# North West Cambridge Area Action Plan Green Belt Landscape Study

May 2006



Final Report





# NORTH WEST CAMBRIDGE AREA ACTION PLAN GREEN BELT LANDSCAPE STUDY May 2006

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#### 1.0 Introduction

- 1.1 Since 1950, when Professor Holford first recommended that a Cambridge Green Belt be established, the protection of the landscape setting of 'the only true University town' in England has been central to the planning of the future growth of the city. The inner boundary of the Green Belt was first defined in 1965 but it was not until 1980 that policy P19/3 of the first Cambridgeshire Structure Plan formally established a Green Belt around Cambridge. However, it was then 1992 before the Cambridge Green Belt achieved full inclusion in the statutory Local Plan. From the outset it has been recognised that the principal purpose of the Cambridge Green Belt is to 'preserve the setting and special character of historic towns'. While the other purposes of including land in the Green Belt clearly apply, they are not the fundamental reason for its existence. The Cambridge Green Belt has been an effective planning mechanism: successful in maintaining a good relationship between the historic core and its rural hinterland and in shaping the growth of the city and its necklace villages while protecting their landscape setting. Cambridge has been a strong growth area for several decades and there is now considerable pressure for further expansion. In the light of this situation a comprehensive review of the Cambridge Green Belt is being undertaken.
- 1.2 As part of the review process, there have been a number of recent studies of the landscape setting of the historic City of Cambridge, which has been designated as Green Belt land in recognition of its importance. In 1998 David Brown Landscape Design [DBLD] prepared a report that evaluated the Cambridge Green Belt landscape. It considered, among other things, the contribution of areas within the Green Belt to its 'setting' function and suggested areas where removal from Green Belt protection would be least damaging to its overall purpose. In the same year, 1998, Chris Blandford Associates [CBA] carried out the South Cambridgeshire Village Capacity Study reviewing the character of each village and its ability to accommodate further development. South Cambridgeshire District Council commissioned the two 1998 studies for use at the Examination in Public of the Regional Planning Guidance (RPG6). In 2002 a further study was prepared to inform the Cambridgeshire Structure Plan. Landscape Design Associates [LDA] set out a vision for the future of the City of Cambridge as a 'compact city', a concept originally proposed by Holford and Wright in 1950. All of these documents, along with the Cambridge Sub-Regional Study (Buchanan and Partners 2001), were put before the Cambridgeshire Structure Plan Examination in Public [EiP] Panel in October – December 2002. The 'Report of the Panel' was published in February 2003 and this supported the vision of Cambridge as a 'compact, dynamic city with a thriving historic core' while identifying areas where land might be released from Green Belt protection to allow development. Paragraph 8.9 of the EiP Panel Report suggests how this vision might be taken forward:

Thus, the vision for Cambridge is of a 'compact, dynamic city with a thriving historic centre'. As to the qualities to be safeguarded, apart from its unique historic character, of particular importance to the quality of the city are the green spaces within it, the green corridors which run from open countryside into the urban area, and the green separation which exists to protect the integrity of the necklace of villages. All of these features, together with views of the historic core, are key qualities which are important to be safeguarded in any review of Green Belt boundaries. All of this could usefully be put at the beginning of the Green Belt section to provide a clear starting point for the future Green Belt reviews.

- 1.3 The Structure Plan identified locations that might be released from the Green Belt for development on the basis of criteria set out in its Policy P9/3b. Of the urban extensions identified in the Structure Plan, it should be noted that the area of University land between Huntingdon Road and Madingley Road was considered differently to the other areas. The University land would not have been released on the criteria employed for the other areas and was only to be released when the University could demonstrate 'a clear need for the land to be released'. It is essential that this fundamental difference in approach to the University land is recognized in considering its future.
- 1.4 The City Council undertook an Inner Green Belt Boundary Study in 2002 to help it determine appropriate boundaries for sites to be released from the Green Belt in its new Local Plan.
- 1.5 This study looks in detail at the landscape considerations that should be taken into account in developing an Area Action Plan for North West Cambridge and shows how these considerations and constraints might influence the extent and form of development in the area. A clear starting point set out by the EiP Panel is that the key qualities of the Green Belt land within the study area should be considered in specific detail. The protection of these qualities is essential to the vision of Cambridge as a compact city and therefore they form a first order constraint on future development. Landscape character and visual matters therefore form an essential determining factor in considering any release of land from the Green Belt. Given the importance of Cambridge as a historic city it is surprising perhaps that the historic value of the landscape setting has not been a more prominent element of many of the studies carried out on the Green Belt landscape. This matter is quite properly included in this study, along with information regarding ecological value, in addition to a more detailed review of landscape and visual characteristics.
- 1.6 Some of the issues that need to be carefully considered in making decisions about the future NW Cambridge rural edge are:
  - what *are* the key qualities of this landscape and existing townscape;
  - what kind of development or land management might enhance the perception of Cambridge in this location;
  - what edge treatment of the urban area will protect the city's immediate setting most effectively;
  - how can the Green Corridors that give Cambridge its special character be preserved and enhanced;
  - how can the planning process try to ensure a sustainable contribution to this part of Cambridge and the city in general;
  - what future requirements should we try to allow for?

In short, we need to clarify an acceptable future vision for the setting of North West Cambridge.

1.7 NW Cambridge divides naturally into two separate areas: Madingley Road to Huntingdon Road and Histon Road to Huntingdon Road. Where appropriate these areas are considered individually in the following report. Much of the information is presented graphically in a series of plans dealing with

different aspects of the landscape, the development potential and Green Belt boundary options. For the University land, three options and their implications are considered in a series of plans.

# 2.0 Planning Policy Background

2.1 The recent planning process for review of the Cambridge Green Belt begins formally with the Regional Planning Guidance (November 2000), Policy 24 of which states that:

A review of the Cambridge Green Belt should be carried out and any proposals for changes to its boundaries included in development plans. The review should start from a vision of the city and of the qualities to be safeguarded.

This guidance informed the review of the Cambridgeshire & Peterborough Structure Plan which was adopted in 2003 but will be replaced, along with RPG6, by the East of England Regional Spatial Strategy in 2006. In combination with these strategic documents, the Cambridge Local Plan and the emerging South Cambridgeshire Local Development Framework will form the development plan for the study area. Both the Cambridge Local Plan and the South Cambridgeshire LDF are being reviewed currently. The Cambridge Local Plan is towards the end of its process of adoption, at Inspector's Report stage. The SCLDF is at an advanced, although earlier, stage of preparation and is at Submission Draft. The City Council intends to start work on a number of LDF documents in the near future.

- 2.2 The Structure Plan EiP Panel considered North West Cambridge as two separate areas: land between Huntingdon Road and Histon Road, and, land between Madingley Road and Huntingdon Road. For the former, the land largely owned by NIAB, the EiP Panel concluded that, there is no reason for the Structure Plan to hold up the possible development of this location, which is agreed by the SPAs to be no less sustainable than those to the south and east. In their discussion of the NIAB land the Panel did however note the need to maintain appropriate green separation between Girton and Cambridge. Land within the City boundary has therefore been allocated for development within the Cambridge Local Plan, since this is by far the most visually marked and significant boundary in the area. For this sector the questions are therefore whether any additional development is possible without excessively compromising the purposes of including land in the Green Belt and what positive management of the Green Belt land can be brought forward with the development. (SCLDF Policy SP/13). As the LDF Submission Draft stands, the lower case text to Policy SP/13 makes it clear that there is currently no proposed change to the Green Belt boundary within South Cambridgeshire in this area.
- 2.3 The second area of North West Cambridge considered by the EiP Panel is the University land between Madingley Road and Huntingdon Road. For this area the Panel took a different view:

  \*Land between Madingley Road and Huntingdon Road\*\*
  - 8.92 This location relates to land owned by the University of Cambridge. It is described as the last major land holding of the University. Unlike the land to the north-east of Huntingdon Road, this location was not considered by the Buchanan Study to have potential for development. The land is prominent, being highly visible from the west and it provides an open setting to the village of Girton, which straddles the A14. On this side of the city the approaches along both Madingley and Huntingdon Roads are relatively open and green until quite close to the central core, emphasising the compact nature of the city.
  - 8.93 The acceptability of this location is dependent upon:
    - the needs of the University;
    - those needs not being capable of being met elsewhere;
    - $\bullet$  the needs outweighing the impact on the purposes of the Green Belt.

And concluded:

#### Conclusion

- 8.106 We conclude that the location North West Cambridge which relates to land proposed for university and related uses is suitable for inclusion in Policy P9/3c, but it should only be released from the Green Belt on the basis that the University are able to show a need for the land to be brought forward.
- 2.4 The adopted Structure Plan includes Policy P9/3a, which establishes the purposes of including land in the Green Belt and identifies *three expanded communities within the context of the overall vision*. Policy P9/3b confirms that a review of the Green Belt boundaries will be carried out and sets out criteria on which land might be considered for release for the long-term development needs of Cambridge:

In determining the boundaries of the areas to be released from the Green Belt the Local Planning Authorities will:

- retain any areas required to maintain the purposes of the Green Belt as set out in Policy P9/3a in the context of delivering sustainable development and planned settlement form;
- have regard to the compact form of the City;
- provide green separation between existing settlements and any urban expansion of Cambridge to maintain the identity of the individual settlements;
- ensure the protection of green corridors running from open countryside into the urban area as generally indicated on the Key Diagram;
- maintain views of the historic core.
- provide, where appropriate, for limited development in identified Rural Centres in accordance with Policy P1/1

Policy P9/3c identifies general areas where the release of land from the Green Belt is to be considered and sets out the approach to be adopted in masterplanning these areas. In relation to the present study area it states:

Land between Madingley Road and Huntingdon Road should be reserved for predominantly University-related uses and only brought forward when the University can show a clear need for the land to be released.

- 2.5 Following the adoption of the Structure Plan, the Cambridge Local Plan Inspector's Report concluded, in respect of the University land:
  - 9.22.34 'The Structure Plan reference to the area included as this Area of Major Change in the Local Plan is (land) "between Madingley Road and Huntingdon Road". This need not mean all of the land between the 2 roads, but to give the necessary freedom in devising a Master Plan for the area I consider that none of the open land between the roads should remain in the Green Belt. The Structure Plan Key Diagram shows a green corridor north of Madingley Road, and the strong hedge north of the Park and Ride site has the necessary characteristics to form a suitable Green Belt boundary. However the Key Diagram is diagrammatic, and the hedge line is some distance north of Madingley Road, well inside the area between the roads. In my opinion the open land north of Madingley Road is not prominent to travellers on the M11, as views of it are limited. I conclude that the land is not so fundamental to the purposes of the Green Belt as to warrant Green Belt designation in the present circumstances obtaining here'.
  - 9.22.35 'A green corridor (shown diagrammatically on Figure 1 in the Plan) should be provided through the Area of Major Change. Its precise whereabouts and the boundaries of the Green Belt should be established in the Master Plan and AAP. It may be that the Master Plan will show that the hedge line referred to above is the most suitable Green Belt boundary which is capable of enduring, but this is a matter to be assessed in the context of an analysis of all the factors which the Master Plan and AAP will take into account. The University's Master Plan does not indicate building in this area, but the Master Plan is only indicative at this stage. As at East Cambridge, following the completion of the Master Plan suitable land can be added back into the Green Belt via the AAP'.
  - 9.22.36 'Similarly further work will determine the location of the green corridor which will fall within the Proposals Sites in the Area of Major Change. It is not yet known what will be proposed beyond these sites, in South

Cambridgeshire. However the M11 should have an open space buffer because at present the M11 runs largely through countryside west of Cambridge'.

9.22.38 'There is general agreement between the Council and objectors to Policy 9/7 that there should be an open buffer between the City and Girton. Some of the buffer would fall within this Area of Major Change and within the City boundary. SC9.027 indicates that some of the strategic gap between the 2 settlements is Green Belt. In the case of this land the function of preventing coalescence is sufficiently important for the reference to Green Belt to be justified. However it seems to me that the main function of the open land within the City is to help to prevent coalescence rather than to preserve the setting of Girton, and this should be made clear in the Policy'.

The Inspector also considered the EDAW Masterplan put forward by the University and decided that this should not carry weight within the Local Plan but that the outcome of the Area Action Plan should precede any formal recognition of a Masterplan within the Local Plan/Local Development Framework process. This was particularly relevant given that the Masterplan included areas within South Cambridgeshire and the Inspector considered it inappropriate to preempt the LDF process.

- 2.6 In respect of land between Huntingdon Road and Histon Road the Local Plan Inspector's Report concluded:
- 9.24.9 <u>'The requirement to provide an open space buffer between Cambridge and Girton is the subject of objection. I am satisfied from my site visits that there is a significant separation between the two, appreciated from Huntingdon Road, and that the separation should be retained. The Felix Hotel has an undeveloped frontage. Opposite is open land forming part of the University Farm, and behind the Hotel are playing fields'.</u>
- 2.7 The broad vision of Cambridge as a compact city therefore forms one starting point for this study and the qualities to be protected include, but are not limited to, those set out above. Taking previous landscape and Green Belt studies into account, South Cambridgeshire District Council has put forward in its Site Specific Policies DPD, as submitted to the Secretary of State, Policy SP/13 which covers the land between Huntingdon Road and Histon Road:
  - 1. The countryside bounded by the City edge, A14 and Girton village will be subject to landscape enhancement, habitat creation and provision for recreation adjoining development within Cambridge City between Huntingdon Road and Histon Road.
  - 2. Planning permission for development within Cambridge City between Huntingdon Road and Histon Road will include a planning obligation requirement for contributions to the implementation of a Countryside Enhancement Strategy comprising an integrated landscape, biodiversity, recreation and public access enhancement strategy, which will complement the existing landscape character of the area and protect and enhance the setting of Cambridge and the countryside edge of Girton village.
    - The LDF also includes a strategic vision whose objectives include ST/e 'to protect the varied character of the villages of South Cambridgeshire' and ST/i, which includes 'Opportunities for increased access to the countryside and enjoyment of biodiversity should be viewed as integral requirements of new development'. Strategic objective ST/j is to protect and enhance townscape assets along with the character of the landscape.
- 2.8 The Countryside Agency have published 'The countryside in and around towns: a vision for connecting town and country in the pursuit of sustainable development' [CA207]. This document sets out ten key issues that should be considered when preparing proposals for development or rural enhancement near urban edges.
- 2.9 This study therefore sets out the landscape considerations that should be taken into account in drawing a new Green Belt boundary in both areas. While there is a wealth of general policy advice on the expansion of Cambridge, Green Belt matters and rural enhancement, the specifics of any particular area in terms of its landscape character, visual attributes, ecological value, historic interest and sustainability (among other things) will enable the policy to be interpreted and so determine its

suitability for development. Figure 1 shows the Policy Context for the study area. Earlier studies, the EiP Panel Report, the Local Plan Inspector's Report and other available guidance will be employed to inform the process of evaluating the study area landscape. The following report deals with these matters thematically, defining the constraints and opportunities that are present, before considering three development options for the study area.

# 3.0 Landscape and Settlement Character

- 3.1 North West Cambridge is located at the edge of two landscape character areas as defined by the Cambridgeshire Landscape Guidelines (1991): the Western Claylands and the Chalklands. To the north of the study area, the Western Claylands give way to the Fenland landscape character area and the part of the Western Claylands north of the A14 is a low undulating fringe as the claylands fall to the fens, its villages often being referred to as 'Fen Edge Settlements'. The transition from Chalklands to Western Claylands is more distinct and is formed, in the vicinity of the site, by the Washpit Brook valley along which the M11 runs. Cambridge itself effectively masks this transition in reality and the Fen edge is the critical landscape boundary in north-west Cambridge. Girton itself sits on a shallow ridge of Glacial Head deposits that extends in a linear fashion from north of Girton church to the Observatory site on Madingley Road. In fact, Girton (Gyrton, Grit-ton) takes its name from this ridge of flint and chalk gravels, and How Hill was originally Grythowe or Grit-how. The CBA 1998 report noted the strong linear settlement character of the village of Girton and the geology provides a sound reason for this – the last reliably dry high ground before the land drops significantly towards the Fens. Girton therefore has a distinctive settlement form dating back at least 1100 years and still evident today. Although on plan the A14 appears to divide the linear form of the village, the A14 is in a cutting at this section and in reality its presence is barely noticed when travelling along Girton Road/Cambridge Road.
- 3.2 Ribbon development along Huntingdon Road has extended the city towards Girton, although the true edge of the substantial built up area of Cambridge is not really experienced until Sherlock Road and Storeys Way. The Thornton Road development is similarly at odds with the prevailing character of Girton and is, if nothing else, a strong argument against further development that is out of character. More recent developments to either side of Histon Road have extended the built up area to the A14 at Arbury Camp on its east side and to Tavistock Road on its west side. South of Huntingdon Road the developed land of the study area is largely landscaped grounds in which large institutional uses are sited (e. g. University Observatory, Departmental buildings, Churchill College). North of the Huntingdon Road the developed area within the study area is primarily residential properties of largely twentieth-century origin. The strip of large houses along Huntingdon Road therefore divides two areas that have very different characters.
- 3.3 The Girton ridge is visible (Figure 4 Visual Issues) as the rising land that is so widely seen approaching Cambridge on the A14 and M11. From the west and south west, the view of Girton College's tower rising above the screen of Pines atop the ridge is one of the quintessential Cambridge views, like that of the University Library from the west. The rising land of the ridge is also prominent in these available views and this is a critical element of the immediate setting of Cambridge. The Girton Ridge can also be appreciated from the land to the north of Huntingdon Road and from the A14. In these views it is the Church tower of Girton that tops the slight rise of the ridge. In such an otherwise flat landscape the shallow ridge is a notable feature. The study area north of Huntingdon Road is generally relatively level rising almost imperceptibly to the west until near Girton itself.

- 3.4 The open land north of Huntingdon Road is sub-divided into largely arable agricultural fields with some field boundary hedges remaining, the most significant being the one that follows the boundary between Cambridge City and South Cambridgeshire. The character of this area is simple and agricultural, although the land around Impington Farm and Woodhouse Farm to its north east has a more well-vegetated and smaller-scale pattern of closes with historic ridge and furrow present. As a result of its very open character views are available from the A14 to the historic core of the city, the tower of the chapel at St John's College being prominent in these views. The overall sense of visual openness is a critical element of the character and value of this area in terms of its setting function.
- 3.5 The land to the south of Huntingdon Road rises eastward significantly from the Washpit Brook near the M11 at less than 10 metres AOD to the 20 metre AOD contour and then continues to rise much more gently to just over 25 metres AOD at the University Farm. Effectively, the land east of the 20 metres AOD contour is a very gently modulated plateau with several areas of more marked contouring related to human activity, such as gravel and coprolite digging. This area includes the medieval 'West Fields' of Cambridge and includes several fields with visible ridge and furrow, furlong S-shaped field boundaries and a veteran Oak pollard that marks the boundary between the city and the Parish of Girton. This is therefore an area where the history of Cambridge is written on the land and is still legible. Huntingdon Road is, of course, the *Via Devana* Roman road and two other Roman roads, now not visible above ground, run through this area. These last remnants of Cambridge's historic landscape setting should be preserved for future generations and therefore must form a constraint to development, regardless of Green Belt status.
- 3.6 As with the area to the north of Huntingdon Road, it is worth noting the damaging effect that late twentieth-century agricultural practice has had on the landscape, through the loss of hedgerows and intensification of arable use (including ploughing of former ridge and furrow). This erosion of character is unfortunately very common and generally found but some of these effects could be remedied by appropriate management.
- 3.7 To the west of the Washpit Brook and beyond the motorway the land rises steeply to Madingley Hill, from which views over the land south of the Huntingdon Road can be obtained. The open rural slopes of the Washpit Brook valley are an important element of local landscape character and give a unique 'sense of place'. On one side the chapel of the American Military Cemetery forms a focal point and on the other the towers of Girton College provide the accent. This landscape is sensitive to change, perhaps even more so than that of western Cambridge, between the University Library and the M11.

## 4.0 Historic Landscape Elements

4.1 Cambridge has a long and interesting history dating back to prehistoric times. That history is written in its urban form and in its place names, among other things. The modern road system retains major elements of the Roman road alignments focused on the River Cam crossing below Castle Hill that gives the city its name. This retention of historic features and patterns adds to our understanding of the place and gives a place its unique character. It is something that can evolve to meet present needs if approached sensitively but that is too easily destroyed if disregarded in the planning and design stages. In recognition of the importance placed on this matter by national guidance the introduction of *Guidelines for Landscape and Visual Impact Assessment* (2<sup>nd</sup> Edition 2002) sets out five reasons why landscape is important and the second is that it is, 'a reservoir of archaeological and historical evidence'. At Structure Plan level, the adopted *Cambridgeshire Landscape Guidelines* includes '*Protect and enhance historic features*' as one of its six overall objectives. The loss of mature

landscape elements is therefore of high significance, particularly in this case where it is the historic city that is the focus of Green Belt protection. The loss of the historic significance of its immediate rural setting would be a diminution of the value of the historic core itself. Like the country house and its setting, the city and its agricultural setting form a unified whole. Change must therefore be very carefully managed if the historic resource is to be sustained.

4.2 Areas and features of historic and archaeological interest have been mapped as part of this study (Figure 3 Historical Interest) and are treated as a constraint to development in considering development options. Ridge and furrow patterns and S-shaped field boundaries are survivals from the former open field system that dates back to at least medieval times; and often beyond to the Anglo Saxon land reorganization. These features are present to the north-east near Impington Farm and to the south west towards the Madingley Road park and ride site. To the north-east there are remnants of the former Impington open field overwritten by early small-scale enclosures or 'closes'. To the south-west the remains of the Cambridge 'West Field' can be found. In particular, the remnants of the medieval West Field system – its ridge and furrow and field boundaries – are elements that should be respected and that will add value to the future of the city. The medieval open field system was most often organized on a three-field system, as at Cambridge where there was a North Field, an East Field and a West Field. North Field and East Field only survive in place names now, having been developed for housing, including Arbury and Chesterton. A full account of the surviving field system can be found in, 'The West Fields of Cambridge' by Hall and Ravensdale (CARS, 1976).

# **5.0** Ecological Elements

5.1 An Ecological appraisal was carried out by Cresswell Associates for the University land in 2004. Their findings are contained in an appendix to the North West Cambridge Masterplan Parameters Report prepared by EDAW (December 2004). In their conclusions they note that 'the proposed expansion of the University would not be without ecological constraint'. Potential adverse effects on bats, badgers, water voles, great crested newts, reptiles and a variety of bird species were identified and the retention of features of value to these species is recommended. They conclude:

In general, at this stage it would appear that any protected 'wildlife area' should probably occupy the southern/south-western part of the site, where the majority of the features of value for protected species are located, including the woodland, the ponds, Washpit Brook and the badger sett.

This area coincides with the area of most historic interest and strengthens concerns regarding development in the southern and south-western sector of the University site.

5.2 No ecological survey or report has yet been provided for consideration for the land to the north of Huntingdon Road but it seems likely that similar principles will apply and the more undisturbed and historic landscape to the north-east of this area is likely to have greater ecological value.

#### **6.0** Green Separation and Green Corridors

- 6.1 The EiP Panel Report notes that the green structure of the city and its Green Belt is of particular importance to the quality of the city and its necklace villages. This green structure is made up of urban open spaces, strategic gaps and green corridors. Together when interlinked these form an important resource for biodiversity, recreation and landscape value. The key units of this structure within the study area are:
  - the strategic gap between Girton and Cambridge
  - the strategic gap between Impington and Cambridge

- the green corridor extending from the open countryside beyond the M11 through the University Farm, Observatory site and Churchill College towards the historic core.
- The green corridor extending from the gap between Girton and Impington, north of the A14, through to the University farm and thence to the historic core.
- Urban green spaces including extensive landscaped grounds that extend the rural corridors into the historic core.
- 6.2 Any development within the study area will be expected to provide appropriate green spaces of sufficient scale for recreation and amenity and these will need to be located carefully in relation to the structural landscaped setting. Improved management and additional planting within the adjacent agricultural land, including the provision of low-key rural recreational space and additional access to the surrounding countryside would improve the setting of the City and increase informal recreation opportunities which are currently very limited. Care would, however, need to be taken to avoid the loss of character of the agricultural setting of Cambridge by formalised 'country parks' or 'landscaped buffers' and by any other overly-controlled provision of a formal nature. Design for these areas should be as for more rural agricultural locations. What is sought is access through a working agricultural landscape rather than a 'countryside' theme park. This is very much the same spirit as that of the Cambridge Preservation Society's proposals for their land at Coton.

# 7.0 Access to the Countryside and Rural Recreational Provision

- 7.1 Cambridge is relatively poorly provided with opportunities to access and enjoy the countryside. Encircled by largely arable agricultural land and with a limited footpath network, positive action is required to improve this situation. Recent and emerging initiatives such as the Coton Countryside Reserve, the proposed re-use of the restored Milton Landfill site for recreation and the proposed new countryside access areas at Trumpington Meadows and South Cambridge, are positive steps to remedy this situation. The north and east of the city remain very poorly provided for and similar initiatives in this sector of the Green Belt would be particularly beneficial. There are, however, proposals for a Teversham Country Park and for potential links to the National Trust's Anglesey Abbey/Wicken Fen Vision which will transform the east sector. These initiatives will be linked to the city through a proposed Cambridge East Green Corridor extending from the countryside to Coldham's Common. These additional initiatives will further highlight the shortfall of provision to the north west of the city. The currently existing or committed provision and its distribution is shown on Figure 2. The South Cambridgeshire LDF recognizes the need for new development to bring with it positive measures for rural management, biodiversity, rural recreation and public access. New footpath/cycleway links are therefore proposed, along with other countryside improvement measures, in the proposals plans.
- 7.2 The Countryside Agency has prepared advice on connecting town and country, referred to earlier (CA 207). This suggests ten key issues that should be considered when considering the rural edges of our towns and cities. A tabulation of these issues and comments on how they might be applicable to a vision for Cambridge is appended. Many have already been considered in the debate regarding the future of Cambridge as a compact city but it nevertheless provides a useful checklist. Two issues that are worth raising in the context of this section are: the immediate countryside as a 'health centre' and also as a 'classroom'. The first aims to encourage safe routes, for work commuting and for recreation, which will encourage fitness activity within the everyday life of local residents. The second recognizes the value of countryside access and countryside quality for learning experiences and formal use by schools and colleges. The countryside around the city is a valuable resource for the local population and this understanding needs to be factored in to decisions regarding its future.

- 7.3 There are many landscape conservation and enhancement opportunities that should be included in proposals for creating a useful Green Belt landscape, such as:
  - Retention of significant woodland, trees, hedgerows, streams and ditches and other field boundary features.
  - Retention of permanent or semi-permanent grasslands (particularly where archaeological interest is present).
  - Introduction or replacement of hedges and other types of boundary feature. Generally this should be mixed native hedging but other features may include post and rail fencing, gates and stiles.
  - New woodland and tree planting (particularly where screening or shelterbelts are required or in field corners where agricultural activities are not easy).
  - Consider improvements to watercourses or creation of new water bodies to increase local biodiversity.
  - New species rich grassland (either as wide headlands around arable land, or as replacement of arable land with pasture).
  - New paths and access provision (particularly where wider networks of paths can be connected). Consider good width path corridors (say 5 metres) with appropriately surfaced dual use width paths. Opportunities for hedging and grass verges. Probable need for traffic management features.
  - New signs (perhaps including local interpretation).
  - New nature areas and passive recreation opportunities on some urban boundaries to provide visual and physical buffers between urban and rural land uses.
  - Some appropriate furniture (for example, benches, dog bins). Exercise features in some identified recreation spaces.
  - Opportunities for some sculptural features either interpretive work on the local landscape and/or landmark elements for local orientation and sense of place.
  - Specific management agreements with landowners to protect and enhance biodiversity and provide / maintain good access.

# **Table 1: A Vision for Cambridge**

Based on 'The countryside in and around towns: a vision for connecting town and country in the pursuit of sustainable development', The Countryside Agency [CA207].

CA / Groundwork 'Issue'	Relevance to a Vision for Cambridge
Gateway to the City	Opportunities to enhance the NW edge of the urban area and routes into the city. New landmark buildings could be sensitively set within this landscape. There are some opportunities to enhance road corridors and other transport routes into the city. A chance to showcase how to successfully deal with urban fringe issues!
Bridge to the countryside	Several existing paths and opportunities for more non-vehicular routes. Links to existing and future recreation areas as well.
A place to live sustainably	Opportunities for integral planning and quality 'lifestyle' design issues. Future public transport corridors and non-vehicular links.
A cultural legacy	The historic development of Cambridge is illustrated in surviving medieval boundaries, field patterns and settlement. Several other historic sites and features. Safeguard these.
A productive landscape	Retain areas of working agricultural use and the existing field system. Consider future woodland management, biomass etc.
A nature reserve	Many opportunities to protect existing environment, enhance it and benefit urban wildlife in general.
An engine for regeneration	Opportunities to enhance local neighbourhoods (Arbury) and improve urban /rural interface. Potential benefits for whole of Cambridge with improved public transport and open space links etc.
A 'health centre'	Footpaths and non-vehicular access. Safe, fit routes to work; a 'Green Lung' for city residents; new recreation spaces.
A 'classroom'	Safe routes to urban edge settings with cultural and ecological diversity. Opportunities for interpretation and use by schools, general public and local universities.
Opportunities for recycling and renewable energy	Perhaps the least relevant to this study area – but thoughtful and appropriate 21st century development should ensure that sustainability is integral to the design and construction process. Low energy buildings; Links to end use landfill sites, as at Milton; opportunities for biomass woodland.

### 8.0 Development Options

8.1 Development on Green Belt land must demonstrate 'very special circumstances', especially where the proposals dictate a revision of the Green Belt boundary. As an exceptional circumstance some areas of land have been identified for removal from the Green Belt so as to allow for the expansion of Cambridge. As a further exception, beyond this general exception, the long-term need of the University for expansion has been recognized as justifying a special revision of the inner Green Belt boundary. However, this should not be taken as a 'carte blanche' for development regardless of the level of harm to the purposes of including land in the Green Belt. A balance needs to be struck between the level of harm that can be accepted and the strength of need that can be demonstrated. There are areas of the Green Belt that cannot be lost without severely damaging its function and these must be retained if the Green Belt is to fulfill its statutory function. The Structure Plan recognizes this in policy P9/3b:

In determining the boundaries of the areas to be released from the Green Belt the Local Planning Authorities will:

• retain any areas required to maintain the purposes of the Green Belt as set out in Policy P9/3a in the context of delivering sustainable development and planned settlement form

The strategic gap to Girton, for example, is an area that cannot be developed while maintaining its viability for Green Belt purposes. In this section, which will largely be presented graphically, three development/Green Belt boundary options are considered for North West Cambridge. For developments on both sides of the Huntingdon Road countryside enhancements are included in all options. These include new footpaths, new countryside landscape 'buffer' zones with habitat enhancement, and landscape management for the agricultural land including new hedges and shelterbelts. The scale and field pattern of the agricultural land should be retained and enhanced. The current scheme for the land north of Huntingdon Road and the University's Consultants' proposals for south of Huntingdon Road are considered as one option, Option A. A second option, Option B, applies the results of this exercise in landscape analysis to Option A and assumes the protection of valuable ecological features, historic landscape elements and the retention of the quality of visual character of this area as overriding concerns required to meet the Structure Plan criteria. Option B accepts a higher degree of harm to the Green Belt specifically to meet the recognized needs of the University, but does not accept a level of harm that would essentially threaten the purpose of the Green Belt in this sector, as would be the case in Option A. Option C is prepared on the basis that only a low level of harm is acceptable and therefore constrains potential development further.

8.2 The purpose of this Study for the area between Huntingdon Road and Madingley Road is to inform the AAP which is being prepared for that sector and where the landscape assessments contained in this Study will help to generate options for the spatial strategy and the revised Green Belt boundaries which will need to be determined through the AAP processes. No information has been supplied regarding transportation, services and other off-site development associated with proposed development on the site and that is likely to have landscape and visual effects. It has therefore not been possible to consider off-site effects here but it should be noted that there are likely to be significant adverse off-site landscape and visual impacts arising given the scale of development proposed. The purpose of this Study for the area between Huntingdon Road and Histon Road is to add to the information which supports the retention of the land in South Cambridgeshire within the Green Belt and to consider ways in which improvements to landscape, biodiversity and countryside access could be achieved consistent with Policy SP/13 of the Site Specific Policies DPD of the South Cambridgeshire LDF as submitted to the Secretary of State. Objections have been made seeking the

identification of land in South Cambs for 1000 dwellings which will be considered as part of the LDF process.

- 8.3 The following features and elements are considered to form constraints of very substantial weight on the extent of development possible:
  - The visually important rising landform of the Girton ridge between Washpit Brook and the brow of the slope at the 20 metres AOD contour.
  - Views of defining local landmarks that give Cambridge its 'sense of place', such as Girton College, Girton Church and St John's College Chapel.
  - Retained elements of the historic Cambridge West Fields and Impington open field.
  - Views to the historic core of the city.
  - Green corridors linking the city to its rural setting.
  - Strategic green spaces to prevent coalescence of settlements.
  - Ecological features of value to endangered species.
  - SSSI

The options will be tested on their ability to respect these constraints.

- 8.4 Development will also bring infrastructure implications for the landscape setting of Cambridge in this sensitive Green Belt location. Access roads could be visually prominent and care will need to be taken on alignment, design and landscaping to minimise any adverse impacts and integrate them into the wider landscape. Similarly, drainage should avoid an over-engineered approach and should be integrated with opportunities to create informal recreation and wildlife habitats. Construction spoil will also need to be sensitively handled if the setting is to be maintained; changes in levels could easily have a very significant adverse impact of the character of this historic landscape.
- 8.5 **Option A** has been prepared using the current aspirational proposals for development in the study area. For the land north of Huntingdon Road there are currently no proposals for the countryside enhancement and access improvements that should form part of any new development, as set out in the LDF strategy and in Policy SP/13 of the LDF by specific reference to this area. This study identifies no additional opportunities for development without causing unacceptable harm to the Green Belt setting function beyond the existing Cambridge City Local Plan allocation. There are no formal proposals for further development in this area at present, but the aspirations of David Wilson Homes as objectors to the South Cambs LDF are indicated in Option A (i). For the land south of Huntingdon Road, an aspirational Masterplan has been prepared by EDAW on behalf of the University and this forms the basis of Option A (i). In this option, development is allowed down the slope towards the Washpit Brook leaving at its narrowest a 100 - 200 metres wide strip of 'landscape buffer' between the M11 and the edge of development. The development would therefore essentially begin where the land starts to rise. Several problems arise from this. The sweep of open rising ground that is so important to the setting of Cambridge is effectively lost. The proximity to the M11 and the falling landform will lead to this area not being perceived as a significant foreground. Views of Girton College would be lost from a number of viewpoints. Areas of historic interest would be permanently lost. The level of development raises infrastructure issues that, in turn, may well have adverse landscape and other environmental impacts. Valuable ecological features are lost and others damaged. Mitigation cannot replace these features and elements. There would be a severe level of harm to the function of the Green Belt as protection for the setting of the historic City of Cambridge and the character of the city on the north west would be fundamentally changed. A variation on this Option, A(ii), shows a development on the University land that extends over the ecologically and historically valued fields to the south-west but limits development on the west-facing slope. This

Option needs to be considered because of the removal of the south-western fields from Green Belt protection by the most recent Cambridge Local Plan. The Inspector allowed for the potential review of this area within the AAP and the potential to return these fields to the Green Belt. In landscape setting, heritage, and ecological terms there is no doubt that these fields should not be developed and should be returned to Green Belt protection in recognition of their resource value and contribution to the setting of the city. This appears to be recognized by all parties, and the University's consultants do not propose development on these fields.

- **Option B** shows two possible options B (i) and B (ii). For both options, no development is included 8.6 beyond the Cambridge Local Plan allocation north of Huntingdon Road because of its significant impact on the setting of Cambridge, and show countryside enhancement measures in the adjoining countryside. For land south of Huntingdon Road, both options use the EDAW plan in Option A and applies the constraints defined above at their minimum level, that is to say accepting a moderate degree of harm to these features and elements. In this option the rise of the land from Washpit Brook is retained as open agricultural land but the proposed development would sit prominently at the top of this slope. With careful design, new landmark buildings – of the quality and architectural merit of the Schlumberger building, the Chapel at the American Cemetery or of Girton College – could be sited here and could form an appropriate urban edge. Pulling the buildings back and accepting the views of Girton College as an architectural design constraint would also preserve this important element of local character and retain a better 'sense of place' than would be the case with Option A. The edge of the city would be seen over a working agricultural foreground rather than washing up to the M11 with an urbanized 'landscape buffer'. The pattern of developing up to bypasses and major roads beyond our towns and cities results in developments such as the recent extensions to Ely and to Kings Lynn, photographs of which are appended (Figure 5). The Kings Lynn example is particularly noteworthy as the effect of recent housing development at different distances from the road can be readily appreciated. On the Cambridge Northern Fringe the same pattern has been adopted and this has removed any locations from which the city and its edge can be seen across an agricultural hinterland. By retaining the historic and ecologically valuable fields to the south-west of the University land, much of the special interest of these areas could be retained, although the proximity of the new development would still result in moderate adverse effects on this resource. The Area Action Plan will determine whether land in this location should be included in the area to be developed or whether it should be put back in the Green Belt. Even where land is not to be Green Belt, historic and ecological features will remain a constraint to be taken into account in future masterplanning and development control decisions. Although moderate harm has been generated in this option, a workable Green Belt setting function is retained. Two alternatives, illustrating different ways in which the strategic gap/green corridor could be treated, are provided. Option B (i) maintains the thrust of the strategic gap towards Madingley Road, whilst B (ii) turns the gap westwards. Option B (i) thus shows a strategic gap which runs broadly north to south through the development and would provide opportunities for a large central open area for both amenity and recreation, as well as to protect the SSSI. This would result in greater development further out from Cambridge which is more closely attached to Girton village. Option B (ii) shows a strategic gap which turns more east to west through the development and would link more directly with the open countryside beyond the M11 and result in a greater development directly on the edge of Cambridge and less development adjoining Girton village.
- 8.7 **Option C:** The release of the Option C land would have primarily visual effects and these would be of relatively low magnitude. While all the land currently within the Green Belt makes some contribution to its purposes, the principle has been established that areas where that contribution is relatively lower can be considered for development as a special exception to Green Belt policy. This

option would effectively protect ecological and historic landscape interests. It also fully protects the settlement character of Girton, whereas the other two options change the form and balance of the settlement to a greater or lesser extent. Option C retains almost all of the new development within the city boundary. It does not extend the already weak strategic gap to Girton by making this 'pinch point' into a long and narrow corridor. In terms of Green Belt purposes alone it is therefore the best option. Clearly the University's long-term aspirations have to be considered and the Structure Plan sets out how these 'needs' should be considered.

# North West Cambridge Area Action Plan - Figures List.

#### Fig 1: Study context

Showing Green Belt; District and Parish boundaries; public footpaths; principal heritage sites.

### Fig 2: Green Belt context

Public access to rural recreation areas around Cambridge.

#### Fig 3a: Historical features (Plan)

Noted features and sites of heritage interest in the study area.

# Figure 3b: Historical features (Photos)

Photographs of historical features in the study area.

#### Fig 4: Views and visual issues

Issues that affect visual perception of the study area.

#### Fig 5: Urban fringe comparisons

Examples illustrating how the distance between the observer and built environments affect perceptions of settlement and influence urban fringe land use.

#### Fig 6: Opportunities and Constraints

Summary of some issues that will influence land use in the study area.

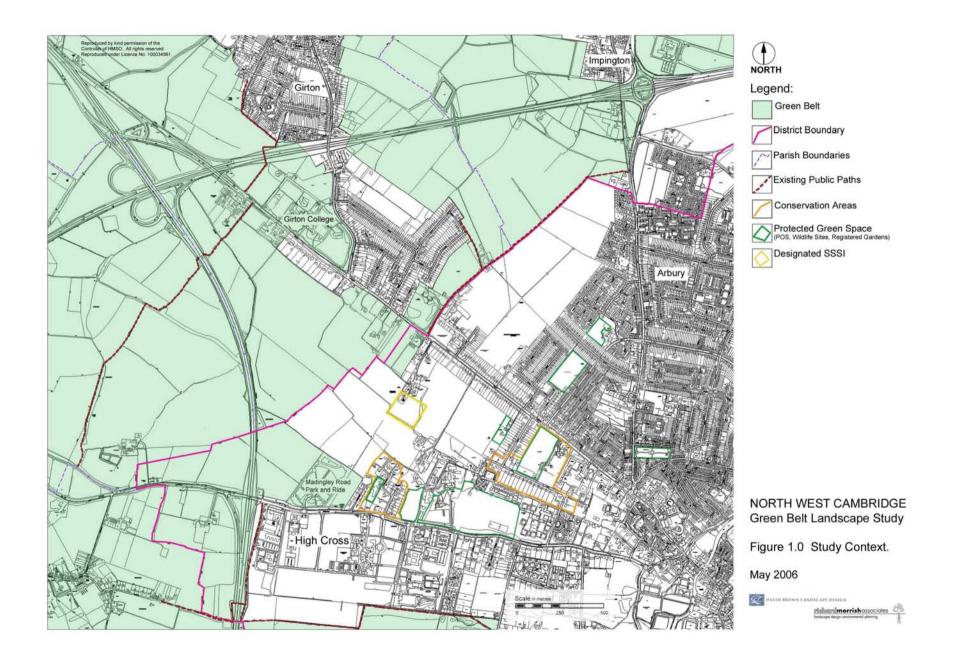
- Fig 7: Option Ai University / NIAB Option: An extensive level of development in the study area.
- **Fig 7: Option Aii** Restrained University / NIAB Option: Development removed from prominent northwest facing slopes and north-eastern agricultural land, but extended along Madingley Road.
- **Fig 7: Option Bi** 'Restrained Development': Revise Green Belt boundary but with landscape setting as a principal constraint issue.
- **Fig 7: Option Bii** 'Restrained Development': As above but less building in Girton and wider 'Strategic Gap'.
- Fig 7: Option C Retain Green Belt boundaries. All new development covered by 'special circumstances.'

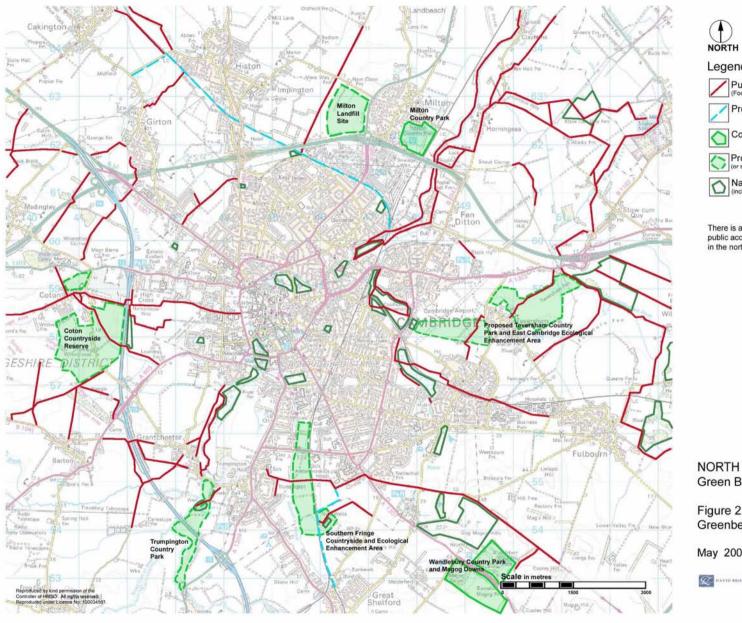
#### **Appendix 1: Photographs**

Photo Location Plan.

Photos – Madingley to Huntingdon Road - Sheets 1, 2, 3, 4 (distant views)

Photos – Huntingdon to Histon Road – Sheets 5 (Strategic Gap), 6, 7.







#### Legend:

Public Rights of Way
(Footpaths, bridleways and others)

Proposed Sustrans Cyclepath

Country Parks

Proposed Country Parks
(or similar public access areas)

Nature Reserves
(incl city & county wildlife sites and SSSIs)

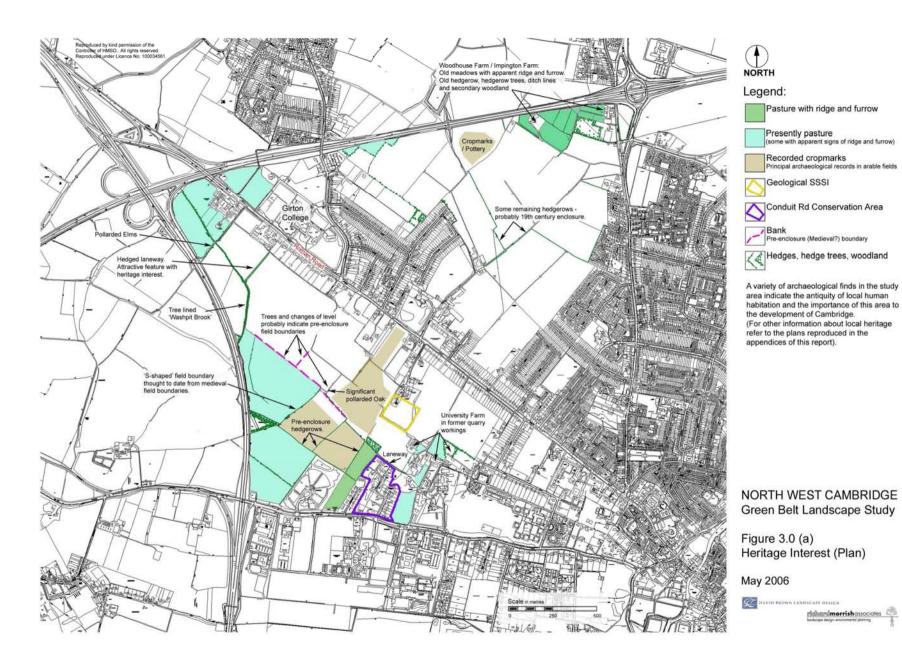
There is an apparent shortage of open space, public access and designated wildlife resource in the north-west of Cambridge.

## NORTH WEST CAMBRIDGE Green Belt Landscape Study

Figure 2.0 Greenbelt Access and Recreation







plakanimorrishassociates



Panoramic view of 'Travellers Rest Pit' geological SSSI, looking east. It appears much of the area near University Farm has formerly been quarried and there have been a variety of archaeological finds.



At the southern edge of the study site adjacent Madingley Park and Ride site, these fields have well preserved ridge and furrow contours with hedge field boundaries thought to date from pre-enclosure farming.



Mature Hornbeam and probable badger setts at SSSI.



This bank and ditch are thought to indicate pre-enclosure field boundaries. This area formed the 'West Fields' which were important to Cambridge from at least medieval times.

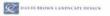


S-shaped field boundaries are thought to indicate pre-enclosure fields - the 'S' formed by ox-ploughs.

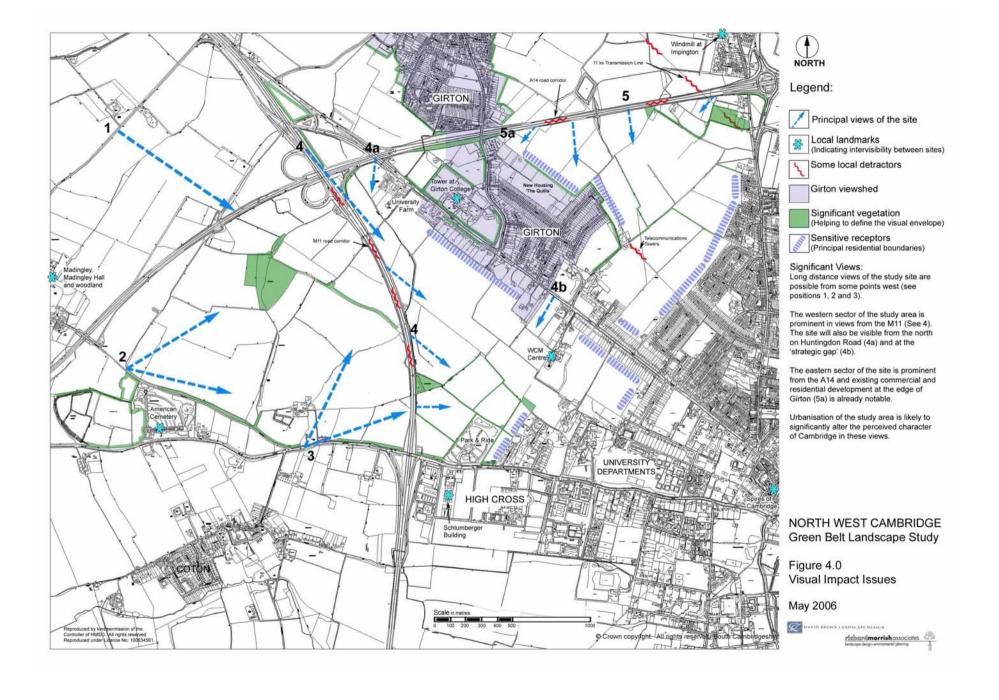


A veteran, formerly pollarded oak tree. Although the field boundary has been degraded the tree is still on the District/Parish boundary.

Figure 3.0 (b) Historic Landscape Features (Photos).









Existing situation at the study site - looking east over the study area from the M11 embankment. The distance from the road to the farm (left) is around 350 metres - an essentially 'rural' feature - and the edge of Girton (500-1000 metres away) is 'soft' due to mature vegetation. The urban edge is therefore well integrated. The foreground is considered to be essentially rural in character.



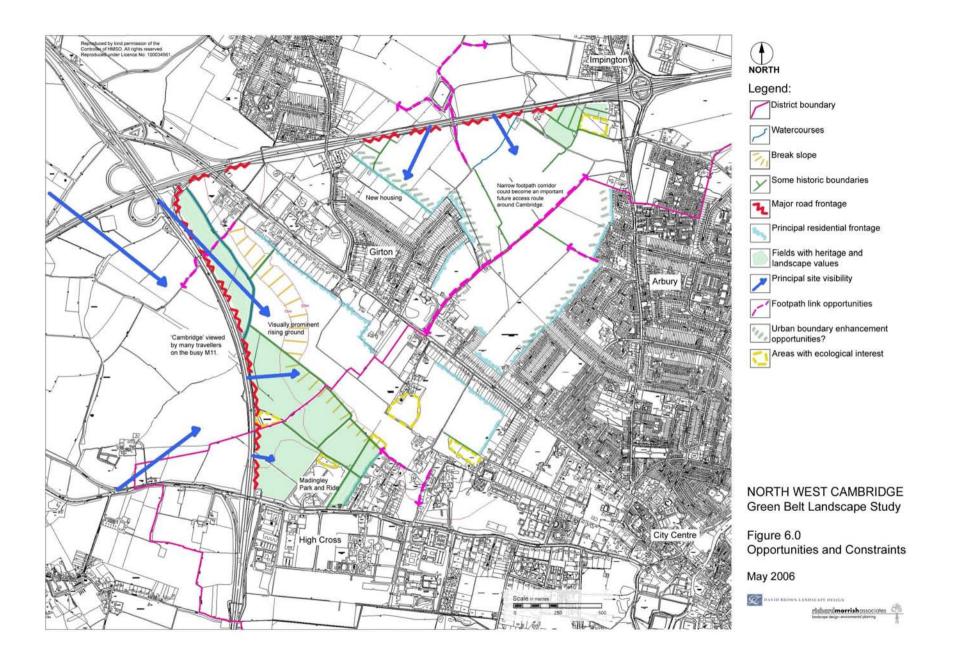
A149 bypass at King's Lynn, with elevated road and agricultural foreground before residential development. The 70s development to the left (white weatherboard) is set-back about 4-500 metres from the road, providing space for working agriculture. The new red brick housing to the right is around 200 metres from the road and the foreground will become public open space and bring the 'town' right to the road boundary. Even with good screen planting the busy road will be perceived to be close to the new housing.



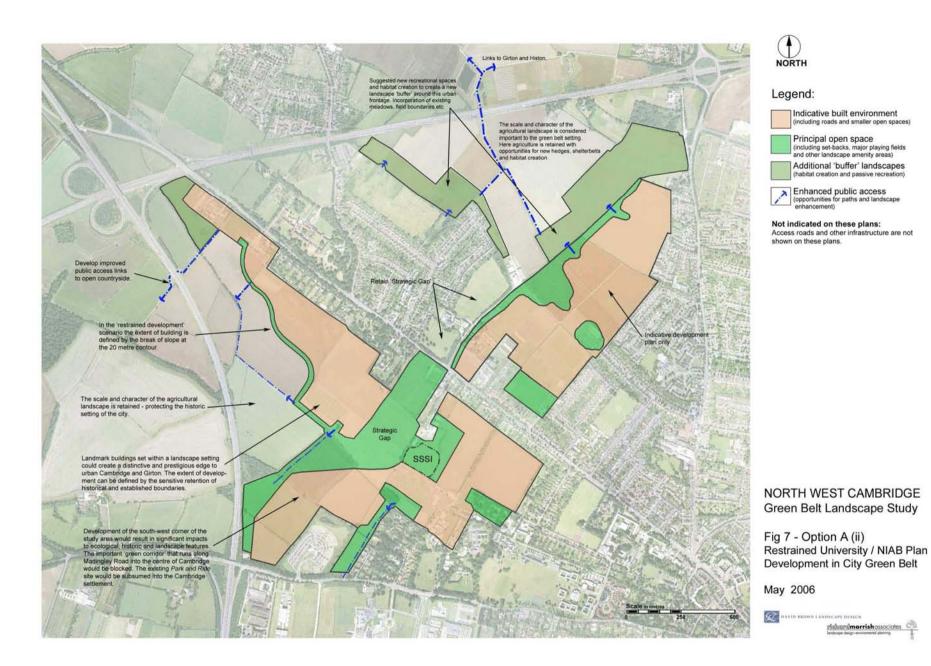
A10 by-pass around Ely, with recent residential development. A linear public space has been created between the busy road and new housing. The distance from the road boundary to the closest houses varies between 50 - 75 metres. Extensive tree planting will hopefully mature into a screen between the road and estate and the space will become a 'woodland walk'. However it is expected that this scale of landscape space will be perceived as having an 'urban' character. 'Ely' will extend to the road edge.

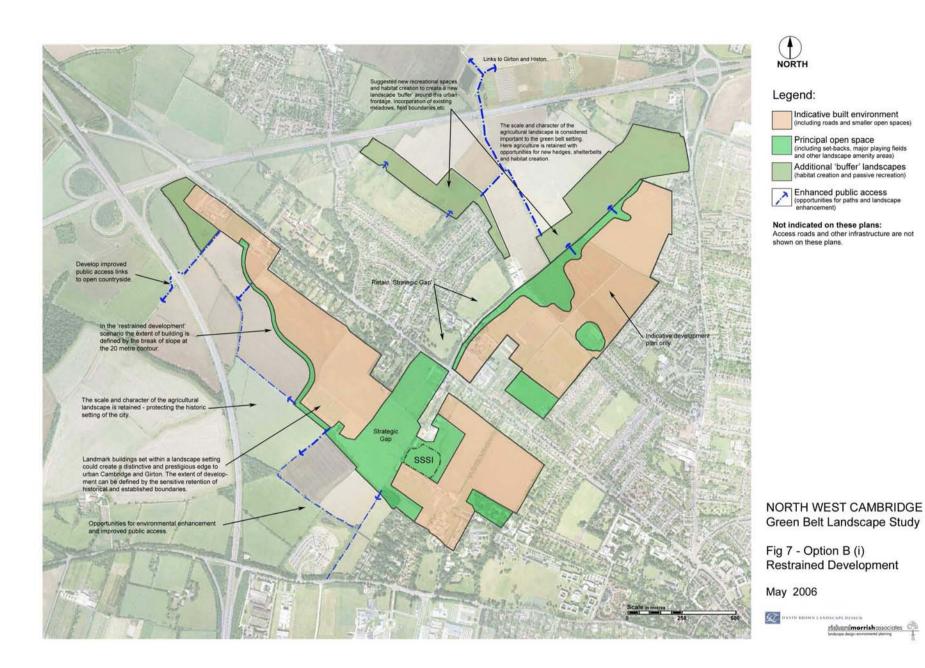
Figure 5.0 Urban Fringe Settings: Some Comparitive Treatments













Indicative built environment (including roads and smaller open spaces)

Principal open space (including set-backs, major playing fields and other landscape amenity areas)

> Additional 'buffer' landscapes (habitat creation and passive recreation)

> Enhanced public access (opportunities for paths and landscape enhancement)

#### Not indicated on these plans:

Access roads and other infrastructure are not shown on these plans.

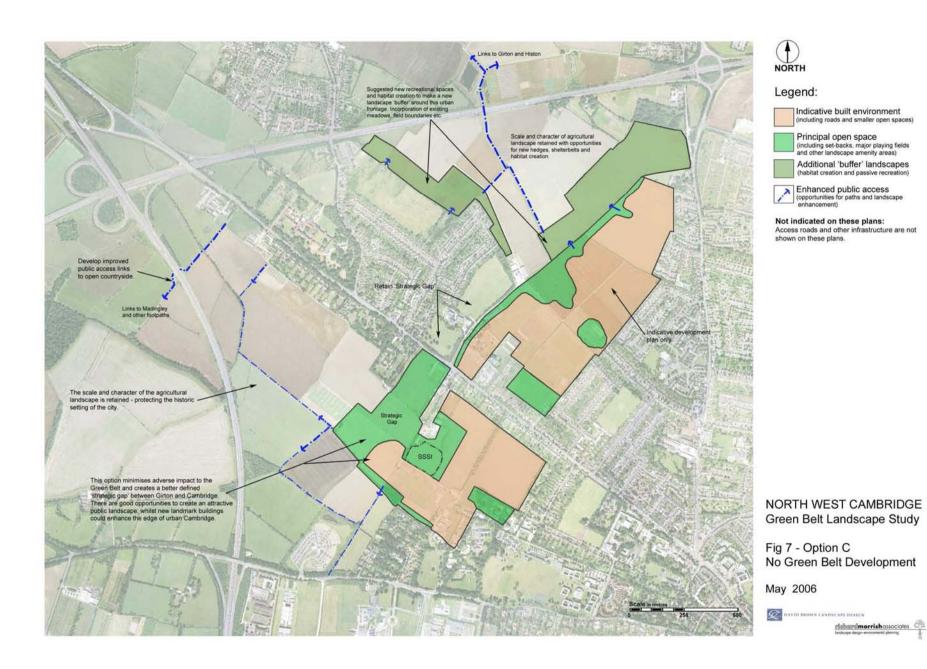
NORTH WEST CAMBRIDGE Green Belt Landscape Study

Fig 7 - Option B (ii) Restrained Development









North West Cambridge Area Action Plan Green Belt Landscape Study

Appendix 1: Site Photographs



View 1: View looking east towards WCM Centre and University Farm. The woodland, hedge and ditch seen to the right could form an appropriate historic and physical western boundary to development in this area.



View 2: Looking west towards the M11 and high ground around Madingley. Field boundaries are probably pre-enclosure and the grass field may have feint ridge and furrow topography.



View 3: Looking north-east across a flat plateau of university farmland towards Huntingdon Road. The WCM Centre is very prominent in this setting.

Madingley to Huntingdon Road Existing Landscape.
Appendix 1: Sheet 1

April 2006





View 4 looking south-west towards Madingley Road. Note the hedge, mature trees and slight bank to left which is thought to be a pre-enclosure boundary. The ploughed field has recorded ridge and furrow markings. The Madingley park-and-ride has been quite successfully enclosed with native planting, but silver light units are visually intrusive. The Schlumberger building is a landmark. Also note dwellings in mature gardens.



View 5, looking north-west towards the M11 and Madingley to the left and Girton to the right. Girton forms a distinctive viewshed between land lying east and west of Huntingdon Road. Although not easily illustrated in a photograph, there is a distinctive break of slope in the foreground and it is considered that this would be an appropriate delineation point for future development.



View 6: There is a definable valley between Girton and Madingley - along which the M11 passes. The road is constructed on embankment along much of this section - often giving motorists elevated views of the adjacent landscape. Blocks of woodland sometimes block or frame these views.

Madingley to Huntingdon Road Other Views Appendix 1: Sheet 2

April 2006





View 7: Looking east / south-east towards Cambridge. Rising topography reaches a distinct break of slope with a flatter 'plateau' area around University Farm (beyond horizon line). The boundary of Girton (left) follows Huntingdon Road and is defined by mature trees and gardens. The ditch, bank and hedge to the right is thought to be a pre-enclosure boundary (see inset).



View 8 - looking east over the study area from the M11 embankment. Note university farm to left and embankment allowing motorists elevated views of the adjacent landscape to the right.



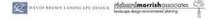






Various Views 9: Mature trees and hedges at north end of site including pollarded elms. Note relationship with established tracks and drainage channels and the attractive hedged laneway.

Madingley to Huntingdon Road Other Views Appendix 1: Sheet 3





View 10: View towards study area from entrance to footpath on Cambridge Road, Madingley. The study area will be partly screened by existing woodland.



View 11: The study area will be visible from the 'The Avenue', near Beck Brook Farm, Madingley.



View 12: There may be seasonal opportunities for views of the study area from the American Cemetery, Madingley - although tree planting around the cemetery largely encloses this site.



View 13: The study area is visible from the A1303 and dwellings near Moor Barns Farm. 'Madingley Moors' once formed the western edge of the historic Cambridge 'West Fields'.

Madingley to Huntingdon Road Appendix 1: Sheet 4





View 14 looking south-east on Huntingdon Rd at entrance to Whitehouse Lane and NIAB premises. This NIAB land is proposed for development - although the main buildings beyond are proposed for retention.



15. Further north on Whitehouse Lane. NIAB buildings may be redeveloped. Anglia Ruskin playing fields at left.



16. Hotel Felix on Whitehouse Lane.



17. View looking north-west on Huntingdon Rd. There is little sense of a 'gap' here, although there are playing fields behind the fence, before the Hotel grounds.



18. On the other side of the road looking north - a pub and part of the University Farm front Huntingdon Road.



19. More NIAB premises on Whitehouse Lane. It is understood that this part of the premises may also be redeveloped.



View 20. The 'Strategic Gap' looking south over the University Farm land towards the WCM Centre and High Cross / Madingley Road.

Huntingdon Rd: The 'Strategic Gap' Appendix 1: Sheet 5.





View 21: Looking west across NIAB land from near Histon Road. Impington and Woodhouse Farms are located within the trees to the right. Girton lying south of the A14 is visible in the distance. A public footpath follows the residential boundary to the left. Note the transmission line which continues over the A14 and to the west of Histon.



View 22: View looking north-east from public footpath. Post-war residential development to the right spreads along Histon Rd. Impington is visible beyond the A14 to the left. The footpath connection to the right appears to be informal.



View 23: Continuation of the above panoramic view looking north-west towards Girton. The NIAB road overpass over the A14 is visible.



View 24: This is the unprepossessing public footpath access as it heads towards Huntingdon Road and the Girton 'Strategic Gap'. The corridor between NIAB land and other private land is relatively narrow.

Huntingdon to Histon Road. Appendix 1: Sheet 6





View 25: View east towards Histon Road from NIAB. This area lies within the Cambridge City boundary and is included in the proposed NIAB development plans.



View 26: View north from footpath looking towards Histon and Impington. Note mature hedgerows - probably dating from later enclosure acts (19th century).



View 27: Looking west towards the NIAB boundary with Girton from public footpath. It is considered that there are great opportunities to enhance the interface between the Girton settlement and adjacent Green Belt land.

Huntingdon to Histon Road Appendix 1: Sheet 7

