifying features of those sites, their conservation objectives and the key environmental conditions to support their integrity;
 - An assessment of all possible impacts on the sites arising from the draft City Plan Part I;
 - An explanation of the impacts that can be screened out and why it has been concluded that it is not necessary to complete a full AA.
- An Appropriate Assessment was undertaken on the Refreshed Preferred Options of the Council's Core Strategy and the proposed Submission Brighton & Hove Core Strategy in 2010, which were subject to consultation with Natural England. Recommendations contained within Natural England's response are attached for information (see Appendices C and D). In July 2011, the Council agreed to withdraw the Core Strategy from its examination to allow it to be updated and amended. This was agreed by the Secretary of State and the Core Strategy was formally withdrawn in September 2011. The need to amend the document arose from soundness issues raised at an Exploratory Meeting with the appointed Planning Inspector in May 2010. This concerned the housing delivery strategy in the submitted document and the government's subsequent proposed removal of regional housing targets. The need to update the document also arises from the number of significant changes that have happened since the document was submitted to the Secretary of State in 2010. These include proposed changes to national legislation and guidance (Localism Act and the National Planning Policy Framework), reduced availability of government funding for capital projects and the completion of updated background studies. A draft City Plan Part I has been prepared and will be subject to a six week period of consultation anticipated to start in May 2012.

2. Screening

European sites

2.1. Table 1 lists the European sites which have boundaries within 20 km of the administrative boundary of Brighton and Hove. The 20 km buffer zone is very comprehensive and greater than has been chosen by other AAs in the South-East. Only Castle Hill SAC is within the administrative boundary of Brighton & Hove City Council.

Table 1: European sites within 20 km of Brighton and Hove

Name	OS Grid Ref.	Designation	Reason for designation	Closest distance (straight line) from Brighton and Hove boundary (km)
Castle Hill	TQ372066	SAC	Chalk grassland with a mosaic of calcareous semi-natural dry grassland communities. Important assemblage of rare and scarce species inc. early spider orchid (one of the largest colonies in the UK), early gentian and burnt orchid.	within boundary
Lewes Downs	TQ441093	SAC	Chalk grassland with CG2 <i>Festuca ovina</i> – <i>Avenula pratensis</i> and CG3 <i>Bromus erectus</i> calcareous grasslands. - important assemblage of rare and scarce orchids.	6
Ashdown Forest	TQ451306	SAC & SPA	One of the largest single continuous blocks of lowland heath (both dry and wet heath) in South East England. Population of great crested newt (SAC). Nationally important breeding populations of nightjar and Dartford warbler (SPA).	19.5
Arun Valley	TQ 033142	SPA	Internationally important wintering population of tundra swan	20

The Draft City Plan Part I

2.2. The draft Brighton & Hove City Plan Part I covers the period 2010-2030 and includes 14 Development/Special Area policies and 22 citywide policies. The key aims of the document include the delivery of:

- A local housing target of 11,300 net additional dwellings;
- Net additional employment floorspace to address the identified shortfall of 96,100 sq m of B1a and B1b floorspace 2006-2026 through existing commitments and potential supply from major development sites and other strategic allocations (as indicated in the City Plan's Employment Land policy CP3);
- Optimising development on brownfield sites throughout the existing built-up area of the city;
- Directing significant development to broad areas of the city where it is possible to make full use of public transport/ public transport interchanges and where identified capacity exists to accommodate further development. These key broad areas are identified for place-shaping and development to bring about sustainable communities;
- Promotion of some major developments, including redevelopment of the Brighton Centre and delivery of the King Alfred development, of importance to the city and the region;
- The allocation of strategic sites and employment sites;
- Improved coordination of policy and strategies across the city.

The potential environmental impacts of each of these policies on European Sites are assessed in Table 2

Table 2: Draft City Plan Part I Policies and their potential environmental effects on European Sites (policies with potential for positive effects are highlighted)

Policy	Summary description	Potential environmental impacts of relevance to this AA
DA 1 – Brighton Centre and Churchill Square Area	New state of the art convention facility (25,000sqm), hotel and leisure facilities Extension of the Churchill Square shopping centre (approx. 20,000sqm in total). Appropriate transport infrastructure improvements that provide and promote public and sustainable transport to support the redevelopment.	Increased resource use – water, hydrocarbons Increased traffic volumes Air pollution

DA 2 - Brighton Marina, Gas Works and Black Rock Area	Development of Brighton Marina as a sustainable mixed use district of the city; enhanced transport infrastructure; improved pedestrian and cycle access; good mix of housing (an additional 1,940 residential units) which reflects housing needs. In addition to the additional housing the following amounts of additional development are detailed: 5,000sqm retail (A1-A5); 4,000sqm industrial (B1-B2); circa 10,500sqm leisure; a community building within the Marina; a health facility within or near the Marina; primary school or increase in school places within or near the Marina.	Increased resource use – water, hydrocarbons. Increased traffic volumes Air pollution Increased recreational pressure.
DA 3 - Lewes Road Area	Sustainable redevelopment and expansion of the University campuses including accommodation for students; improved bus, cycle and pedestrian routes; open space improvements; an additional 885 residential units (inc 300 at Preston Barracks); employment led development comprising 15,600 sqm employment floorspace (inc 5,000sqm at Woollards Field South); 16,000sqm business school and 900 bed student accommodation (inc 750 at Preston Barracks); community building at Bevendean.	Increased resource use – water, hydrocarbons. Increased traffic volumes Air pollution Increased recreational pressure.
DA4 - New England Quarter and London Road Area	Revitalise the London Road retail area and create a major new business quarter (20,000 sq m office floor space post 2016); create a green gateway to the city at Preston Road West; minimum of 1140 residential units, 300 bed student accommodation; improvements in vocational training and further education as an extension to the Academic Corridor.	Increased resource use – water, hydrocarbons. Increased traffic volumes Air pollution Increased recreational pressure.
DA5 - Eastern Road and Edward Street Area	Improvements to the public realm and townscape; additional school places; 33,000sqm additional office floorspace; a minimum of 600 residential units; enlargement of Royal Sussex County Hospital (additional 74,000sqm hospital floorspace); 400 bed student accommodation; University floorspace, multi practice GP's surgery and community facilities/ buildings (eg for Queens Park and Craven Vale and also in the former fruit and vegetable market).	Increased resource use – water, hydrocarbons. Moderate increase in traffic volumes Air pollution Possible increase in recreational pressure.
DA6 - Hove Station Area	Employment-led mixed-use regeneration of under-used land and buildings, improving the public realm and the walking and cycling	Increased resource use – water, hydrocarbons.

	network in the area; an additional 575 residential units and 4,000sqm employment floorspace.	Moderate increase in traffic volumes Air pollution
DA7 - Toads Hole Valley	Modern, high quality and sustainable mixed use development that meets the future needs of the city including a minimum of 700 homes, c. 25,000 sq m office/ high tech business space, a secondary school and open space and biodiversity enhancements.	Increased resource use – water, hydrocarbons. Increase in traffic volumes Air pollution Increase in recreational pressure.
DA8 - Shoreham Harbour Area	Long-term regeneration of Shoreham Port and immediately surrounding area to deliver a series of appropriately located high quality sustainable mixed use developments including new housing, employment space, leisure opportunities, improved public realm. Consolidation and enhancement of Shoreham Port. Within Brighton and Hove ; 400 new residential units and 7,500 sq m of net additional employment floorspace.	Increased resource use – water, hydrocarbons. Increased traffic volumes Air pollution Increased recreational pressure
SA1 – The Seafront	On-going regeneration, in an integrated and coordinated manner, to support the retail, leisure, recreation and cultural role of the seafront, new leisure provision and 400 homes at King Alfred (strategic allocation).	Possible improvements to water effluent; potential for increased traffic volumes and air pollution
SA2 - Central Brighton	Reinforce central Brighton’s role as a vibrant, thriving regional centre for shopping, tourism, cultural and commercial facilities; significant new retail development; improved public realm and community safety. Identifies Central Brighton as the primary office area where existing office accommodation will be protected.	Potential for increased traffic volumes and air pollution
SA3 – Valley Gardens	Regenerate the Valley Gardens to reduce the adverse impact of vehicular traffic and create a continuous green boulevard.	Possible reduction in recreational pressure on downland sites
SA4 - Urban Fringe	Protection and enhancement of the urban fringe; promoting urban fringe as part of the city’s green network; improved access to the countryside. Urban fringe is defined as ‘land between the built up area boundary and the intended South Downs National Park boundary’. There is no such land within 2km of a European Site.	Possible reduction in recreational pressure to more remote downland sites.
SA5 – The South Downs	Maintain and protect the natural beauty of the South Downs, in the National Park boundary and its setting; enhancing access by	Possible increase in recreational pressure to downland sites

	sustainable transport.	
SA6 - Sustainable Neighbourhoods	Contribute to creating and maintaining sustainable neighbourhoods and reduce inequalities between neighbourhoods by: maintaining a good balance and mix of uses in local centres; improving quality of public services and range of learning and training facilities; improving sustainable transport access; improving community facility provision and choice of housing; improving environmental sustainability of new and existing buildings; supports sports, arts and cultural projects that enhance the environment and social cohesion; securing good quality employment and training opportunities; help to reduce health and learning inequalities and promote healthier lifestyles and in areas with environmental and community safety concerns support improvements to public realm, biodiversity and open space.	Possible reduction in recreational pressure on downland sites; potential for reduced resource use – water, hydrocarbons.
CPI - Housing Delivery	New housing development delivered in a managed way in order to help provide sustainable communities - 565 new homes annually to 2030.	Increased resource use – water, hydrocarbons. Increased traffic volumes Air pollution Increased recreational pressure.
CP2 - Sustainable Economic Development	Overarching strategy regarding sustainable economic development: supporting city's key employment sectors ICT infrastructure, Local Employment Scheme.	Increased resource use – water, hydrocarbons. Increased traffic volumes Air pollution.
CP3 - Employment Land	Alongside proposals and allocations set out in DA1 – DA8 and SA2, this policy ensures sufficient employment sites and premises are safeguarded in order to meet the needs of the city to 2030; sets out the hierarchy of employment sites that will be protected for B1-B8 uses and those where mix use development (housing and employment) will be allowed. Secondary employment sites will continue to be protected.	None
CP4 - Retail Provision	Current hierarchy of shopping centres will be maintained and enhanced.	None
CP5 - Culture and Tourism	Maintain and enhance the historic environment and culture of the	None

	city to the benefit of residents and visitors.	
CP6 - Visitor Accommodation	Management of proposals for new major hotel facilities.	Increased resource use – water, hydrocarbons. Increased traffic volumes Air pollution Increased recreational pressure.
CP7 - Infrastructure CIL and Developer Contributions	Provision of social and physical infrastructure.	None directly
CP8 – Sustainable Buildings	Promote the best possible standards of sustainable building design, construction, management and decommissioning in new and existing developments.	Possible reduction in recreational pressure on downland sites; potential for reduced resource use – water, hydrocarbons.
CP9 - Sustainable Transport	Contribute to creating an integrated sustainable transport system that will accommodate new development, improve accessibility, promote walking, cycling and public transport use, and contribute to a safer, cleaner, quieter city. The policy is divided into two main parts – part A sets out the strategy for transport on a local and regional level and part B sets out the measures that will be undertaken. The main measures to intercept car journeys into the city are to better use existing car parks on the periphery of the city and to encourage transfers onto rail. Infrastructure will be put in place to enable the introduction of rapid/express bus services on key routes.	Increased resource use – hydrocarbons. Increased traffic volumes Air pollution Increased recreational pressure.
CP10 - Biodiversity	Develop programmes and strategies which aim to conserve and enhance biodiversity including a -green network/Nature Improvement Area.	Possible reduction in recreational pressure on downland sites.
CPI1 - Flood Risk	Reduce flood risk.	None
CPI2 – Urban Design	Raise the standard of architecture and design in the city.	None
CPI3- Public Streets and Spaces	Quality, legibility and accessibility of the city’s public urban realm will be improved in a comprehensive manner.	None
CPI4 - Housing Density	Higher housing densities permitted, where it meets defined criteria with a net density of at least 50 dwellings per hectare.	None directly
CPI5 - Heritage	Conserve and enhance the city’s historic environment, including	None

	buildings of historic importance and conservation areas. .	
CP16 - Open Space	Safeguard, enhance, and promote access to Brighton and Hove's green/open spaces.	Possible reduction in recreational pressure on downland sites.
CP17 - Sports Provision	Safeguard, enhance and promote access to Brighton and Hove's sports facilities helping to increase participation in sport and physical activity.	Possible reduction in recreational pressure on downland sites.
CP18- Healthy City	Support and promote healthier lifestyles and reduce health inequalities.	None
CP19 - Housing Mix	Ensure that an appropriate mix of housing in terms of housing type, size and tenure is achieved across the city.	None
CP20 - Affordable Housing	Require the provision of affordable housing on all sites of 5 or more dwellings (net) in line with the affordable housing targets set out in the policy.	Increased resource use – water, hydrocarbons. Increased traffic volumes Air pollution Increased recreational pressure.
CP21 - Student Housing and Housing in Multiple Occupation (HMO)	New policy that sets a threshold for new HMO in identified areas alongside an Article 4 Direction. Identification of sites for new build student accommodation (Varley Halls, Preston Barracks, Circus Street and Pelham Street and Circus Street) and sets out criteria for assessment of purpose built student accommodation.	None
CP22 - Traveller Accommodation	Provision will be made to meet the city's need for gypsy and traveller accommodation. The council will seek to deliver 16 permanent residential pitches to meet the assessed local need for the period to 2016. Although the precise locations for gypsy and traveller accommodation have not been defined, there is an undertaking that they will not have a significant adverse impact on a site of European Nature Conservation Importance.'	None

Likely Environmental Impacts

2.3. The possible environmental impacts of the City Plan Part I on European Sites can be summarised as being in the form of:

- Increased recreational pressure on green spaces and the countryside including the possibility of increased visits to the European sites.
- Increased traffic, leading to increased air pollution, which could affect species that are sensitive to air quality.
- Increased resource use, including minerals, water and fuel. Increased water abstraction could affect water levels at the European sites.

In Combination Effects

2.4. The AA for the South East Plan identifies a number of existing environmental trends at the regional scale. These need to be considered where relevant to the potential environmental impacts identified in 2.3 (above) on the European Sites listed in Table I because of their potential to have ‘in combination’ effects:

- **Water supply:** Most of the wetland sites in the South-East are affected by existing abstraction rates. The AA to the South East Plan is unable to conclude that the Plan is unlikely to have a significant impact on the integrity of some European Sites, including Arun Valley, without a number of ‘strong measures’ being put in place to improve water efficiency and reduce demand. Increased demand associated with new housing and other development is likely to exacerbate any water abstraction effects on European Sites.
- **Worsening air quality due to traffic growth and increased fossil fuel consumption.** Ashdown Forest, Castle Hill and the Lewes Downs are listed in the AA for the South East Plan as being European Sites known to have depositions of air pollutants which exceed their critical load. Elevated levels of oxides of Nitrogen, Ammonia, Sulphur Dioxide and low-level Ozone are of particular concern. Motor vehicles are key contributors of these pollutants (see AA to the South East Plan, Table 8).
- **More recreational pressure as a consequence of increased population.** The AA to the South East Plan lists a number of potential effects associated with recreation, including disturbance to wildlife, management difficulties and erosion. Ashdown Forest, Arun Valley and Lewes Downs are listed as being European Sites where it cannot be

concluded that there will be no adverse effect due to increased recreational pressure associated with developments (see AA to the South East Plan, Table 10).

2.5. All the impacts described above are related to the effects of housing and other development. Table 3 shows the housing allocations in the South East Plan for the Local Authorities containing the European Sites listed in Table 1 and those in the vicinity of Brighton and Hove, that could lead to an ‘in combination’ effect with the Brighton & Hove City Plan Part 1. The Localism Act sets out the government’s intention to revoke regional spatial strategies. It is acknowledged that any move to revoke existing regional strategies is subject to the outcome of the consultation on the related environmental assessments. Whilst the South East Plan remains part of the list of documents in the Planning and Compulsory Purchase Act 2004, which local authorities must have regard to when preparing their development plan documents the government have indicated that subject to the assessment process they expect the orders revoking the existing Regional Plans to take effect Spring 2012. Local authorities who have not already adopted their Core Strategies or respective Development Plan Document will be looking to set their own local housing targets. Nevertheless for the purposes of this assessment, it has been assumed that local housing targets will not have a significantly different effect from the South East Targets and therefore the regional housing targets have been used.

2.6. Table 3 does not take account of proximity to a European Site and is therefore only a crude assessment of relative impact. Nevertheless it indicates that up to 12% of any impact on the European sites in Table 1 due to new housing could be attributable to Brighton and Hove.

Table 3: Housing close to Brighton and Hove that could lead to ‘in combination’ impacts with the Brighton & Hove City Plan Part 1

Local Authority	House construction in South East Plan to 2026	Percent of total (to nearest whole number)
Adur	2,100	2
Arun	11,300	12
Brighton & Hove	11,400 (reduced to 11,300 in the City Plan Part 1)	12
Chichester	9,600	11
Crawley	7,500	8

Horsham	13,000	14
Lewes	4,400	5
Mid Sussex	17,100	19
Worthing	4,000	4
Wealden	11,000	12
Total	91,400	

Screening Table

2.7. Table 4 summarises the screening of the potential direct and in combination effects of the Brighton & Hove City Plan Part I on the European Sites identified in Table I.

Table 4: Screening of the potential effects of the Brighton & Hove City Plan Part I on European Sites

Site	Qualifying features	Key environmental conditions to support site integrity	Possible impacts arising from City Plan Part I	Is there a risk of a significant effect?	Possible 'in combination' impacts.	Risk of significant 'in combination' effects?
Arun Valley	<ul style="list-style-type: none"> - Used by more than 1% of GB's population of Annex I species Bewick's swan (<i>Cygnus columbianus bewickii</i>). - Internationally important wintering population of 20,000+ waterfowl. - The neutral wet grassland ditches support rich aquatic flora and fauna. - 7 Red Data Book 	Sympathetic management of lowland wet grassland /grazing marsh (including water level management).	None – dependent on local factors	No	None	No
		Maintenance of hydrological regime, including winter flooding	Development of 11,300 new homes in Brighton and Hove will increase demand for water. But Brighton and	No	None – the Catchment Abstraction Management Strategy (CAMS) for The Arun and Western Streams does not address the	No

	threatened species, one of which is endangered; plus 4 rare and 4 nationally scarce plant species.		Hove is not in the Arun Valley water catchment.		Brighton and Hove area which is in a separate catchment	
Ashdown Forest (SAC & SPA)	- European dry heaths	Only approx. 19% of the SAC is grazed. Spread of scrub and bracken is a major threat. Air pollution (nitrogen deposition) can exacerbate scrub encroachment	None: Potential air pollution emissions from housing and additional traffic related to the new housing and employment sites, but site is 19+km from boundary of Brighton and Hove	No	Development of additional houses and other development in surrounding local authorities could increase traffic levels.	No – see discussion
	Northern Atlantic wet heaths with <i>Erica tetralix</i>	Long-term drying out of the site may take place, due to borehole extraction and transpiration from increase in vegetation cover.	None: Brighton and Hove outside hydrological regime of Ashdown Forest	No	Development of additional houses and other development in surrounding local authorities could increase water demand on the site, but there will be no contribution from Brighton and Hove	No
	- Great Crested Newt	Suitable foraging and refuge habitat within 500m of the pond; unpolluted water; grazing management to prevent succession;	None	No	Local issues not significantly affected by development in Brighton and Hove	No

	- Nationally important breeding populations of nightjar and Dartford Warbler	Low recreational disturbance of birds	New housing in Brighton and Hove will not significantly effect traffic levels and recreational pressure on Ashdown Forest, some 19 km away (see discussion)	No	Ashdown Forest has a wide recreational catchment area. The increased housing proposed for neighbouring local authorities could increase recreational pressure. However development in Brighton and Hove will have a negligible effect (see discussion)	No
Lewes Downs	Chalk grassland with CG2 <i>Festuca ovina</i> – <i>Avenula pratensis</i> and CG3 <i>Bromus erectus</i> calcareous grasslands. - important assemblage of rare and scarce orchids. The colony of burnt orchid is one of the largest in the UK	The grassland habitats depend upon grazing by sheep and cattle. Gradual scrub and coarse grass invasion can be indicative of nutrient (Nitrogen) enrichment or inadequate grazing. Where arable land meets the SSSI boundary, leaching and spray-drift are potential threats. Recreational pressure is not regarded by the JNCC as a threat	Potential air pollution emissions from additional traffic related to new housing could increase Nitrogen deposition rates but the impact of Brighton and Hove development is not considered significant Local management issue None	No (see discussion) No No	Development of additional houses and other development in surrounding local authorities could increase deposition of Nitrogen and other pollutants but the contribution of Brighton and Hove is not thought to be significant (see discussion) None None	No No No

		to the site. Lewes Downs is managed as a national Nature Reserve and therefore increased recreation, if it did become an issue, could be managed accordingly				
Castle Hill	<p>This chalk grassland consists of a mosaic of calcareous semi-natural dry grasslands. Castle Hill's important assemblage of rare and scarce species includes early spider-orchid <i>Ophrys sphegodes</i> and burnt orchid <i>Orchis ustulata</i>. The colony of early spider-orchid is one of the largest in the UK.</p> <p><u>Early gentian</u> <i>Gentianella anglica</i></p>	<p>Continued conservation grazing by sheep and cattle. Encroachment by scrub is prevented by cutting and grazing animals. The issue of concern relates to gradual coarse grass invasion. This can be indicative of nutrient (Nitrogen) enrichment or inadequate grazing.</p> <p>The site is surrounded by arable land, so leaching and spray-drift are potential threats.</p> <p>Recreational pressure is not recorded as a threat to the site. Castle Hill is managed as a national Nature Reserve and therefore increased recreation, if it did become an issue, could be managed accordingly</p>	<p>Potential air pollution emissions from housing and additional traffic related to new housing and employment could increase Nitrogen deposition rates but the impact of Brighton and Hove development is not considered significant</p> <p>None</p> <p>None</p>	<p>No</p> <p>No</p> <p>No</p>	<p>Development of additional houses and other development in surrounding local authorities could increase deposition of Nitrogen and other pollutants but the contribution of Brighton and Hove is not significant (see discussion)</p> <p>None</p> <p>None</p>	<p>No</p> <p>No</p> <p>No</p>

3. Discussion of Potential Effects

Air Pollution

3.1. Air pollution arising from policies in the City Plan Part I which result in increased road traffic and other sources is a potential impact at all the European sites listed in Table I, except the Arun Valley. Air pollution can have a range of impacts:

- Sulphur, nitrates, nitrogen oxides and nitric acid can acidify soils. They are primarily caused by power stations, industrial boilers, motor vehicles and domestic heating.
- Nitrogen oxides and ammonia promote nutrient enrichment. This promotes some competitive plant species over slower-growing, low nutrient demanding species, which tend to be the rarer species.
- Ground-level ozone, released from car engines, damages plants and can alter plant communities.

3.2. Table 5 summarises existing air quality problems at the European Sites under consideration. Ozone levels exceed critical levels at all sites. Acid deposition at Ashdown Forest and the Arun Valley also exceeds critical levels.

Table 5: Air quality at selected European sites

site	habitat	pollutant, measurement	critical level / range	deposition
Ashdown Forest	lowland heathland	N deposition (dry heath), kg N/ha/yr	10-20	14.98 deposition is within critical load range
		N deposition (wet heath), kg N/ha/yr	10-25	14.98 deposition is within critical load range
		ozone, ppb hours	3000	4379.91 deposition exceeds critical load

		acid deposition, keq/ha/yr	CLmaxS: 0.32 CLminN: 0.64 CLmaxN: 0.96	1.49 (N: 1.07 S: 0.42) deposition exceeds critical load range
		Ammonia µg/m	1-3	0.68 deposition is below critical load
		Sulphur Dioxide µg/m ³	20	1.52 deposition is below critical load
		Nitrogen Oxides, µg NO _x (as NO ₂) m ⁻³	30	13.77 deposition is below critical load
Castle Hill	Sub-atlantic semi-dry calcareous grassland:	N deposition (calcareous grassland), kg N/ha/yr	15-25	14.42 deposition is below critical load range
		Nitrogen Oxides µg NO _x (as NO ₂) m ⁻³	30	17.93 deposition is below critical load
		ozone, ppb hours	3000	4198.77 deposition exceeds critical load
		acid deposition keq/ha/yr	CLmaxS: 3.95 CLminN: 0.85 CLmaxN: 4.81	1.33 (N: 1.03 S: 0.3) deposition is below critical load
		Ammonia µg m ⁻³	1.0 - 3	1.18 deposition is above minimum value but below maximum critical level
Lewes Downs	Sub-atlantic semi-dry calcareous grassland:	Sulphur Dioxide µg/m ³	20	1.32 deposition is below critical load
		N deposition (calcareous grassland), kg N/ha/yr	15-25	17.22 deposition is above minimum value but below maximum critical level
		Nitrogen Oxides µg NO _x (as NO ₂) m ⁻³	30	16.75 deposition is below critical load
		ozone, ppb hours	3000	4175.81 deposition exceeds critical load
		acid deposition keq/ha/yr	CLmaxS: 3.99	1.62 (N: 1.23 S: 0.39) deposition is below

			CLminN: 0.85 CLmaxN: 4.85	critical load
		Ammonia $\mu\text{g}/\text{m}$	1.0 - 3	1.57 deposition is above minimum value but below maximum critical level
		Sulphur Dioxide $\mu\text{g}/\text{m}^3$	20	1.33 deposition is below critical load
Arun Valley	Grazing marsh	N deposition (Low and medium altitude hay meadows), kg N/ha/yr	20-30	14.98 deposition is below critical load range
		Nitrogen Oxides $\mu\text{g NO}_x$ (as NO_2) m^{-3}	30	13.34 deposition is below critical load
		ozone, ppb hours	3000	3314.63 deposition exceeds critical load
		acid deposition keq/ha/yr <i>no comparable acid critical load class for which the CL function is calculated. The soil base empirical CL (based on the dominant soil) for grid square is quoted</i>	4.00	1.39 deposition exceeds critical load
		Ammonia $\mu\text{g}/\text{m}$	1.0 - 3	1.26 deposition is above minimum value but below maximum critical level
		Sulphur Dioxide $\mu\text{g}/\text{m}^3$	20	1.27 deposition is below critical load

Note: Based on the most recent information provided by the Air Pollution Information System (www.apis.ac.uk).

Air pollution trends.

3.3. Air pollution in the UK has generally fallen since the 1970s, due to improved emissions standards and technological improvements. However over the longer term pollution levels are likely to rise again due to increasing traffic, despite

factoring in further improved emissions standards and technological improvements. Declining air quality could become a particular problem at Ashdown Forest because of predicted increases in traffic on the A22¹.

- 3.4. Potentially the existing and possible future air pollution problems at all the sites could be increased by the development proposed in the City Plan Part I. However, AAs elsewhere (e.g. Horsham) have shown that it is impossible to clearly show a link between development proposed in a particular area and air quality levels at the European Sites. Furthermore paragraph 7.5.6 of the AA to the SE Plan states:

“Low-level ozone is a particular problem in that it cannot be practically assessed or avoided at anything less than a national scale, due to the complex nature of its relationship to increases in traffic, housing, etc. and its trans-national character.”

- 3.5. In 2006 the then English Nature (now Natural England) wrote to Runnymede Borough Council, in response to their concern that any development in Runnymede could significantly affect European sites through air pollution². English Nature’s response suggests that AAs at the local level should focus on local air pollution impacts:

“The LDF-CS can only be concerned with locally emitted and short range locally acting pollutants. In terms of pollution from vehicular emissions the concentrations decline exponentially from the road edge. Though it varies with a range of factors and from pollutant to pollutant the concentrations of pollutants from roads can be said to have localised impacts up to 200m from the road side. Therefore for the LDF-CS effects of vehicular atmospheric emissions should be considered if the roads on which the vehicles travel are closer than 200m from the Natura 2000 site.”

Lewes Downs, Ashdown Forest and the Arum Valley are all several kilometres outside the boundary of Brighton and Hove and any increase in localised air pollution caused to them by the City Plan Part I (from increased vehicular movements along roads within 200m of these sites) is considered to be trivial in comparison with existing background levels and the effects of proposed development much closer to these sites. Therefore, taking into account current guidance, air pollution effects on these sites resulting from the City Plan Part I cannot be considered to be significant. Similarly, although Castle Hill is within the boundary of Brighton and Hove, the site is at least 400m from the nearest road and therefore beyond the range of localised

¹ See AA to the South East Plan, paragraph 7.4.1

² See AA to South-east Plan, paragraph 7.5.1

impacts. It therefore seems reasonable to conclude, with the information available at this stage of City Plan Part I development, that there is no significant effect of increased development in Brighton and Hove on air pollution within the European sites listed in Table I.

'Urban fringe' for residential development is defined in the City Plan Part I as 'land between the built up area boundary and the South Downs National Park boundary'. There is no such land in Brighton and Hove within 2km of a European Site. Therefore a similar conclusion can be drawn as stated in the previous paragraph about the potential air pollution impacts of such development on European sites.

Recreational Pressure

3.6. **Castle Hill SAC** is within the boundary of Brighton and Hove and therefore, of the European sites listed in Table I, perhaps the most prone to increases in recreational pressure resulting from the Brighton & Hove City Plan Part I. However Natural England consider that there is no evidence of an adverse effect on the interest features of the SAC due to recreational pressure³. According to Natural England, visitor numbers to Castle Hill have remained steady at around 3,500 per year since 1991, despite the introduction of open access legislation in 2000 and a policy of open access. The entire SAC is a National Nature Reserve, owned by the local authority, and therefore should recreational pressure become an issue in future, mechanisms could be put in place to manage visitor numbers.

3.7. **Ashdown Forest SPA** is vulnerable to recreational pressure because of the risk of reducing the breeding success of Nightjar and Dartford Warbler, which are ground nesting birds and the qualifying features of the SPA. However Ashdown Forest is over 19 km from the boundary of Brighton and Hove and studies have shown an exponential drop in visitor numbers (by car) with distance from similar heathland sites. For example research by English Nature (now Natural England) found that half the people accessing a range of heathland sites across Dorset in 2006 lived within 3.7 km of the site⁴. Even when parking at the heathland site is provided, the report found that the typical distance people drove to a Dorset heathland was about 4km and only 5% of people travelled further than 10km. Similarly, planning guidance designed to mitigate for the effects of recreational pressure on the Thames Basin Heaths SPA reports that

³ E-mail from Natural England dated 28th September 2007. See Appendix D

⁴ Visitor Access Patterns on the Dorset Heathlands. English Nature Research Report No. 683

75% of visitors who regularly drive to heathland sites travel less than 5 kilometres. Consequently the planning guidance only requires mitigation for the potential effects of development within 5km of the SPA⁵.

- 3.8. Research from other heathland sites in the South East therefore suggests that a very small proportion of the visitors to Ashdown Forest are from Brighton and Hove. However according to the AA of the Horsham City Plan Part I, Ashdown Forest has a larger visitor catchment area than the Thames Basin Heaths. A tourist survey of Ashdown Forest carried out in summer 2004⁶ found that, of 218 visitors surveyed, 72% were day visitors from outside the forest area. However the number of these visitors that came from the Brighton and Hove area was still very small (single figures). The Horsham AA concludes that any recreational effects on Ashdown Forest can be screened out, even though Horsham is closer than Brighton and Hove to the SPA and will accommodate a larger amount of new housing (see Table 2). This suggests that the new housing proposed by the Brighton & Hove City Plan Part I is also unlikely to have a significant impact on Ashdown Forest, and with the information available at this stage of City Plan Part I development, that it can therefore be screened out.

4. Summary and Conclusions

- 4.1. The Brighton & Hove City Plan Part I details areas with new housing and other development which could have an impact on European sites in the vicinity. However most of this new development will be focused on specific growth areas within the existing built-up area and although some development is proposed on land between the built up area and South Downs National Park, there will be no encroachment onto land within 2km of a European Site.
- 4.2. The possible impacts of the City Plan Part I on European Sites amount to water abstraction, air pollution and recreational pressure. Of these:

⁵ THAMES BASIN HEATHS SPECIAL PROTECTION AREA: MITIGATION STANDARDS FOR RESIDENTIAL DEVELOPMENT (Draft). English Nature 26 May 2006.

⁶ Tourism South East Research Services. 2004. Ashdown Forest visitor monitoring survey 2004. Report commissioned by Wealden District Council and the Ashdown Forest Tourism Forum.

- Water abstraction would not have a significant effect on any European site because there are no such sites which are vulnerable to water abstraction within the water catchment area of Brighton and Hove.
- Despite policies which promote travel choice and minimise air pollution, it is still possible that air pollution may worsen as a result of the City Plan Part I. However localised air pollution of this nature would not have a significant effect on any European site, according to Natural England advice.
- Recreational pressure on downland in the vicinity of Brighton and Hove may increase as a consequence of the Brighton & Hove City Plan Part I. However only one of the European sites assessed is vulnerable to recreational pressure (Ashdown Forest) and studies elsewhere have shown that this site is far enough away from Brighton and Hove to safely conclude that there would be no significant recreational impact on it as a result of the Brighton & Hove City Plan Part I.

4.3. With the information available at this stage of City Plan Part I development, all the possible impacts of the Brighton & Hove City Plan Part I on European sites have been discounted at the screening stage of this AA. It is therefore concluded that no change to the City Plan Part I is required at this stage.

4.4. Brighton & Hove City Council includes the Castle Hill Special Area of Conservation, and a number of other European or Ramsar wildlife sites are located in the wider area. The City Plan Part I has been assessed under the provisions of the Habitat Regulations to ensure that it will not have an adverse effect on any European or Ramsar wildlife site and this assessment has been recorded. The City Plan Part I does not support any project proposal where it cannot be demonstrated that the development would not have an adverse effect on the integrity of any European or Ramsar site. Any subsequent plan following this City Plan Part I will similarly adhere to the requirements of the Habitat Regulations.

Appendix A

Transcript of an emailed letter from Natural England dated 2 May 2012 (relating to the May 2012 updated report - provided above)

Dear Mr Thomas,

Appropriate Assessment: Brighton and Hove City Plan, (May 2012).

I can confirm that Natural England concurs with the conclusion of the document attached to your to you email of the 1st May 2012 (Appropriate Assessment City Plan FINAL – for NE comment.doc), namely that the Brighton and Hove City Plan will result in no likely significant effect on any European site.

For any correspondence or queries relating to this consultation only, please contact Charles Routh on 07990 773630 or by email at charles.routh@naturalengland.org.uk. For all other correspondence, please email consultations@naturalengland.org.uk, or if it is not possible to consult by email, please send to the above address.

Yours sincerely

Charles Routh

Lead Adviser, Winchester Land Use Operations Team, Natural England.

Appendix B

Transcript of letter from Natural England dated 24 February 2010 (relating to the January 2010 updated report):

Dear Matthew

Brighton & Hove LDF – Core Strategy Appropriate Assessment

Thank you for consulting Natural England on the above document.

Natural England concurs with the conclusion of the report, that the Brighton & Hove Core Strategy is unlikely to have a significant effect on the Natura 2000 sites assessed.

Please do not hesitate to contact me should you have any queries.

Yours sincerely

Jo Clarke
Environmental Planning Adviser
Government Team
Jo.clarke@naturalengland.org.uk
Tel: 0300060 4060
Mob: 07901513218

Appendix C

Statutory consultee comments and response

Natural England were consulted on an earlier version of this report before 2009 and in February 2010. Since then the amounts of development in the Development Areas have increased, Toads Hole Valley Development Area has been identified and the provision of formal Park and Ride sites removed (see Table 2). Their responses to both consultations are detailed below:

Consultee	Summary of comment on draft AA report	How comment was taken on board in this report
Natural England 4 th April 2008	The Core Strategy document is still developing - sites should not be screened out until the final record of the Habitats Regulations Assessment is produced at the submission stage.	Conclusions qualified to refer only to the current stage of the Core Strategy. Commitment to a review of the Habitats Regulations Assessment at the submission stage
	Ashdown Forest Visitor Monitoring Survey should be clearly referenced in the document	Full reference included as footnote 6
	Include in the appendix a summary of the relevant sections of the Ashdown Forest Visitor Monitoring Survey, and the information Natural England provided on access and recreation for Castle Hill SAC.	Information from Natural England on Castle Hill included in Appendix D
	Include the following explanatory paragraph: The Brighton & Hove City Council includes the Castle Hill Special Area of Conservation, and a number of other European or Ramsar wildlife sites are located in the wider area. The Core Strategy has been assessed under the provisions of the Habitat Regulations to ensure that it will not have an adverse effect on any European or Ramsar wildlife site and this	Paragraph included at 4.4

	assessment has been recorded. The Core Strategy does not support any project proposal where it cannot be demonstrated that the development would not have an adverse effect on the integrity of any European or Ramsar site. Any subsequent plan following this Core Strategy will similarly adhere to the requirements of the Habitat Regulations.	
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Transcript of a letter from Natural England dated 4th April 2008:

Dear Matthew,

Habitats Regulations Assessment of the Refreshed Preferred Options of the Council's Core Strategy

Thank you for consulting Natural England on the above document.

Natural England concurs with the conclusion of the report, that the Brighton & Hove Core Strategy is unlikely to have a significant effect on the Natura 2000 sites assessed. The current Core Strategy document is still developing and in order to progress to a final assessment, Natural England advises that sites should not be screened out until the final record of the HRA is produced at the submission stage.

We confirm that the approach to the Assessment is satisfactory. However we would advise that the Ashdown Forest Visitor Monitoring Survey is clearly referenced in the document, as it is referred to in the text. It would also be advisable for clarity, to include in the appendix a summary of the relevant sections of the survey, and the information Natural England provided on access and recreation for Castle Hill SAC.

The assessment of plans under the provisions of the Habitats Regulations should ensure that the plan itself does not lead to any adverse effect on any European or international wildlife site, and also that any future plan or project that stems from the plan similarly does not have an adverse effect. It is therefore advised that, the submission draft of the Core Strategy should include an explanatory paragraph as follows:

The Brighton & Hove City Council includes the Castle Hill Special Area of Conservation, and a number of other European or Ramsar wildlife sites are located in the wider area. The Core Strategy has been assessed under the

provisions of the Habitat Regulations to ensure that it will not have an adverse effect on any European or Ramsar wildlife site and this assessment as been recorded. The Core Strategy does not support any project proposal where it cannot be demonstrated that the development would not have an adverse effect on the integrity of any European or Ramsar site. Any subsequent plan following this Core Strategy will similarly adhere to the requirements of the Habitat Regulations.

With the addition of the above suggestions and amendments Natural England hopes to be able to agree to the final HRA and its conclusions, and that the final HRA will be able to demonstrate that any adverse effects on the integrity of neighbouring sites have been avoided, both alone and in-combination.

I hope these comments are useful to you. Please do not hesitate to contact me if you wish to discuss any point in further detail or have any queries.

Yours sincerely



Jayne Field

Environmental Planning Advisor

Direct Dial: 01273 407937

e-mail: jayne.field@naturalengland.org.uk

Appendix D

Transcript of an e-mail from Natural England dated 28th September 2007

Matthew,

Please see attachments & below for info for AA of Castle Hill- this should give you some decent baseline data. Malcolm says that he has not seen any significant increase in visitor numbers in the last 5 years -just the nature of the visitors - ie- bike riders, and his assessment is that there is no evidence of an adverse effect on the interest features of the SAC.

Regards,

Jayne

From: Emery, Malcolm (NE)

Sent: 28 September 2007 11:26

To: Field, Jayne (NE)

Subject: RE: Appropriate Assessment: Brighton & Hove LDF Core Strategy

Visitor numbers are ~3,500 per annum; a very rough estimate. We have had no proper surveys of visitor numbers, but I have not perceived any obvious changes since 1991, nor did the establishment of Open Access show any obvious increases in foot traffic. There has however, been a steady increase in the number of mountain bikes using the bridleways over this time. In case it is relevant, I have attached a draft Access management plan for the Reserve. This was written by myself and the then Access officer, Jenny Bowen, with elements of appropriate assessment principles in it, but its main focus/flavour was on assessing what we needed to do to ensure we were not preventing access without good justification. As far as I am aware, although it does not have the statutory status of, say, the SSSI citation, it reflects Natural England's current position regarding access to the NNR CRoW access land. We have also made the non - CRoW land on the Reserve open to access on foot. This will be so until the next review of CRoW access areas. NNR leaflet also attached.

Cheers

Malcolm



Brighton & Hove
City Council