

# Options for Future Urban Expansion in Warwick District Considerations for Sustainable Landscape Planning

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landscape design • environmental planning



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*Prepared for*  
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## **Options for Future Urban Expansion in Warwick District Considerations for Sustainable Landscape Planning**

### **1.0 Introduction/Background.**

- 1.1 Warwick District Council is required to identify a supply of land to facilitate future urban growth in the locality. Given the district's predicted long-term growth requirements and the low level of 'brownfield' land available, the majority of this supply will need to be on substantial areas of 'greenfield' land (previously undeveloped). Therefore the Council must consider how the inevitable impacts of such development can be mitigated.
- 1.2 In 2008, a *Joint Green Belt Study* (JGBS) was undertaken on behalf of Coventry City Council, Rugby Borough Council, Nuneaton and Bedworth Borough Council and Warwick District Council. The study sought to identify land within selected areas of the West Midlands Green Belt that was least constrained in environmental and physical terms and considered to have the greatest potential to accommodate urban expansion. The study was undertaken by SSR Planning, and Richard Morrish Associates Ltd, Chartered Landscape Architects (RMA), assisted with a preliminary landscape assessment of the study areas.
- 1.3 In 2009, RMA undertook a second study for Warwick District Council reviewing several land parcels lying to the south of Warwick and Leamington. This was called the *Landscape Character Assessment for Land South of Warwick* (LCASW) and looked at areas outside of the green belt and therefore not considered in the JGBS. The emphasis in this second study was to form conclusions on which areas of land contributed most to the landscape setting of south Warwick district.
- 1.4 Both studies have provided a 'landscape value' – a relative evaluation of the particular land parcel, reflecting its character, use, landscape assets, designatory status, tranquility and likely sensitivity to development. A logical conclusion to such a process would be to consider that 'lower value' or less sensitive landscapes were more suitable for future urban expansion, whilst 'higher value' or more sensitive landscapes might be protected. However, although landscape evaluation is clearly useful in determining some decisions about appropriate future urban form, it is unlikely in itself to secure high quality sustainable development.
- 1.5 Warwick District Council (WDC) have therefore raised a number of questions. What if future land supply demands were such that some of the previously considered land parcels with a higher landscape value had to be considered for development? What principles for master planning and landscape design would help to protect or enhance the character of existing landscapes and settlements, whilst making successful new neighbourhoods? How can cumulative development impacts and perceptions of coalescence between settlements be mitigated or avoided? What design principles need to be enshrined in development masterplans in order to create sustainable landscapes?
- 1.6 Richard Morrish Associates were appointed in March 2012 to revisit five particular land parcels defined by WDC and to provide guidance as to how they might be sensitively developed to mitigate the possible adverse impacts of development. In addition, WDC have asked RMA to consider five larger areas and to identify potential cumulative impacts from a variety of potential development sources; to consider the likelihood of perceived settlement coalescence if all developments proceeds; and to make suggestions as to how major adverse landscape impacts might be avoided.

## **2.0 The study areas.**

2.1 The WDC brief therefore identified ten sites to be considered in a two-part study process.

**Part 1** of the study addressed five sites close to Warwick and Leamington where all or part of the land parcel has been considered to have high landscape value in previous studies. (Refer to figure 1). The WDC brief asks – how could these areas be sensitively designed to mitigate development impacts? The five areas are:

- a. Land South of Gallows Hill & The Asps (Site D in the LCASW)
- b. Land South of Harbury Lane (Site E - LCASW)
- c. Land at Blackdown (WL6b and WL7 in part - JGBS)
- d. Loes Farm (WL5a in part - JGBS)
- e. Red House Farm (WL10 in part - JGBS)

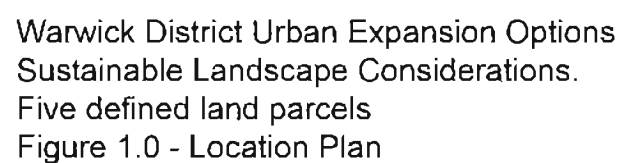
2.2 The study format reviews the general site description data gathered previously and updates and adds to it where relevant. Then, after consideration of the opportunities and constraints at the site, a development scenario is suggested that outlines some key recommendations for masterplanning design that would aim to conserve and/or enhance the distinctive landscape attributes of the site whilst creating sustainable high quality new development.

2.3 **Part 2** of the WDC brief has asked for consideration of the potential cumulative landscape effects of development in five larger areas within the District (refer to figure 2). In particular, to what extent may multiple developments lead to perceived coalescence of existing settlements? The study areas are:

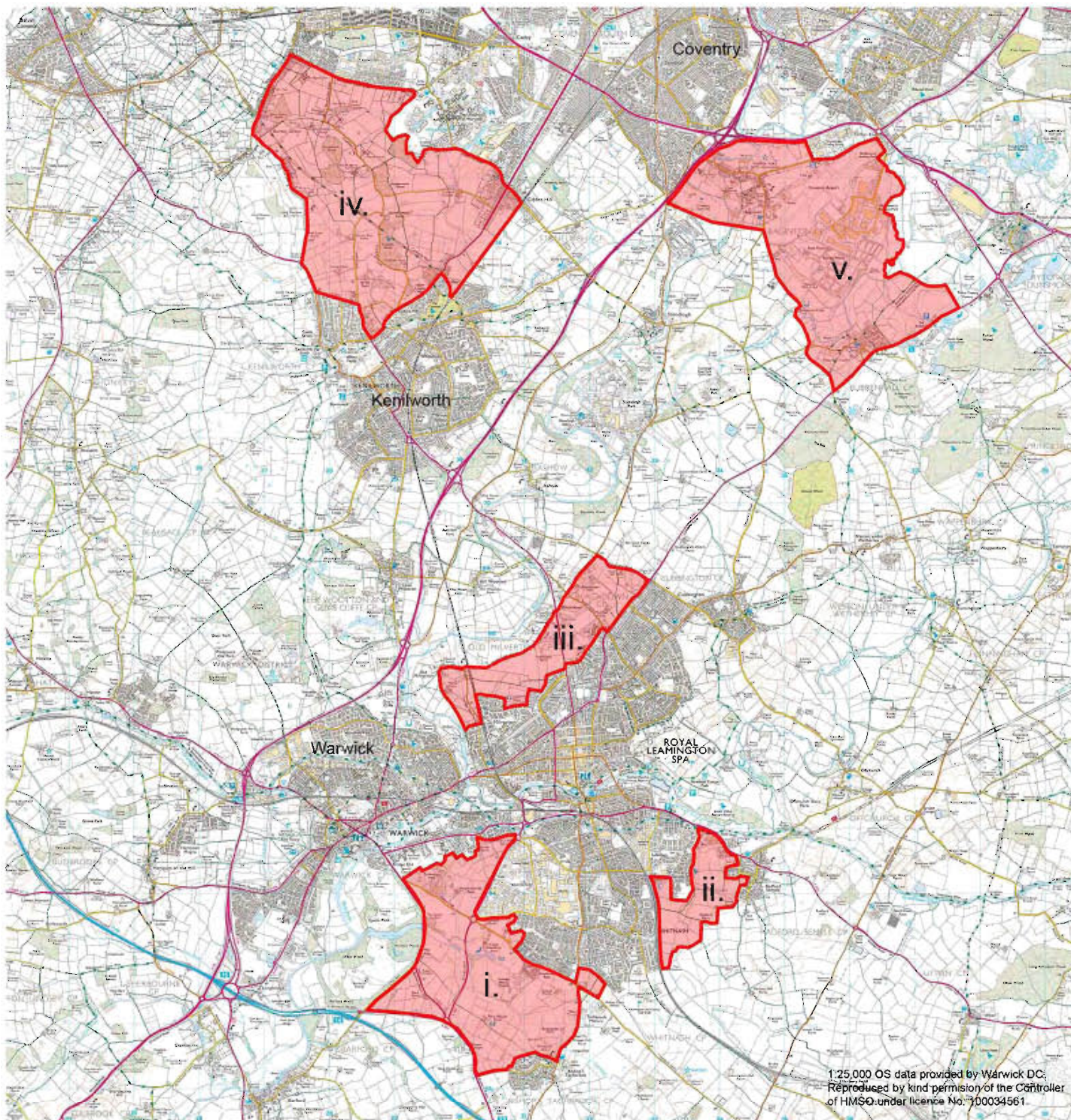
- i. Leamington, Warwick, Europa Way, Warwick Gates and Bishops Tachbrook (largely considered as sites C, D, E and F in the LCASW study)
- ii. Sydenham, Whitnash and Radford Semele. (Previous areas G, H, J and environs – LCASW)
- iii. Leamington, Old Milverton, North of Milverton and Blackwood (WL5b / WL6a, WL6b - JGBS).
- iv. Kenilworth, Burton Green, Westwood Heath and Coventry (C13, C14, K1 and K9 – JGBS).
- v. Coventry Airport, Baginton and Bubbenhall (C10a/b and C11a/b/c – JGBS)

2.4 The report reviews the previous data and current reports and representations for development proposals in the localities. It then seeks to identify some landscape planning principles for these areas based on existing character, views, landscape condition, settlement pattern, access, planning goals and other criteria.









0 1km 2km

Five areas where proposals for development could lead to physical or perceived settlement coalescence.

- i. Warwick Gates, Europa Way, South of Harbury Lane
- ii. Sydenham, Whitnash, Radford Semele
- iii. Milverton, Old Milverton, Blackwood
- iv. Kenilworth, Coventry and Westwood Heath
- v. Coventry Airport, Baginton, Bubbenhall

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Warwick District Urban Expansion Options  
Sustainable Landscape Considerations.  
Development and coalescence  
Figure 2.0 - Location Plan



### **3.0 Method of assessment.**

- 3.1 The study has been undertaken using desk-top studies and field visits undertaken in March, April and May 2012. Background research has included relevant legislation and guidance as well as representations and studies produced for different sites within the study areas. (Further details on methodology and definitions as well as a bibliography are provided as Appendix C.)
- 3.2 Limitations / Disclaimers. The process of impact assessment for each of the study sites has required a broad brush approach with assumptions about the final form and density of development that might be proposed at each site. Little analysis has been possible regarding indirect construction requirements – such as additional roads, drainage, energy services and the like – or any offsite impacts. Such matters will influence a final evaluation of sustainability of development at each site. In relation to landscape impacts, eventual requirements for infrastructure provision might greatly influence the final zone of visual influence for a development.
- 3.3 Although the study tries to summarise known site assets, there has been no detailed appraisal of ecological and heritage values at each site. Further evaluation of landscape and visual impacts will also be necessary as part of an iterative planning process for detailed development proposals. In addition, no detailed topographical survey data has been utilised at this stage, so that details regarding site conditions, site access, drainage, etc. will all require further analysis.
- 3.4 The study has not included any consultation with local residents who may have relevant local knowledge and opinion that could and should influence development outcomes.

### **4.0 Planning context.**

#### New National Policy

- 4.1 A variety of new legislation will greatly influence development planning in coming years. The government has claimed that the new National Planning Policy Framework (NPPF), published March 2012, has condensed over 1,000 pages of planning guidance into less than 50 pages. It places great emphasis on achieving *sustainable development* – and defining exactly what this means for individual sites will no doubt be at the centre of many future planning negotiations.
- 4.2 This report has embraced paragraph 9 of the new framework – that is that *sustainable development involves seeking positive improvements in the quality of built, natural and historic environment, as well as in people's quality of life, including (but not limited to):*
- *making it easier for jobs to be created in cities, towns and villages*
  - *moving from a net loss of bio-diversity to achieving net gains for nature*
  - *replacing poor design with better design*
  - *improving the conditions in which people live, work, travel and take leisure, and*
  - *widening the choice of high quality homes.*<sup>1</sup>
- 4.3 Paragraphs 56–68 of the NPPF stress the need for good design – including attributes such as longevity of design, sense of place, maintaining local character, allowing safe and equitable access, supporting facilities and networks (e.g. transport), and being visually stimulating. Special mention is given to providing good landscaping and green public space.
- 4.4 Paragraphs 109–125 of the NPPF outline conserving and enhancing the natural environment. They state that the planning system should contribute to and enhance the natural and local environment by protecting / enhancing landscapes; by recognising ecosystem services; by

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<sup>1</sup> CLG – NPPF, page 3, para 9 – March 2012. For further definition see Appendix C.



protecting/improving biodiversity; by avoiding pollution or environmental degradation and by remediating degraded land. LPAs should set criteria-based policies by which to judge potential impacts to wildlife, landscape, etc. and set out a strategic approach to green infrastructure in local plans.

- 4.5 Paragraphs 126–141 of the NPPF address conserving and enhancing the historic environment in which it is stated that LPAs should have a positive strategy to conserving the historic environment in the Local Plan – including consideration of settings, where such assets might be irreplaceable. ‘Substantial harm’ to listed buildings, parks or gardens should be exceptional.
- 4.6 Another major new piece of legislation that is likely to influence future planning and development is the Localism Act, 2011. This will provide new opportunities for parish councils and community led groups to help define the adopted local plan for an area. This commitment to ‘localism’ is also enshrined in the NPPF document. Under ‘Core Principles’, the NPPF refers to the need for neighbourhood plans to set out a *positive vision for the future of the area*<sup>2</sup>.
- 4.7 As of spring 2012, the new legislation is generally untested and may yet be interpreted in different ways. There will be contentious issues. This report simply aims to set out some planning and design principles that are considered achievable, defensible and able to offer benefits to a wide range of stakeholders.
- 4.8 One contentious issue may be the potential loss of land presently designated as Green Belt. In simple terms, expanding urban development into countryside can only be determined as ‘encroachment’ (whether it is designated Green Belt or not). However, as the JGBS report found, there is a great range of landscape types within the West Midlands Green Belt, often with variable scenic quality and landscape condition. A case can often be made for creating a more accessible landscape (better paths and links to settlement areas) with enhanced habitat and biodiversity potential. In some cases it may be appropriate to facilitate such initiatives with carefully planned built development.
- 4.9 In considering how sites might be sensitively developed, and how cumulative landscape impacts can be minimised, the study seeks to consider the purposes of Green Belt by aiming to:
- identify lines in the landscape that can ‘naturally’ determine building boundaries (and therefore reduce the likelihood of future sprawl)
  - make judgements about the appropriate distance between settlements that can help to sustain independent identity (preventing coalescence)
  - consider how landscape settings can be preserved, especially when they are considered to have special historic character
  - identify possible ideas for urban regeneration and improvement of degraded land or features.

#### Relevant local studies

- 4.10 In working to produce their preferred options plan, WDC have prepared a variety of evidential reports. Documents reviewed for this study include the Strategic Housing Land Availability Study (SHLAA–2009) and the 2011/2012 updates, WDC site specific sustainability appraisals and the WDC Local Plan (1996–2011).
- 4.11 In recent years, local planning authorities have begun to embrace ‘green infrastructure’ in a more holistic way at a local, district and sub-regional level. Landscape infrastructure planning is eventually being widely recognised as a way of helping to deliver economically, environmentally and socially successful developments. Documents reviewed for this study include the WDC Green Infrastructure Study (2010), the LUC Warwickshire, Coventry and Solihull sub-regional

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<sup>2</sup> CLG – NPPF, page 5, para 17, bullet 1 – March 2012

GI study (2011), the LUC, Warwick District Green Infrastructure Delivery Assessment (Feb 2012) and the WDC Green Space Strategy (draft – 2012).

- 4.12 A range of data has been gathered regarding the ecological and historic landscape resource in Warwick District. Some data reviewed for this study include Warwick Museum services Warwick District Habitat Assessment (2008) and work by the County Council on historic landscape characterisation including data from the Warwickshire Historic Land Characterisation Project (2007) and the Warwickshire Historic Farmsteads Characterisation Report (2011).

## **5.0 About landscape appraisal.**

- 5.1 Some of the elements that contribute to landscape character include the shape and scale of topography, the presence and pattern of natural geology, outcrops, water bodies and vegetation and, the patterns and features of man's intervention – including land management and settlement. How and from where the landscape can be viewed greatly influences how it is perceived – so that the availability of access becomes influential in determining landscape character. A variety of views (long vistas, wide panoramas, framed focal points) generally adds to our enjoyment of a landscape. Landmarks are of particular value/interest in any landscape – even if they have disputed amenity value (e.g. Eden Court flats at Lillington).
- 5.2 Detractors in the landscape tend to be elements that are considered to be discordant with the overall scene or in some way fail to fit perceptions of typical scenery. For example, the 'weedy' appearance of set-aside farmland, overgrown hedgerows or use of non-traditional fencing materials around pony paddocks can introduce an unkempt appearance to otherwise 'pristine' rural landscapes, creating a perception of landscape decline.
- 5.3 These and other matters have been considered in appraising the landscapes in the study areas, as they affect *landscape sensitivity* – the relative ability of a landscape to accommodate or respond to change. Any evaluation of new development must consider this in order to establish the potential adverse, or beneficial, impacts of change. The brief has specifically asked for consideration of the *cumulative* effects of potential development. For the purposes of this study these are defined as:
- effects on the fabric of the landscape (loss or change to existing elements and addition of new elements)
  - effects on aesthetic attributes (scale, diversity, enclosure, naturalness, tranquility and others)
  - effects on overall landscape character (combination of above – leading to modification of key characteristics and possible emergence of new character).

In particular the landscape appraisal has sought to consider:

- Will proposed developments generally be *intervisible* - with overlapping ZTVs (zone of theoretical visibility)?
  - Will different projects be seen in the same views from selected viewpoints (within or outside the study areas)?
  - Will prominently visible and defining landscape settings in the district of Warwick be substantially altered?
- 5.4 In planning new development, the landscape appraisal informs the design process: How can the existing landscape 'shape' successful development? Some aspects to consider are:
- successful retention / integration of landscape assets
  - harmonious relationship with existing development / urban fringe
  - views to and from existing town, key buildings, and surrounding countryside
  - setting of key buildings, spaces, etc. within the new development.



Other issues to consider:

- Integration of infrastructure elements – notably water management elements, roads and paths and utility services.
- Physical landscape mitigation elements – e.g. banks and barriers for acoustic screening, visual screening, woodland planting, etc.
- Ecological mitigation – creating corridors, tunnels, and bridges.
- Cultural heritage – retaining historic features.

## **6.0 About sustainability – opportunities and constraints.**

6.1 In formulating possible successful development scenarios we have begun to consider some sustainability goals. These include:

- creating high quality residential and/or work environments (with attractive, distinctive settings, with good aspect and outlooks and, where possible, set-back from main roads, etc.)
- looking for opportunities for energy-efficient design, e.g. south facing aspects for passive solar design, opportunities for sustainable drainage, etc.
- providing alternatives to car use (with opportunities for good non-vehicular access that can reduce car journeys and perhaps car ownership)
- healthy lifestyles (including non-vehicular travel as above, access to natural environments, local round walks, communal social spaces, etc.)
- protecting and contributing to the natural and historic environment (respecting the existing landscape, using natural resources prudently, improving biodiversity and considering the possible impact of future climate change).

6.2 On the latter bullet point, and as this is principally a report addressing sensitive approaches to *landscape* master planning, it is relevant to outline in more detail some of the matters that should be considered important in sustainable design practice.

Stages of delivering sustainable development.

6.3 Development can be split into three distinct stages – planning, construction and operation. Even with the best intentions, the aspirations of the planning stages may not all be delivered at the construction stage. Several years later, the scheme that was delivered can often be greatly diminished by a lack of ongoing management or a failure to communicate design intentions to owners and managers. This is especially the case in landscape matters – and it follows that consideration of long-term management must be at the heart of good master planning.

What are the real impacts of development?

6.4 Landscape impacts from development are usually identified as the immediate and specific changes – but often there are more subtle and pervasive changes over time that have similar significance in the longer term. Some may ultimately be unavoidable – but they will certainly not be avoided if they are not recognised from the outset.

6.4.1 Landuse changes: Permanent loss of agricultural land is a sustainability issue. We have considered it outside the scope of this study – but it may yet need further debate in the context of urban expansion in Warwick District in general.

6.4.2 Loss of landscape variety and detail: Pre-industrial settlement development tended to follow the lie of the land, working around the quirks of local topography, drainage, outcrops, etc. This makes for much of the charm and distinctive character of older settlements. Modern development tends to remove such variety and melds the landscape to fit the settlement.

6.4.3 Where possible, new development should be planned to fit the landscape. This is more likely to create unique and distinctive places. It may also reduce the cost of development.

- 6.4.4 Loss of historic features. Although rural landscapes have been greatly affected by modern agricultural practice in the last 60 years, still much of the pattern of the British countryside has very ancient origins – medieval or older. Modern urban development often results in the permanent removal of these patterns and features. In the JGBS and LCASW studies, the assessment of landscape condition and value has included preliminary appraisals of such assets with a view to protecting them. Some historic features are protected by conservation designations – but common elements such as field shapes, banks, ditches and ‘ridge and furrow’ are generally not protected.
- 6.4.5 Where possible, sensitive development should retain these elements in a sustainable context. Further debate may be required about the suitability of development on some sites with good historic character.
- 6.4.6 Loss of vegetation and soils: Mature, often locally indicative, vegetation and soils are generally lost to modern development. Soils are the underpinning element of all site ecology – but even where development includes retention of existing levels, soils are frequently mismanaged. This may mean that expensive soil remediation or even total replacement is required – generally an unnecessary expense to the development and an adverse impact to site ecology.
- 6.4.7 Sensitive site design should look for opportunities to retain more undisturbed ground and to responsibly manage soil resources where their temporary movement is required. Stricter enforcement of good soil management is required on construction sites.
- 6.4.8 Trees and Hedges: In many respects, trees are some of the best protected features of a mature landscape. The *Hedgerow Regulations* (1997) require a licence for removal of certain hedges and BS5837 *Trees in relation to construction* (2012) provides guidance on managing trees on a construction site. However, even if these features survive the development process, they are frequently allowed to decline and are permanently lost in the following years.
- 6.4.9 Pervasive management decline: Mature trees in an agricultural setting are generally not in close proximity to people. If they have deadwood or diseased branches in the canopy, it can remain – with great benefits for a range of other flora and fauna as well as landscape character. The same tree integrated into an urban setting is likely to become ‘problematic’ and risk-management protocol will dictate it must be managed in a different way. Deadwood is likely to be removed, reducing wildlife value. Management becomes a revenue cost issue. The original ‘root protection zone’ that may have been adhered to in construction stages is compromised by subsequent pavement or service provision. A tree that may be 300 years old, and would have lived for another 150 years in the rural hedge, declines and is removed after only 25 years in an urban context. Similarly, hedges that would have been regenerated with cutting every two years in an agricultural setting are left to grow and soon become problematic when retained amongst development.
- 6.4.10 Divided ownership: An additional problem is that trees and hedges are frequently ‘privatised’ in development, one hedge or a group of trees possibly ending up with several different owners with different approaches to management.
- 6.4.11 For these important, often historic features to be sustainably retained within development, some or all of the following considerations may be appropriate.
- Planning must identify sufficient space to retain trees and hedges – including space for sustainable long-term management.
  - Trees/hedges must be recognised as dynamic living organisms that may grow, move and vary over time – and that require space for such variation.



- Protection throughout development and in ongoing operational stages of development must be properly enforced and resourced.
- Where possible, important tree and hedge assets should be retained within one landholding to allow a coordinated approach to management.
- Where necessary, legal documentation such as covenants might be attached to land registry deeds stipulating preservation and management clauses for important landscape assets in perpetuity.
- A programme of regeneration and replacement must be in place.
- Recognition of wider landscape values and goals must be assimilated into planning and site management policy. Replacing oak and ash trees with Leyland cypress over time may replace a tree with a tree, but it will certainly have a great impact on overall landscape character.

6.4.12 **Biodiversity:** Measuring and increasing the variety of life forms in an ecosystem is now widely used as a measure of successful development. Baseline studies are taken to assess the biodiversity before development commences, and then design measures are recommended that will boost overall biodiversity in the finished scheme. It is a fact that many modern agricultural landscapes have a relatively low biodiversity, and that an established residential neighbourhood with mature gardens can have a relatively high biodiversity. However, the effects of development in urban fringe areas can be more subtle. Species that thrive in an agricultural settings may well disappear after development – even if there is great attention to initial habitat conservation.

6.4.13 In fieldwork for this study, species noted at one site included Rook, Skylark, Great Tit, Blue Tit, Pheasant, Partridge, and signs of Badger. Rooks will nest in mature trees in or near urban areas, and may forage in short grassland environments such as road verges and parklands, but they generally prefer frequenting open arable agricultural land and tend to avoid foraging in urban areas. Skylark, Partridge and Pheasant are ground nesting birds that prefer an agricultural environment and are unlikely to be retained in an urban setting unless there were very considerable natural greenspaces. Badgers are also unusual urban residents and are sensitive to disturbance. They tend to frequent areas where human presence is limited. Although in the early years of development species like Great/Blue Tit may disappear, they and a variety of other small birds and mammals may eventually prosper in parks and gardens – especially where bird tables are common.

6.4.14 These examples indicate that it is likely that there will be a significant and permanent alteration to local ecology where settlement extends into former agricultural settings around Warwick and Leamington. Ecological impacts at the ‘operational’ stages of development are likely to include regular human disturbance and the introduction of domestic pets – especially cats<sup>3</sup>. Although opinions are divided on the impact of cats on native fauna, it is generally agreed that many domestic cats will hunt up to half a mile from home on a regular basis. Essentially that might mean that for a nature reserve to be generally free of cat predation, it would need to be at least half a mile from residential areas. An urban ‘green wedge’ with residential areas either side of it may therefore need to be more than a mile wide to best fulfil a function as a nature reserve. Reference to the five land parcels in Part 1 of this study suggest such distances are unlikely to be possible and therefore that the ecology of any conservation habitats proposed are likely to be influenced by domestic cats.

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<sup>3</sup> The Pet Food Manufacturers Association estimated the 2011 population of domestic cats in the UK was 8 million. This is said to represent about 25% of all households.

6.4.15 Recognising the likely long-term threats to existing biodiversity must be factored into master planning.

- Species-specific habitat management must be considered. If landscape is likely to become unsuitable for an existing resident species, offset with new habitat creation elsewhere.
- There must be sufficient scale and capacity in green infrastructure provision to ensure landscapes can be managed and sustained as a multifunctional asset – including nature reserves.
- Detailed design must consider creation of buffers and barriers that can benefit wildlife with protected habitat zones.
- High activity landscapes and corridors will ideally need to be separated from ‘nature’ areas.

#### Economic landscape opportunities

6.5 In the majority of urban landscape schemes, trees and shrubs are planted principally for amenity values and local landscape screening. Recognition is generally given to wildlife value, but within very narrow parameters – as outlined above. In establishing new urban areas, there is great potential to create more practicable landscapes that would have long-term benefits as productive woodland, including small timber products, firewood and biomass products. To facilitate this approach at master planning stages, attention must be given to creating an appropriate scale of planting, allowing for management access requirements and working areas and to selecting a suitable species mix. Such innovation could provide opportunities for low carbon initiatives, carbon compensation and sequestration schemes and local employment and business opportunities. Appropriate landscape management can underpin the preservation of traditional skills and landscape types – e.g. coppice woodland.

6.6 In evaluating an appropriate scale for woodland planting, it is worth considering that a typical mature rural hedge may be between 2 and 4 metres wide and that one mature native tree (e.g. oak, beech, ash) might have an overall spread of 15–20 metres. Therefore appropriate planning widths might be considered as follow:

- Hedge/screen – 3–5m wide. (Screening principally defined by height rather than width. Additional volume might be provided with ‘hedge trees’ where space permits.)
- Shelterbelt – 15–20m wide. With an appropriate mix of species, it can provide screening through its width and it may have some value for productive timber management on a small scale.
- Woodland – 100m width. To create a woodland with sufficient volume to provide a range of woodland habitats and multifunctional use (with tracks, clearings, glades, etc.) a minimum width of 100m will generally be necessary depending on overall size and shape.

#### Flexible, adaptive, robust landscapes

6.7 In planning green infrastructure it is essential to consider the potential impacts of climate change and other changing environmental factors. There is no better example of this than the arrival of a range of concerning pests and diseases affecting trees. In early 2012, few people had heard of *Chalara fraxinea* dieback in ash, but by October many were predicting that it may rapidly and permanently change the landscape of Britain. Robust green infrastructure design must consider such potential threats and allow for flexibility and adaptation.

## **7.0 Clarity of vision and enforcement of action.**

7.1 This report recommends site specific design and development approaches at the identified study sites. These are based on a preliminary assessment of site opportunities and constraints and, where possible, a review of existing proposals at and near the site. It is inevitable that decision making criteria will alter over time and that a variety of stakeholders will bring different ideas



and approaches to the same sites. This may especially be the case where small portions of a larger site are being developed in isolation and possibly by different design teams.

- 7.2 It is therefore essential that a clear development vision for the larger landscape setting<sup>4</sup> is agreed by primary stakeholders and held to over ensuing years.
- 7.3 It will also be essential that administration of design development is adequately resourced through the three phases of development – planning, construction and establishment/operation. Especially in the case of landscapes, quality design takes time to establish and mature. Trees can live for hundreds of years – but on development sites frequently die in their first few years. Landscape design must be carefully specified and conditioned through the development control system and then sufficient resources must be provided to monitor the implementation. Tree protection and management must be monitored throughout the development process. Ongoing landscape management must be adequately funded and monitored.
- 7.4 Local authorities are presently facing severe resource constraints. Nevertheless they are still the principal organisations responsible for ensuring high quality design in the public realm. New urban development on greenfield sites creates living and working environments that will be in place for decades – possibly centuries. Councils must ensure that sufficient resources are made available at the time of construction to fulfil design promise and to eliminate poor practice. If ‘in-house’ resources are not available then a scheme of monitoring and reporting by the developer and consultant team, perhaps set through planning conditions, may be a viable alternative.

## **8.0 Summary of site assessments and conclusions.**

### Part 1: A Sensitive Design Approach to Five Land Parcels.

- 8.1 The first part of the study has addressed five study sites previously defined as having landscape values worth protecting from urban expansion and has sought to define opportunities and goals for acceptable, ‘sensitive’ development. The full appraisals are provided as **Appendix A** but summarised as follows:
- 8.2 Land South of Gallows Hill & The Asps.  
SHLAA areas W10 (Land south of Gallows Hill), W26 (Gallows Hill / Europa Way), and W27 (The Asps, Europa Way and Banbury Road) form a large triangle of land south of Warwick. The Asps, the largest part of the study area, is prominent in approaches to Warwick, is valuable in the setting of the town and provides the historic context for Castle Park. The recommendation remains that this area should be protected from development. However, it is suggested that there is some potential for development in the areas of W10 and W26 to be visually contained and to have limited impacts to the wider landscape – as long as adequate measures are taken to develop appropriate green infrastructure. Important considerations identified include the need to strengthen the multi-functional role of the east-west corridor along Tachbrook; to create north-south green corridors that will provide links to the *Europa triangle* (and areas to the north); and, to establish woodland shelterbelts opposite castle park. The south-east portion of the site might remain undeveloped to minimise and mitigate wider visual impacts.
- 8.3 Land South of Harbury Lane, south of Leamington.  
SHLAA area W07, including W03 and L09, constitute a large area of land south of Heathcote and the *Warwick Gates* estate and also form part of the Tachbrook valley landscape. Several proposals

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<sup>4</sup> Ideally ‘larger settings’ will be defined by landscape types or character areas – and they may cross administrative as well as ownership boundaries, requiring the LPA(s) to ensure a coordinated approach.

have been made for mixed use development across the site – although these have been contentious because of concerns that this would lead to the coalescence of Leamington and Bishop's Tachbrook. A previous study commissioned by WDC has proposed a 'peri-urban park' along the valley – which could have multifunctional benefits for existing and future residents. There would seem to be good potential to use development in W07 to help implement the green infrastructure concepts. Other advantages would include re-using brownfield land (W03 – former sewage works) and integrating the anomalous *Heathcote Park* caravan park. Our plan A2 shows how a main corridor of naturalistic open space could create a substantial green buffer between new development and agricultural land / Bishop's Tachbrook to the south. It is suggested that green space with a more 'urban' character (playing fields, allotments, play areas, etc.) would ideally be incorporated into the layout of the built environment.

8.4 Land at Blackdown, north of Leamington.

This area is included in the 2012 SHLAA study as L48 although the original JGBS study concluded that it should be retained in the Green Belt. However, development here could be relatively well contained by local topography – and existing assets (topography, mature tree and hedge cover, watercourses, footpaths), if carefully retained, could help to create a distinctive and attractive development. There might be excellent opportunities to create a linking network of green infrastructure that extended around north Leamington to Warwick – with benefits for existing and future residents. The principal constraints are likely to include impacts to local infrastructure (especially the local road system) and the potential associated impacts of upgrading existing infrastructure (if required), as well as visual impacts on existing residents.

8.5 Loes Farm, Woodloes, north of Warwick.

This area is a triangle of greenfield land defined by the A46, A429 and the existing Woodloes housing estate and is SHLAA site W28. It has significant constraints due to historic landscape features, mature trees and topographic variety, whilst creating suitable access may also be difficult. Visual impacts would be notable due to the proximity to main roads and adjacent housing, and there is some potential for cumulative impacts with other potential development. We have proposed that a partial development of the site might be sustainable if the loss of historic landscape assets was accepted.

8.6 Red House Farm, Lillington.

This generally flat, greenfield site is situated on high ground south of the Lillington residential estate and is included in the WDC SHLAA report as site L23. In spite of the topography, it is concluded that a sensitively considered development here could avoid being visually prominent and might have potential landscape benefits e.g. opportunities to make good some urban fringe problems and also to create a better transitional zone at the urban-rural interface. It is recommended that a slope at the south-east corner of the site is not developed.

Part 2: Addressing potential cumulative impacts and settlement coalescence in Warwick District.

8.7 The second part of the study has addressed five larger areas in Warwick District where a variety of development proposals could have cumulative adverse impacts on the landscape setting. What might those impacts be and how might they be mitigated? The full appraisals are provided as Appendix B but summarised as follows:

8.8 Gallows Hill, Europa Way, Warwick Gates.

The areas south of Gallows Hill and Harbury Lane have been addressed in Part 1 of this study, and it has been suggested that a mix of development might be possible here as long as it was coupled with a recognition of the strategic importance of landscape assets – especially the Tachbrook valley – and an associated commitment to green infrastructure planning. The significance of these provisos becomes apparent when the cumulative impacts of likely development on adjoining or nearby sites at 'Europa Way triangle' (W08 and W21), at 'Warwick Gates' (W20) and at Woodside Farm (L14) become apparent. In addition, there are proposals for

development around Bishop's Tachbrook and, potentially, for a park-and-ride facility on or near the A452. This landscape is important in perceptions of Warwick and Leamington – especially as it provides a rural buffer between the towns and the M40 and the setting to Castle Park. Future planning must sustain overall landscape character and viable agricultural units whilst creating appropriate portions of multifunctional public landscape. Development design must aim to avoid wider visual impacts (including 'secondary' impacts such as might arise from service infrastructure provision and night lighting). It should also be a primary planning goal to avoid creating barriers to non-vehicular movement – e.g. with the increasingly busy local road system.

8.9 Sydenham, Whitnash and Radford Semele.

There is development pressure to expand Sydenham and Whitnash south and east into greenfield areas of the Whitnash Brook valley, whilst there is also pressure to expand the village of Radford Semele. Both areas of expansion are likely to lead to the actual or perceived coalescence of the settlements. This study has concluded that the rural setting, which includes managed nature reserve areas and well used public footpaths, has important functions for existing residents that are likely to be greatly undermined by some of the larger proposals for development adjacent the valley. Smaller land parcels are suggested for possible development where there would seem to be potential to retain the separate identity of Radford, the wider landscape character, some specific and distinctive landscape features and the multi-functional green infrastructure purposes of the valley. It is again considered important that viable agricultural units are retained. A commitment to excellence within new development is also essential – where some previous residential development in the locality seems to lack the potential to mature into attractive, desirable neighbourhoods in the longer term.

8.10 Old Milverton, North of Milverton and Blackwood.

The northern fringes of Warwick and Leamington have been proposed for substantial areas of mixed use development – notably SHLAA area L07 (north of Milverton) and L48 (at Blackdown and West Hill – included in Part 1 of this report). The review of these areas has concluded that the local landscape has a range of assets that could help to provide distinctive development and that with adequate attention to green infrastructure planning there could be considerable benefits for existing and future residents. The aim should be to create an extensive network of non-vehicular routes around north Leamington, where place-making, creation of viable wildlife corridors and inclusion of multifunctional purposes such as sustainable urban drainage should also be principal goals. It is considered that the setting of Old Milverton and the Avon valley should be protected, utilising opportunities to improve the informal recreation provision in these areas (paths, nature reserves and possibly other open space). Visual impacts could be greatly mitigated by avoiding built development on some areas of high ground – especially at the north-west and east ends of the study area. The cumulative impacts of infrastructure – especially road infrastructure – to facilitate the urban expansion of north Leamington is a concern. It is suggested that the extent of sustainable development might be defined by 'acceptable' infrastructure provision – where infrastructure that had significant adverse impacts on important landscape assets would ideally be discouraged.

8.11 Kenilworth, Coventry, Burton Green, Westwood Heath.

The landscape between Coventry and Kenilworth has recognised importance as Green Belt and it is considered that these functions must be safeguarded. A variety of housing development has been proposed in the study area and other development pressures include the proposed HS2 rail corridor and possible future expansion of the University of Warwick campus. It is proposed that a mix of development might be possible in small areas around the northern edge of Kenilworth and on land adjacent Westwood Heath / Burton Green. However, principal goals of such development should include facilitation of improved access to existing green infrastructure assets in the locality and mitigation of landscape impacts from other development proposed (e.g. HS2).



**8.12 Coventry Airport, Baginton and Bubbenhall.**

In spite of the existing airport, large-scale industrial and commercial developments areas, major road corridors and the landscape degrading effects of some existing urban fringe land-use types, this locality still has pockets of attractive, historically interesting landscape. Baginton has several important historical sites, the river corridors of the Sowe, Sherbourne and Avon have a variety of landscape and ecological assets (though they are under utilised as multi-functional public landscapes) and there are golf courses, riding schools, plant nurseries and other important community assets here. The proposed 'Coventry Gateway' project must not be allowed to undermine the potential to utilise these assets to enhance the locality for existing and future residents. Particular aspects of the proposals that will need to be carefully mitigated are the construction of large-scale buildings on relatively high, prominent topography and road infrastructure that could compromise some of the valley landscapes. Proposed residential development adjacent the River Sowe (SHLAA site C10) may have potential to assist in developing local green infrastructure assets, although the proximity to the airport could be a constraint. Retaining a 'buffer' of agricultural land between C10 and the adjacent airport / gateway project is suggested – but some generous provision of green infrastructure within the Gateway project site will also be necessary. Woodland shelterbelts are suggested. Proposed residential development on other sites around Baginton would seem to have a variety of significant constraints. The LPA must ensure that cumulative impacts from development at the former Ryton Peugeot site, the HS2 rail corridor and potential expansion of neighbouring villages (e.g. Bubbenhall) are also considered by individual developers so that the wider landscape can be regenerated rather than degraded by new development.

**9.0 Conclusions.**

The scale and extent of development presently being considered in Warwick District is possibly unprecedented and will undoubtedly have major implications for the character and appearance of the towns and parishes affected for many decades to come. There is presently considerable pressure on local authorities to act quickly and to facilitate development. However, it is essential that good decisions are made for the long term. There is extensive contemporary guidance highlighting the importance of landscapes, ecology, historic fabric and all ecosystem services in creating sustainable development. Planning officers, developers and consultants know that these guidelines are available and important, and that they need be used in innovative ways to address the particular requirements of specific sites. The challenge is perhaps to ensure that sufficient resources are allocated by decision makers to be sure that the exemplary designs required for the 21<sup>st</sup> century will be implemented.

## **Part 1: Possible approaches to development in sensitive locations.**

### **Evaluation of five proposed land parcels in Warwick District.**

#### **Plan annotation**

An indicative plan is provided for each site illustrating some principal concepts for sustainable planning considerations – pending further detailed study for each site and formulation of development proposals. A key to each plan is provided below:

#### **KEY:**



Study boundary



Existing trees / vegetation



New structure planting:  
woodland / hedges / screen belts



Open space / meadows



Water / balancing ponds



Indicative development

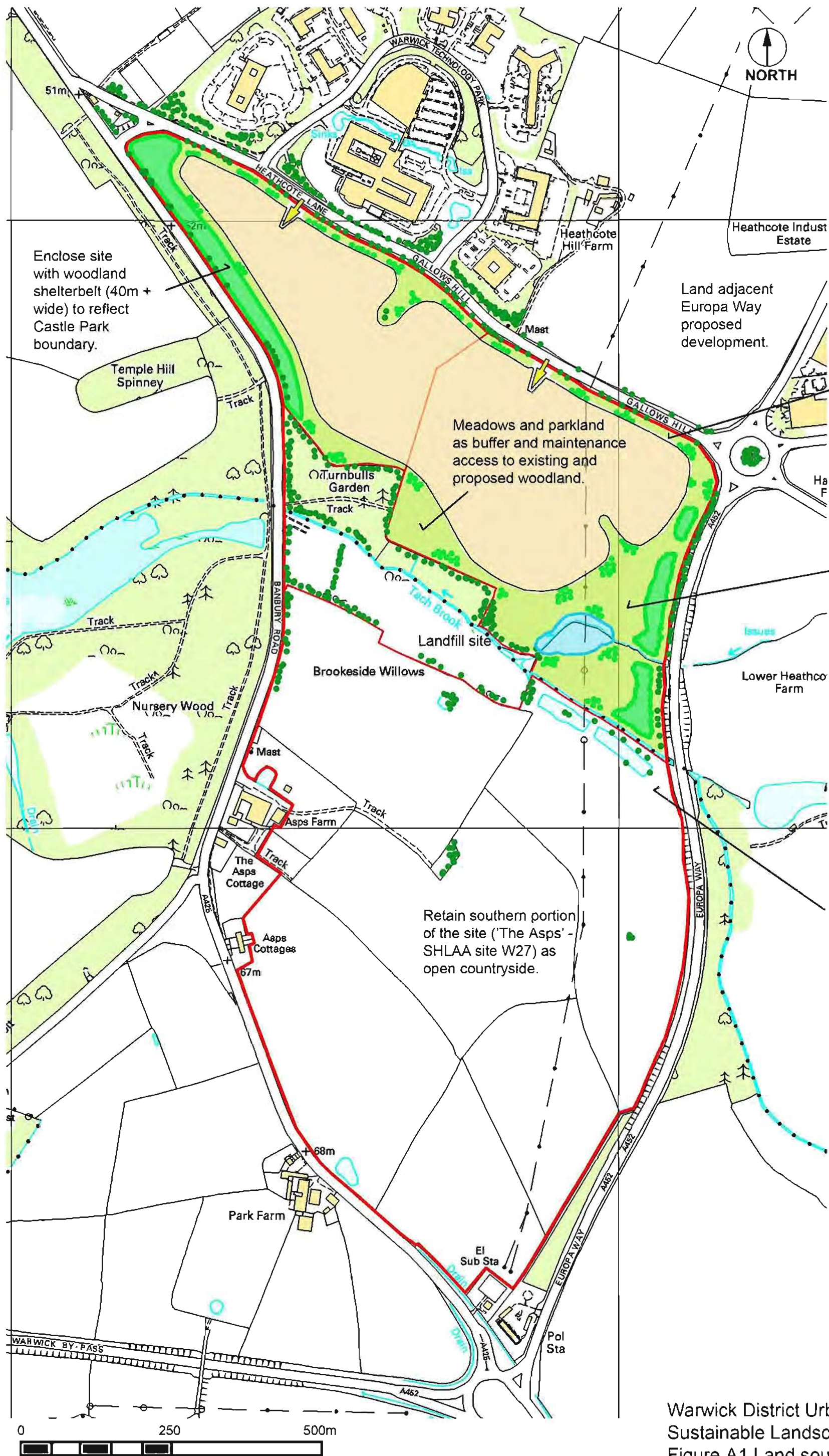


Indicative access



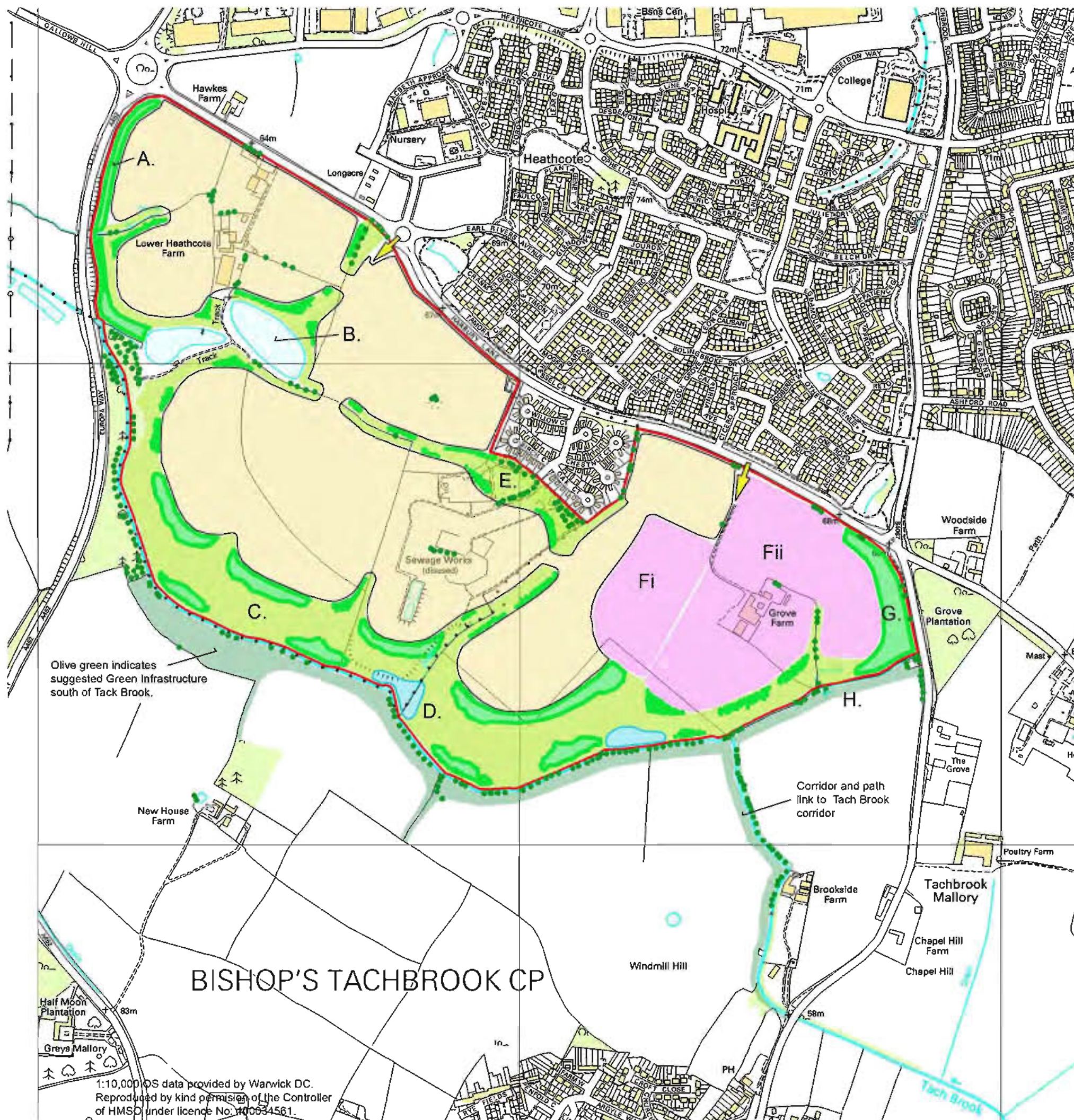
Indicative school land (Fig A2)





Warwick District Urban Expansion Options  
Sustainable Landscape Considerations.  
Figure A1 Land south of Gallows Hill, Warwick.





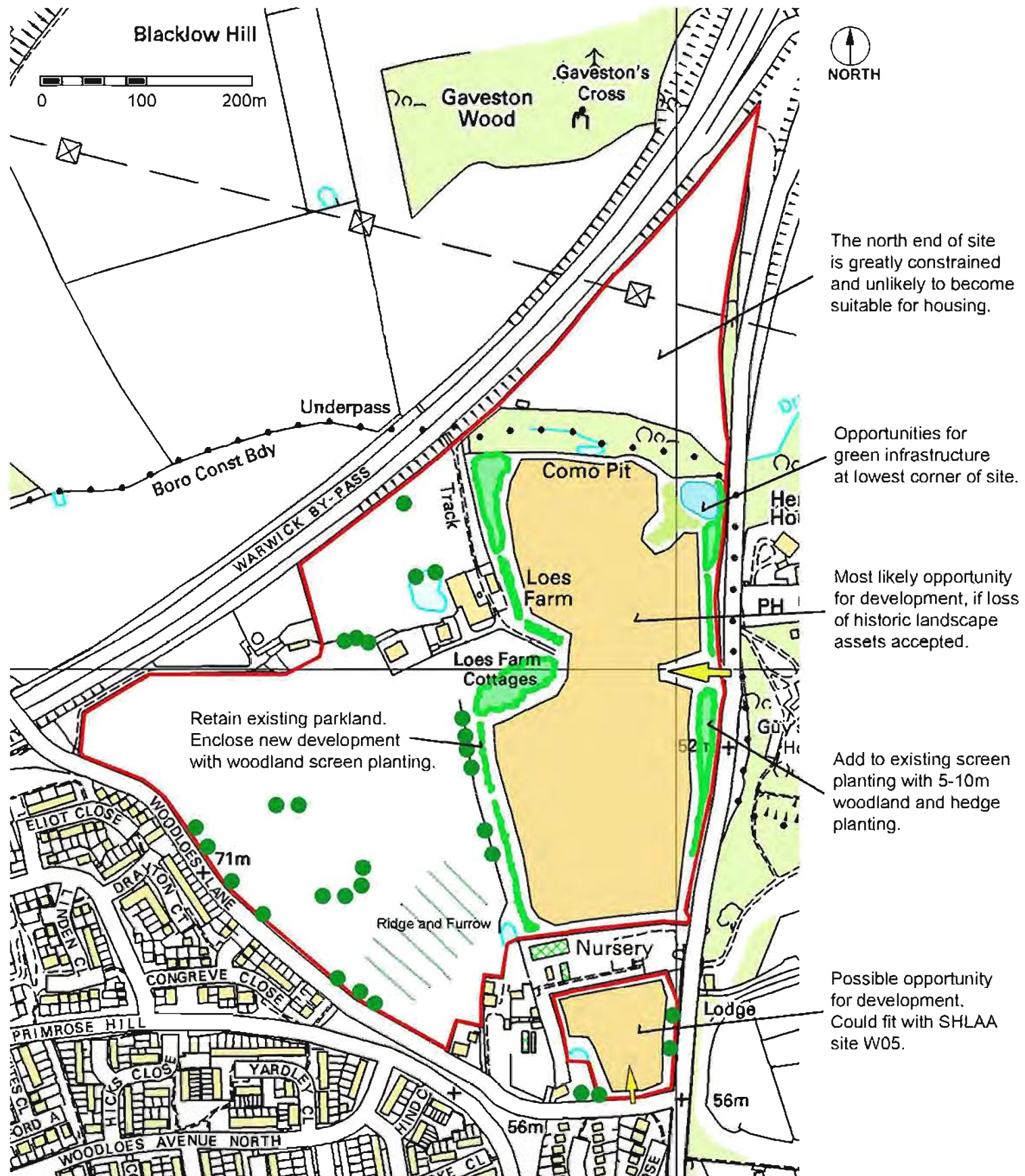
- A. A woodland shelterbelt along the A452 will enclose the development site, provide a buffer between the road and new housing, and create a corridor for round-site walks.
- B. Major existing landscape assets retained within new site infrastructure.
- C. The 'Tachbrook Linear Park' will ideally be between 75-150m wide and will comprise, meadow, woodland, and scrub habitats with space for SUDS related water infrastructure.
- D. Indicative SUDS attenuation pond.
- E. East/west corridor utilising existing features where possible. Blocks of new and existing trees along these higher contours will help break up the development in views from the south.
- F. Fi (indicative primary school site) and Fii (secondary school). The area required will depend on the number of pupils. The areas shown correspond roughly to a primary school for 350 pupils (3 Ha) and a secondary school of 1000 pupils (5-6 Ha). The schools could benefit from the proximity to the GI network.
- G. Substantial block of woodland at east end will enclose the site and reduce the perception of coalescence if Woodside Farm is developed. It is also noted that Grove Plantation includes a lot of mature poplar that might be cropped in future - opening up the landscape to the west.
- H. Although the Tach Brook runs to the east of Brookside Farm, a deep ditch (H) really defines the valley bottom. This would appear to be the 'natural' line to delineate development.

Warwick District Urban Expansion Options  
Sustainable Landscape Considerations.  
Figure A2 Land South of Harbury Lane, Leamington.







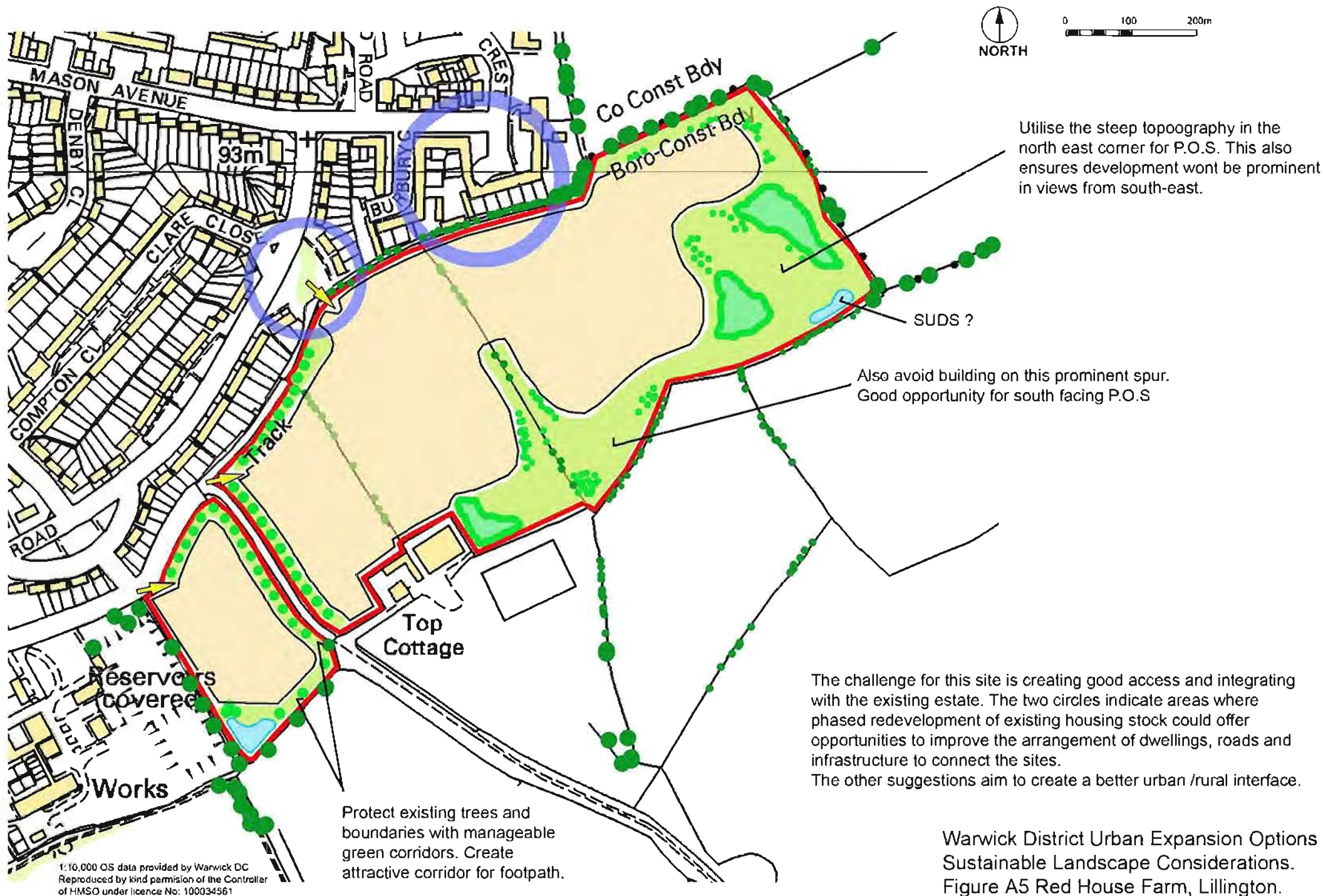


Development with appropriate constraint at Loes Farm could avoid adverse impacts to the majority of neighbours, and use existing topography and woodland to enclose the development. New woodland shelter belts could sustain a 'leafy' entrance to Warwick.

1:10,000 OS data provided by Warwick DC. Reproduced by kind permission of the Controller of HMSO under licence No: 100034561.

Warwick District Urban Expansion Options  
Sustainable Landscape Considerations.  
Figure A4 Loes Farm, north Warwick.





Warwick District Urban Expansion Options  
Sustainable Landscape Considerations.  
Figure A5 Red House Farm, Lillington.

## **Part 2: Addressing potential cumulative impacts and settlement coalescence in Warwick District.**

### **Evaluation of five study areas as defined by WDC.**

#### **Plan annotation**

A plan is provided for each study area illustrating some principal concepts for sustainable planning considerations – pending further detailed studies and masterplanning. A key to each plan is provided below:

Refer to individual keys for site specific nomenclature.

#### **KEY:**



Study boundary



SHLAA Sites



Indicative development



Potential GI and POS

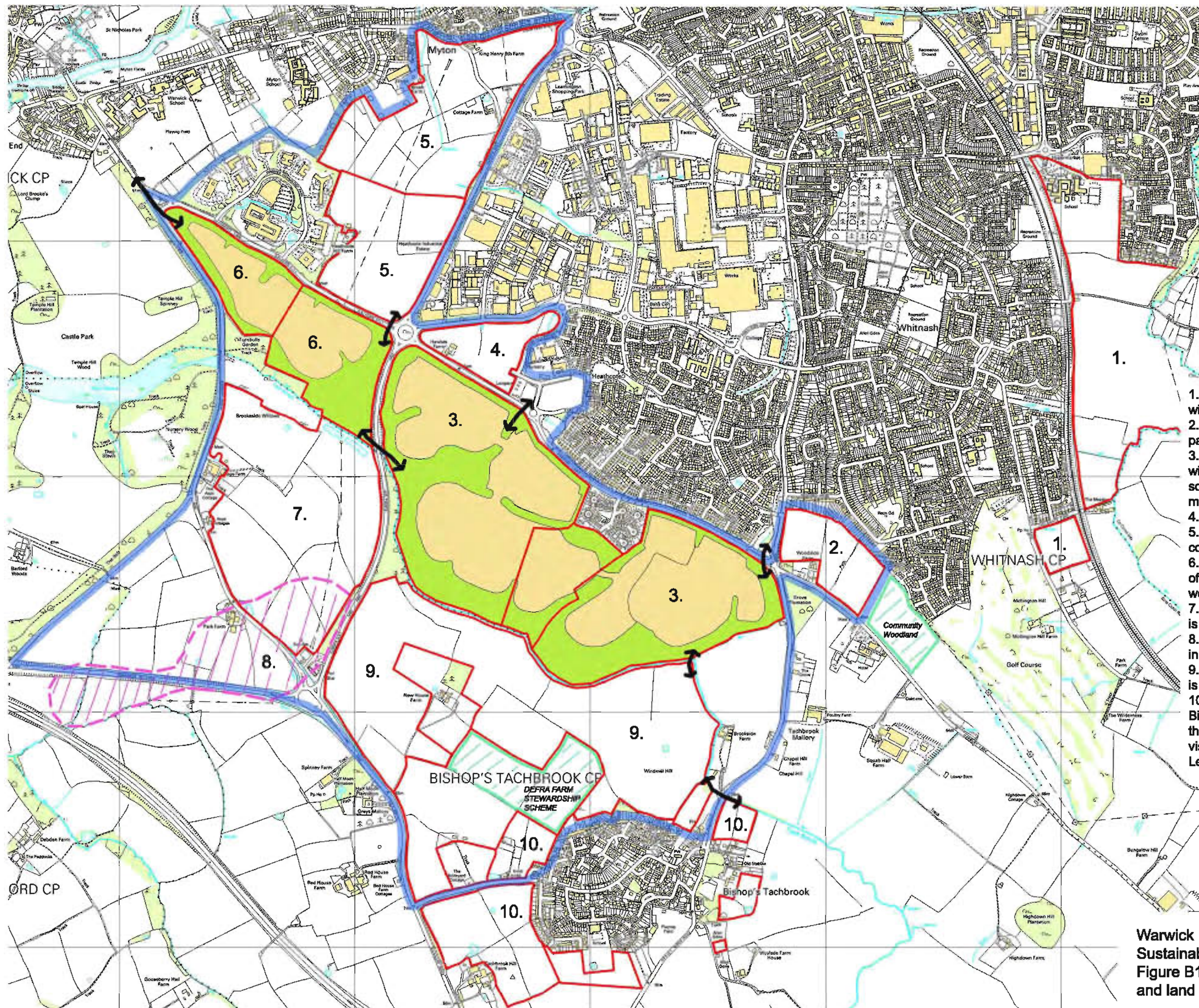


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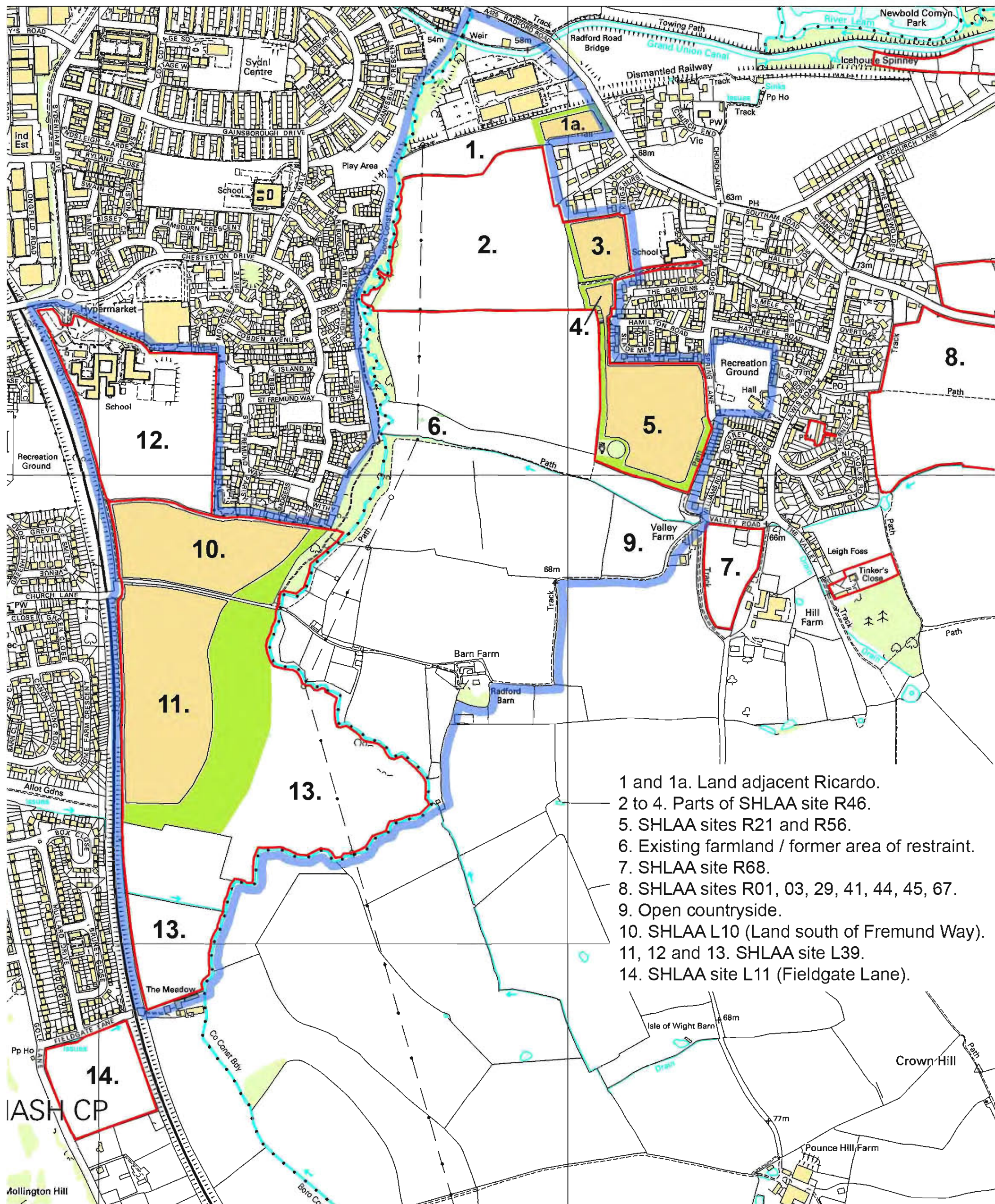
- Study Site.
- SHLAA Sites.
- Park and Ride Area of Search.
- ↔ Some key links ?
- Existing GI initiatives
- Indicative development.

1. SHLAA sites south and east of Whitnash will not be intervisible with the study site.
2. SHLAA site L14 (Woodside Farm) will be partially visible from the south and west.
3. Land south of Harbury Lane (SHLAA W07) will be potentially prominent in views from the south. Green infrastructure could greatly mitigate landscape impacts.
4. SHLAA site W20 - Warwick Gates.
5. SHLAA sites W08 and W21 are likely to come forward as a mixed-use development.
6. A sensitive approach to development south of Gallows Hill (SHLAA sites W10 and W26) would limit wider landscape impacts.
7. It is recommended that SHLAA site W27 is retained as open countryside.
8. A 'park-and-ride' facility has been proposed in this area.
9. It is recommended land south of Tachbrook is retained as open countryside.
10. Specific smaller SHLAA sites around Bishops Tachbrook should be reviewed on their individual merits. Several will be inter-visible with the sites south of Warwick and Leamington.



Warwick District Urban Expansion Options  
Sustainable Landscape Considerations.  
Figure B1: Warwick Gates, Bishops Tachbrook  
and land south of Harbury Lane.





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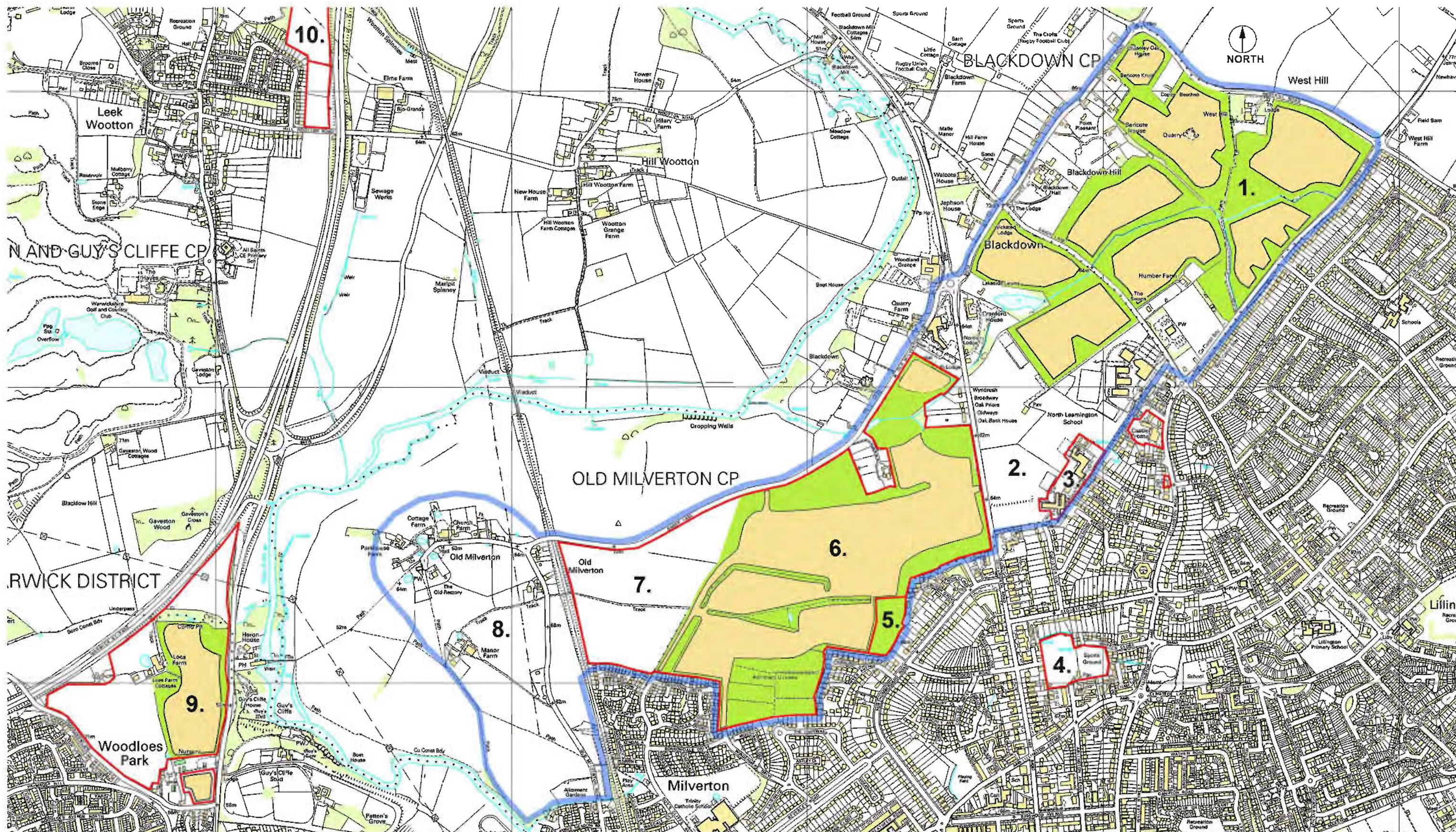
Study area boundary.

SHLAA sites.

Refer to text for further notes on each area.

Warwick District Urban Expansion Options  
Sustainable Landscape Considerations.  
Figure B2: Sydenham, Whitnash and Radford.





1. Provisional plan for the Blackdown / West Hill area. It would be partially intervisible with the areas to the west.
2. This plan assumes that the playing fields are generally retained - maintaining a 'green' setting for approaches to Leamington.
3. Former school site - SHLAA sites L41 and L42.
4. SHLAA sites within the urban area are not anticipated to be intervisible with urban fringe development.
5. SHLAA site L03 - could be retained as green infrastructure.
6. Development north of Milverton (SHLAA site L07) might broadly follow the masterplan promoted by Taylor Wimpey. Wider landscape impacts and intervisibility with other sites could be greatly contained with green infrastructure provision.
7. If any area of L07 was not required for development, the higher ground at the western end might be retained as agricultural land. This would help minimise potential wider visual impacts to the north and west.
8. Old Milverton is shown retained within open countryside. Initiatives for landscape enhancement would be beneficial.
9. SHLAA site W28 - Woodloes Park, if developed would be partially intervisible with Old Milverton.
10. SHLAA sites at Leek Wootton could be partially intervisible with land north of Milverton.

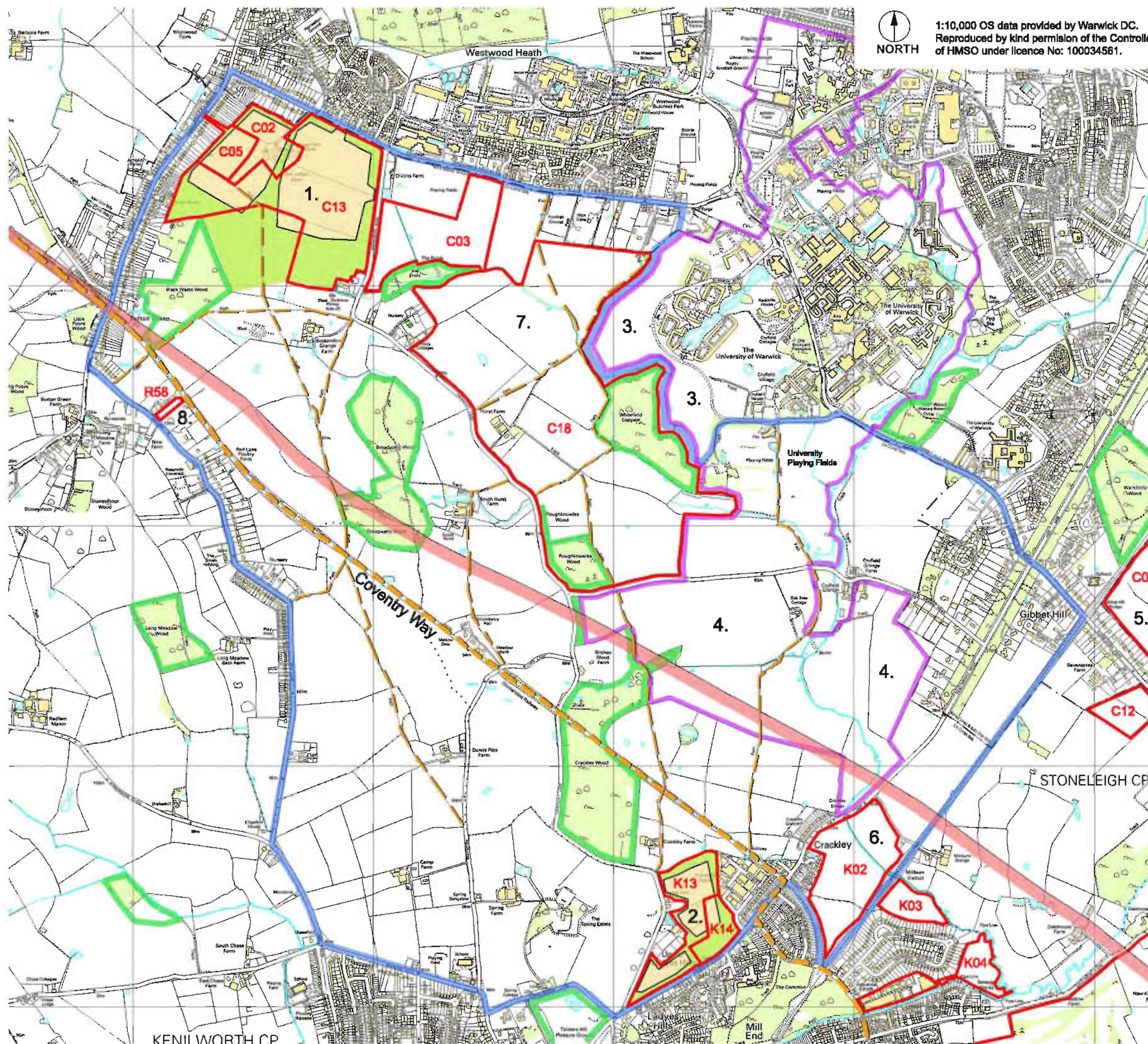
Study area. SHLAA sites. Indicative development.

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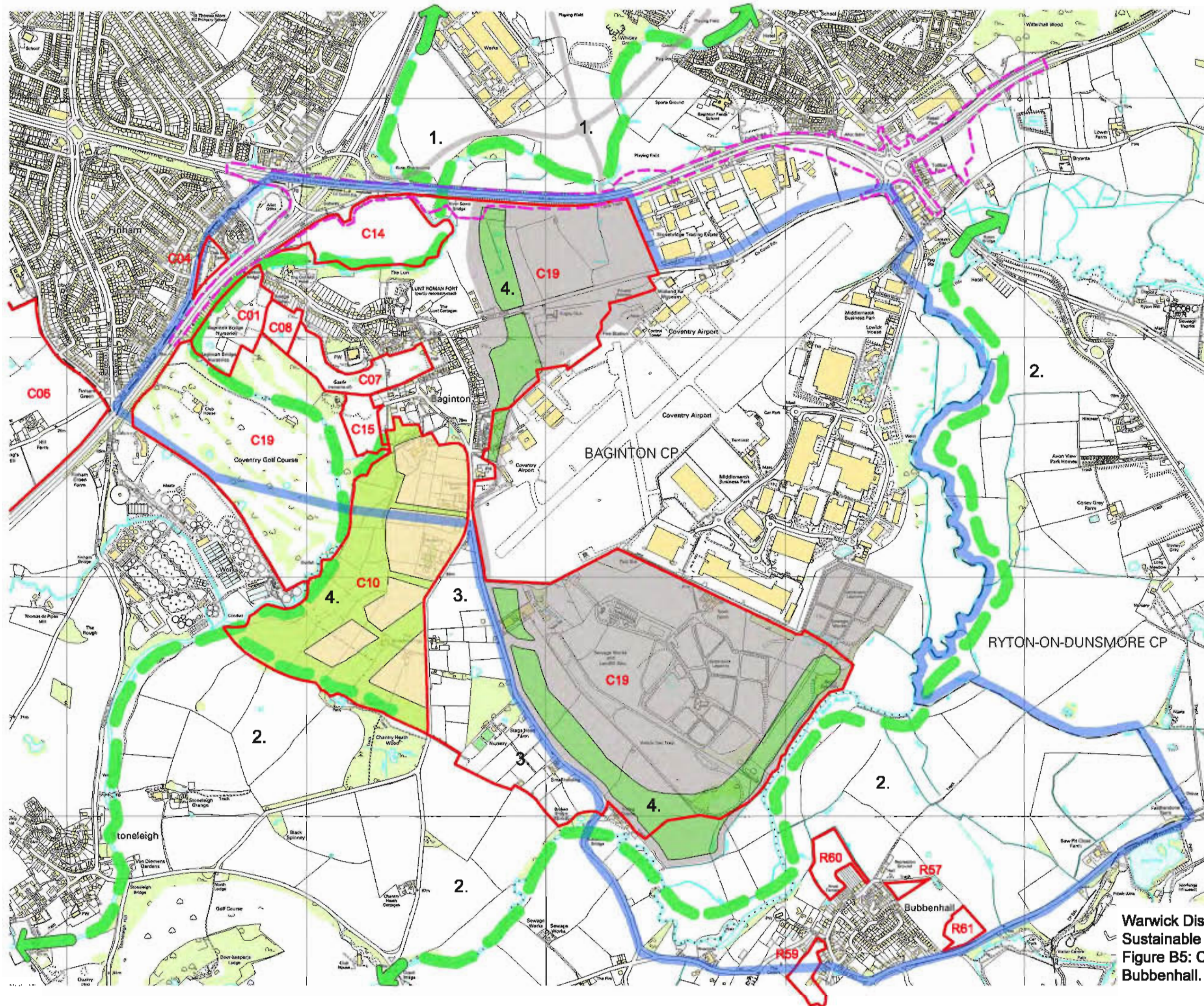
0 250 500m

Warwick District Urban Expansion Options  
Sustainable Landscape Considerations.  
Figure B3: Milverton and Blackdown, Leamington.









0 250 500m

NORTH

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- Study site.
- SHLAA sites.
- A45/A46 Highway Agency improvements.
- Coventry Gateway. Including preliminary green structure planting.
- Proposed 'sustainable extension'.
- Opportunities for green corridors and path access.

1. Roads and possible future development proposed within the Coventry Gateway proposal. Impacts on this valley landscape need to be carefully considered.

2. These areas of open agricultural land will assume increased importance as strategic gaps between development and need to be protected and enhanced as multi-functional landscapes.

3. This existing triangular wedge needs to be retained as a landscape buffer between proposed development areas.

4. Detailed design development must ensure that landscape infrastructure complements and benefits the wider landscape setting.

Warwick District Urban Expansion Options  
Sustainable Landscape Considerations.  
Figure B5: Coventry Airport, Baginton and  
Bubbenhall.



landscape design • environmental planning



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