Landscape Assessment of the Borough of Rugby

Sensitivity and Condition Study

Warwickshire County Council

Working for Warwickshire

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Introduction

This report details the work of a broad scale landscape assessment and sensitivity analysis of the Borough of Rugby, looking in more detail at the countryside around the urban fringe of Rugby itself. It was carried out by the Living Landscapes Project in conjunction with Warwickshire County Council and Rugby Borough Council. The aim of the study was to examine the character of the landscape around the town, its sensitivity to change, the condition of the countryside abutting Rugby's urban fringe and beyond, and to demonstrate how the outcomes could be used as a decision tool in the development planning process. In order to arrive at this level of detail it was necessary to carry out a broad based assessment of the landscape within the Borough as a whole. Landscape character assessment will be an important component in the Local Development Framework for Rugby Borough.

A key component of the Rugby study has been the working relationship that Warwickshire County Council has with The Living Landscapes Project. The evaluation methodology used has been developed by the Living Landscapes Project with the aim of providing an integrated geographical information system (GIS)-based decision support framework capable of linking national/regional policy objectives with county/borough wide planning and land management activities.

The building block of this framework is the Landscape Description Unit (LDU) – a discrete tract of land defined by a distinct pattern of physical, biological and cultural attributes. LDUs can be grouped into Landscape Character Types/Areas (see Glossary).

In order to underpin the existing classification and bring Warwickshire up-to-date with the rest of the Midlands, a Geographical Information System (GIS) based LDU map has been produced for the whole county. These LDUs are currently being verified and amalgamated to update the existing landscape character types shown in the Warwickshire Landscapes Guidelines. LDUs have formed the basis for the sensitivity analysis.

A number of LDUs that abut the edge of the town have been sub-divided into land cover parcels (LCPs). These can be defined as discrete areas of land bounded by roads, railways, water courses, parish boundaries or breaks in slope, where similar patterns of land use, field pattern and tree cover are evident. Each LCP nests within an LDU, and reflects changes in ownership and landuse which may influence factors such as landscape condition. They form a useful tool for looking in more detail at the landscape around urban fringes and for enabling specific parcels of land to be assessed for potential development/enhancement.

Character based decision making

If landscape assessment is to be of any practical use as a decision support tool it needs to go beyond simply describing what can be seen. The assessment process must also be able to provide an informed analysis of the way in which the landscape has evolved as a basis for understanding the dynamics of current and future change. The challenge for planners and land managers is to find new ways of accommodating change, whilst at the same time retaining and, where possible, strengthening regional character and local distinctiveness. This does not mean that things should be kept as they are, but if we are serious about retaining landscape diversity new ways need to be found not only to manage the countryside more effectively but also to guide and control the forces for change.

In order to meet this challenge the process of landscape evaluation needs to do more than identify 'important', or 'high' quality landscapes. It must also be capable of making reasoned judgements about the relative sensitivity of different types of landscape, their current state or condition, and how vulnerable they are to change. The Warwickshire Landscapes Guidelines go some way to achieving this by highlighting specific conservation and enhancement measures for each landscape character type. The Guidelines were designed primarily as a land management tool, however, and they are only of limited use for development planning. This study aims to "plug the gap" thereby enabling practitioners to both understand and interpret the character and sensitivity of the landscapes within Rugby Borough and to make more informed judgements when considering the capacity of the urban fringe to accommodate change .

The methodology adopted in this study involves three main components:

- a **character** (LDU) **analysis** to establish what is appropriate in a particular landscape;
- a **sensitivity analysis** to define the degree to which a landscape can accept change: and,
- a **condition/function analysis** to define the need/opportunities for enhancement.

The outputs from each stage of the analysis are presented in the form of GIS generated maps. All the information shown on these maps is held on a GIS database.

Character (LDU) analysis

The Countryside Agency define character as "a distinct and consistent pattern of elements in the landscape that makes one landscape different from another, rather than better or worse", (Landscape Character Assessment Guidance for England and Scotland, April 2002). The character analysis is essentially a desk-based exercise involving the preparation of simplified map overlays, which are used to systematically divide the study area into a series of discrete and relatively homogeneous tracts of land, termed Landscape Description Units (LDUs). LDUs are defined by four pairs of definitive attributes at the county/district level, (8 attributes in total), which determine the extent of each spatial unit. These include physiography (the underlying structure and physical form of the land), ground type (the nature of the land surface as related to rock type and soils), land cover (the broad pattern of primary land use and associated tree cover) and cultural pattern (the structural component of the historic landscape as related to the pattern of settlement and land use).

The process of LDU mapping involves four phases of analysis starting with the natural dimension of the landscape (physiography and ground type) and then using the results of this work to help to understand and map the cultural dimension (land cover and cultural pattern). The natural dimension is mapped first, not only because it provides a context for analysing the historical evolution of the landscape, but also because the baseline attributes of relief, geology and soils have 'real' boundaries, which can be readily extracted from existing published maps. Cultural attributes do not usually have such clearly defined boundaries, but because of the constraints that have historically been imposed on land utilisation by slope, soil fertility and drainage it is often possible to map cultural patterns at the landscape scale using the emerging LDU framework.

The process of LDU mapping and subsequent description of the emerging units of land using other data sets, makes it possible to begin to understand the relationship between the many factors that contribute to landscape character. The iterative nature of this process greatly assists in the understanding of how a particular landscape has developed and is the key to assessing the character of that landscape. Once the inherent character of the land has been described it is then much easier to understand and describe the more intangible aesthetic aspects of the landscape, such as scale, form and enclosure. Although these are the qualities which are most apparent to viewers on the ground, the fact that they are almost invariably controlled by either relief, or the surface pattern of vegetation and land use, explains why the LDUs defined by the process of overlay mapping can be amalgamated to define Landscape Character Types (LCTs) and/or Character Areas (LCAs), (see the Summary of Findings, map 5).

The LDU analysis forms the basis for considering the relative sensitivity and capacity of different landscapes to accept change.

Sensitivity analysis

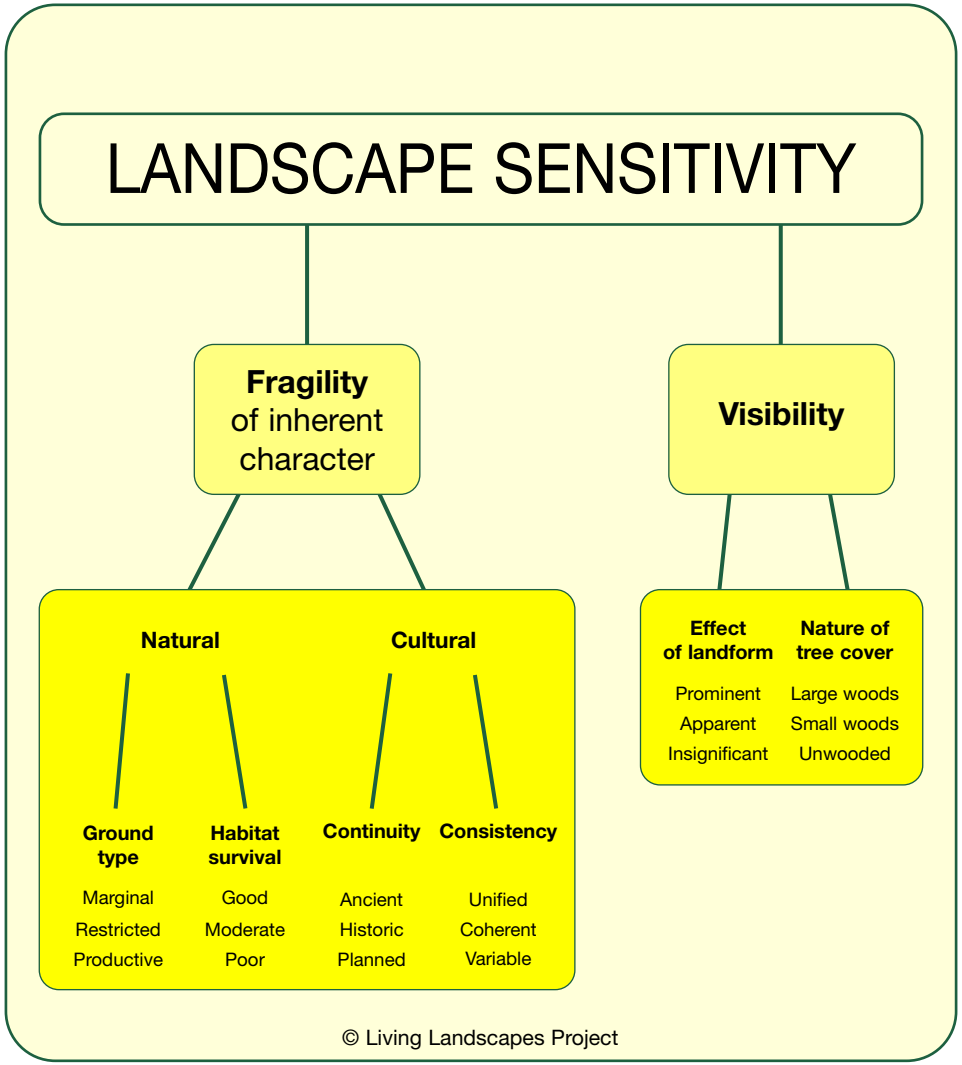
Landscape sensitivity is a measure of the degree to which the countryside can accept change without causing irreparable, long term damage to the essential character and fabric of the landscape - the term 'change' being used in this context to refer both to potentially beneficial change, such as new woodland planting, as well as change brought about by new development. Sensitivity is closely related to the nature and pattern of key elements that define the character of a particular landscape and any analysis of sensitivity needs to look separately at the **fragility** of the inherent (**natural and cultural**) pattern and the degree of **visibility** within each landscape. The concept of fragility is related to the extent to which change may result in the loss of features, or patterns that cannot be easily replaced. The concept of visibility relates to the degree to which change is likely to cause a visual impact within a particular landscape. The components of this analysis are summarised in **Figure 1**.

Fragility

The concept of fragility incorporates both the natural (ecological) and cultural dimensions of the landscape. The oldest, (and by implication most sensitive), landscapes are those that still survive in a semi-natural state (i.e. heathlands, moorlands, etc). Most landscapes in the lowlands, however, have been settled and improved for agricultural production and, as a result, any surviving semi-natural habitat is almost invariably associated with the cultural pattern (i.e. woodlands, field boundaries and other 'man made' features).

- **Cultural Sensitivity** - Fragility is strongly related to the cultural dimension of the landscape, in particular, the consistency of the pattern that defines a particular LDU and also to the continuity, or 'time depth' of that pattern – the assumption being that the longer it has taken to evolve the more difficult it will be to restore/replace and therefore the more sensitive it will be to change. However, it is not only 'ancient' landscapes that are sensitive to change. Any landscape that has a clearly defined and strongly unified character (e.g. The Fens) will be more sensitive to change by virtue of the fact that such landscapes are less able to accommodate 'alien' features that do not conform to the existing pattern.

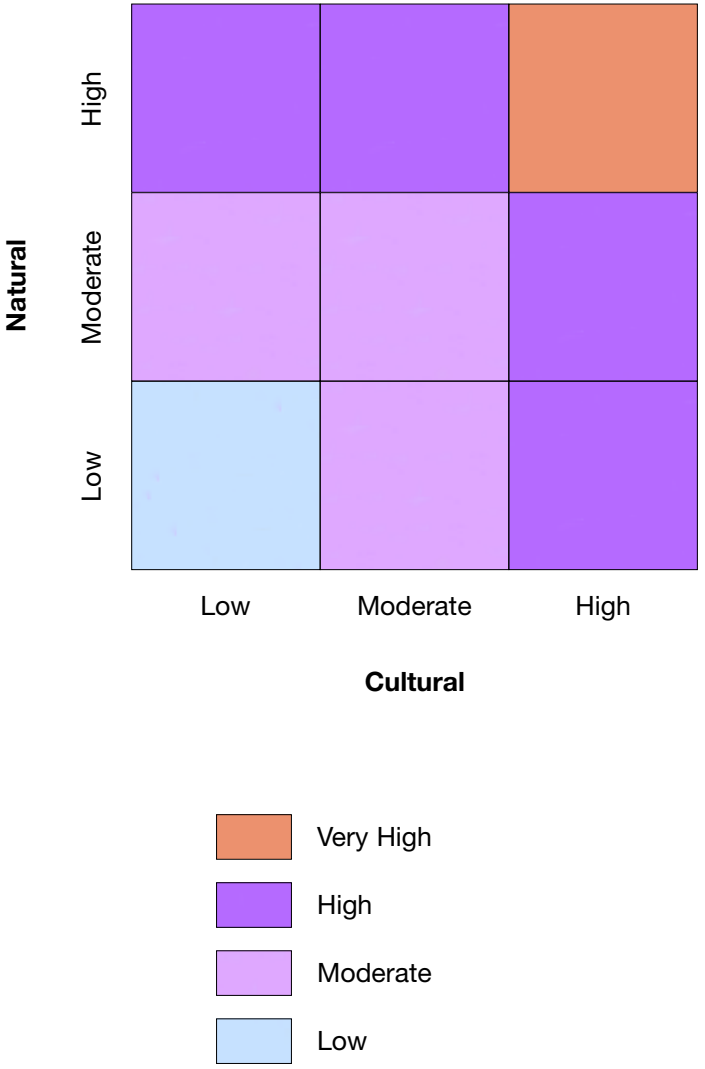
Figure 1: Sensitivity analysis



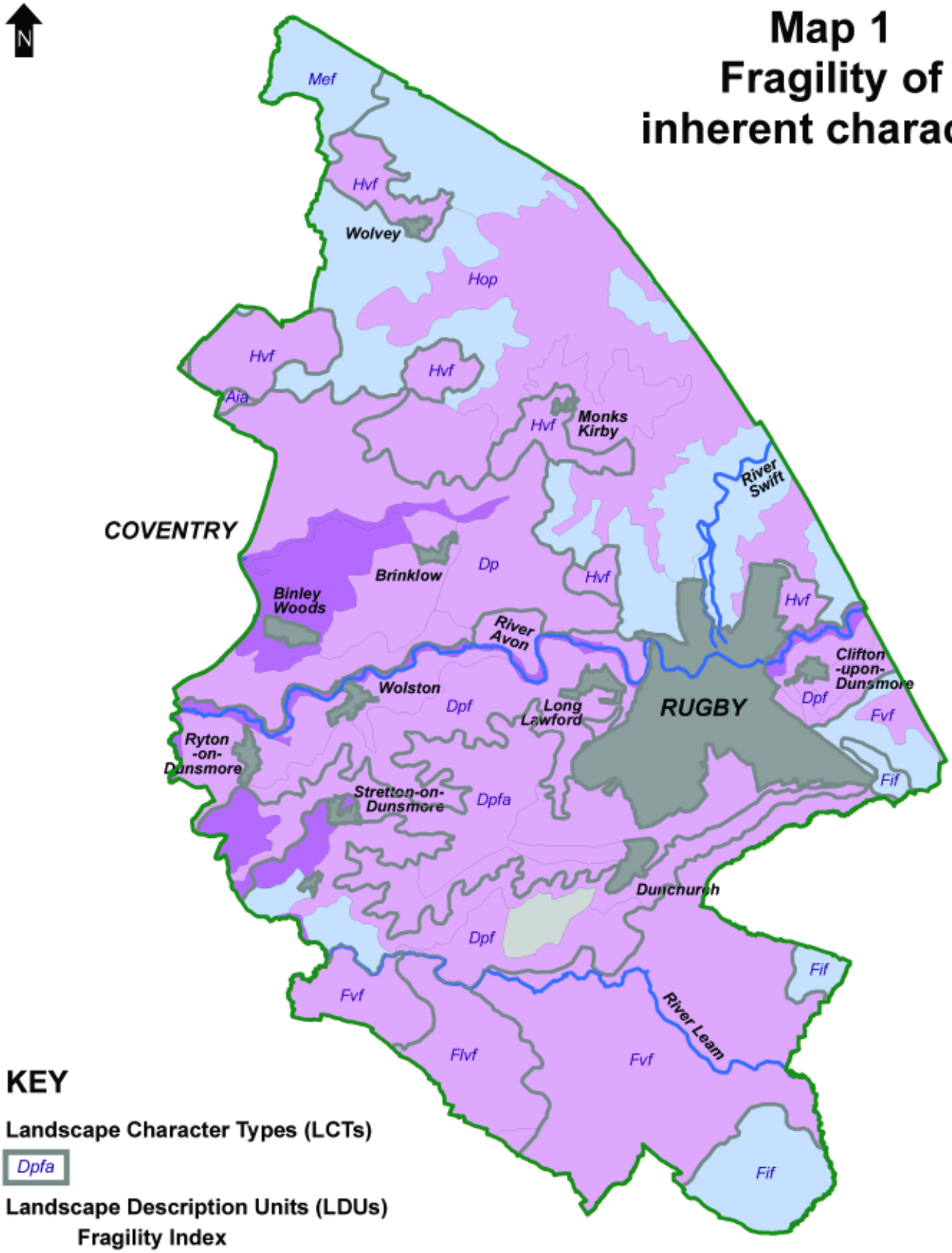
- **Natural Sensitivity** - Since features such as woodland are already included in the cultural sensitivity analysis, the natural side of the analysis focuses on the presence of other non-woodland habitat patches, which are often characteristic of certain types of 'marginal' landscape. Where such patches still survive they will increase the overall sensitivity rating. Analysis of patch survival is largely a predictive exercise which looks at the current pattern of land use within the context of 'productive' and more 'marginal' ground types – the assumption being that a settled arable landscape associated with good (brown/gleyed) soils is likely to have fewer patches of semi-natural habitat than a pastoral landscape associated with marginal (wetland, heathland, chalk and limestone, or moorland) soils.

Combination of the natural and cultural sensitivity values enables an aggregate index for the fragility of character for each LDU to be generated (**Figure 2**). The landscapes that are most sensitive to change are those that occur at the top, or right hand side of the matrix (i.e. those that have a high natural and/or cultural sensitivity), whilst those that are variable in character and/or more recent in origin are likely to have a greater (although not unlimited) capacity to accommodate change. The output from this stage of the analysis (**Map 1**) provides the primary sieve through which to evaluate the likely impact of change. This is because the analysis deals with primary heritage (natural and cultural) features that once lost, or damaged irreparably, cannot be replaced. There is, therefore, often little scope to mitigate this type of impact and the best course of action is usually to try and avoid the impact in the first place.

Figure 2: Landscape Sensitivity - Fragility of inherent character



Map 1
Fragility of inherent character



KEY

Landscape Character Types (LCTs)

Dpfa

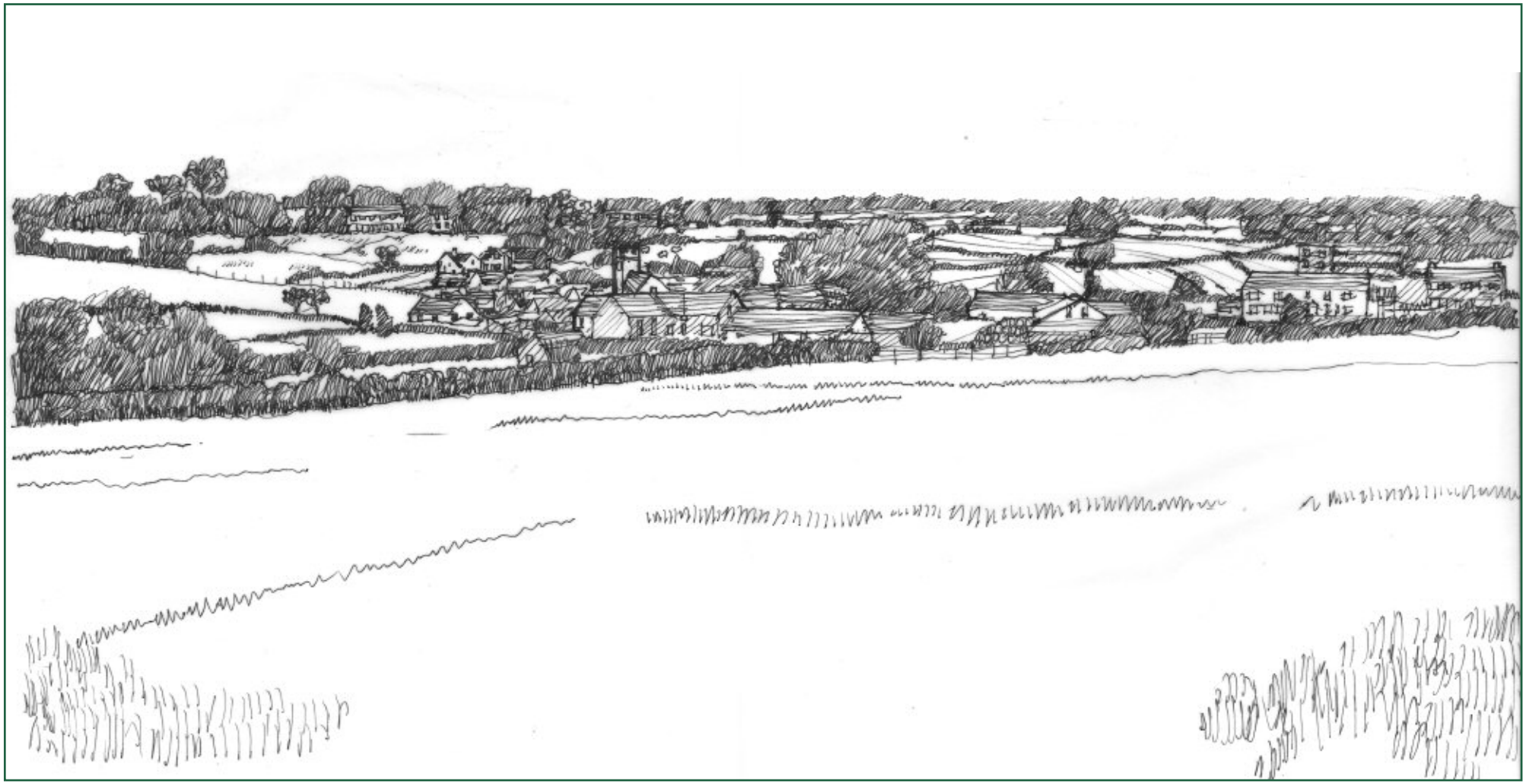
Landscape Description Units (LDUs)

Fragility Index

- High
- Moderate
- Low
- Water
- Urban

Dpfa	Dunsmore, Plateau Farmlands	*Flvf*	Feldon, Lias Village Farmlands
Dpf	Dunsmore, Plateau Fringe	*Hop*	High Cross Plateau, Open Plateau
Dp	Dunsmore, Parklands	*Hvf*	High Cross Plateau, Village Farmlands
Fif	Feldon, Ironstone Fringe	*Mef*	Mease Lowlands, Estate Farmlands
Fvf	Feldon, Vale Farmlands	*Aia*	Arden, Industrial Arden

NOT TO SCALE



The retention of a coherent, historic field pattern, in the otherwise intensively farmed landscape of the High Cross Plateau, Village Farmlands, results in a moderate fragility rating.

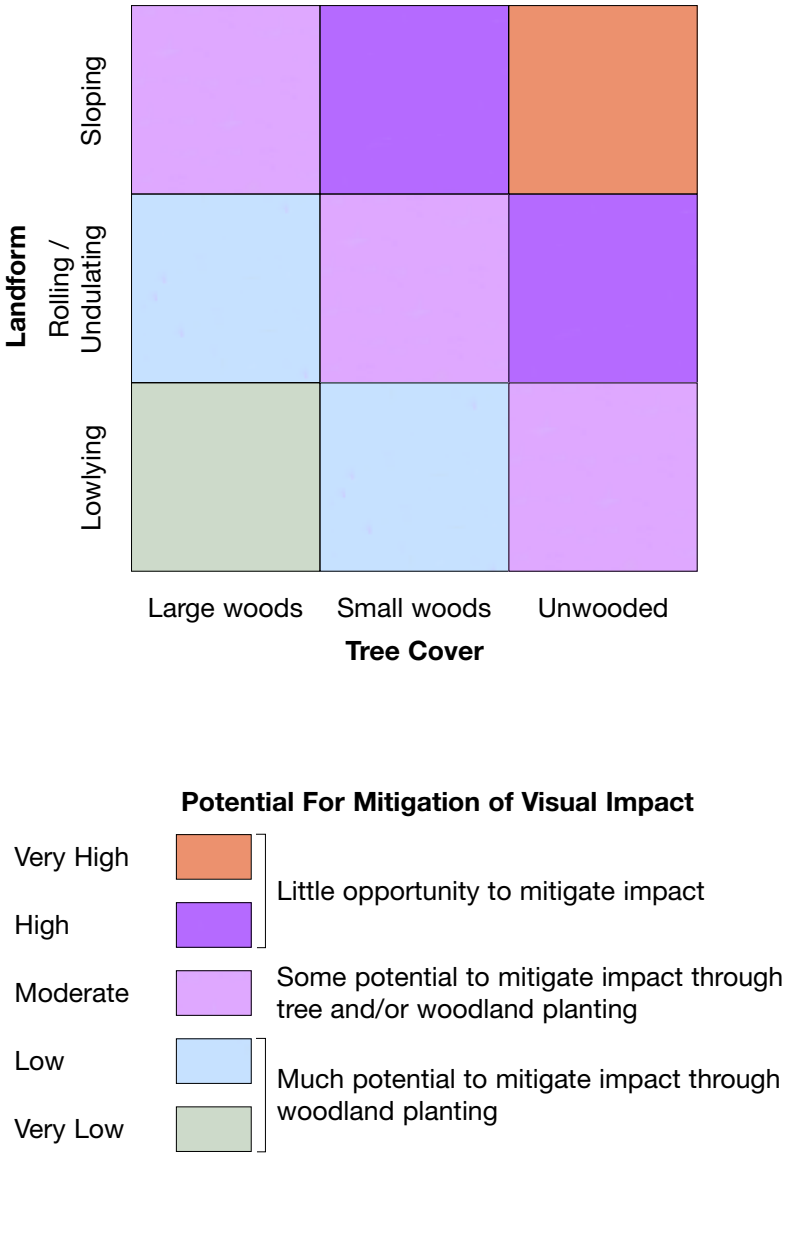
Visual sensitivity

Visual sensitivity, or 'visibility' is a measure of the degree to which change is likely to cause a visual impact within a particular landscape. A visibility index can be defined by looking at the relationship between the prominence of landform and the nature/extent of tree cover (**Figure 3**). Thus, an upland landscape with little tree cover would have a high visibility score whereas a well-wooded lowland landscape would have a very low score.

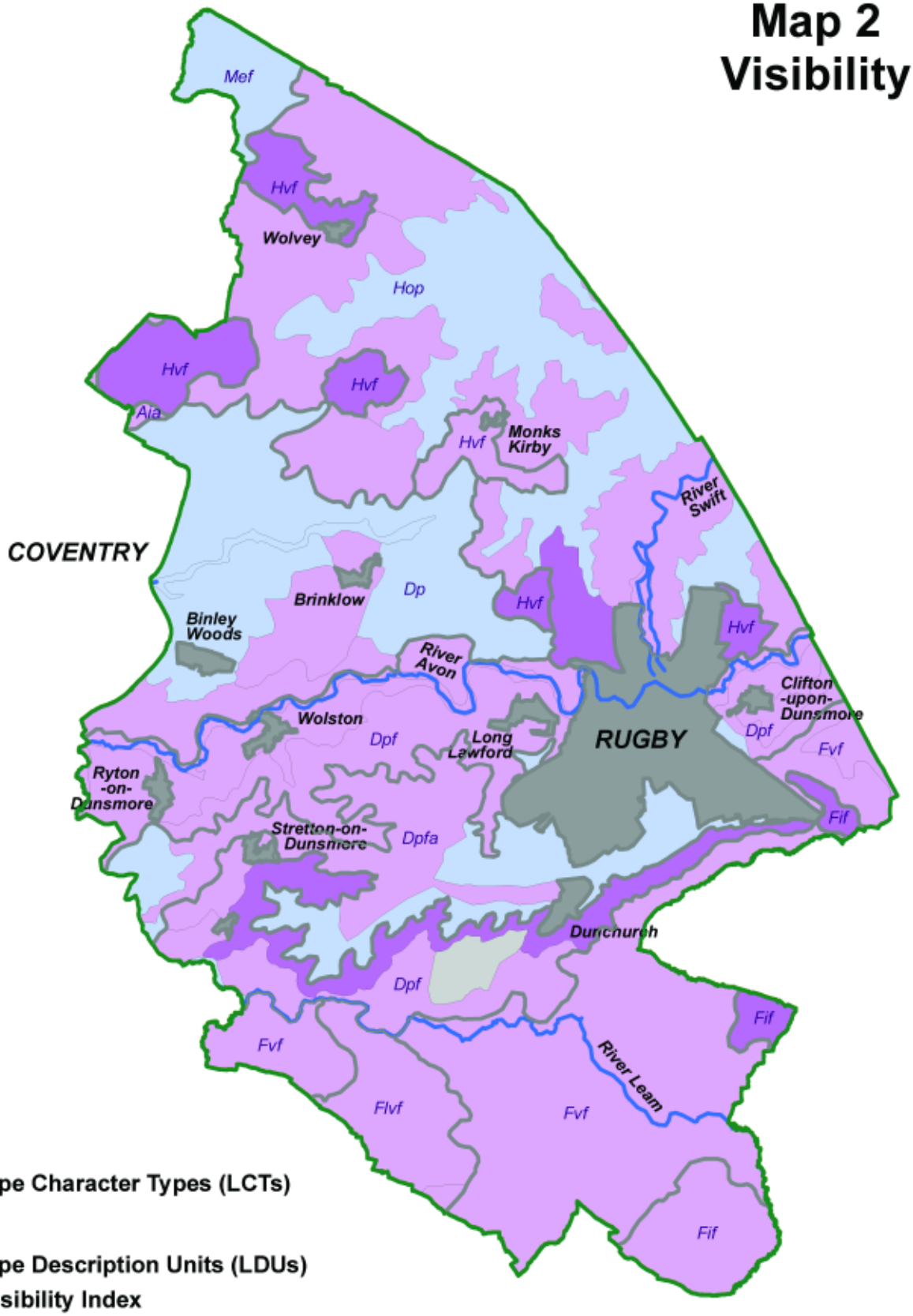
The visibility analysis, (**Map 2**), is designed to be used as a second sieve in the evaluation process. In most cases it is possible to mitigate visual impact, particularly if the change causing the impact has been directed into a landscape that is more able to accommodate change in the first place. The best way to mitigate visual impact is often through on-/off-site woodland planting. Obviously this will be easier in well-wooded landscapes than those where tree cover is restricted to discrete coverts and /or groups of trees. However, although sparsely wooded landscapes are most sensitive to visual intrusion, this does not necessarily preclude change, but great care is needed to ensure that the mitigation measures themselves do not draw attention to the development that they are trying to hide.

Map 3, Overall sensitivity, shows how fragility and visibility indices can be combined to give an overall sensitivity rating for the Borough.

Figure 3: Landscape Sensitivity - Visibility



Map 2
Visibility



KEY

Landscape Character Types (LCTs)

Dpfa

Landscape Description Units (LDUs)

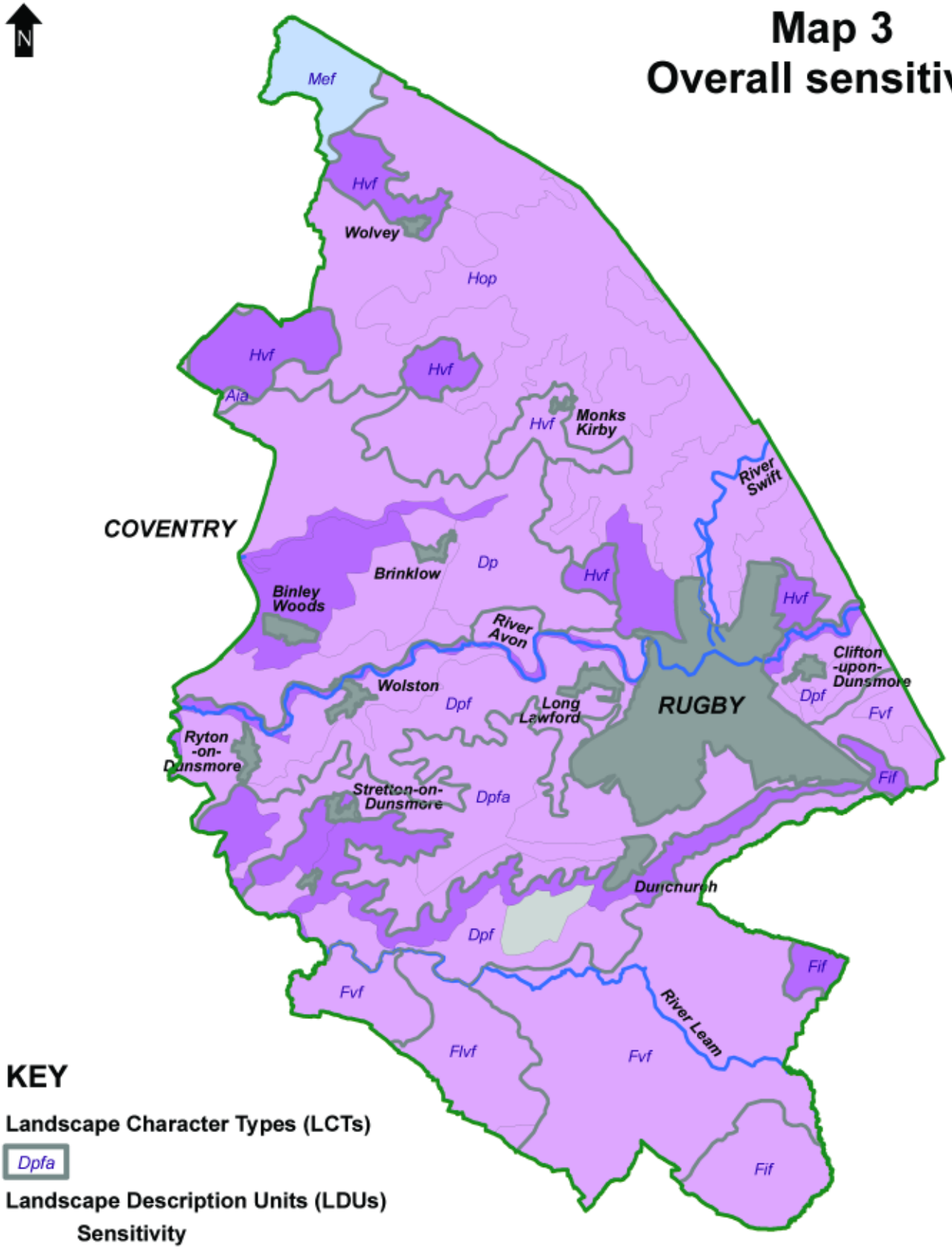
Visibility Index

- High
- Moderate
- Low
- Water
- Urban

Dpfa	Dunsmore, Plateau Farmlands	*Flvf*	Feldon, Lias Village Farmlands
Dpf	Dunsmore, Plateau Fringe	*Hop*	High Cross Plateau, Open Plateau
Dp	Dunsmore, Parklands	*Hvf*	High Cross Plateau, Village Farmlands
Fif	Feldon, Ironstone Fringe	*Mef*	Mease Lowlands, Estate Farmlands
Fvf	Feldon, Vale Farmlands	*Aia*	Arden, Industrial Arden

NOT TO SCALE

Map 3
Overall sensitivity



KEY

Landscape Character Types (LCTs)

Dpfa

Landscape Description Units (LDUs)

Sensitivity

- High
- Moderate
- Low
- Water
- Urban

Dpfa	Dunsmore, Plateau Farmlands	Flvf	Feldon, Lias Village Farmlands
Dpf	Dunsmore, Plateau Fringe	Hop	High Cross Plateau, Open Plateau
Dp	Dunsmore, Parklands	Hvf	High Cross Plateau, Village Farmlands
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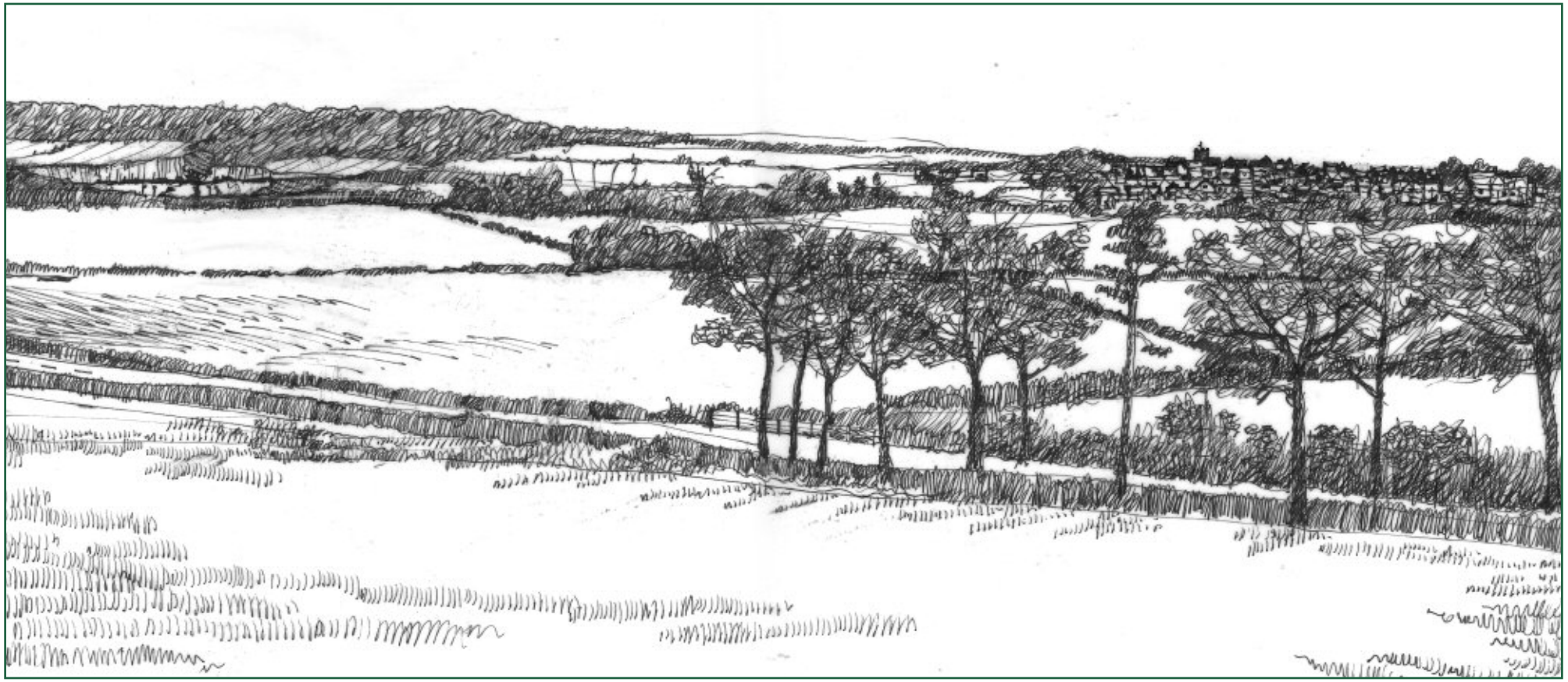
Fvf	Feldon, Vale Farmlands	Aia	Arden, Industrial Arden

NOT TO SCALE



Rolling topography and small woods result in moderate visibility within this area of Feldon, Lias Village Farmlands.
This, combined with a coherent historic field pattern, results in a moderate overall sensitivity rating.

Condition / function analysis

The condition of a landscape, which should be clearly distinguished from its character, is a measure of how far removed that landscape is from an 'optimal' state where all the key characteristics are present and functional. Although landscape character can change over time, such changes are usually gradual and measured in decades rather than years. Condition, on the other hand, can change much more rapidly due to the impact of external factors, such as land use change, agricultural intensification or neglect. Thus redundant and gappy hedgerows should be regarded as an indicator of poor condition rather than as an inherent characteristic.

Condition tends to vary at the local level, often being influenced by changes in ownership and landuse. This stage of the analysis is therefore best carried out using Land Cover Parcels (LCPs), each of which nests within a larger LDU.

Condition

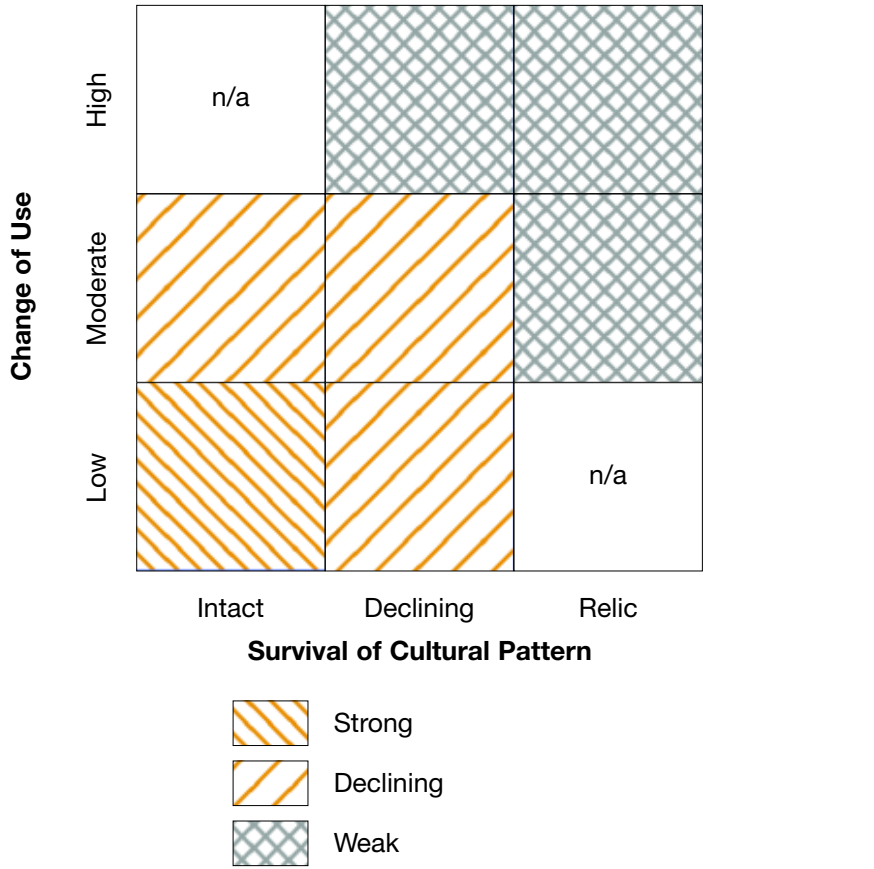
Condition has both a visual dimension, reflecting the degree to which the landscape appears visually unified, and a functional dimension reflecting the degree to which the countryside functions as a self sustaining resource. The latter embraces a range of issues related to the ecological health of the countryside and the inherent stability of the present day landscape. The key indicators for evaluating how well the landscape is functioning are:

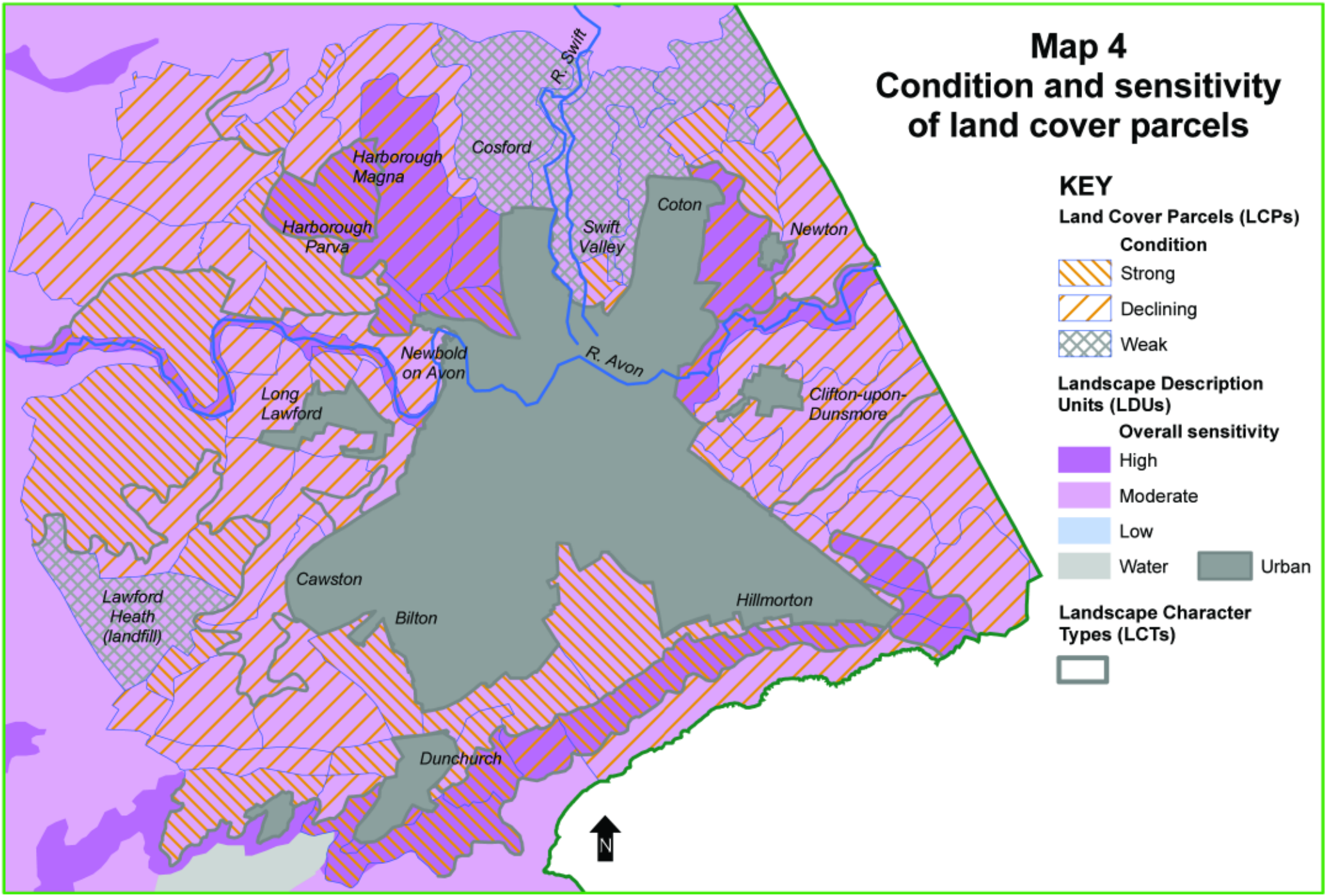
- **Change of use** – a measure of both the nature and extent of land use change/intensification of use (high, moderate, low). This analysis is based on comparison of current land use, taken from the recently digitised Land Cover Map 2000, with that from the original 1930's Land Utilisation Survey for Warwickshire.

- **Survival of cultural pattern** – a measure of the current function/state of management of field boundaries and other primary heritage features (intact, declining, relic). This analysis is based on information recorded in the field.

Combination of these two indicators allows an aggregate index for the condition of each LCP to be generated (**Figure 4**). The parcels where there has been little or no change in use and where there is still a functioning cultural pattern occur in the bottom left hand corner of the matrix, whilst those where the pattern is in decline, or has become fragmented are situated towards the top right hand corner. The output from this stage of the analysis, when viewed in combination with the sensitivity analysis (Map 3) provides a lower level tertiary sieve, which can be used to identify specific sites that are in need of landscape enhancement (**Map 4**).

Figure 4: Analysis of Condition





NOT TO SCALE

The High Cross Open Plateau is characterised by large hedged fields.
Without this primary feature the condition of the landscape is in decline.

Summary of Findings

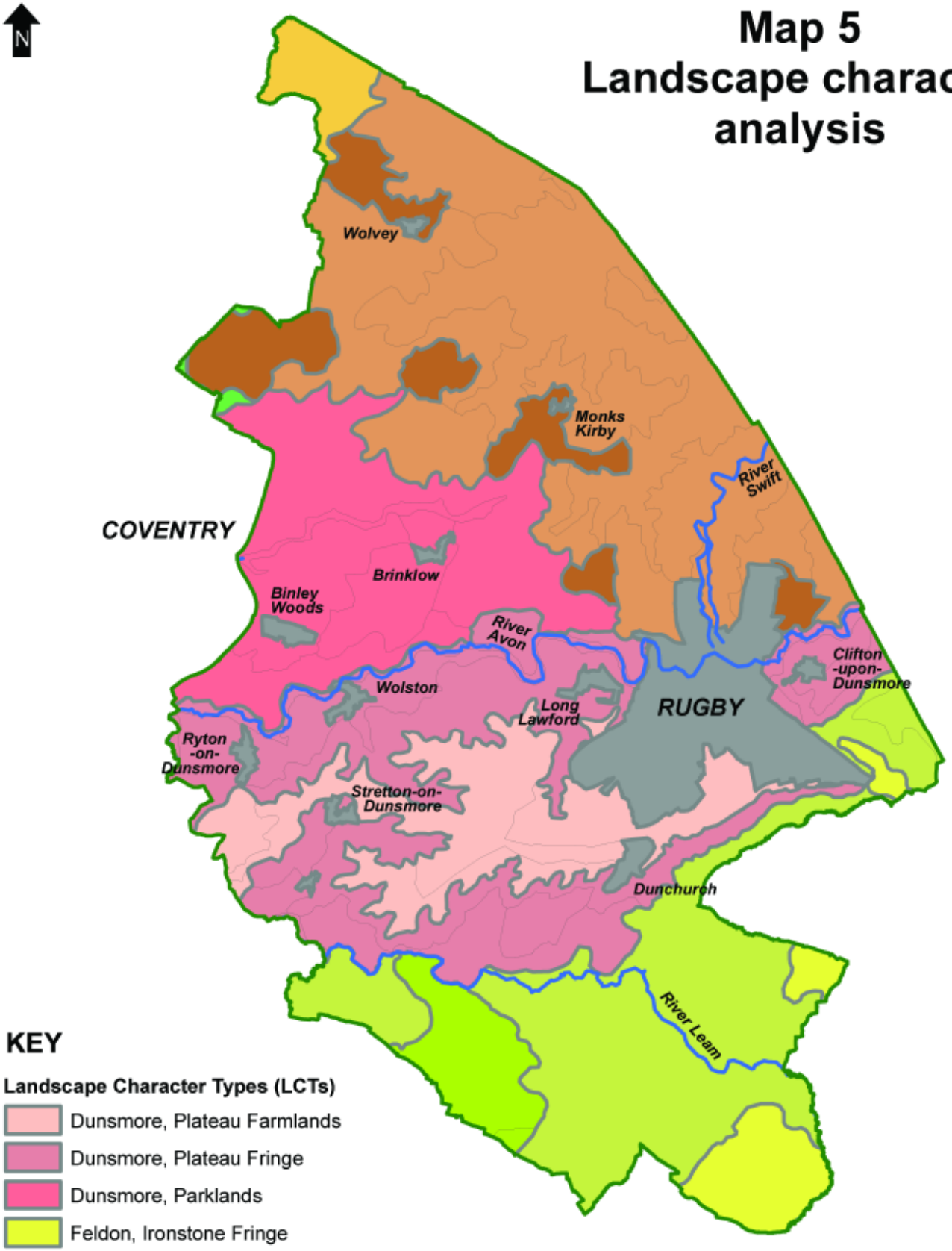
Landscape Character Analysis

The landscape character analysis identified a number of LDUs within the Borough of Rugby. These LDUs were then grouped together to form Landscape Character Types (LCTs) - **Map 5**. The extent of each LCT was compared with its original boundaries as defined in the Warwickshire Landscapes Guidelines (1993). This resulted in a certain amount of refinement of the earlier assessment and in two cases a reclassification was necessary: around Binley Woods, from Dunsmore Plateau Farmlands to Dunsmore Parklands; and to the east of Hillmorton in Rugby from Feldon, Ironstone Fringe to Feldon, Vale Farmlands.

Landscape Character Types combine to form Landscape Character Areas (LCAs), four of which occur in Rugby Borough: Dunsmore, Feldon, High Cross Plateau, and Mease Lowlands. There is also a very small area of Arden at the western extreme of the Borough, but this has not been detailed below as it is considered insignificant in size.

The larger Landscape Character Areas, an amalgam of LCTs, will be considered first since their component LCTs and LDUs share common physical, historical, ecological and cultural associations. Landscape Character Types will also be described, and the results of the sensitivity analyses considered. Finally, the condition of individual Land Cover Parcels (LCPs) around Rugby's urban fringe will be examined. The results of this more detailed LCP field survey are summarised in the accompanying leaflet at the back of this report.

Map 5
Landscape character analysis



KEY

Landscape Character Types (LCTs)

- Dunsmore, Plateau Farmlands
- Dunsmore, Plateau Fringe
- Dunsmore, Parklands
- Feldon, Ironstone Fringe
- Feldon, Vale Farmlands
- Feldon, Lias Village Farmlands
- High Cross Plateau, Open Plateau
- High Cross Plateau, Village Farmlands
- Mease Lowlands, Estate Farmlands
- Arden, Industrial Arden
- Urban

Landscape Description Units (LDUs)

NOT TO SCALE

High Cross Plateau : Open Plateau
A large scale, open, rolling landscape characterised by wide views and a strong impression of “emptiness” and space.

Dunsmore

The area known as Dunsmore is characterised by a range of historical and ecological associations, which are strongly influenced by the underlying geology of the region. It lies almost wholly within Rugby Borough, comprising an area of low glacial plateaux and incised, meandering river valleys lying between Leamington Spa, Coventry and Rugby. The widespread occurrence of glacial sands and gravels is reflected in the strong association with former common and heath. Although none of the heath remains today, the occurrence of remnant heathy vegetation, the late enclosure pattern of large geometric fields, and the abundance of "Heath" names, all impart a strong sense of regional identity. Light sandy soils and large geometric fields have resulted in an intensively farmed landscape. The extent of semi-natural habitat is therefore rather limited to: pockets of unimproved grasslands; flood meadows and associated wetland habitats along the river corridors; and to two major ancient woodland complexes to the south and east of Coventry. These ancient woodlands, together with characteristic mature hedgerow oaks, and historic parklands, give this region a well-wooded appearance.

Dunsmore can be sub-divided into three different landscape types, each of which is characterised by a particular aspect of the wider regional character:

- Plateau Farmlands
- Plateau Fringe
- Dunsmore Parklands

Plateau Farmlands

The Plateau Farmlands is a very distinctive landscape – the gently rolling, low glacial plateau being characterised by: an "empty" landscape of former waste with few roads and little settlement; a regular, geometric field pattern defined by closely cropped hawthorn hedges; many mature hedgerow oaks; large blocks of ancient woodland; remnants of heathy vegetation in woodlands and roadside verges, such as birch and bracken.

Sensitivity – Fragility: Cultural sensitivity is moderate due to a planned, strongly unified, field pattern. The Ryton Woods area alone is high, both culturally and ecologically, due to the size of the ancient woodland. Ecological sensitivity is generally low elsewhere except for an area south of Cawston where smaller blocks of ancient woodland may also be found.

Sensitivity – Visibility: Visibility is generally moderate due to the gently rolling landform with only scattered trees. Where tree cover is stronger, such as south of Cawston and Ryton, visibility is lower.

Overall sensitivity: With the exception of Ryton, which has a high overall sensitivity, the remainder of this landscape type is moderate. The strongly unified pattern and the gently rolling topography with scattered trees are the key elements which contribute to its sensitivity.

Condition: This varies considerably. A significant area to the south of Bilton, extending to the west of Dunsmore has a strong condition. This is one of the most intact areas of countryside on Rugby's immediate urban fringe. Beyond this, there is quite a large area, between Cawston Spinney and the Coventry Road (B4429), which is in decline. At the extreme end of the spectrum, the landfill site at Lawford Heath is shown as being of "weak" condition.

Plateau Fringe

The Plateau Fringe is a rather variable landscape with an undulating topography of low rounded hills, broad valleys, and short, steep slopes occurring on the northern and southern edge of the Dunsmore plateau. For the most part it is a large-scale, intensively farmed agricultural landscape, characterised by large arable fields, often with a poorly defined field pattern. In places, however, there are smaller scale pockets of permanent pasture and smaller hedged fields, usually associated with more steeply sloping ground. The narrow meandering river valleys of the Avon and Leam are also noteworthy features within this landscape with large arable fields often sweeping down to the river's edge. Pockets of river meadowland still survive in places, notably on the Avon at Little Lawford. Small nucleated villages are also a characteristic feature and contrast with the sparsely populated nature of the adjoining Plateau Farmlands.

Sensitivity – Fragility: Cultural sensitivity is moderate due to the historic, coherent pattern within this LCT. Ecological sensitivity is low with the exception of: the moderately sensitive steeper slopes of southern escarpment which fall towards Feldon; and the highly sensitive River Avon.

Sensitivity – Visibility: Visibility is generally moderate due to the presence of small woods and trees superimposed over a rolling topography. On the slopes of the southern escarpment, however, visibility is high.

Overall sensitivity: With the exception of the southern escarpment and the River Avon, overall sensitivity is moderate, with visibility being the limiting factor.

Condition: To the north, the Plateau Fringe is generally in decline with the exception of an area of parkland between the River Avon and Long Lawford, and land around Church Lawford and King's Newnham, where the condition is strong. The southern fringe or escarpment on the other hand, is not only highly sensitive, but also largely in strong condition, making this an important feature to the south of the town.

Dunsmore Parklands

Dunsmore Parklands is a gently rolling estate landscape with a well-wooded character, defined by woodland edges, parkland and belts of trees. Wooded streamlines and mature hedgerow and roadside trees, (typically oak), reinforce this impression by creating a sequence of linked wooded spaces. Large blocks of woodland and smaller coverts help to create a sense of scale and enclosure in an otherwise intensively farmed landscape. Field pattern is large but poorly defined, and in places absent altogether, allowing middle distant views to wooded skylines.

Sensitivity – Fragility: Cultural sensitivity is generally moderate due to the historic coherent pattern which exists in this area. Where it is high this is due to a slightly older, more unified pattern (ancient woodlands are contributing to this pattern). Overall ecological sensitivity is moderate due to the ancient wooded landscape character.

Sensitivity – Visibility: Visibility is generally low, due both to the level of tree cover, as well as to the low-lying, rolling topography. It is moderate when tree cover is reduced.

Overall sensitivity: Overall sensitivity is moderate as a result of both cultural (time depth) and ecological factors – primarily ancient woodlands.

Condition: Apart from an area to the south of Harborough Parva, where the condition is strong, this area is generally in decline.

Feldon

Feldon comprises most of the south-eastern part of Warwickshire, with only the northern area falling within the Borough of Rugby. The name "Feldon" originates from the Old English word feld, meaning "open, cleared land", and even to this day the area remains largely unwooded. It has traditionally been a good stock-rearing area due largely to the heavy but relatively fertile Lower Lias Clays, which underlie much of the area. Neutral grassland and semi-natural woodland are the most valuable habitat types in this farmed landscape but neither occurs to any extent within the Rugby Borough. Woodland is virtually absent, but within hedgerows calcareous soils give rise to ash and oak as the main tree species.

The character of Feldon is strongly influenced by the historical development of the region, in particular the Tudor and Parliamentary enclosure movements. This is reflected in the pattern of: large geometric fields resulting from deliberate planning; small villages (red brick in the Rugby region) typically linked by few direct roads; and the strong impression of emptiness in many areas. The farmed landscape has a strong rural character retaining many historic features, in particular, ridge and furrow and deserted village sites.

Feldon can be sub-divided into four different landscape types, only the first three occurring in the borough of Rugby:

- Ironstone Fringe
- Vale Farmlands
- Lias Village Farmlands
- Feldon Parklands

Ironstone Fringe

The Ironstone Fringe is a remote rural landscape associated with a raised Lower Lias tableland which occurs along the fringe of the Ironstone Wolds, (a hilly region in the western part of adjoining Northamptonshire). It has a large scale, gently rolling topography, punctuated in places by prominent ironstone hills. There are few roads or settlements, and sometimes there are extensive areas of empty countryside, often associated with deserted medieval villages. Large, isolated manor farmsteads are a feature of this area, together with small, strongly nucleated ironstone villages often situated on rising ground. It is characterised by a large, strongly hedged field pattern, which creates a relatively strong sense of enclosure in an otherwise rather open, intensively farmed landscape with sparse tree cover. Extensive areas of permanent pasture were a characteristic feature of the Ironstone Fringe until relatively recently, much having been ploughed up. Where pockets of pasture still remain, well-preserved ridge and furrow is often a special feature. Roadside verges are typically wide and bounded by tall, thick hedgerows and on steep hillsides, semi-natural grassland may sometimes be found.

Sensitivity – Fragility: Cultural Sensitivity is low due to the presence of a variable, albeit historic, pattern. Ecological sensitivity is also low within the study area.

Sensitivity – Visibility: Where visibility is high this is due to the unwooded, rolling landform. At the southern tip of the Borough visibility is more moderate due to the presence of small woods.

Overall sensitivity: Visibility is the main contributor to the overall sensitivity rating – where visibility is high the overall rating is high and, where moderate, the rating is moderate.

Condition: Only a small parcel of land to the southeast of Hillmorton falls within the survey area, the condition of which is in decline.

Vale Farmlands

This is perhaps the most typical landscape within Feldon – an area of broad, flat, low-lying clay vales with few roads or settlements. It is characterised by a largely intact pattern of medium to large-sized geometric fields, bounded by hawthorn hedges. Tree cover of any kind is sparse, allowing wide views to rising ground and giving a strong impression of sky and space. Despite a significant move towards arable production in recent years, extensive areas of permanent pasture still remain a feature of this landscape, together with well-preserved areas of ridge and furrow. Deserted medieval villages have also survived in places.

Villages are typically few and far between, often consisting of small, straggling clusters of farmsteads and dwellings. Most are situated around a cross-road, and many are well off the beaten track. Roads are often single track, with wide grass verges, bounded by a ditch and thick hedge.

Sensitivity – Fragility: Cultural sensitivity is generally moderate due to a coherent historic pattern. Ecological sensitivity across the area is low with the exception of an isolated wetland area, giving this pocket a moderate fragility score.

Sensitivity – Visibility: Visibility is moderate due to the low-lying, unwooded landscape character.

Overall sensitivity: Visibility and cultural sensitivity (coherent cultural pattern) both contribute to a moderate overall sensitivity rating.

Condition: Within the survey area the condition of land to the east of Hillmorton, together with a parcel of land to the south of the Plateau Fringe are both in decline.

Lias Village Farmlands

Lias Village Farmlands is a varied, small-scale, hedged landscape of scattered farms and nucleated brick and stone villages, closely associated with a belt of Blue and White Lias Limestones that run through the central part of the region. Much of this area has a varied undulating topography often associated with steep, wooded scarp slopes. The farmed landscape is characterised by a well-defined geometric pattern of small to medium-sized fields enclosed by thorn hedges. This, together with the undulating nature of the topography, creates a strong sense of scale and visual unity. This pattern is further emphasised by numerous hedgerow and roadside trees. Where the landscape is more open, distant views are typically framed by low, rounded hills or ridgelines. Lias Village Farmlands occurs in four areas within Warwickshire - within the Rugby Borough it arises only within the area around Leamington Hastings and Birdingbury.

Sensitivity – Fragility: Cultural sensitivity is moderate due to the historic, coherent landscape pattern, but ecological sensitivity is low within the study area.

Sensitivity – Visibility: Visibility is moderate due to the rolling topography and small woods.

Overall sensitivity: Both cultural sensitivity and visibility contribute to the moderate overall sensitivity rating.

High Cross Plateau

High Cross Plateau is a sparsely populated area characterised by wide rolling ridges and valleys. It actually belongs to the south western section of the Leicestershire Wolds with only part of the area extending into Warwickshire - here it forms the region of high ground between Rugby and Hinkley in the north-eastern corner of the county. This rolling plateau is dissected by a series of streams, forming deep but poorly defined valleys separated by broad, round ridges. Sands and gravels, giving light, freely draining soils, often cap the summits of these ridges but for the most part the area is characterised by heavy soils with impeded drainage. Two major Roman roads cross the area; Watling Street and Fosse Way, which meet at High Cross.

The physical nature of the area and the historical development have both had a strong influence on the character of the landscape. This is reflected in the pattern of large fields, the nucleated settlement pattern and the strong impression of "emptiness" in many areas resulting from the early enclosure of this rather marginal agricultural area. Small rural red brick villages are the dominant settlement type. Like Feldon, the farmed landscape also retains many historic features such as remnants of medieval ridge and furrow, and associated deserted medieval village sites.

The High Cross Plateau is primarily an agricultural area and the most valuable habitats such as neutral grassland are associated with farmland. Streams, rivers and associated areas of marginal vegetation, unimproved meadow and alder/willow carr, as well as secondary woodland, are also important for wildlife.

The High Cross Plateau can be sub-divided into two different landscape types:

- Open Plateau
- Village Farmlands

Open Plateau

This is a remote, large-scale, open, rolling plateau dissected by broad valleys, characterised, for the most part, by wide views and a strong impression of "emptiness" and space. This is reinforced by an absence of roads and settlements, with sparsely populated hamlets and isolated manor farmsteads prevailing. In places there are extensive areas of largely inaccessible countryside, which relates closely to deserted medieval village sites. Field pattern is generally medium to large in scale but is often poorly defined and tends to be a relatively minor element in this landscape, as the eye is naturally drawn to distant skylines rather than to foreground views. In places, however, smaller fields may occur, often associated with pockets of permanent pasture, and ridge and furrow. Shelterbelts may also form prominent features in an otherwise open and featureless landscape.

Sensitivity – Fragility: Whilst the Open Plateau is a planned landscape, the cultural sensitivity varies with the central plateau summit having a more consistent pattern than the rest. Ecological fragility is low across the whole LCT.

Sensitivity – Visibility: The rolling topography gives rise to a moderate sensitivity, but on the plateau summit the more gently rolling landform, together with the presence of very distinctive shelterbelts, results in reduced visibility. The area between Harborough Magna, and Cosford, north of Newbold on Avon, has a high visual sensitivity due to lack of tree cover.

Overall sensitivity: Due to a combination of cultural coherence and rolling topography, the overall sensitivity is rated as moderate. This becomes high to the north of Newbold on Avon where the landscape is rolling but unwooded.

Condition: There is an extensive area to the north of Rugby whose condition is considered to be weak. To the north and west of Newbold on Avon, as too with land around Coton House, condition is strong. Elsewhere it is in decline.

Village Farmlands

This is a small scale, mainly pastoral, hedged landscape, closely associated with nucleated village settlements around the plateau fringe. The clusters of houses and farmsteads, narrow winding lanes, small-hedged fields, and in places, the undulating topography typically associated with small valleys, combine to create a varied, intimate landscape which contrasts strongly with the surrounding large scale Open Plateau. The farmed landscape is characterised by a semi-regular pattern of small fields, enclosed by thorn hedges. Where these are well managed they create a strong sense of scale and visual unity. Scattered hedgerow and roadside ash also emphasise this pattern. Permanent pasture is often associated with ridge and furrow, and field ponds, often fringed by trees and scrub, are also a feature in this landscape type.

Sensitivity – Fragility: Cultural sensitivity is moderate due to the coherent pattern which exists within this historic landscape. Ecological sensitivity is low since the area is intensively farmed.

Sensitivity – Visibility: Visibility is high due to the absence of woodland cover in this rolling landscape. Only at Monks Kirby are there small woods which reduce the visibility rating to moderate.

Overall sensitivity: Overall sensitivity is high except at Monks Kirby, due to high visibility and a coherent small-scale historic cultural pattern.

Mease Lowlands

The Mease Lowlands are a relatively low-lying, rolling, agricultural area lying largely outside Warwickshire. Only a small part of the northern-most tip of Rugby Borough falls within this area. The strongly nucleated settlement pattern is a particularly distinctive feature of this area. Estate Farmlands is the only landscape type occurring in Warwickshire.

Estate Farmlands

This is a well-ordered landscape characterised by: a gentle, rolling topography of low, rounded hills and valleys; a geometric pattern of large-hedged fields, characteristic of parliamentary enclosure; many small, regularly shaped game coverts associated with large country estates; large country houses often set in mature parkland; small hilltop villages often marked by a tall church spire; and a dense network of minor roads and lanes typically bordered by wide grass verges.

It is an intensively farmed arable landscape with permanent pasture largely restricted to small pockets around villages and along river corridors. Field pattern is generally intact but often poorly defined by low cut or gappy hedgerows. In places extensive removal of hedges has resulted in very large arable fields.

Sensitivity – Fragility: This is a planned landscape with a coherent pattern. It has a low cultural rating and a low ecological rating, resulting in a landscape of low fragility.

Sensitivity – Visibility: The area is low-lying with small woods, resulting in a low visibility rating.

Overall sensitivity: Fragility and visibility are both low giving rise to low overall sensitivity.

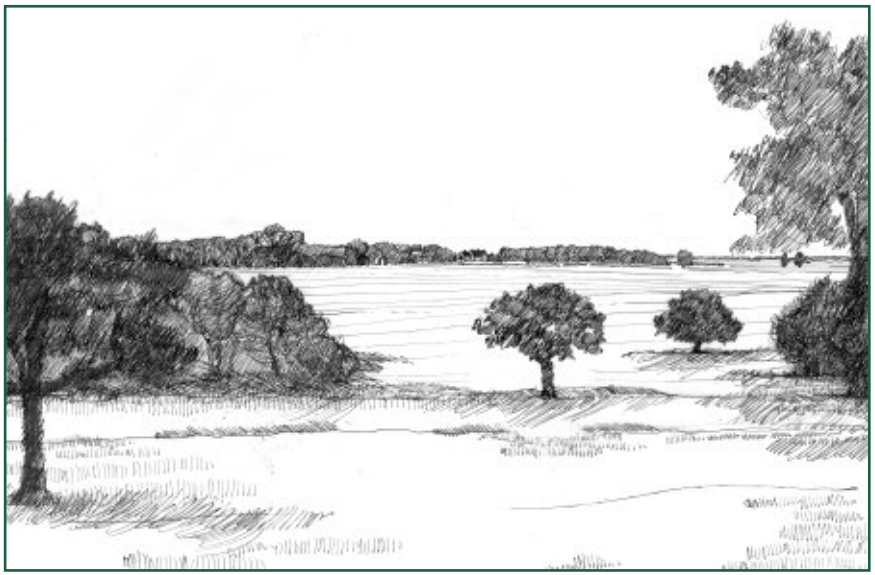
Conclusion

The methodology used in this report provides a structured and transparent means for using landscape character assessment in the development planning process. The information presented is primarily based on a desktop study supported by fieldwork undertaken during summer 2005. The study has drawn extensively on the work of the Living Landscapes Project, thus ensuring that the resulting GIS database and maps are fully compatible with the emerging West Midlands regional framework.

The study identifies the key characteristic features of the Landscape Character Types (LCTs) within Rugby Borough. It assesses the sensitivity of the Landscape Description Units (LDUs) within these LCTs, and looks more closely at the condition of the smaller Land Cover Parcels (LCPs) around Rugby's urban fringe. It is intended that this information will provide a useful tool for: future development planning; environmental protection; promoting effective land management; and making decisions on development control, mitigation, and enhancement measures.

The following patterns have emerged from the study:

- The north of Rugby is in a particularly weak condition.
- To the south of the town, the importance of the southern escarpment cannot be over-emphasised, being highly sensitive, and in strong condition.
- There are a number of sites of local significance around the urban fringe in a condition of decline, which would benefit from further protection and enhancement measures to ensure their long-term benefit to future generations. These would include; Hillmorton Locks, Newbold, Cosford, Newton, and the River Avon corridor.
- There are large areas to the east and west of the town whose condition is also in decline but which are in less sensitive locations.
- There is nowhere within the urban fringe that is of low sensitivity.



Glossary

Condition is a measure of how far removed a landscape is from its 'optimal' state, where all key characteristics are present and functional. Condition can change as a result of external factors, such as land use change, agricultural intensification or neglect. For example, redundant and gappy hedgerows should be regarded as an indicator of poor condition rather than as an inherent characteristic.

Landscape Character Area (LCA) – (regional scale, e.g. Arden, Feldon) - a large tract of countryside, often many hundred sq. km. in extent, where common physical, historical and ecological associations impart a sense of unity to the landscape.

Landscape Character Type (LCT) – (county/district scale, e.g. Plateau Fringe) - tracts of countryside where particular combinations of landform and land cover elements impart a sense of unity to the landscape.

Landscape Description Unit (LDU) – a discrete tract of land defined by a distinct pattern of physical, biological and cultural attributes.

Land Cover Parcel (LCP) was originally defined by the Warwickshire Landscapes Project as a discrete area of land 'bounded by roads, railways, water courses and parish boundaries', where similar patterns of land use, field pattern and tree cover were evident. In line with Countryside Agency Guidance, LCPs now take account of the wider landscape setting and sit within the parameters of the Landscape Description Units. They may also therefore follow a break in slope.

Landscape Sensitivity is a measure of the degree to which the countryside can accept change without causing irreparable, long-term damage to the essential character and fabric of the landscape – the term 'change' being used in this context to refer both to potentially beneficial change, such as new woodland planting, as well as change brought about by new development.