



Centre for Sustainability at TRL Ltd



Halcrow Group Ltd

**Dacorum Borough Council
&
St Albans City and District Council**

**Core Strategies Supplementary Issues and Options
Paper
Growth at Hemel Hempstead**

**Sustainability Appraisal & Strategic Environmental
Assessment Working Note**

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This document and accompanying Technical Appendix can be accessed online at www.dacorum.gov.uk.

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1 Introduction

1.1 Background

This Working Note sets out the results of the appraisal of the Dacorum Borough and St Albans City and District Councils' Core Strategies Supplementary Issues and Options Paper (Growth at Hemel Hempstead, November 2006). This Working Note does not form part of the formal Sustainability Appraisal (SA) / Strategic Environmental Assessment (SEA) reporting process. It has been produced to contribute to the plan making process, by providing independent appraisal of the issues discussed, with a view to guiding the production of the preferred options towards contributing to sustainable development principles. Sustainability appraisal is a decision aiding tool rather than a decision making one and the contents of this report should therefore be considered in this light.

The proposed extra growth at Hemel Hempstead which has been recommended by the Panel Report has not previously been subjected to sustainability appraisal as it did not originally feature in the Draft East of England Plan. The Panel recommendations will need to undergo sustainability appraisal but the results of this work are not yet available for inclusion in this report.

1.2 Supplementary Issues and Options Paper - Growth at Hemel Hempstead

The first three sections of the Supplementary Issues and Options Paper provide background information relating to the potential expansion of Hemel Hempstead which has been recommended by the independent panel report on the draft East of England Plan. Sections 4, 5 & 6 then provide the details as to how this potential growth could be accommodated, and pose a series of questions for consultees to respond to which relate to the issues discussed. The Sustainability Appraisal has considered the document at three distinct levels.

Firstly the more general elements of the supplementary paper (i.e. sections 1 to 5) have been appraised at a level appropriate to the level of detail contained in each section and the number of options proposed for each question.

Secondly the areas put forward as potential urban extensions in Section 6 have been assessed at a level, which whilst aiming to remain strategic examine the main sustainability constraints specific to the individual locations.

Thirdly the appraisal has also looked at how the potential increased growth would impact on the existing Core Strategies and the findings of the sustainability appraisal work undertaken to date. The significant increase in potential housing numbers compared to those covered by the original Issues and Options Papers cannot be appraised in isolation and it has been necessary to examine the wider implications on the immediate and surrounding areas.

1.3 Appraisal Approach

Whilst the Sustainability Appraisal for the original Core Strategies' Issues and Options Papers utilised the framework of objectives that had been developed for the Sustainability Appraisal Scoping Report, it has been decided that this approach is not appropriate for the Hemel Hempstead Growth Supplementary document.

Many of the issues raised and questions posed are not easily appraised using the framework, and instead a commentary is provided in terms of the likely sustainability implications of the taking forward the different proposals relating to the issues discussed.

2 Appraisal

2.1 General Appraisal

This section of the SA Working Note summarises the sustainability implications of the various proposed issues and options. It also includes a series of recommendations to be taken forward as part of future stages of the development of the related Development Plan Documents. A summary of the appraisals for the potential urban extensions is provided in this section. The full appraisal results are contained in a separate appendix document which can be accessed online at www.dacorum.gov.uk.

Each of the questions that are posed in the Supplementary Issues and Options Paper are set out in this document, with the findings of the sustainability appraisal being discussed below.

Question 1: Do you agree these planning principles should be followed?

Whilst the set of planning principles presented in the Supplementary Issues and Options Paper provides a sensible approach towards further expansion of the town, this list could be strengthened through modification of some of those principles in the original list and the inclusion of some additional principles.

Modifications

With reference to the principle of “**Making best use of the existing green infrastructure**” it is not clear whether this would entail the protection of public open space. Also the wording to “make best use of” does not actively encourage enhancement of the green infrastructure resource.

In relation to new development “providing its own infrastructure” it is unclear what this means in terms of the type of infrastructure referred to (e.g. schools, roads, community facilities). This would benefit from clarification.

Additional Principles

Additional principles that could be considered for inclusion include:

- Taking into account accessibility issues
- Development proposals should help reduce the need to travel
- Protecting and enhancing landscape, heritage and biodiversity interests
- Creating green corridors
- Ensuring an adequate supply of leisure and recreation resources
- Providing a range of housing types and sizes linked to identified needs (including affordable housing needs)

As an alternative approach, the principles relating to biodiversity could instead make reference to the recommendations of the Dacorum Urban Nature Conservation Study – March 2006.

Question 2: Should the level of housing development that is supported be guided by threshold limits for these facilities?

This question is difficult to appraise as it stands and instead comments are provided below on the implications of adopting the approach or not.

If levels of housing development were supported based on threshold limits for facilities such as group practice health centres and secondary schools, this would seek to make optimal use of the existing facilities without creating an over demand. Whether or not this is a practical approach to take will depend on the existing capacity available at the facilities. If for example an existing secondary school is already near to its capacity, growth in an area could be restricted by this constraint alone, even if the area or site is one of the more sustainable options being considered.

By taking the alternative approach of not using threshold limits, this could lead to a situation where the new houses are inadequately provided for in terms of facilities, and people may be forced to travel relatively long distances to access suitable alternatives. It would only be in the case of there being a significantly inadequate supply that building of new facilities may be considered.

It is important to realise that development on the scale that is proposed will drive the need for some new facilities to be built, as opposed to the level of development being constrained by availability of existing facilities. This will be the case for the infrastructure that makes up part of the 'Neighbourhood Concept', such as primary schools.

Question 3: Should the issue of a northern bypass around the town be explored further

The northern bypass was put forward in the Hemel Hempstead Transportation Plan (1995) as an option for helping to relieve congestion. However it was identified as having significant adverse environmental effects and was rejected at the consultation stage.

This sustainability appraisal agrees with the findings of the earlier assessment and supports the proposal made in the Supplementary Issues and Options Paper to “**seek local solutions and more limited infrastructure investment**” as a way of tackling the traffic issues. The existing road network should be studied to determine whether there are modifications or improvements that could be made to help alleviate the issues currently being faced and in so doing obviate the need to build new transport infrastructure.

If a decision is made to reconsider a northern bypass, measures should be considered which aim to ensure that overall traffic levels do not increase as a result of the scheme. This could be achieved through the implementation of traffic management measures and the provision of attractive and accessible alternatives to the private car.

(NB: The northern bypass is not considered in the Hertfordshire Local Transport Plan 2006/07 – 2010/11 and does therefore not form part of the Strategic Environmental Assessment for that document.)

Question 4: Which of the main opportunities for job growth do you support? Please indicate your preferences in order with 1 being the highest priority.

- ***Using existing surplus employment land***
- ***Intensification in Maylands business area***
- ***Intensification in the town centre area***
- ***Extending into the Green Belt east of Maylands business area towards the M1 motorway***

• **Supporting development at Leavesden**

If the proposed housing increases are to take place it is important that a proportional level of development land is provided so that new job opportunities are created to provide for the anticipated increased demand. Levels of out-commuting to London are an issue and if the correct balance between housing and employment opportunities is not reached, it could be made worse.

The first three options, '*using surplus employment land*', '*intensification on Maylands business area*' and '*intensification in the town centre area*' all have potentially positive sustainability implications for employment in Hemel Hempstead. All three could contribute to increasing the vitality and viability of Hemel Hempstead (and in the case of Option 2, the Maylands business area) as an employment centre, and strengthen the economic prosperity of the area.

Using existing surplus employment land (including development of a key employment site)

This option refers to the use of the Gateway area along Breakspear Way. It is within close proximity to the town centre, and is considered to be the key employment site in the Hemel 2020 Vision (rather than Spencers Park). Some of the employment sites may be redeveloped and used for housing and possibly other uses; although there would be no loss of general employment area. Using surplus employment land for job growth would be a positive step and would help to increase the vitality and viability of Hemel Hempstead as an employment centre. However, the majority of the Gateway area identified as a key development site currently includes large areas of open land and disused playing fields. Using this land for employment development may have negative sustainability consequences. Through development of the open land for employment purposes, this not only affects the character and structure of the town, but restricts the potential to maintain as open spaces in the future and could have adverse biodiversity implications.

Intensification on the Maylands business area

This option could increase the economic potential of the business area, and will utilise previously developed land. Intensification at the site will also make best use of the existing infrastructure/access. '*Intensification in the town centre*' is sustainable in that it is making use of previously developed land, and provides opportunities for using existing infrastructure. Its location close to the town centre implies that the employment site is likely to be highly accessible, particularly by more sustainable modes of transport, which could have positive sustainability implications for air quality and reducing greenhouse gases. However, it should be ensured that existing traffic and congestion problems on the existing local road network are not aggravated further by the intensification at Maylands.

Extending into the green belt east of Maylands business area towards the M1 motorway

The fourth option, extending into the greenbelt east of Maylands business area, would primarily result in the loss of greenbelt land, negatively affecting the sustainability of the proposal. Where previously developed land is available elsewhere for employment use, this should be considered first. The site's location within the greenbelt is also likely to have negative sustainability implications for landscape and the character of the local countryside. Its location, within close proximity of the M1 junction, may also encourage car use, rather than sustainable modes, affecting air quality and greenhouse gas emissions.

The urban extensions potential sites assessment has assessed this site (Site 13 Breakspear Way - see Section 2.2 and Appendix). The assessment (looking at environmental designations, land uses and accessibility to key services and opportunities) revealed that the entire site was Grade 2 agricultural land, listed as one of the council's constraints for development. Oil pipelines also pass through the site, which may pose restrictions for future development in terms of layout.

Supporting development at Leavesden

The Leavesden site is located in the Three Rivers District, south east of Hemel Hempstead town centre. It is a major developed site in the greenbelt and it located just within the M25. Its location makes it easily accessible by car, but at the same time may increase the need to travel, particularly if sustainable travel alternatives are not available. This may have negative sustainability impacts, including poor air quality and increases in greenhouse gases and in terms of limited access to employment opportunities for those without access to a private vehicle.

Question 5: Do you agree that the following options offer opportunities for more housing?

- **Higher density on Local Plan greenfield sites**
- **Major growth in the town centre**
- **A housing target for Maylands business area**
- **Use of greenfield land at North East Hemel Hempstead**
- **Reuse of some Open Land**

Higher density on Local Plan Greenfield sites

Greenfield sites have been identified within the Local Plan for residential purposes. The first option proposes that these sites assume a higher density. It is anticipated that a higher density on Local Plan Greenfield sites would increase dwelling capacity by 107 residential units in 2001-21. Whilst building on Greenfield sites is not preferable, the use of the allocated sites should be maximised through increased density. Implications for the resulting developments include taller, more tightly packed and often bulkier buildings and less parking and space for amenities.

Major growth in the town centre

The second proposed option for additional housing is '*major growth in the town centre*'. It is anticipated that the scale of housing development in the town centre that could be achieved is a density of 125 dwellings per ha, which equates to approximately 750 dwellings, with development up to 9 storeys. It is expected that 85% of the development would be flats.

Encouraging higher densities and further growth within existing urban areas should be supported, positive implications for reducing the need to travel, through providing homes close to where people work, reducing the negative impacts of motorised transport (e.g. poor air quality, climate change, severance, noise etc). Proximity and access to existing amenities and employment opportunities is also beneficial. However, major growth within the town centre also presents some negative consequences, including higher buildings, less parking provision and very limited amenity space. It should be ensured that housing growth is accommodated on previously developed land, and does not encroach upon valuable public open space within the urban area. It is assumed that higher densities will result in an increase of one and two bed apartments. The Council must also be mindful to ensure the delivery of larger three and four bed town houses to cater for families.

A housing target for Maylands business area

The third option is the setting of a '*housing target for the Maylands business area*' as it is suggested that the area could incorporate some element of residential use. It is anticipated that it could accommodate 300 additional dwellings in the period 2001-21, and an extra 300 dwellings in the 2021-31 period. Notional targets could be set by DBC to encourage live-work units and mixed use, such as flats with a scheme of new shops and services.

In principle, this suggestion could be accommodated. Encouraging mixed use developments may have positive implications for reducing the need to travel, through providing homes close to where people work, reducing the negative impacts of motorised transport (e.g. poor air quality, climate change, severance, noise etc).

Use of Greenfield land at North East Hemel Hempstead

The fourth option proposes that 12 hectares of Greenfield land north east of Hemel Hempstead could be made available for housing (approximately 350 dwellings). The use of Greenfield sites should only be considered after all previously developed land options are explored first. There are also other potential constraints that would need to be investigated, including important environmental designations, current land use issues (agricultural land, mineral resources etc), and accessibility to the site and other key services and opportunities, to determine whether the site would be suitable for residential development.

This site has been appraised as one of the Hemel Hempstead potential urban extension sites (Site 12a Woodend Farm – see Section 2.2 and the Appendix) and the Greenfield land being referred to is the western half of the site within the Dacorum boundary. The southern half of this site is Grade 2 agricultural land (a development constraint identified by the Council) and to the north of the site there is a slight conflict with a dismantled railway wildlife site. These land use and environmental constraints suggest that the use of the site, in addition to it being Greenfield land, is not sustainable.

Reuse of some Open Land

The final option for additional housing is the reuse of open land through the redevelopment of school buildings (Primary School Review) and relocation of the Town Football Club. It is anticipated that the targeted loss of open land could result in 250 additional dwellings in the period 2001-21. Whilst the redevelopment of existing buildings is considered to be sustainable, the loss of any open land, including that which is not freely accessible to the public, may affect the character and structure of the town, and should therefore be retained. Through using these sites for housing now, the potential to conversion to public open land in the future will diminish. There may also be negative implications for biodiversity if open land is developed.

Question 6: Excluding land in the Green Belt, are there any other additional sources of housing opportunity that should be pursued?

No alternatives have been recommended as part of this report, however if new sources of opportunity are put forward as part of this consultation exercise they will be appraised as part of the ongoing sustainability appraisal process.

Question 7: How much building should the councils support as being appropriate in the Green Belt?

The full amount needed to meet the Panel's housing and employment target(s)

Some building for:

(a) housing purposes

(b) employment purposes

(c) other purposes (please specify)

None

This question tackles the issue at the very heart of this document, notably should the recommended growth at Hemel Hempstead go ahead or not, an issue that has more appropriately been addressed in the final section of this Working Paper. There are however some points from the appraisal which refer directly to the Green Belt and these have been covered below.

The Supplementary Issues and Options Paper identifies that in order to meet the level of growth for Hemel Hempstead that is recommended by the Panel Report, development in the green belt is inevitable. This has been estimated to be at a level of 3,181 dwellings between 2001 – 2021.

Whilst the principle of protecting the Green Belt is an important sustainability consideration, this should not be achieved at all costs by developing all other available land in preference to building in the Green Belt. Taking this approach would potentially result in the loss of strategic open spaces within the confines of the town which form an important resource for recreation, contribution towards well-being, and in providing context for the built up elements. On a similar note, any short term loss of employment land to make provision for housing would only result in Green Belt land having to be released at a later stage for employment use. This does not mean that development in the Green Belt should be encouraged, quite the contrary it should only be considered after all other ‘reasonable’ capacity has been exhausted.

Question 8: If the councils plan for some development (in the Green Belt), over what time period do you think this should be?

a) 2001 – 2021 (i.e. for the plan period only); or

b) 2001 – 2031

Planning for the longer time period will by definition result in more land take from the Green Belt having to be considered. Bearing in mind the environmental constraints that exist which discourage any Green Belt loss, it would be preferable to plan for the shorter time period, which in itself will cause problems, rather than have to make successive decisions as to which is the next “least worse” site that should be proposed for the next development.

Notwithstanding this, it would however be prudent to consider the likely implications of the longer term option so that the sustainability implications of phasing over this time period can be understood. It will be necessary to determine whether the infrastructure, and social facilities will be in place to ensure that adverse effects of the increased housing levels are minimised. For example this could involve ensuring the sufficient provision of public transport and cycle and pedestrian links to ensure that sustainable travel patterns are provided for and encouraged right from the start of a new development. This work could be undertaken whether or not a formal Green Belt review takes place in order to help the process of informed decision making should the need arise to release Green Belt land in the period 2021 – 2031.

Question 9: Do you agree with the constraints listed?

Purpose of the Green Belt should not be undermined

The main purpose of the Green Belt is to resist the encroachment of the urban area into the countryside and prevent the merging of settlements. However PPG2 – Green Belts identifies other important functions of the Green Belt which include:

- Provision of opportunities for access to the open countryside for the urban population;
- Provision of opportunities for outdoor sport and recreation near urban areas;
- Retention of attractive landscapes, and enhancement of landscapes, near to where people live;
- Improvement of damaged and derelict land around towns;
- Securing nature conservation interest; and
- Retention of land in agricultural, forestry and related uses.

The constraint '*purpose of the Green Belt should not be undermined*' is therefore an important one which cuts across many social, biodiversity and landscape related issues. On this basis it should be retained in future policy development.

No Building on the flood plain

PPG25 – Development and Flood Risk (soon to be superceded by Draft PPS 25) requires that a sequential test be undertaken by local authorities which gives priority in allocating or permitting sites for development to areas in the low risk flood zone (Zone 1) before developments in the higher risk zones (Zones 2 & 3) are considered.

The constraint 'no building on the flood plain' is in accordance with the requirements of Government guidance and should be retained.

Public open space of town-wide importance should be retained

Pressure to maximise use of land in the town boundary in order to avoid developing in the Green Belt should not be allowed to undermine the need to retain public open space within the town itself. Open space performs numerous functions and should be retained and protected. This constraint is therefore supported.

No building over historic, environmental and conservation designations

As well as areas which are designated at national or local level, there are also non-designated areas which may act as constraints to development which will need to be taken into account. Amongst others, these might include priority habitats or species in the Local Biodiversity Action Plan or areas of historical landscape importance.

It is not clear from the description and the explanatory text whether this constraint covers landscape designations. Certainly the local landscape character area classification and the historic landscape classification should be utilised when looking at particular sites and identifying environmental constraints.

No extensive building in the Gade Valley and Bulbourne Valley

This constraint is supported by this appraisal as it aims to protect a particular landscape character of the town. The valleys around Hemel Hempstead help to define its distinctive form and this needs to be maintained.

Development should be a safe distance away from hazardous installations

The incident at Buncefield in December 2005 has reinforced the need to ensure that sufficient buffer zones are provided around such hazardous installations. As well as the obvious health and safety considerations that have been the driver for this constraint, the fear and uncertainty that could result from living or working within close proximity to such an operation may result in indirect health impacts such as those caused through worry or stress. This constraint is therefore supported.

Mineral resources should not be sterilised

In order to remain consistent with County level policy relating to minerals sterilisation this constraint is supported.

Extensive use of top quality agricultural land should be avoided

There are some areas of top quality agricultural land to the east of Hemel Hempstead which will need to be protected from extensive development and this constraint is therefore supported. Soil is an important resource that is often overlooked when considering constraints to development and this can result in significant cumulative loss and degradation of an important natural asset.

2.2 Appraisal of Potential Sites

This section focuses upon Question 10 to 26 of the Supplementary Issues and Options Paper, which explores 17 potential sites for urban extension at Hemel Hempstead. The methodology used for the assessment is described, followed by a summary of the constraints and planning principles identified by Dacorum Borough Council and St Albans City and District Council. Finally, an overview of the environmental, accessibility and land use constraints of each site is presented.

2.2.1 Methodology

Seventeen sites have been proposed by Dacorum Borough Council, in conjunction with St Albans District Council, for consideration for urban expansion at Hemel Hempstead. Geographical Information Systems (GIS) have been used to assess the sites in terms of potential constraints and opportunities. The GIS layers used to compare environmental designations, accessibility and key services and land use attributes are shown in Table 1. In the majority of cases, it was identified whether an attribute conflicted with the proposed site area (yes or no). Alternatively, distance buffers were used to the edge of the proposed site. This enabled the assessment to determine access to key facilities within a certain distance from the proposed site, for example, primary schools within 600m (in some cases, both the presence of a key service or attribute within the site, and within a distance from a site were assessed – both criteria are listed in Table 1).

Table 1: GIS Layers Used in Site Assessment

GIS Layer	Query Criteria
<i>Environmental Designations</i>	
Site of Archaeological Interest	Yes/No
Area of Outstanding Natural Beauty	Yes/No
Area subject to local preservation (archaeology)*	Yes/No
Area subject to recording condition (archaeology)*	Yes/No
Conservation area	Yes/No
Flood zone 2	Yes/No
Flood zone 3	Yes/No
Regionally Important Geological/Geomorphological Site	Yes/No
Historic Parks and Gardens	Yes/No
Scheduled Ancient Monuments	Yes/No
Wildlife sites	Yes/No
Sites of Special Scientific Interest / Local Nature Reserves	Yes/No
Listed Buildings	Yes/No

Accessibility / Key Services	
Employment Area	Yes/No
	Within 2000m
Primary School	Yes/No
	Within 600m
Local Centre	Within 800m
	Within 5000m
Town Centre	Within 2000m
Railway Station	Within 1000m
Doctor's Surgery	Yes/No
	Within 800m
Land Uses	
Public open space	Yes/No
Common Land	Yes/No
Agricultural Land (Grade 2)	Yes/No
Reservoirs	Yes/No
Rivers	Yes/No
BPA Lines	Yes/No
	Within 100m
Buncefield Oil Depot	Yes/No
	Within 190m, 250m, 350m
Hazardous Substances	Yes/No

* Layers relate to areas of land where conditions would be imposed on development planning proposals concerning the disturbance of the ground (local preservation) and the presence of an archaeologist (recording conditions)

The results of the GIS assessment are shown in the following tables. Each table provides an overview of the constraints and opportunities, and additional information regarding the proposed site as provided in the *Core Strategies Supplementary Issues and Options Paper* (DBC & SADC, 2006), followed by an indication of whether the site should be considered further to accommodate growth at Hemel Hempstead.

2.2.2 Constraints to Hemel Hempstead Urban Expansion

The *Core Strategy Supplementary Issues and Options* paper (DBC & SADC, 2006) discusses a number of potential constraints related to the consideration of proposed sites. These are summarised as follows:

- The purpose of the Green Belt should not be undermined by:
 - Merging settlements;
 - Substantial intrusion into open countryside and development (which is poorly related to the town).
- There should be no building on the floodplain. Development is recommended to be directed to Flood Zone 1, not Zones 2 and 3, in Government Guidance Draft PPS 25: Development and Flood Risk.
- Public open space of town-wide importance should be retained;
- There should be no building over historic, environmental and conservation designations (e.g. SSSIs, NNR, and SAMs)
- There should be no extensive building along prominent open countryside in the Gade Valley and Bulbourne Valley. Popular characteristics of the town would be destroyed, although less extensive developments may be considered.
- Development should be a safe distance from hazardous installations. Critical installations currently include the Buncefield Oil Terminal, and pipelines to and from the terminal (advice is outstanding regarding the recommended proximity of

new development to the oil terminal and proximity to oil pipelines, which currently present a layout constraint).

- Mineral resources should not be sterilised, as outlined in the Hertfordshire Minerals Local Plan. Therefore the existence of the sand and gravel belt suggests postponement of development.
- The extensive use of top quality agricultural land should be avoided (Grades 1 and 2).

Principles that the councils consider to be important that could be used to shape a new neighbourhood or the enlargement of an existing neighbourhood include:

- Sensitive recognition of natural and historic features and landform in new layouts;
- Avoiding or overcoming features which would be damaging to the occupiers (e.g. through noise or air pollution);
- Ensuring that the local neighbourhood's needs are met; and
- Providing good access to services (which are not part of the neighbourhood) (DBC, 2006).

These constraints and important principles have been taken into account in the assessment of potential sites.

2.2.3 Assessment of Potential Urban Extension Sites

An overview of the site assessment is presented in Table 2. The full assessment can be viewed in Appendix A. The key for this table is as follows:

Key to Potential Urban Extension Sites Appraisal Tables	
P	Present at the proposed site (or within distance stated)
A	Absent at the proposed site (or within distance stated)
	Positive attribute of proposed site (no constraint to urban expansion)
	Negative Attribute of proposed site (constraint to urban expansion)

An example of the site assessment and interpretation of tables is provided below:

P	E.g. a primary school is located within 600m of a proposed site – it is therefore easily accessible to the proposed site and is not a constraint for urban expansion.
A	E.g. there are no primary schools located within 600m of a proposed site – it is therefore not easily accessible to the proposed site and poses a constraint for urban expansion.
P	E.g. a Site of Special Scientific Interest is located within/partly within a proposed site – it therefore poses a constraint for urban expansion.
A	E.g. a Site of Special Scientific Interest is not located within or partly within a proposed site – therefore no constraints for urban expansion are present.

The review of constraints recognised that for many of the potential sites there is a lack of appropriate services within easy reach. However for those sites large enough to accommodate a new neighbourhood, many of these facilities would be provided as part of the development (“The Neighbourhood Concept”).

An overview of the assessment of each of the potential sites follows alongside the questions posed in the Supplementary Issues and Options Paper for growth at Hemel Hempstead.

Table 2: Overview of Constraints and Opportunities – Proposed Sites for Urban Extension

Site ID	Constraints and Opportunities: Environmental Designations												Constraints and Opportunities: Key Services and Accessibility										Land Uses																
	Site of Archaeological Interest	Area of Outstanding Natural Beauty	Subject to Local Preservation	Subject to Recording condition	Conservation Area	Flood zone 2	Flood zone 3	RIGGS	Historic Parks or Gardens	Scheduled Ancient Monument	Wildlife site	Site of Special Scientific Interest / LNR	Listed Buildings	Employment Area	Within 2000m of Employment Area	Primary school	Within 600m of Primary School	Within 800m of a Local Centre	Within 5000m of a Local Centre	Within 200m of Town Centre	Within 1000m of Railway Station	Doctors Surgery	Within 800m of Doctor's Surgery	Public Open Space	Common Land	Agricultural Land Grade 2	Railway Line	Sand/Gravel Belt	Reservoirs	Rivers	BPA Lines Poly	BPA Lines region	Buncefield Oil Depot	Buncefield Buffer (190m, 250m, 350m)	Hazardous Substances	Greenbelt			
1	A	A	A	A	A	A	A	A	A	A	A	A	A	P	A	P	P	P	A	A	A	A	P	A	P	A	P	A	A	A	A	A	A	A	A	A	A	P	
2	A	A	A	A	A	P	P	A	A	A	A	P	P	P	A	P	P	P	A	P	A	A	A	A	A	A	P	A	P	A	P	A	A	A	A	A	A	P	
3	P	A	A	A	A	A	A	A	A	A	A	A	A	P	A	P	P	P	A	P	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	P	
4	A	A	A	A	A	A	A	A	A	A	P	A	A	A	P	A	P	P	P	A	P	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	P	
5	A	A	A	A	P	P	P	P	A	A	P	A	A	A	P	A	P	P	P	P	P	A	P	A	P	A	P	A	A	A	P	A	A	A	A	A	A	P	
6	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	P	P	P	P	A	A	A	P	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	P
7	A	A	A	A	A	A	A	A	A	A	P	A	A	A	A	P	P	P	P	P	A	A	P	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	P
8	A	A	A	A	P	A	A	A	A	A	P	A	A	A	P	A	P	P	P	P	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	P
9	A	A	A	A	A	A	A	A	A	A	A	A	A	A	P	A	P	P	P	P	A	A	P	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	P
10	A	A	A	A	A	A	A	A	A	A	A	P	A	P	A	P	P	P	A	A	A	P	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	P	
11	A	A	A	A	A	A	A	A	A	A	A	A	A	A	P	A	P	P	P	A	A	A	P	A	A	A	A	A	A	P	P	A	A	A	A	A	A	P	
12a	A	A	A	A	A	A	A	A	A	P	A	A	P	P	A	P	P	P	A	A	A	P	A	A	P	A	A	P	A	A	P	P	A	A	A	A	A	P	
12b	A	A	A	A	A	A	A	A	A	A	A	A	A	P	A	A	A	P	A	A	A	A	A	A	A	A	P	A	A	A	A	A	A	A	A	A	A	P	
13	A	A	A	A	A	A	A	A	A	A	A	A	A	A	P	A	A	P	A	A	A	A	A	A	A	A	P	A	A	A	A	A	A	P	A	P	A	P	
14a	A	A	A	A	A	A	A	A	A	A	A	A	A	A	P	A	P	P	P	A	A	A	A	A	A	A	P	A	A	A	A	A	P	A	A	A	A	P	
14b	A	A	A	A	A	A	A	A	A	A	A	A	A	A	P	A	A	P	P	A	A	A	A	A	A	A	P	A	P	A	A	A	A	P	A	A	A	P	
14c	A	A	A	A	A	A	A	A	A	A	A	A	A	A	P	A	A	A	P	A	A	A	A	A	A	A	P	A	P	A	A	P	P	A	A	A	A	P	

*Where sites are listed as recommended for further consideration (Y), the site comments/constraints should be referred to.

Question 10: Do you support a new neighbourhood at Bunkers Park?

Overview

Environment: In terms of the environmental designations and constraints examined, the Bunker's Park site does not present any conflict.

Key Services and Accessibility: Bunker's Park is located to the south east of the Hemel Hempstead town area and is reasonably well located in terms of access to employment areas (within 2000m), local primary schools (within 600m) and local town centres for key services (within 800m). However, there is currently no access to a doctor's surgery (within 800m), and the nearest railway station is in excess of 1000m, which may pose accessibility or sustainable transport problems.

Land Uses: Bunker's Park is almost entirely an area of public open space, which, if developed upon, would be a loss for local communities. The land has been classed as Grade 2 agricultural land (very good) which would usually be protected for agricultural uses. The site lies within the sand and gravel belt. Any development on the site will lead to the sterilisation of minerals, limiting their extraction potential in the future. The site is within the Bedmond Plateau and Upper Glade Valley character areas

Additional Information from Issues and Options Paper (DBC, 2006): The area is large enough to accommodate a new neighbourhood. Road infrastructure is poor, and providing new roads, and/or widening lanes would have a local impact. Public transport infrastructure would also have to be planned. The site is fully located within the greenbelt.

The Bunker's Park site presents a number of constraints, including an area of public open space, Grade 2 agricultural land and has is part of the sand and gravel belt (potential for future mineral extraction)

Question 11: Do you support expansion of Nash Mills?

Overview

Environment: The Nash Mills site conflicts with flood zones in categories 2 and 3 (running through the centre of the site). As the majority is the high-risk category 3, development of residential areas should not be permitted. The Red Lion Public House (London Road, King's Langley) is a listed building located to the north west of the site. However, it is unlikely that this building would be affected by any development.

Key Services and Accessibility: The north area of the site contains part of the Nash Mills employment area, and therefore provides potential employment opportunities. The site is also located close to key services, including local primary schools (within 600m), local shopping centres (within 800m) and is within close proximity to a railway station (within 1000m). However, the nearest Doctor's surgery is in excess of 800m, which may pose problems when trying to access health care from any future development.

Land Use: Nash Mills is located within the sand and gravel belt. Any development on the site will lead to the sterilisation of minerals, limiting their extraction potential in the future. It is also within close proximity of the British Pipeline Agency (BPA) pipelines, which may lead to restrictions on location of development. The site is within the Upper Glade Valley character area

Additional Information from Issues and Options Paper (DBC, 2006): As the Green Belt is narrow at this location, development would lead to coalescence with the settlement of Rucklers Lane and/or housing in Lower Road to the south, effectively merging Hemel Hempstead with Kings Langley. There are existing road networks, but an increase in traffic on these routes may increase difficulties (DBC, 2006). The area adjoins bus routes between Kings Langley and Hemel Hempstead. The site is fully located within the greenbelt.

A large proportion of the Nash Mills site contains high-risk flood zone (zones 2 and 3).

As the site is situated in the sand and gravel belt, there is potential for future mineral extraction and it is also in the Bulbourne Valley character area, all constraints to development for residential purposes.

Question 12: Do you think a new neighbourhood should be built at Shendish?

Overview

Environment: A site of archaeological interest slightly overlaps the Shendish site to the west. However, damage or disruption to this site could easily be avoided. There are no other conflicts with environmental designations or constraints examined.

Key Services and Accessibility: Shendish is located to the south of the Hemel Hempstead area and is well located in terms of access to employment sites (within 2000m), local primary schools (within 800m), local shopping centres (within 800m) and a railway station (within 1000m). However, the nearest Doctor's surgery is in excess of 800m, which may pose problems when trying to access health care from any future development.

Land Uses: Shendish is located in the sand and gravel belt. Any development on the site will lead to the sterilisation of minerals, limiting their extraction potential in the future. The site is within the Upper Glade Valley character area

Additional Information from Issues and Options Paper (DBC, 2006): New road infrastructure and a railway bridge are considered necessary. However, the local highway authority does not consider that new access at junctions to London Road can be satisfactorily achieved. Development at the Shendish site would effectively merge Hemel Hempstead with the settlement at Rucklers Lane. The site is fully located within the greenbelt.

The main constraints for this site include its positioning within the sand and gravel belt, posing a threat for future mineral extraction (sterilisation of resources), potential visual intrusion, its location within the Bulbourne Valley, and merging of settlements. There is potentially a problem relating to lack of access to healthcare (doctor's surgery) facilities, but as a new neighbourhood is proposed, this would likely be overcome through the 'Neighbourhood Concept.'

Question 13: Do you support expansion of the residential area at Felden?

Overview

Environment: The north west area of the Felden site coincides with a wildlife site, grassland south of Roughdown common.

Key Services and Accessibility: In terms of access to key services, the site is well located for access to employment zones (within 2000m), local centres (800m) and a railway station (within 1000m). However, basic services, including local primary schools and doctor's surgeries are in excess of 600m and 800m respectively. The site is within the Lower Bulbourne Valley and Bovingdon and Chipperfield Plateau character areas.

Additional Information from Issues and Options Paper (DBC, 2006): Access to the area is limited as major transport routes surround it, including primary roads and the railway. The site is fully located within the greenbelt.

The Felden site is poor in terms of accessibility to key services (notably primary school and doctors surgery). The site also conflicts with a wildlife site, which may be disturbed or destroyed by residential extension.

Question 14: For a range of landscape and environmental reasons we conclude that new development in the Bulbourne Valley outwards from Boxmoor is not appropriate. Do you agree?

Overview

Environment: A river runs through the Boxmoor site from west to east, which has resulted in flood zones in categories 2 and 3 covering the central area of the site. The majority of the area is in the high-risk category, and therefore development of residential areas should not be permitted within this zone. There is a conservation area that overlaps with the western end of the site, and two wildlife sites (Harrison's Moor and Boxmoor Common cover a considerable proportion of Boxmoor. There is also a regionally important geological site covering the south of the site. It would prove difficult to avoid these important environmental assets when considering future residential development of the site.

Key Services and Accessibility: In contrast, the site is well located in terms of access to key services, including employment sites (within 2000m), local primary schools (within 600m), local centres (within 800m) and Hemel Hempstead town centre (within 2000m), a railway station (within 1000m) and a doctor's surgery (within 800m).

Land Uses: The southern area of the site is currently common land, which, if developed upon, would be a loss for local communities. The site is within the Lower Bulbourne Valley character area. The site is fully located within the greenbelt.

Despite the accessibility benefits, there are a number of environmental (flood zone 2 and 3, conservation area, RIGS, Wildlife Area) and land use (common land and location within the Bulbourne Valley) constraints present at the Boxmoor site.

Question 15: Do you think a new neighbourhood should be built at Pouchen End?

Overview

Environment: The Pouchen End site is located to the west of the Hemel Hempstead area. In terms of the environmental designations and constraints examined, the Pouchen End site does not present any conflict

Key Services and Accessibility: Although the Pouchen End site has good access to local primary schools (within 600m), local centres (within 800m) and doctor's surgeries (within 800m), it is not within close proximity to employment areas or a railway station.

Land Uses: The site is within the Lower Bulbourne Valley and Little Health Uplands character areas

Additional Information from Issues and Options Paper (DBC, 2006): The neighbourhood would not lead to the merging of settlements, but it would be close (Winkwell and Bourne End). The site is fully located within the greenbelt.

As Pouchen End is being considered for a new neighbourhood, accessibility to key service constraints could be overcome through the provision of new services. Although Pouchen End does not present any conflict with the environmental constraints examined, half of the site lies within the Bulbourne Valley character area.

Question 16: Do you think a new neighbourhood should be built north of Gadebridge?

Environment: The Gadebridge North site conflicts to the north east with the Dell Wood wildlife (also site of ancient semi-natural woodland). However, careful planning could ensure that the site is not disturbed or destroyed.

Key Services and Accessibility: Gadebridge North is located to the north west of the Hemel Hempstead centre and benefits from access to local primary schools (within 600m), local centres and Hemel Hempstead town centre (within 800m and 2000m respectively) and doctor's surgeries (within 800m). However, employment sites and railway stations are not within close proximity of the site.

Land Uses: The site is within the High Glade Valley and Little Heath Uplands character areas. The site is fully located within the greenbelt.

Additional Information from Issues and Options Paper (DBC, 2006): Road access is difficult to the site, and existing roads are unable to accommodate significant levels of additional traffic. Development would not be very well rated to the town and Hemel Hempstead would come close to merging with Potten End.

Constraints at Gadebridge North include conflicts with a wildlife site and area of ancient semi-natural woodland, and accessibility to key services/opportunities (employment, medical facilities). It is also in a dry valley area.

**Question 17: Do you think the Old Town should be expanded northwards into:
(a) the smaller area immediately adjoining?
(b) the larger area beyond Fletcher Way?**

Overview

Environment: The Old Town site is located to the north of Hemel Hempstead. A conservation area and wildlife site (How Grove) overlaps with the site to the north and south, however, development could easily avoid these areas.

Key Services and Accessibility: It is reasonably well located in terms of access to employment areas (within 2000m), local primary schools (within 600m) and local town centres and Hemel Hempstead for key services (within 800m and 2000m respectively). However, there is currently no access to a doctor's surgery (within 800m), and the nearest railway station is in excess of 1000m, which may pose accessibility or sustainable transport problems.

Land uses: The site is within the High Glade Valley character area. The site is fully located within the greenbelt.

Old Town is constrained by the presence of a conservation area and wildlife site that encroach the site, and that it is located within the Gade Valley character area. Access to healthcare (doctor's surgery) may also prove to be problematic.

Question 18: Should Grovehill be extended through development at Marchmont Farm?

Overview

Environment: The Marchmont farm site does not have any conflicts with environmental designations or areas examined.

Key Services and Accessibility: It is well located in terms of access to employment sites (within 2000m), local primary schools (within 600m), local centres and Hemel Hempstead town centre (800m and 2000m respectively) and doctor's surgeries (within 800m). Access to a railway station is restricted as it is in excess of 1000m from the site.

Land Uses: The site is within the High Glade Valley character area. The site is fully located within the greenbelt.

Marchmont Farm is constrained by its location in the wider Gade Valley character area.

Question 19: Do you think a new neighbourhood should be built north of Grovehill and Woodhall Farm?

Overview

Environment: The Grovehill and Woodhall Farm conflicts slightly with a Grade II listed building (Barn at Little Lovett's End Farm, Dodd's Land), which is located to the north of the site. The site does not have any other conflicts with environmental designations or areas examined.

Key Services and Accessibility: It is well located in terms of access to employment sites (within 2000m), local primary schools (within 600m), local centres and Hemel Hempstead town centre (800m and 2000m respectively) and doctor's surgeries (within 800m). Access to a railway station is restricted as it is in excess of 1000m from the site.

Land Uses: The site is within the Revel End Plateau and Gaddesdon Row character areas. The site is fully located within the greenbelt.

Additional Information: The site is in a dry vally which wraps around existing development. It is considered that development at the site would not fit in with the form of the town and would result in the loss of valuable recreation opportunities.

The main constraint at Grovehill and Woodhall Farm is the listed building to the north of the site, although careful planning could avoid conflict. It is also situated in a dry valley, where development would present a conflict in terms of going against the form of the town. Development may also lead to loss of recreational opportunities.

Question 20: Do you think a new neighbourhood should be built east of Woodhall Farm?

Overview

Environment: In terms of the environmental designations and constraints examined, the Holtsmere End site does not present any conflict.

Key Services and Accessibility: It is well located in terms of access to employment sites (within 2000m), local primary schools (within 600m), local centres and Hemel Hempstead town centre (800m and 2000m respectively) and doctor's surgeries (within 800m). Access to a railway station is restricted as it is in excess of 1000m from the site.

Land Uses: The British Pipeline Agency (BPA) line also runs through the site. The site is within the Upper Veal Valley and Revel End Plateau character areas. The site is fully located within the greenbelt.

The main constraint at Holtsmere End is the presence of the oil pipeline which runs through the site, although this is only expected to affect the layout of any future development.

Question 21: Do you support the development of:
(a) one new neighbourhood;
(b) two new neighbourhoods; or
(c) nothing at Wood End Farm?

Site 12a: Woodend Farm (New Neighbourhood)

Overview

Environment: The first site at Woodend Farm conflicts with the disused railway (Hemel Hempstead) Wildlife site to the north. However, with careful planning, development causing disruption or destruction to the wildlife site could be avoided if the proposed site boundaries were tightened.

Key Services and Accessibility: Woodend Farm is located to the north east of the Hemel Hempstead town area and is reasonably well located for access to employment sites (the Swallowdale/North East Hemel Hempstead employment area covers the west of the site), local primary schools (within 600m), local centres (within 800m) and doctor's surgeries (within 800m). Access to a railway station is in excess of 1000m.

Land Uses: Half of the site is classed as grade 2 (very good) agricultural land, and should normally be protected for agricultural use due to it being best quality and versatile land. The

British Pipeline Agency (BPA) line also runs through the site. The site is within the Upper Vea Valley and Buncefield Plateau character areas. The site is partially located within the greenbelt; the west half is located on Greenfield land.

Additional Information from Issues and Options Paper (DBC, 2006): new development could include a park and ride facilities, cycle and pedestrian links. New road infrastructure would have to be planned. Electricity transmission lines also cross the site – health concerns would entail rerouting and/or a buffer left to any new residential development.

The northern area of the site containing part of a wildlife site, and the southern half of the site is Grade 2 Agricultural Land. The oil pipeline also runs through the site, although this is only expected to affect the layout of any future development.

Site 12b: Woodend Farm (New Neighbourhood)

Overview

Environment: The second Woodend farm site is to the east of the first. There are no conflicts with the environmental constraints or designations examined.

Key Services and Accessibility: Due to its easterly location, the site is not within close proximity to primary schools, railway station or doctor's surgery, and local centres are in excess of 2000m (not including Hemel Hempstead).

Land Uses: Half of the site is classed as grade 2 (very good) agricultural land, and should normally be protected for agricultural use due to it being best quality and versatile land. The site is within the Upper Vea Valley and Buncefield Plateau character areas. The site is fully located within the greenbelt.

Additional Information from Issues and Options Paper (DBC, 2006): new development could include a park and ride facilities, cycle and pedestrian links. New road infrastructure would have to be planned. Electricity transmission lines also cross the site – health concerns would entail rerouting and/or a buffer left to any new residential development.

Woodend Farm (12b) site is currently constrained by the lack of, or access to, key services and opportunities (schools, healthcare, public transport, local shops), although the 'Neighbourhood Concept' is likely to aid provision of such services.

Question 22: Should land off Breakspear Way be designated as an extension of the Maylands business area?

Overview

Environment: In terms of the environmental designations and constraints examined, the Breakspear Way site does not present any conflict.

Key Services and Accessibility: The site is located within 2000m of employment sites, but a large distance from local centres (5000m) and is not within close proximity of primary schools, doctor's surgeries or a railway station.

Land Uses: The entire site is classed as grade 2 agricultural land, and therefore should normally be protected for agricultural use. The BPA pipelines are within close proximity of the site. It is also with 150m of the Buncefield oil depot. The site is within the Buncefield Plateau character area. The site is fully located within the greenbelt.

Additional Information from Issues and Options Paper (DBC, 2006): The area lies between the M1 and Buncefield Oil Depot.

The Breakspear Way site is situated on Grade 2 agricultural land, and is also constrained by the oil pipelines that run through the site, although this is only expected to affect the layout of any future development.

Question 23: If this land is designated in this manner, should it:
(a) be available for development during the plan period (i.e. before 2021); or
(b) held in reserve for development after 2021?

If the land off Breakspear Way is chosen as a suitable site for employment, whether or not it should be considered for development before or after 2021 will depend on what other sources of employment are available. However, as a general principle, developing this site up to the M1 motorway should be held off until all other options are exhausted.

Question 24: Do you support the development of:
the following neighbourhoods
(a) Westwick (east of Westwick Row)
(b) Blackwater (south east of the town)
(c) Corner Farm (further to the south east)
or, nothing at Leverstock Green

Site 14a: Leverstock Green – Westwick (New Neighbourhood)

Overview

Environment: There are no conflicts with environmental designations or constraints examined for the Westwick site at Leverstock Green.

Key Services and Accessibility: It is located to the west of the Hemel Hempstead area and is reasonably well placed in terms of access to employment areas (within 2000m), primary schools (within 600m), and local centres (within 800m). Railway stations are in excess of 1000m and doctor's surgeries 800m.

Land Uses: A very small section to the south of the site has been classed as grade 2 agricultural land and the east of the site is within the BPA pipeline region. The site is within the St Stephens Plateau and Buncefield Plateau character areas. The site is fully located within the greenbelt.

Additional Information from Issues and Options Paper (DBC, 2006): There is an area of Ancient semi-natural woodland (Blackwater Wood) which lies south of Blackwater Lane, and areas of woodland, which are inhabited by badgers.

The Westwick site at Leverstock Green does not present any constraints in terms of the environmental designations or constraints examined, but it does conflict with ancient semi-natural woodland, and access to key services and opportunities (doctor's surgery, public transport) may be problematic, although the 'Neighbourhood Concept' may help to overcome these constraints through provision of such services. It is also situated on Grade 2 agricultural land. The oil pipelines also run close to the boundary of the site, although this is only expected to affect the layout of any future development.

Site 14b: Leverstock Green – Blackwater (New Neighbourhood)

Overview

Environment: There are no conflicts with environmental designations or constraints examined for the Blackwater site at Leverstock Green.

Key Services and Accessibility: The site is located close to employment areas (within 2000m) and local centres (within 800m), but other key services, including primary schools, doctor's surgeries and railway station are more difficult to access (in excess of 600m, and 800m respectively).

Land Uses: Most of the site is classed as grade 2 agricultural land (very good), and therefore

would normally be protected for agricultural use. A large proportion lies within the sand/gravel belt, which may lead to the sterilisation of minerals, and place pressure of resources if development is to be undertaken. The BPA pipeline is also within close proximity of the site. The site is within the St Stephens Plateau and Buncefield Plateau character areas. The site is fully located within the greenbelt.

Additional Information from Issues and Options Paper (DBC, 2006): There is an area of Ancient semi-natural woodland (Blackwater Wood) which lies south of Blackwater Lane, and areas of woodland, which are inhabited by badgers.

The Blackwater site at Leverstock Green does not present any constraints in terms of the environmental designations or constraints examined, but it does conflict with ancient semi-natural woodland, and access to key services and opportunities (doctor's surgery, primary schools and public transport) may be problematic, although the 'Neighbourhood Concept' may help to overcome these constraints through provision of such services. It is also situated on Grade 2 agricultural land and within the sand and gravel belt. The oil pipelines also run close to the boundary of the site, although this is only expected to affect the layout of any future development.

Site 14c: Leverstock Green – Corner Farm (New Neighbourhood)

Overview

Environment: There are no conflicts with environmental designations or constraints examined for the Corner Farm site at Leverstock Farm.

Key Services and Accessibility: The site is located within 2000m of employment sites, but a large distance from local centres (5000m) and is not within close proximity of primary schools, doctor's surgeries or a railway station.

Land Uses: Most of the site is classed as grade 2 agricultural land (very good), and therefore would normally be protected for agricultural use. A large proportion lies within the sand/gravel belt, which may lead to the sterilisation of minerals, and place pressure of resources if development is to be undertaken. The BPA pipeline is also within close proximity of the site. The site is within the St Stephens Plateau and Buncefield Plateau character areas. The site is fully located within the greenbelt.

The Corners Farm site at Leverstock Green does not present any constraints in terms of the environmental designations or constraints examined. However, access to key services and opportunities (doctor's surgery, primary schools, local shopping areas and public transport) may be problematic, although the 'Neighbourhood Concept' may help to overcome these constraints through provision of such services. It is also situated on Grade 2 agricultural land and within the sand and gravel belt. The oil pipelines also run through the site, although this is only expected to affect the layout of any future development.

Question 25: If the councils are required to plan for residential development in the Green Belt, what are your preferences among the following nine locations? Please number from 1 to 9 with 1 being your most preferred location and 9 your least preferred.

[3]	Shendish
[6]	Pouchen End
[11]	Holtsmere End
[12]	Wood End Farm
[14]	Leverstock Green
	Neighbourhood Expansion
[2]	Nash Mills
[4]	Felden
[8]	Old Town
[9]	Marchmont Farm

This report has provided appraisal and comments on all of the sites mentioned in Question 25 along with the five other sites that have not been included in this question. The conclusions for these appraisals make it clear what constraints exist for the individual sites and these should be used to help inform the decision making process. This appraisal has not made any attempt to 'rank' the sites in terms of their suitability for potential development.

Question 26: Is there any area you consider merits serious consideration as a location for growth and urban extension at Hemel Hempstead which has not been covered?

No alternative areas have been recommended as part of this report, however if new sources of opportunity are put forward as part of this consultation exercise they will be appraised using the same methodology as those appraised as part of this report. This will help to inform the plan makers of the likely sustainability outcomes of selecting the sites in a format that will enable direct comparison with the work already carried out.

3 Overview of the Appraisal

3.1 Introduction

Whilst the previous section looked at the individual elements put forward in the Supplementary Issues and Options Paper, this section provides commentary on the wider implications of taking forward the proposals recommended by the Panel Report. This section draws on the findings of the previous sustainability appraisal work carried out for the original Core Strategy Issues and Options Reports.

3.2 Links to Previous Appraisal

The sustainability appraisal for the Dacorum Core Strategy Issues and Options Paper identified that concentrated and compact development at Hemel Hempstead was the most sustainable of the spatial strategies put forward. That appraisal was based on a housing requirement of 7,100 homes rather than the 12,000 which has been recommended by the panel report. This increased requirement will mean that urban extensions into the Green Belt will need to be considered.

The sustainability appraisal also supported the proposed option to “*maximise urban capacity and limit greenfield/site development*” as it outperformed the other options considered. Again, whilst this remained a feasible alternative in the context of providing 7,100 new homes, when looked at in relation to a requirement to provide 12,000 new homes this will no longer remain true as there is not the capacity to provide these house numbers without turning to greenfield sites (in the Green Belt).

The previous work identified issues that would need to be considered if the concentrated and compact development at Hemel Hempstead was to be taken forward as the as the preferred development option and these included:

- Demonstration of how the impacts of climate change can be addressed and overcome;
- Issues relating to water quality; and
- Identification of specific measures to protect biodiversity and address impacts on landscape and biodiversity.

If the proposed housing increase is sanctioned these same issues will still need to be looked at, but it is far more likely that environmental thresholds will be threatened or exceeded.

Earlier scoping work for the SA/SEA had also identified a series of sustainability issues relating to the Dacorum and St Albans areas, some of which directly relate to the proposals for extra housing at Hemel Hempstead. These included:

- Over abstraction of water resources in the area has been identified as an issue which puts a constraint on the level of new housing;
- Increased air pollution from traffic growth and congestion;
- Increase in light pollution
- Loss of tranquillity; and
- High levels of out-commuting to London

One of the options put forward in the Dacorum BC Core Strategy Issues and Options Paper was for a level of housing of 10,000 dwellings (other options being for 6,300, 7,100 and 8,200). The sustainability appraisal for this option saw it score positively against many of the social and economic objectives (particularly as more affordable housing would result), but negatively for the majority of the environmental objectives. There was uncertainty in some

cases due to the lack of spatial information as to where the extra houses would be accommodated.

The recognition by the Panel Report that areas of St Albans District can also be considered for the provision of additional housing at Hemel Hempstead potentially provides extra sites which may be more sustainable to develop over those previously considered in Dacorum Borough.

3.3 Other Issues

Draft East of England Plan policy context

Hemel Hempstead lies in area identified in the Draft East of England Plan as the 'London Arc'. Policy LA1 in the Draft East of England Plan recognises that the close proximity of the Arc to London brings with it certain issues, and that there is a need to secure more sustainable forms of development for this area. One part of the policy states that there will be "*release of land from the green belt only where exceptional circumstances can be demonstrated and the proposed release achieves a sustainable form of development*". This particular element of the policy is particularly applicable in the context of the potential extra growth at Hemel Hempstead and needs to be taken into consideration in any response to the Panel's recommendations.

Landscape, heritage and biodiversity

Information relating to landscape character changes showed that in the period 1990 -1998 the Chilterns landscape character area was subject to some changes inconsistent with character¹. Development on the scale proposed for Hemel Hempstead will put further pressure on the particular characteristics that define the Chilterns character area. A more recent Countryside Quality Counts study has recently been completed but the results have not yet been published. They will however be available to inform the next stages in the development of the Core Strategies for Dacorum and St Albans.

Significant levels of growth will have an adverse impact on the landscape character of the area and will also have an impact of the historical landscape characteristics. There may also be impacts on archaeological resources.

The loss of greenfield sites that would result from increased levels of development would impact on biodiversity. As well as some of the designated areas that may be affected there will also be areas of undesignated land which are of biodiversity importance whether as habitats supporting particular species or important components in a wildlife network.

The increase in population may result in other impacts on biodiversity, for example through a significant increase in the number of dog walkers in the urban fringe.

Where decisions are taken which result in the degradation or loss of green spaces and particular habitats, the 'no net-loss' principle should be applied, with appropriate compensatory areas being provided at alternative locations. If wildlife sites are present in areas taken forward for extra housing it will be necessary to ensure that they are absorbed into the green infrastructure that will need to be incorporated into the new development.

Water, Air and Soil Issues

Large increases in the area of non-permeable surfaces could result in the increased risk of flooding, particularly when considered in the context of the changes in climate that have

¹ <http://www.cqc.org.uk/archive/oldweb/cap/southeast/CA110.htm>

been predicted. Increased levels of development may also have an adverse affect on water quality.

Soil resources are likely to be lost or damaged as a result of new development, and the increased number of cars that would result from expansion will have negative effects on air quality which will potentially exacerbate the adverse effects on water and soil quality.

Social Issues

The Issues and Options Paper mentions that the hospital in Hemel Hempstead is to be downsized, with full Accident & Emergency services being moved to Watford, and other services also being lost to neighbouring areas. Whilst this is a decision that has been made in the context that relates to 2006, if Hemel Hempstead does expand by the levels proposed by the Panel Report it would be appropriate to reassess the future healthcare needs of the town and plan hospital provision accordingly.

There are also likely to be health implications relating to the loss of loss of open land around Hemel Hempstead if this were to happen. A report by the RSPB² identified that there is “*evidence that green space in an urban environment can improve life expectancy and decrease health complaints*”, and that “*local access to safe natural green space can help individuals sustain levels of physical activity*”.

Planning can play an important part in maintaining and improving the health of local residents and this needs to be taken into account through all areas of decision making.

One benefit that could come from extensive development would be to increase the provision of affordable housing.

Out-commuting

There are already relatively high levels of out-commuting from both Dacorum and St Albans, with 20% of Dacorum working residents travelling over 20km to their place of work (27% for St Albans)³. If a large amount of additional housing is built, the easy access afforded from Hemel Hempstead to the M1 motorway is likely to result in an increase in unsustainable commuting to London. Whilst the intention is to provide a balance between new jobs and houses in Hemel Hempstead this may not prevent the new houses being occupied by those working in London.

With this additional out-commuting would come increased congestion and emissions of greenhouse gases. Whilst increased emissions would result wherever new houses are built, locating the development closer to places of work would reduce the need to travel and levels of emissions.

3.4 Summary

If the proposed extra growth is required to be delivered at Hemel Hempstead this is likely to have widespread sustainability implications. Whilst there may be positive social and economic effects, there are also likely to be significant adverse environmental effects. These adverse effects are mainly linked to the intrusion into the Green Belt that will almost certainly result from the proposed growth. . With this will come the direct impacts of loss of greenfield sites and a range of other direct and indirect impacts which have been discussed above.

² Natural Fit, RSPB (2004)

³ Census 2001.