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Land south west of Hitchin:

Landscape sensitivity study

Final report to North Hertfordshire District Council Prepared by LUC December 2012 **Project Title**: Landscape Sensitivity Study for the land south west of Hitchin

Client: North Hertfordshire District Council

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Acknowledgements:

This study was steered by a team of officers from North Hertfordshire District Council – Helen Leitch, Louise Symes and Richard Kelly. The study was undertaken by Land Use Consultants (LUC) in conjunction with the steering group. LUC's team comprised Kate Ahern (Principal), Andrew Tempany (Project Manager), Kate Anderson and Victoria Goosen.

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1 Introduction

Context and Scope

Background

1.1 Land Use Consultants (LUC) was commissioned in November 2012 by North Hertfordshire District Council (NHDC) to undertake a landscape sensitivity analysis study for an area covering land south west of Hitchin. The study area is shown at **Figure 1.1** below.

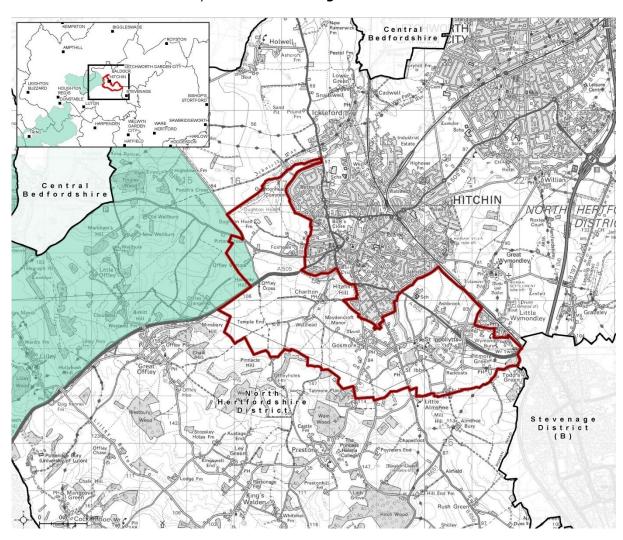


Figure 1.1: Study area location and context

1.2 This study will provide background information in relation to the Local Plan currently being prepared and to inform future development within North Hertfordshire.

Site location and context

- 1.3 Hitchin is a market town located in the south east of England, approximately 25 miles north of London. Predominantly rural in land use its landscape setting is characterised by open rolling chalk farmland. The Chilterns AONB lies approximately 1km to the west of Hitchin, with a small portion of the designated landscape falling within the study area.
- 1.4 The study area covers an area of Green Belt land of approximately 12km² located immediately to the south west of Hitchin. Settlements within the study area include Little Wymondley, St Ippolyts and Gosmore to the south of Hitchin and the village of Charlton to the south west.
- 1.5 The study area comprises a varied rural landscape encompassing part of the chalk river valley of the Oughton, a small part of the Chilterns AONB outlier, a varied chalk landscape of dry valleys associated with the River Hiz and its source at the Langley Valley, plus chalk grassland, woodland, arable cultivation and several vernacular settlements, notably Little Wymondley, Charlton and St Ippolyts. Further information on landscape character is provided in **section 3**.

Key study objectives

- 1.6 Key objectives of this study are as follows:
 - To assess the sensitivity of the landscape of the study area to large scale residential development, and to provide sensitivity judgments, to inform future spatial planning and preferred options within the Local Plan;
 - To provide guidance to focus change in the most positive terms, for parts of the study area which are judged to have lower landscape sensitivity to the change proposed.

Summary of existing landscape studies

- 1.7 The baseline for this study is formed by the landscape classification in the North Hertfordshire District and Stevenage Landscape Character Assessment (LCA). This detailed district wide LCA provides a suite of strategic landscape design and management guidance. The North Hertfordshire and Stevenage Landscape Character Assessment provides a good basis for the study, with some sub divisions defined to reflect the more local scale of this study.
- 1.8 In addition, account has also been taken of two earlier landscape sensitivity studies:
 - North Hertfordshire Sensitivity Study, The Landscape Partnership, 2011 (a strategic study undertaken to understand inherent sensitivities of the district character areas)
 - Landscape Sensitivity and Capacity Study, NHDC, 2006 (this looked at small land parcels around the periphery of Hitchin)
- 1.9 Reference has also been made to the North Hertfordshire District Green Infrastructure (GI) Plan (LUC, 2009) in developing landscape guidance and recommendations, in this study.

2 Methodology

- 2.1 This sets out the method used in undertaking the study. The key stages were as follows:
 - · Desk study and data review
 - Landscape classification
 - · Criteria definition
 - Field survey
 - Sensitivity analysis
 - Landscape guidance

Desk study and data review

- 2.2 This involved review of the earlier landscape sensitivity study developed by NHDC for parts of the Hitchin urban/ rural fringe and the landscape character context for the study area (the latter presented in **section 3**), to focus both method development and an understanding of landscape issues to inform selection of sensitivity criteria to test through fieldwork. The key data used is:
 - NHDC, 2006 Landscape Sensitivity and Capacity Study for edge of settlement in North Hertfordshire
 - NHDC, 2011, North Hertfordshire Landscape Study (Character, Sensitivity and Capacity), [based on the original Landscape Character Assessment of North Hertfordshire and Stevenage by Babtie, 2004 and the Landscape Sensitivity and Capacity work by The Landscape Partnership, 2011]
 - LUC, 2009, North Hertfordshire District Green Infrastructure Plan
 - Chilterns Conservation Board, Chilterns AONB Management Plan 2008-2013
 - Relevant saved Local Plan policies from the North Hertfordshire District Local Plan

Landscape classification

2.3 The existing district landscape character areas were sub divided into smaller scale landscape units for the purposes of the study (presented at **section 4**). Sub divisions were made after reviewing a variety of GIS data, such as Historic Landscape Characterisation (HLC), heritage designations and the nature conservation context of the study area, and tested in the field.

Criteria definition

- 2.4 With reference to the work previously undertaken by LUC on behalf of Landscape East in developing a Regional Landscape Sensitivity Method, and to the North Hertfordshire District Landscape Character Assessment, a series of criteria have been defined to focus the analysis. These have also been informed by our knowledge of the area through the Green Infrastructure Plan and the earlier landscape sensitivity work at Stevenage North. The criteria are presented, with explanation, in three separate sections, below. These are:
 - Analysis criteria identifying landscape attributes.
 - · Development model for the analysis.

• Landscape sensitivity scale and definitions.

Analysis criteria – identifying landscape attributes

2.5 The following landscape attributes have been used to assess sensitivity to residential development:

Representation of special qualities of the Chilterns AONB

2.6 Landscapes with a higher level of representation of the special qualities of the AONB or which are more intact/ comparable in this regard will have the highest sensitivity. Special qualities of the AONB are identified at **section 3**. This criterion has been considered only for landscape units which include part of the AONB or which are within 1km of the protected landscape and therefore influenced by it visually/in character terms.

Landscape scale

2.7 Whether human scale elements (e.g. built form and settlement, small scale landscape features, structure and pattern) are present within the landscape. Landscapes of large scale without a human scale presence generally have a higher sensitivity to residential development.

Landform and topography

2.8 Presence or absence of landform variation. For example, whilst rolling/undulating landforms may be more able to contain visual impact of development, they would have a higher sensitivity to residential development in landscape terms than flat landforms or those with comparatively little topographic variation.

Landscape pattern, complexity

2.9 Level of landscape structure and field pattern variation. For example a landscape comprising a complex array of different habitats and/or land cover features such as ancient woodland, or presence of key habitats will have a higher sensitivity to residential development than will a simple landscape.

Cultural pattern and time depth

2.10 Indicators include aspects of the historic landscape/historic environment, such as parkland, historic processes which have shaped the landscape, and scheduled monuments and their setting. A landscape with a strong sense of 'time depth' (historic continuity) and intact cultural pattern will have a higher sensitivity to residential development than a landscape where cultural pattern is eroded or comparatively absent.

Settlement pattern

2.11 Consideration of settlement form, density and age/vernacular, and existing settlement edge character. Landscapes of 'unsettled' character or those displaying a small scale and traditional settlement character (e.g. nucleated or dispersed) will have a higher sensitivity to residential development than will landscapes characterised by modern settlement and settlement 'edge' influences.

Skyline character

2.12 Skylines defined by distinctive landforms, woodland or a lack of development will be more sensitive to residential development than those which are characterised by development.

Experiential qualities

2.13 These include movement, tranquillity, sense of remoteness and aesthetic attributes such as interplay of colour, texture, light and reflection. Landscapes with a higher degree of remoteness and tranquillity will have a higher sensitivity to residential development.

Visual and intervisibility

2.14 This includes consideration of identified vantage points from the AONB and intervisibility with the protected landscape, as well as key views, visual relationships and intervisibilities within and across the landscape units.

Development model used to inform the analysis

- 2.15 The form of development being assessed for the purposes of this study is a possible urban extension to Hitchin. Whilst the work has considered large scale residential development in a more general sense (in the context of medium to high density residential development) for the purpose of assessing landscape sensitivity, the following model has informed thinking and the production of supporting guidance to focus change:
 - Medium to high density scenario of 2-2.5 storey dwellings arranged at a net density range of 30-40 dwellings per hectare.
- 2.16 Account has also been taken of supporting infrastructure likely to be required in the delivery of future development options e.g. a dual carriageway grade bypass and supporting infrastructure such as neighbourhood centre. The indicative route for the bypass road submitted by a promoter to NHDC (November 2012, and which has informed this assessment) is shown on **Figure 2.1** below. This is not a precise alignment for the road and further detailed work would be required before establishing the route were it to go ahead.

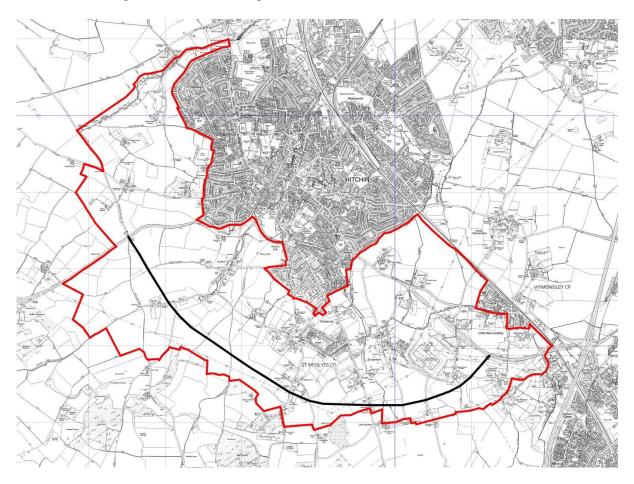


Figure 2.1: Indicative bypass road alignment (source: sketch plan submitted by promoter to NHDC)

Landscape sensitivity scale and definitions

2.17 The following 5 point sensitivity scale was developed and applied to the landscape units in relation to the landscape attributes.

Landscape sensitivity scale

Sensitivity level	Definition
High	Key characteristics of the landscape are highly vulnerable to the type of change being assessed, with such change likely to result in a significant change in character.
Moderate- high	Many of the key landscape characteristics are vulnerable to the type of change being assessed, with such change likely to result in a potentially significant change in character. Considerable care will be needed in locating and designing change within the landscape.
Moderate	Some of the key characteristics of the landscape may be vulnerable to the type of change being assessed. Although the landscape may have some ability to absorb change, some alteration in character may result. Considerable care may be needed in locating and designing change within the landscape.
Moderate- low	The majority of the landscape characteristics are less likely to be adversely affected by change. Although change can potentially be more easily accommodated, care would still be needed in locating and designing change in the landscape. There is an opportunity to create and plan/ design for new character.
Low	Key characteristics of the landscape are less likely to be adversely affected by change. Change can potentially be more easily accommodated without significantly altering character. Sensitive design would still be needed in relation to accommodating change in the landscape. There is an opportunity to create and plan/ design for new character.

Field survey

2.18 The landscape attributes of the local landscape units, and their sensitivities to the development model, were tested through field survey and recorded on a survey form (survey form template is shown at **Appendix 1**). The site was visited in November 2012 by qualified and experienced Landscape Architects including a Chartered Member of the Landscape Institute (CMLI). Field survey was undertaken from public vantage points, rights of way and public highways within and in the vicinity of the study area, supported by photographs and map annotations, as appropriate.

Sensitivity analysis

2.19 With reference to the analysis criteria and 5 point sensitivity scale defined above, an overall landscape sensitivity judgement was defined for each landscape unit, supported by colour coded GIS mapping. The judgement included a narrative of what is sensitive, and why, to help inform guidance.

A note on the baseline for the sensitivity analysis

2.20 Given that the detailed form and density of proposed development within the area is still largely unknown and cannot be predicted until more detailed spatial proposals emerge, the baseline for the assessment has been taken as conditions on site in November 2012.

Landscape guidance

2.21 The overall sensitivity judgement was used to identify whether development can be accommodated in the landscape units, and to develop landscape guidance to focus change in ways which respond to landscape character – identification of important and sensitive landscape features which would act as constraints to development.

Notes on scale and relationship to previous studies

- 2.22 This study has been undertaken at a scale of 1:10,000 and within the existing framework set by the District LCA. It understands the sensitivity of the landscape and the attributes which make up that landscape, to a specific form of change (residential and mixed use development), as opposed to the strategic sensitivity analysis undertaken in the character area level study by The Landscape Partnership, which identified inherent or general landscape sensitivities. Therefore different judgements are reflective both of study scale and the fact that landscape attributes have specific sensitivities and levels of sensitivity vary with specific/defined change scenarios.
- 2.23 Account has also been taken of the findings of the earlier settlement fringe landscape sensitivity analysis by North Hertfordshire District Council, in developing this study.

3 Study area: Landscape and Environmental Context

3.1 This section sets out the landscape context of the study area in terms of landscape character and relevant environmental designations. In respect of landscape character, relevant information in relation to biodiversity and cultural pattern has been included, insofar as this relates to character.

Landscape Character

3.2 This summarises national and local (district) landscape character context. Landscape character context is shown at **Figure 3.1**.

National character context

3.3 The study area lies within National Character Area (NCA) 110: Chilterns. The key characteristics relevant to the study areas are as follows:

NCA 110: Chilterns

- 3.4 A landscape defined by chalk hills and plateaux with prominent scarp topography in many places and extensive dip slopes and numerous dry chalk valleys. Chalk downlands are a feature of the escarpment and valley sides as are beech dominated hanging woodlands. Dry valleys and chalk river valleys often have an intimate character, in contrast to open, expansive plateau tops, which often have extensive areas of semi open common land.
- 3.5 This is a farmed landscape defined often by small fields and a dense patchwork of hedgerows and small farm woodlands. The landscape is cut by a network of rural lanes and ancient green lanes and trackways/droving roads which link many settlements and archaeological features. Settlement is often defined by scattered medieval and later vernacular villages and farmsteads, with grand country houses and parklands also featuring, often prominently located on valley sides.
- 3.6 In addition a very small part of the East Anglian Chalk NCA extends into the easternmost tip of the study area, although this is heavily influenced by the A602 corridor at this point.

Local landscape character

- 3.7 The North Hertfordshire and Stevenage Landscape Character Assessment has been used as a source of baseline information on the landscape character of the study area. The landscape character areas within the study area are as follows:
 - LCA 214: Langley Valley
 - LCA 215: Wymondley and Titmore Green
 - LCA 216:Arlesey- Great Wymondley
 - LCA 217: River Oughton and Purwell Valleys
- 3.8 The following summary descriptions highlight the key aspects of the character of the local landscape.

LCA 214: Langley Valley

3.9 This area is defined by a rolling chalk landform. Large scale arable farming dominates, with smaller areas of grazing on the steeper chalk slopes south of Hitchin. A landscape of relatively

- little woodland cover, with plantations concentrated in the north on more pronounced areas of chalk landscape.
- 3.10 Minor parklands feature, as at Gosmore. Other distinctive features are the A505 dual carriageway which bisects the area, plus the Langley Valley airfield and scrapyard.

LCA 215: Wymondley and Titmore Green

3.11 This is a rolling chalk landscape, often of intimate scale, with a historic settlement pattern linked by winding lanes, in close proximity to strategic transport corridors such as the A1(M) and A602. A settled character is created by small scattered hamlets and farmsteads often using traditional vernacular materials.

Area 216 Arlesey-Great Wymondley

- 3.12 This is a rolling arable landscape characterised by large scale fields with occasional scattered plantations and copses. It covers an area surrounding Letchworth Garden City and forms the setting to the east of Hitchin.
- 3.13 Pockets of horse grazing and other 'edge' influences such as golf courses and caravan parks can be found on the settlement edges. The presence of the A1(M) to the east is strong as are pylon lines to the south. The character area is crossed by several 'A' roads linking settlements, which creates a strong sense of movement and activity.
- 3.14 This character area has a sparse covering of recorded nature conservation sites.

LCA 217: River Oughton and Purwell Valleys

- 3.15 Key features of this area are grazed water meadows and meandering water courses with associated ponds and water bodies. Linear woodland belts are distinctive, following the line of the water course.
- 3.16 Other distinctive aspects of this area are nature reserves at Oughtonhead Common and Purwell Mill, public parkland at Ickleford and the embanked mainline railway corridor.

Designated landscape interests - The Chilterns AONB

- 3.17 The Chilterns Area of Outstanding Natural Beauty (AONB) was nationally designated on account of its scenic quality in 1965. It comprises a large part of the Chiltern Hills escarpment extending from the Thames near Wallingford up to Luton, and the 'outlier' which falls between Luton and the land to the west of Hitchin. A small part of this outlier falls within the study area.
- 3.18 A number of special qualities underpin the designation of the Chilterns AONB, as referenced in the AONB Management Planⁱ. Many of these relate directly to landscape character and experience (and have therefore been referenced in appropriate areas within the sensitivity analysis). Key special qualities of the Chilterns AONB are listed below.
 - Steep chalk escarpment with areas of flower-rich downland
 - Woodlands
 - Commons
 - Tranquil valleys
 - · Chalk streams
 - The network of ancient routes
 - · Villages with brick and flint houses
 - A rich historic environment of hill forts and chalk figures

Green infrastructure

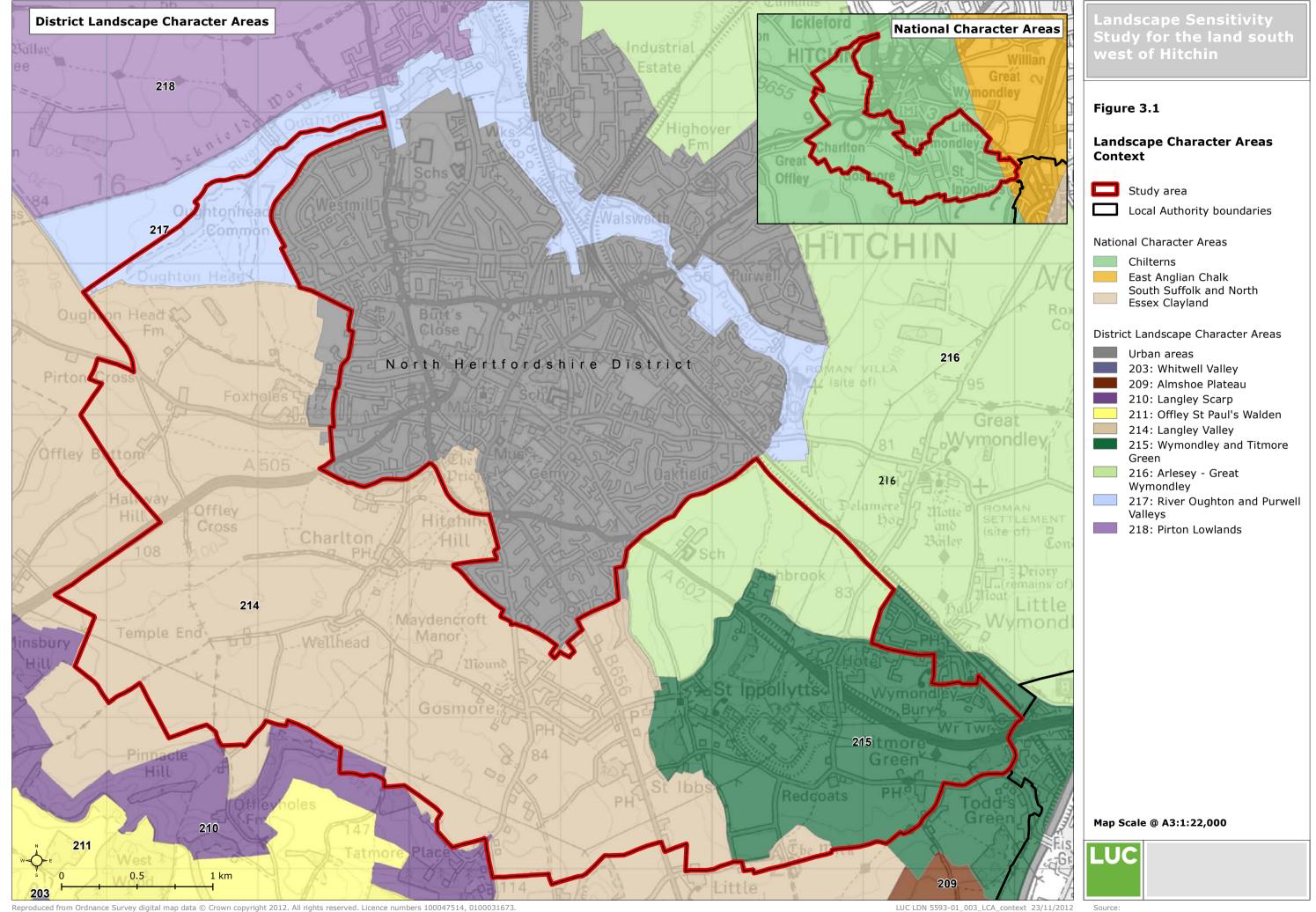
- 3.19 The North Hertfordshire District Green Infrastructure Plan (GI Plan) identifies a number of characteristics, opportunities and principles for green infrastructure in and around Hitchin's urbanrural fringe. Relevant points noted in the GI Plan are summarised below:
 - The importance of the AONB and its close proximity to the town, seeking to conserve characteristic landscape features both within the AONB and comparable elements in landscapes beyond it
 - Tranquil character of the river valleys such as the Oughton, Purwell and Hiz
 - Conservation of views to and from the Oughton Valley, plus conservation of the wooded skyline along the Hiz at Hitchin Hill
 - Retention of the green gap at Priory Park and which extends into the wider landscape to the
 west
 - The role of the town's surrounding landscape as a green gap, providing separation with outlying settlements
 - The importance of the sunken lane and hedgebank network
- 3.20 The GI Plan makes reference to the value of existing woodlands in terms of shading and cooling and enhancing habitat connectivity.
- 3.21 The GI Plan identifies the potential implications of climate change for the structural landscape palette, and that this may be accommodated through a broader native planting palette in future landscape proposals and green spaces associated with development.
- 3.22 Relevant potential projects identified in the Green Infrastructure Plan are:
 - A new River Valley Park and co-ordinated programme of wetland enhancement including the minor rivers and tributary network (River Hiz and Ippolyts Brook) to the south and west of the town, within the landscape sensitivity study area.
 - Green wedge at Priory Park
 - River Hiz Valley Greenway (linking into and referencing the historic aspiration to have an access route in the urban parts of the valley, cf the earlier Hiz Valley access project produced by North Hertfordshire District Councilⁱⁱ).

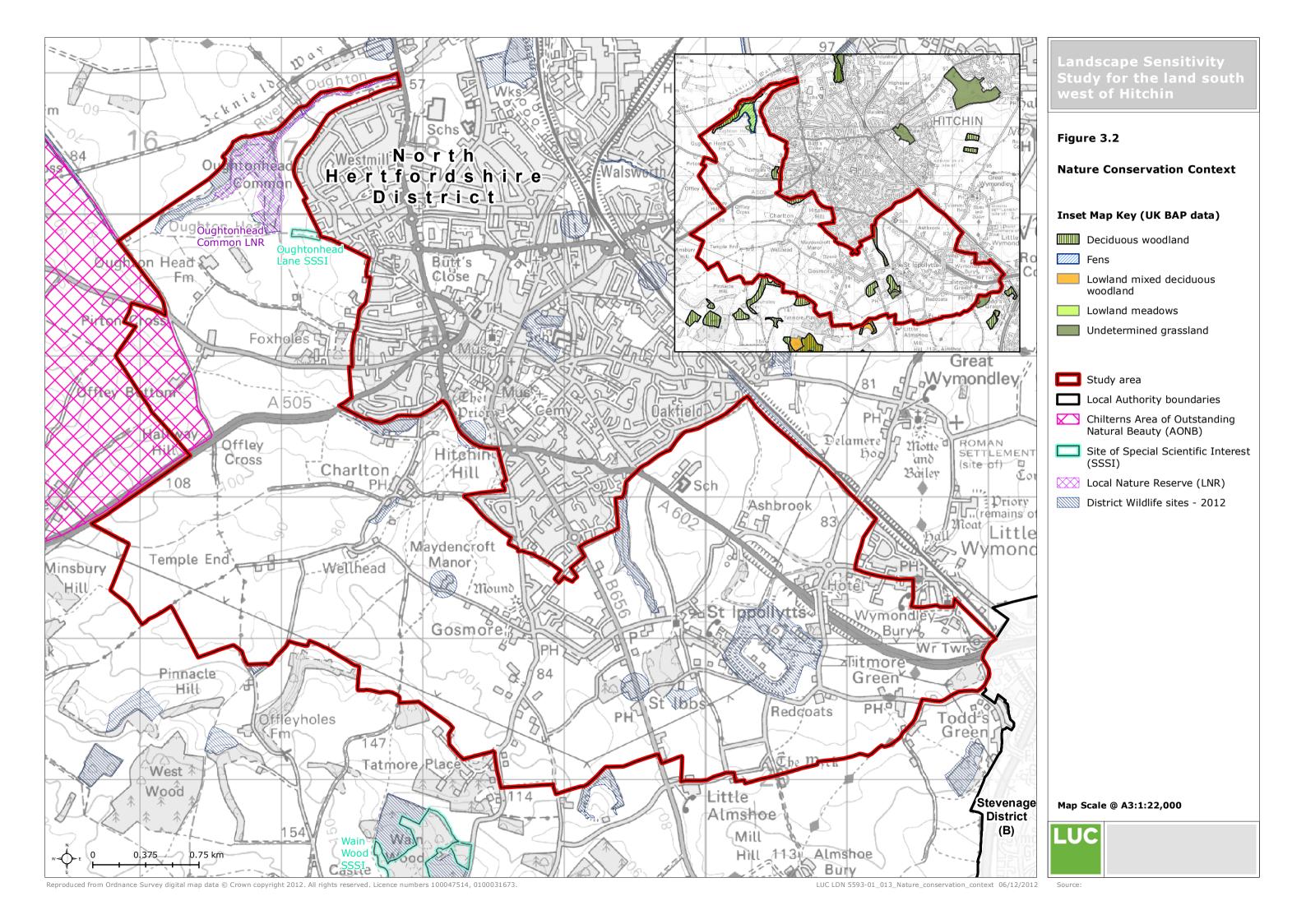
Nature conservation designations

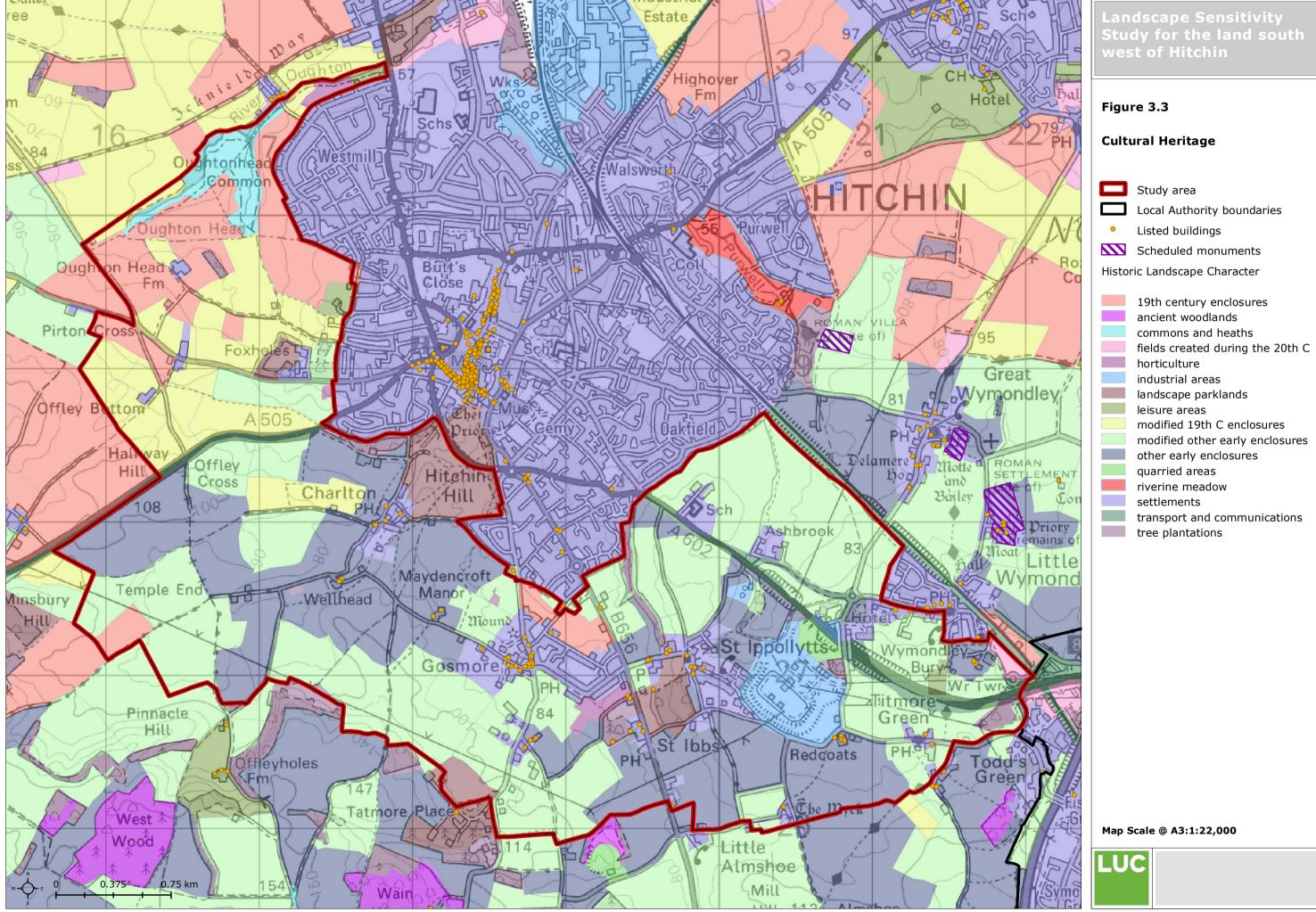
3.23 Several sites within the study area are designated for nature conservation value at a local level (District Wildlife Sites). These are notably the Oughton Valley (also a Local Nature Reserve), part of Priory Park, parts of the Hiz Valley and woodland sites such as around Wymondley Transformer Station and alongside the railway corridor. Nature conservation designations are shown on **Figure 3.2**.

Cultural heritage

3.24 The Priory at Little Wymondley is designated as a Scheduled (Ancient) Monument, although this is just north of the study area, and no such heritage designations cover the study area itself. A number of the village cores within the study area are designated as Conservation Areas, notably Charlton, Gosmore and St Ippolyts. The cultural heritage context and historic landscape character types from the Hertfordshire Historic Landscape Characterisation (HLC) are shown on **Figure 3.3**.

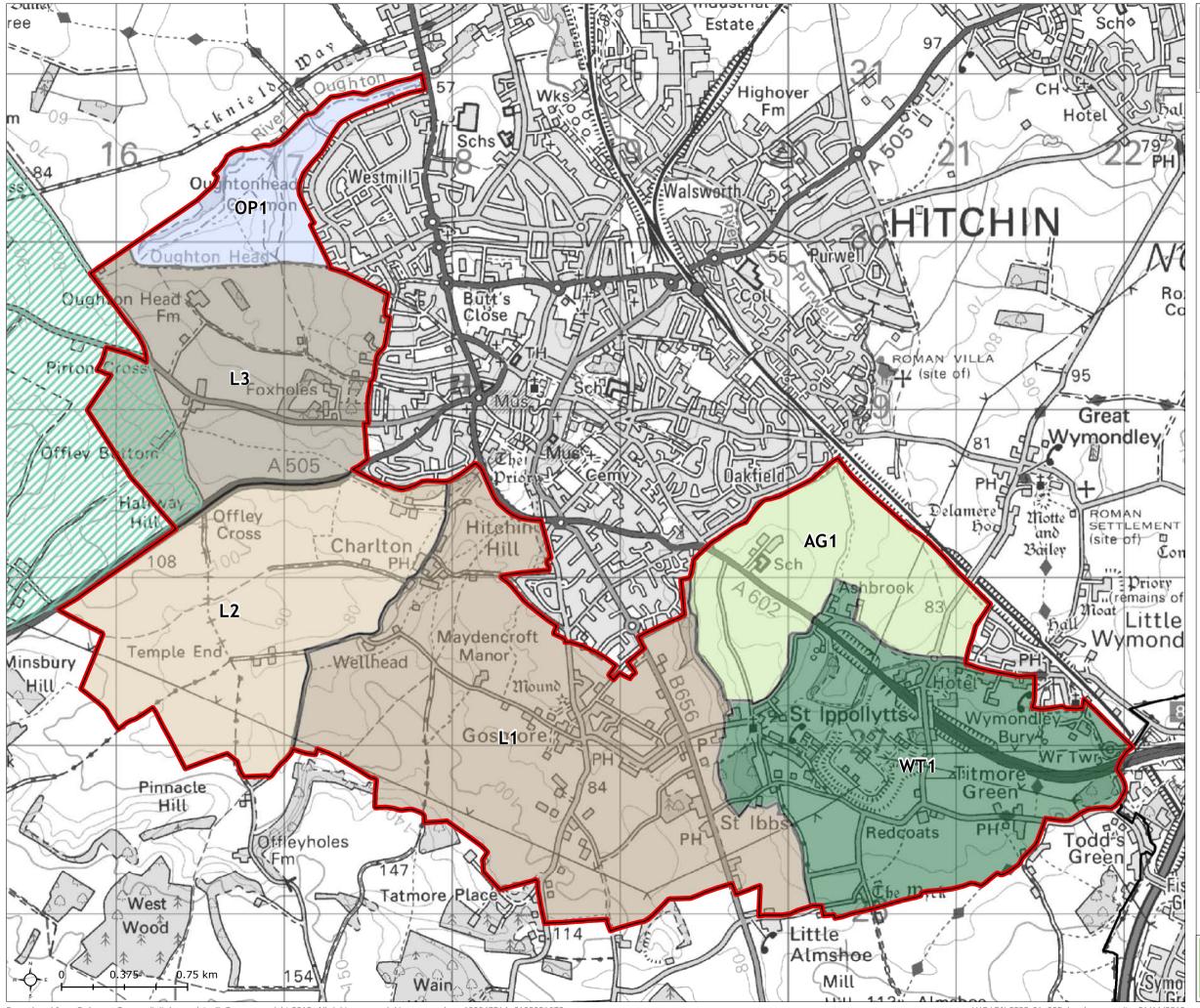






4 Sensitivity Analysis and Guidance

- 4.1 This section sets out the sensitivity analysis for each landscape unit. The sensitivity analysis has applied the criteria presented at **section 2**, together with the 5 point sensitivity scale. The sensitivity analysis has been undertaken with reference to medium to high net density (30-40 dwellings per hectare), large scale residential development. On peripheries a lower density of 20dph could be considered where appropriate as part of any mitigation, and this is identified where relevant in the sensitivity analysis. Account has also been taken of this in a separate paper concerning development viability in landscape terms, in relation to the study area. Consideration has also been given to potential supporting infrastructure proposals where relevant, such as community infrastructure and a potential bypass (dual carriageway) which is being considered to serve any potential future development.
- 4.2 For the purposes of this study, the district landscape character areas have been used, with the large Area 214: Langley Valley sub-divided into a number of smaller units based on common landscape patterns and characteristics observed in the field. The landscape units used for the analysis are shown on **Figure 4.1** overleaf.
- 4.3 The sensitivity analysis has been undertaken at a scale of 1:10,000 and is appropriate for use at that scale.
- 4.4 The local landscape units are identified below. The alpha numeric codes for each unit have been derived from the names of the wider district character areas in which they fall e.g. AG refers to Arlesey-Great Wymondley. Where there is more than one unit in the sequence, e.g. sub-divisions of Langley Valley, these have been numbered consecutively L1-L3 for example.
 - AG1: A sub area of LCA 216 Arlesey-Great Wymondley
 - WT1: A sub area of LCA 215 Wymondley and Titmore Green
 - L1: The southern part of LCA 214 Langley Valley within the study area including Gosmore Village and Priory Park
 - L2: A sub area of LCA 214 Langley Valley, north of the River Hiz
 - L3: A sub area of LCA 214 Langley Valley, north of the A505 and including a small part of the Chilterns AONB to the west
 - OP1: A sub area of LCA 217 River Oughton and Purwell Valleys
- 4.5 The findings are presented in the remainder of this section. Supporting mapping in relation to the sensitivity analysis is shown on **Figure 4.2**, at the end of this section. Summaries and conclusions as to the study's findings are presented at **section 5**.



andscape Sensitivity

Figure 4.1

Landscape Units for Analysis

Study area

Local Authority boundaries

Chilterns Area of Outstanding Natural Beauty (AONB)

Map Scale @ A3:1:22,000

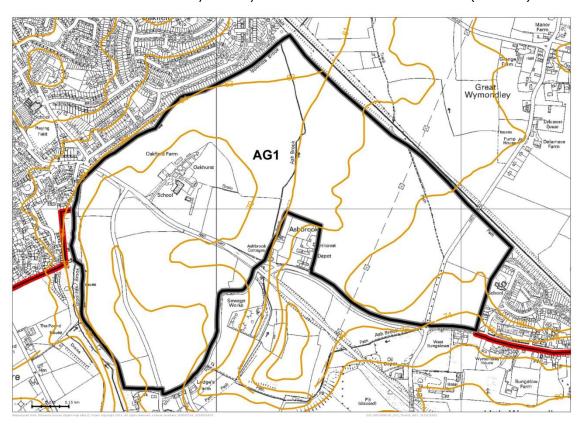


Landscape character unit: AG1

Baseline

Location

4.6 This forms the westernmost extent of wider district LCA 216 – Arlesey-Great Wymondley. The unit is bounded to the north by the railway line, to the east by the edge of Little Wymondley, to the west by the settlement edge of Hitchin and to the south by the adjacent landscape unit WT1, a subset of the wider district Wymondley and Titmore Green character area (LCA 215).



LCA context

National

Area 110: Chilterns. Chalk hills and plateaux with remnant chalk downland and extensive areas of beech hanger woodland. Cut by a network of valleys whose intimacy contrasts with the expansive and open plateaux. Scattered settlements and farmsteads, some of which are of ancient and medieval origin.

Local (District)

Area 216: Arlesey-Great Wymondley. Relevant key characteristics are given below.

Summary description from North Hertfordshire District LCA

- 4.7 The district character area is one of two distinct parts: Large flat expansive arable landscape in the north, and a rolling arable landscape of large scale fields and with relatively few trees in the south. The core of the area is defined by the urban development of Letchworth and Hitchin.
- 4.8 The North Hertfordshire District Landscape Sensitivity and Capacity Study identifies the character area to be of low inherent landscape sensitivity, due to the significant urban influence and presence of detracting landscape elements. The study also identifies the character area to have a low-moderate visual sensitivity, due in part to relatively open views which would be vulnerable to introduction of further urbanising features.

Policy context and designations; relationship to designated landscape interests

4.9 There are no designated landscapes within the part of the character area covered by the landscape unit. The woodland to the railway line in the north of the landscape unit is a District Wildlife Site.

Landscape functions

4.10 Key functions of this area are the gap it provides between Hitchin, Stevenage and Little Wymondley. It also forms part of the rural setting of the village of Little Wymondley. Its other key function is that of productive arable agriculture.

Sensitivity analysis

Criteria	Comment	
Landscape		
Special qualities of the Chilterns AONB	Not applicable to this area.	
Landscape scale	This landscape has a number of human scale elements, in the form of traditional, small scale vernacular settlement at Little Wymondley and the northern edge of the village of St Ippolyts. Such human scale indicators reduce sensitivity to residential and mixed use development.	
	A relatively intimate spatial scale is created by topographic and landform variation.	
	A sense of enclosure is created by a partly eroded field boundary hedgerow network, with evidence of field boundary loss due to agricultural intensification.	
Landform and topography	A rolling chalk landscape with a notable degree of local landform variation. Topography is subtle, with landform heights varying from around 60-70m AOD from north to south, although the rounded undulating landforms are distinctive. They make an important contribution to the landscape experience and to the level of visual containment in this area. The level of landform variation would be sensitive, in landscape terms, to large scale residential and mixed use development.	

Criteria	Comment
Landscape pattern and complexity	Key aspects of the landscape pattern in this unit are the rural road and lane network which traverses the area. This is lined with dense, well managed hedgerows with mature hedgerow oaks in the western part of the area around Oakhurst, and dense deciduous woodland (UK BAP habitat) along part of the western boundary, although the enclosure pattern is more fragmented elsewhere. A small tributary of the River Purwell (the Ippolyts Brook) lines the western boundary of the landscape unit. Other aspects of the landscape pattern are farmsteads such as Oakfield Farm, Kingshott School, a small cluster of 20 th century cottages at Ashbrook, and the western settlement edge at Little Wymondley, which is mostly of 20 th century date. The dispersed vernacular settlement of St Ippolyts forms part of the southern boundary with the adjacent LCA 215.
	The pattern created by the rural road and enclosure network would be sensitive to residential development, particularly the more intact areas of the landscape and hydrological pattern in the western part of the landscape unit. However, sensitivity to a low density and dispersed development model (15-20 dph) which fitted within this landscape pattern, would be lower.
Cultural pattern and time depth	Key elements are the farmstead at Oakfield Farm, and the historic rural lane network, which includes sunken lanes and relict hedgebanks in places. Such features would be sensitive to residential and mixed use development.
	The Historic Landscape Characterisation (HLC) identifies large parts of the area to be of 'unconfirmed' status, although there are small pockets of 19 th century enclosure near Oakfields Farm and contained areas of settlement e.g. the 20 th century cottages at Ashbrook.
Settlement and human influences	The southern edge of Hitchin which forms the western boundary of the unit is well wooded, as is the low railway embankment which forms the northern boundary. Other key elements of the settlement pattern are farmsteads such as Oakfield Farm, Kingshott School, a small cluster of 20 th century cottages at Ashbrook and the western settlement edge at Little Wymondley, which is mostly of 20 th century date. The dispersed vernacular settlement of St Ippolyts forms part of the southern boundary with the adjacent LCA 215.
	The small scale settlement character and the sense of separation the individual settlements have from one another, would be sensitive to residential and mixed use development, as would the well-integrated settlement edge of Hitchin.
Skyline character	Skylines are defined predominantly by chalk landforms and interlaced field boundary hedgerows, as well as by the semi wooded railway corridor. With the exception of areas of compact or dispersed settlement (Little Wymondley and St Ippolyts respectively), skylines are largely undeveloped, although the pylon line is apparent to the east. Skylines would therefore be sensitive to the introduction of further residential/mixed use development.

AG1

Criteria	Comment
Perceptual/experiential qualities (colour/texture/light/reflection, movement, tranquillity, remoteness)	A seasonally colourful landscape (due to arable cropping, field boundary hedgerows, different types and forms of settlement). Field boundaries and the Ippolyts Brook create further textural variation. Although lightly settled, a number of intrusions affect the tranquillity of this landscape unit, such as the busy A602 in the southern part of the area and the railway corridor in the north. These reduce the sensitivity of this landscape in perceptual terms.
Visual	
Visual relationships and views (including key vantage points from designated landscapes)	Views are often confined due to topographic variation and partly framed/filtered by variable field boundary vegetation. This level of containment decreases sensitivity in visual terms.
Level of intervisibility: - With AONB – N/A - With other landscape character areas	Due to landform variation and intervening vegetation, plus the presence of features such as the railway and the tree lined A602 corridor, this landscape unit has very little intervisibility with adjacent landscape units/character areas – low sensitivity in visual terms.
Overall landscape sensitivity	Overall landscape sensitivity to residential and mixed use development is judged to be moderate . Whilst elements such as landform variation within the landscape unit would be sensitive, other aspects such as intrusions created by transport infrastructure and the degree of visual containment, reduce landscape sensitivity. However the western most part of the area, around Oakhurst and Oakfield, would have a higher (moderate-high) landscape sensitivity rating, due to the more intact landscape structure, which does however provide a greater degree of visual containment. It is also recognised that the function the landscape unit serves as part of the gap between Hitchin, Stevenage and the Wymondleys is highly important, as is the well-integrated settlement edge to Hitchin. Small scale, dispersed low density development could potentially be accommodated within the landscape pattern, although careful consideration would be needed in relation to the sense of separation between settlements.

Landscape guidance and recommendations

4.11 Key recommendations for this landscape unit are:

- The north western part of the area is most sensitive in terms of the distribution of landscape features and its local green infrastructure value, and consequently has limited ability to accommodate anything above small scale development which is visually contained within the landscape framework. The Ippolyts Brook and adjoining landscape features should be conserved as part of the local GI network.
- The western edge of Little Wymondley, up to Arch Road has the potential to accommodate a small amount of development with additional native landscape screening and hedgerow reinforcement to provide landscape connectivity and visual assimilation.

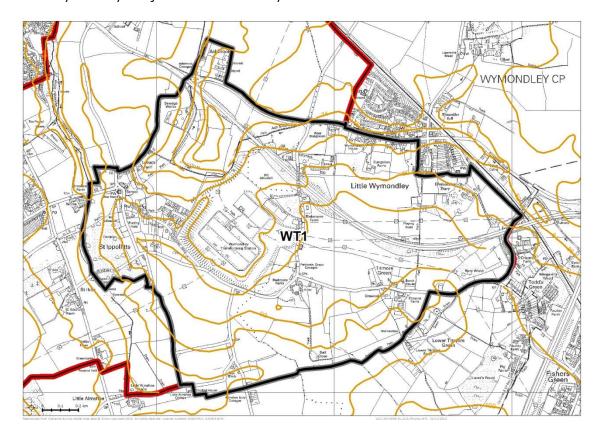
 As such only a small scale quantum of development could be accommodated in this area in landscape terms. The mostly undeveloped skylines (chalk landforms and field vegetation) should be avoided to maintain the sense of a landscape and visual gap between the settlements (the ridge which falls away from St Ippolyts to the south is important in this regard).

Landscape character unit: WT1

Baseline

Location

4.12 This unit is located to the south east of Hitchin, almost extending as far as the local authority boundary to the north west of Stevenage Borough. The boundary of the wider LCA is defined at its south eastern extent by the A1 (M) though the study area stops short of this, north of Lower Titmore Green. The unit is defined at its northern extent by Stevenage Road and Ashbrook Lane, and includes the historic vernacular settlement of St Ippolyts in the west. The historic village of Little Wymondley lies just outside the study area to the north.



LCA context

National

Area 110: Chilterns. Chalk hills and plateaux with remnant chalk downland and extensive areas of beech hanger woodland. Cut by a network of valleys whose intimacy contrasts with the expansive and open plateaux. Scattered settlements and farmsteads, some of which are of ancient and medieval origin.

Local (District)

Area 216: Arlesey-Great Wymondley. Relevant key characteristics are given below.

Summary description from North Hertfordshire District LCA

- 4.13 At the district character area level, this is a relatively small scale landscape with rolling chalk landforms and irregular sized fields and historic pattern of small winding lanes and mature enclosed character. Settlement pattern is defined by small villages such as St Ippolyts and scattered farmsteads. Land cover is mixed arable and grazing, with a high proportion of tree cover.
- 4.14 The North Hertfordshire District Landscape Sensitivity and Capacity Study identifies the character area to be of low to moderate inherent landscape sensitivity, due the small scale rolling landform and its historic and mature farmland character having been degraded by infrastructure and the electricity transformer station. The study also identifies the character area to have a low visual sensitivity, due to the presence of infrastructure and the electricity transformer station, though in reality these are well screened and not readily perceptible in the landscape.

Policy context and designations; relationship to designated landscape interests

4.15 No designated landscapes fall within the part of the character area covered by the landscape unit. St Ippolyts is a Conservation Area. The woodlands surrounding Wymondley Transforming Station and St Ibbs Park are District Wildlife Sites, as is the woodland forming part of the unit's western boundary.

Landscape functions

4.16 Key functions of this area are the gap it provides between Hitchin and Stevenage. It also forms part of the rural setting of the village of Little Wymondley. Its other key function is that of productive arable agriculture.

Sensitivity analysis

Criteria	Comment	
Landscape		
Special qualities of the Chilterns AONB	Not applicable to this area.	
Landscape scale	Relatively intimate, small scale landscape, enclosed by trees, hedgerows and small farmsteads/settlements with vernacular buildings, including St Ippolyts. However, some larger field sizes with pylons and overhead lines are located mostly away from settlements.	
	Larger scale landscape elements would be sensitive to residential and mixed use development, although the intimate, small scale areas of landscape and associated pattern could potentially accommodate a degree of small scale, low density development in the 15-20 dph range).	
Landform and topography	Rolling topography and domed landforms which are fairly constant throughout the landscape unit. Wymondley Transforming Station is located in an old gravel pit which alters the landform locally. Heights are between 85-95m AOD. Although landform is sensitive, it does present an opportunity	

Criteria	Comment
	for some well-placed small-scale development if visually concealed within undulations.
	However, topographic variation is sensitive to the indicative route for the bypass road proposed in this unit, off the A602 and following an arc west of Titmore Green.
Landscape pattern and complexity	Irregular field sizes to the south reflect historic agricultural landscape patterns; winding lanes; a complex landscape of historic settlement, woodland and hedgerows, pylons and overhead lines and farmed landscapes. The deciduous woodland to the western boundary of the landscape unit and west of St Ippolyts village is a UK BAP habitat.
	Narrow winding lanes and historic influences in the landscape would be sensitive to residential and mixed use development and the indicative route for the bypass road, due to the potential for impact on characteristic landscape pattern and legibility, particularly around the western part of the landscape unit.
Cultural pattern and time depth	Disappearance of almost all of the woodland and the loss of many field boundaries characterises much of the area (the HLC identifies early and modified enclosures – surviving areas of early enclosure would be sensitive to residential development and the bypass road proposal due to potential impact on their integrity). Informal medieval parkland lies to the west. The vernacular village of St Ippolyts is a Conservation Area. The 11 th Century church of St Ippolyts and the 12 th Century church of St Mary in Little Wymondley are located in the north of the landscape unit, also near to a possible medieval village and moated site at Wymondley Bury. Such historic features would again be sensitive to residential and mixed use development due to potential impact on their integrity.
Settlement and human influences	The landscape unit does not abut the existing settlement edge of Hitchin. Within the landscape unit, small settlements and farmsteads including St Ippolyts, Ashbrook, and Titmore Green contribute to the historic character and have historic place names. Larger scale developments including Wymondley Transforming Station and the sewage works lie in the north east of the unit – both are well concealed in the landscape. Traditional vernacular settlement would be sensitive to new residential and mixed use development. Other human influences include the A602 in embankment and cutting, and larger scale more recent residential buildings and
	cutting, and larger scale more recent residential buildings and a hotel north of the A602 which have an impact locally.
Skyline character	A tree lined and natural skyline largely reflects the lines of the rolling landform. Pylon lines are apparent to the north.
	The mostly undeveloped skyline character would be sensitive to new residential and mixed use development and to the proposed bypass road, particularly if lit.
	<u> </u>

	VVII
Criteria	Comment
Perceptual/experiential qualities (colour/texture/light/reflection,	An intimate landscape with mature trees and hedgerows in addition to attractive vernacular settlements and historic buildings.
movement, tranquillity, remoteness)	Settlements such as St Ippolyts create focal points but elsewhere views are largely either limited by vegetation cover or by the rolling landform. The presence of pylons and overhead lines has a strong visual influence and provide contrast in the rolling farmed landscape. Infrastructure has a more harsh influence locally including Wymondley Transformer Station and the A602, reducing tranquillity.
	The Hertfordshire Way (long distance footpath), is located in the south eastern corner of the landscape unit.
	Human influences on the landscape associated with existing infrastructure reduce the sensitivity of the landscape to development, although the small scale and historic grain of distinct settlements such as St Ippolyts are more sensitive to new development.
Visual	
Visual relationships and views (including key vantage points	St Ippolyts church is a key feature on the skyline in the local landscape, as well as views from the church into the valley.
from designated landscapes)	The presence of vegetation and nearby settlements creates a relative sense of enclosure but views open up around larger fields away from settlement. Open views would be sensitive to residential and mixed use development, due to potential issues of visual impact.
Level of intervisibility: - With AONB – N/A - With other landscape character areas	There is intervisibility to the west with the rural and high quality landscape of the Langley Valley. Such views would be sensitive to residential and mixed use development.
Overall landscape	Justification and judgement
sensitivity	Overall landscape sensitivity to residential and mixed use development is judged to be moderate . The predominantly arable rolling landscape generally has a rural, historic and attractive character. However, the character is also influenced by major infrastructure including the A602, Wymondley Transforming Station, the sewage works in the north west of the landscape unit and pylons and overhead lines. These elements reduce the sensitivity of the landscape.
	Generally the northern half of the landscape unit is considered to be less sensitive to development, being more under the influence of the A602 and other infrastructure. Larger scale development such as the hotel on Blakemore End Road and the water tower at Tower Close are located here, alongside more recent housing and more degraded field boundaries.

Criteria	Comment
	The function this landscape unit has in maintaining separation between Stevenage and Hitchin is also important, as well as to the setting of settlements such as St Ippolyts and Little Wymondley, and the relationship to the high quality rural landscape of the Langley Valley to the west.

Landscape guidance and recommendations

4.17 Key recommendations for this landscape unit are:

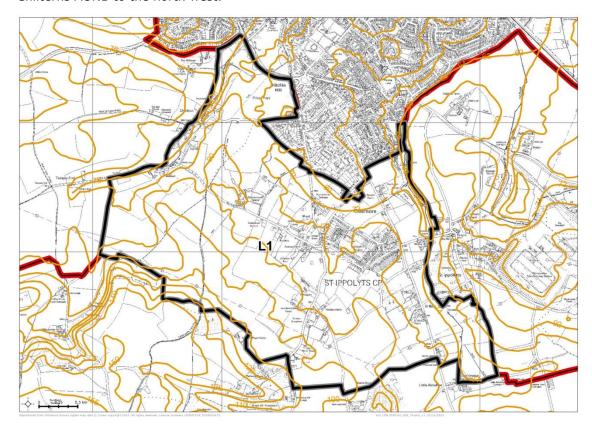
- The landscape in the northern half of the landscape unit is likely to be more able to accommodate development due to the existing presence of infrastructure and larger scale landscape patterns. This should however, be small scale and should avoid visually breaching the ridgeline with the adjacent landscape unit, north of St Ippolyts.
- The area to the south, especially around St Ippolyts is more sensitive due to the presence of historic landscape and settlements, winding lanes and intervisibility with the Langley Valley.
 This contributes to the GI network/ connectivity with the Langley Valley.
- A small amount of development of a scale appropriate to the rural character and layout of the
 existing landscape may be considered within this landscape unit, although this should be
 carefully designed and located. Removal of significant areas of tree or hedgerows should be
 avoided, as this forms a key element of enclosure and mature rural character to the landscape
 unit.
- If the bypass road is considered in relation to this landscape unit, this should be designed to 'run with the contours' and respect landform as far as possible, avoiding the need for extensive re grading. Any lighting should be of full cut off design to minimise sky glow. Lighting should be confined to developed areas of the route as far as practically possible. The route should also seek to minimise disturbance to existing landscape structure.
- The landscape character unit is placed in a key strategic location for creating separation between Hitchin and Stevenage, which should be taken into consideration.

Landscape character unit: L1

Baseline

Location

4.18 This landscape unit is formed by the southernmost part of the wider Langley Valley within the study area (District LCA 214: Langley Valley). The landscape unit includes Gosmore Village and the designed landscape of Priory Park on the western edge of Hitchin, and lies within 1km of the Chilterns AONB to the north west.



LCA context

National

NCA 110: Chilterns. Chalk hills and plateaux with remnant chalk downland and extensive areas of beech hanger woodland. Cut by a network of valleys whose intimacy contrasts with the expansive and open plateaux. Scattered settlements and farmsteads, some of which are of ancient and medieval origin.

Local (District)

LCA 214: Langley Valley. Relevant key characteristics are given below.

Summary description from North Hertfordshire District LCA

4.19 The LCA identifies main characteristics of the landscape as follows. A large scale rolling landform, predominantly under arable cultivation, but with pockets of grazing on the steeper slopes in the north and near the settlements of St Ippolyts and Langley. Field sizes are variable, with

- extensive arable cultivation southwest of Hitchin and smaller fields often associated with grazing. The landscape structure is defined by well-trimmed hedges with remnant mature trees, including a high proportion of stag heads in places. Settlement pattern is scattered and includes farmsteads, plus discrete areas of commercial land use. Parklands are a notable feature across the character area.
- 4.20 The TLP study identifies the following inherent landscape and visual sensitivities at the district LCA level. In landscape terms the area is identified as having a moderate sensitivity due to the gently undulating landform, but with sensitivity reduced due to urban influence. In terms of visual sensitivity, this is identified as being moderate-high. The study identified important features to be panoramic views along the valley, which would be sensitive to the introduction of built features.

Policy context and designations; relationship to designated landscape interests

4.21 The landscape unit lies less than 1km south east of the Chilterns AONB. In terms of non-landscape designations within the landscape unit, parts of Priory Park and the Hiz Valley floor are designated as District Wildlife Sites. With regard to the historic environment, the core of Gosmore Village is a Conservation Area. The landscape parkland of Priory Park is un-registered.

Landscape functions

4.22 Primary functions are the wildlife corridor in the wooded Hiz Valley floor, amenity and informal recreation (Priory Park) and productive arable agriculture. The area also forms an important buffer between the edge of Hitchin and the Chilterns AONB, having some characteristics in common with the protected landscape.

Sensitivity analysis

Criteria	Comment	
Landscape		
Special qualities of the Chilterns AONB	Due to the close proximity to the AONB, this criterion is considered for this landscape unit. The unit displays the following characteristics common to a number of the special qualities of the AONB: tranquil valleys, chalk streams and areas of vernacular settlement. All of these features impart a strongly rural character to the landscape, which would be sensitive to residential and mixed use development.	
Landscape scale	This landscape has a number of human scale indicators such as the vernacular linear settlement of Charlton within the River Hiz valley floor. A relatively intimate spatial scale is also created by a field boundary hedgerow network which often includes mature trees. Field pattern is variable and most intact/small scale where associated with the Hiz valley floor. Human scale indicators reduce landscape sensitivity to residential and mixed use development, however small scale landscape patterns associated with areas of settlement would also be sensitive to the proposed western bypass road, the broad route of which is being considered (feasibility/pre outline design stages) in this landscape unit.	
Landform and topography	A distinctive ridge and valley landform (80-100m AOD) creates much local level containment and enclosure. These 'micro level' landform variations would be sensitive to residential and mixed use development footprints. Such landform variation would also be highly sensitive to the proposed western bypass,	

Criteria	Comment
	which would need careful siting in relation to these features.
Landscape pattern and complexity	A varied landscape pattern is created in the landscape unit due to the interplay of features such as the chalk stream (Hiz) and associated mature wet woodland, linear/dispersed and small scale vernacular settlement at Charlton and sunken lanes/hedge banks, plus areas of designed parkland such as at Priory Park, plus UK BAP habitats in the form of deciduous woodland south east of Gosmore. These all combine to create a diverse landscape pattern, the integrity of which would be vulnerable to residential and mixed use development footprints.
Cultural pattern and time depth	The HLC indicates main historic landscape types in the area to be landscape parkland (Priory Park), early enclosures immediately south of Priory Park, and modified early enclosures in much of the area south and west of Gosmore. Save for the Conservation Areas at Gosmore and Charlton, there are no designated/scheduled sites in the landscape unit, although the historic integrity of Priory Park (already interrupted by the A602 bypass) and the early enclosure field systems would be sensitive to residential and mixed use development footprints. On the southern boundary, immediately outside the unit, is an area of ancient woodland at Vicar's Grove, which would be sensitive to potential development within the landscape unit, depending on proximity.
Settlement and human influences	The existing settlement edge of Hitchin is well integrated with the wider landscape due to mature trees in large rear gardens which back on to the landscape unit, and woodland around Priory Park. Other key aspects of the settlement pattern in this area are the small scale linear vernacular valley settlement at Charlton which comprises of 18 th and 19 th century red brick properties, plus scattered farmsteads. This small scale, relatively dispersed and traditional settlement pattern would be sensitive to residential and mixed use development, as would the generally well-integrated edge of Hitchin in this unit.
Skyline character	As main areas of settlement are largely in the valley floor, skylines in this landscape unit are predominantly undeveloped, being defined by topography and field boundary vegetation (an interlaced, wooded skyline). The open skyline created by the smooth chalk landforms in the landscape unit immediately north (L2), intervisible with this unit, are highly distinctive. The undeveloped skyline character of the landscape unit would be sensitive to the introduction of further development which could change this character. The pylon line to the south is however a prominent skyline element.
Perceptual/experiential qualities (colour/texture/light/reflection, movement, tranquillity, remoteness)	A varied landscape mosaic is created by the juxtaposition of river valley, rush pasture and wet woodland with areas of vernacular settlement, chalk grassland and arable agriculture. A seasonally colourful landscape due to vegetation and arable cropping, and one which is essentially of rural, tranquil character. Such qualities would be sensitive to residential and mixed use development which would alter this perception. The sense of tranquillity would also be potentially vulnerable to the

Criteria	Comment
	route of the western bypass road, which would be likely to take the form of a lit dual carriageway.
Visual	
Visual relationships and views (including key vantage points from designated landscapes)	Views within and across this character area are essentially framed and filtered by landform and interlaced field boundary vegetation. However there are glimpsed views into parts of Priory Park. This degree of visual containment reduces sensitivity in visual terms, meaning that some development could potentially be assimilated subject to scale.
Level of intervisibility: - With AONB - With other landscape character areas	The landscape unit is intervisible with the open skylines and chalk landforms in the adjacent L2 landscape unit to the north, although views to the AONB are largely denied by landform. The intervisibility with the open skylines to the north would result in a higher visual sensitivity to residential and mixed use development.
Overall landscape sensitivity	Justification and judgement Overall landscape sensitivity of this landscape unit to residential and mixed use development is judged moderate-high. This is in view of landscape scale, the well-integrated settlement edge, the complexity of the landscape pattern and the sense of tranquillity. Whilst the level of containment creates lower sensitivity in visual terms, this is a sensitive landscape overall. Landforms in particularly would be sensitive to the potential route for the bypass road being considered for the area.

Landscape guidance and recommendations

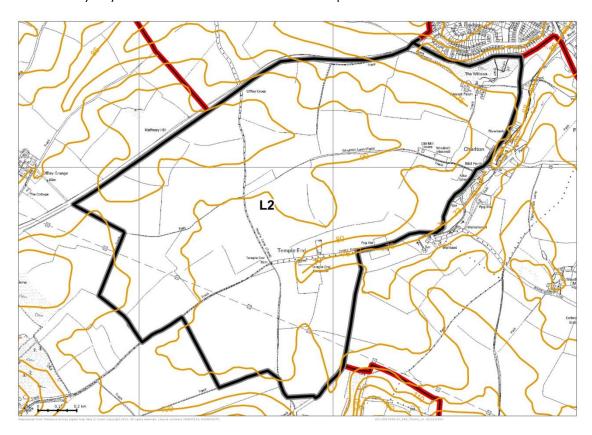
- 4.23 Key recommendations for this landscape unit are:
 - This landscape unit has a very limited ability to accommodate anything other than very small scale development which fits within the existing landform and landscape structure pattern, and which responds to the existing scale and quantum of settlement.
 - The landscape unit should therefore be primarily conserved as part of the green infrastructure network and green setting of Hitchin as far as possible, to maintain green lungs such as at Priory Park and an effective landscape buffer to the AONB.
 - If the bypass road is considered in relation to this landscape unit, this should be designed to 'run with the contours' and respect landform as far as possible, avoiding the need for extensive re grading. Any lighting should be of full cut off design to minimise sky glow. Lighting should be confined to developed areas of the route as far as practically possible.

Landscape character unit: L2

Baseline

Location

4.24 This landscape unit is formed by the smooth chalk landforms and open arable farmlands on the south facing slopes of the Hiz Valley. The area is bounded to the south by the River Hiz and the dispersed linear hamlet of Charlton and to the north by the A505, with the Chilterns AONB lying immediately beyond to the north west of the landscape unit.



LCA context

National

NCA 110: Chilterns. Chalk hills and plateaux with remnant chalk downland and extensive areas of beech hanger woodland. Cut by a network of valleys whose intimacy contrasts with the expansive and open plateaux. Scattered settlements and farmsteads, some of which are of ancient and medieval origin.

Local (District)

LCA 214: Langley Valley. Relevant key characteristics are given below.

Summary description from North Hertfordshire District LCA

- 4.25 The LCA identifies main characteristics of LCA 214 as follows. A large scale rolling landform, predominantly under arable cultivation, but with pockets of grazing on the steeper slopes in the north and near the settlements of St Ippolyts and Langley. Field sizes are variable, with extensive arable cultivation southwest of Hitchin and smaller fields often associated with grazing. The landscape structure is defined by well-trimmed hedges with remnant mature trees, including a high proportion of stag heads in places. Settlement pattern is scattered and includes farmsteads, plus discrete areas of commercial land use. Parklands are a notable feature across the character area.
- 4.26 The TLP study identifies the following inherent landscape and visual sensitivities at the district LCA level. In landscape terms the area is identified as having a moderate sensitivity due to the gently undulating landform, but with sensitivity reduced due to urban influence. In terms of visual sensitivity, this is identified as being moderate-high. The study identified important features to be panoramic views along the valley, which would be sensitive to the introduction of built features.

Policy context and designations; relationship to designated landscape interests

4.27 The landscape unit is adjacent to the Chilterns AONB to its north western corner. Within the landscape unit, principal non-landscape designations are the dense wooded belt that forms part of the south western edge of Hitchin and which is designated as a District Wildlife Site. There are no designations in respect of cultural heritage within the landscape unit.

Landscape functions

4.28 Primary functions are productive arable agriculture, and the buffer that the landscape provides to the Chilterns AONB. The AONB lies less than 1km west of Hitchin at closest point.

Sensitivity analysis

Criteria	Comment
Landscape	
Special qualities of the Chilterns AONB	Due to the close proximity to the AONB, this criterion is considered for this landscape unit. The unit displays some characteristics in common with special qualities of the AONB, such as chalk landforms, woodlands and wetland features associated with the chalk stream of the Hiz in the adjacent area. All of these features impart a strongly rural character to the landscape, which would be sensitive to residential and mixed use development.
Landscape scale	This is a relatively large scale arable landscape ('prairie fields') due to agricultural intensification and field boundary loss. As such there are few human scale influences save for isolated farmsteads, the mill house and associated remains of a disused windmill, and the landscape would be sensitive to residential and mixed use development.
Landform and topography	Topography is distinctive in this landscape unit with a series of smooth, undulating chalk landforms associated with the south facing upper valley slopes of the Hiz, rising to a high point of 100m AOD in the north. This degree of landform variation and the relative visual prominence it has would render the

Criteria	Comment	
	landscape sensitive to residential and mixed use development in topographic terms. Landform in this unit would also be highly sensitive to the initial proposals being considered for the bypass road, which would potentially affect this landscape unit.	
Landscape pattern and complexity	In the main, this is a simple arable landscape with little variation save for occasional sparse field boundary hedgerows of rectilinear formation, part of an expanded enclosure field boundary network partly lost to agricultural intensification. The wooded northern edge of the landscape unit (mature broadleaf and wet woodland at 'The Willows', a UK BAP habitat) is more complex, and provides additional landscape texture and interest. This aspect and its integrity would be vulnerable to development footprints. The simple, repetitive arable landscape pattern of the majority of the landscape unit would be rather less sensitive to residential development (lower vulnerability is due to relative paucity of complex landscape features).	
Cultural pattern and time depth	The HLC indicates main historic landscape types in the area to be early enclosures including large areas of modified early enclosures. The integrity of such features would potentially be sensitive to residential and mixed use development. The landscape unit has no designated heritage landscape assets. Important aspects of the historic landscape pattern in this area are the historic part sunken rural lane network and relic hedgebanks, plus the old Mill House and remains of the adjoining windmill.	
Settlement and human influences	The southern edge of Hitchin is effectively integrated and visually concealed by dense broadleaf and wet woodland at 'The Willows'. Key aspects of the settlement pattern in this area are scattered farmsteads such as Kennel Farm and isolated large dwellings such as The Old Mill House, associated with a narrow and historic rural lane and track network. Such small scale, traditional settlement features would be sensitive to residential and mixed use development footprints, as would the well-integrated settlement edge at Hitchin.	
Skyline character	Skylines are largely undeveloped in character, whether open smooth chalk landforms, or the densely wooded edge to Hitchin at 'The Willows', which essentially masks the town from view. To the south the wooded Hiz and rising arable farmland beyond form the skyline. Horizons of such undeveloped character would be sensitive to the introduction of significant amounts of development, due to their open character and visual prominence, although the presence of the pylon line to the south is noted.	
Perceptual/experiential qualities (colour/texture/light/reflection, movement, tranquillity, remoteness)	A simple landscape with a muted colour palette (although this would potentially be seasonally colourful, depending on arable cropping regimes). The landscape of the unit mostly has a tranquil, rural and isolated character, although this is locally impeded to the north by the A505 (dual carriageway). The mostly tranquil character of the landscape would otherwise be sensitive to residential and mixed use development.	

Criteria	Comment
Visual	
Visual relationships and views (including key vantage points from designated landscapes)	Views within and across this character area are mostly filtered due to the level of landform variation, plus the strongly wooded edges at Hitchin ('The Willows') and to the course of the River Hiz. This creates a level of containment, which could potentially assimilate a degree of development, reducing sensitivity to residential and mixed use development in visual terms.
Level of intervisibility: - With AONB - With other landscape character areas	The northern part of the landscape unit has intervisibility with the rising chalk landforms within the AONB outlier to the immediate north west. Such views would be sensitive to development due to the visual setting this unit provides for the protected landscape.
Overall landscape sensitivity	Justification and judgement Overall landscape sensitivity of this landscape unit to residential and mixed use development is judged to be moderate-high, due to the tranquil character, largely undeveloped skylines and interface with the AONB/the sense of separation the landscape provides between the AONB and Hitchin.

Landscape guidance and recommendations

4.29 Key recommendations for this landscape unit are:

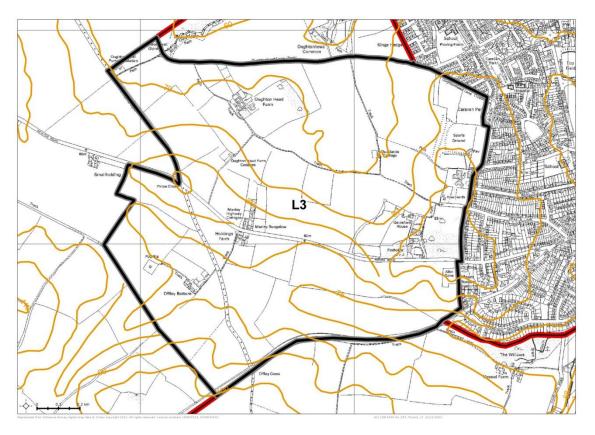
- Any future development should be confined to the lowest and therefore most visually
 contained parts of the landscape unit near the woodland at 'The Willows', but ensuring that
 such landscape structure, together with adjacent wetlands, is maintained, conserved and
 enhanced/reinforced as part of a connected landscape network. However, only small scale
 development could be located here due to the above and to avoid coalescence between
 Hitchin and Charlton.
- The sense of openness of the more elevated upper valley sides should be conserved as should the visual relationship with and the setting the landscape provides to the AONB maintain the sense of separation between Hitchin and the AONB.
- If the bypass road is considered in relation to this landscape unit, this should be designed to 'run with the contours' and respect landform as far as possible, avoiding the need for extensive re grading. Any lighting should be of full cut off design to minimise sky glow. Lighting should be confined to developed areas of the route as far as practically possible.

Landscape character unit: L3

Baseline

Location

4.30 Landscape unit L3 comprises the northern section of the wider Langley Valley LCA (214). It is defined by the A505 to the south, the urban edge of Hitchin to the east, Oughtonhead Lane to the north and Hitchin Road (including fields west of this) to the west. A small part of the Chilterns AONB is present in the south western corner. The unit sits south of the River Oughton and Purwell Valleys LCA (217). A small area along the eastern edge of the unit lies outside of the wider LCA classification but is within the green belt (and therefore not considered urban for most purposes). This has been brought within this landscape unit for this study, for ease of assessment and consistency of scale of assessment units.



LCA context

National

Area 110: Chilterns. Chalk hills and plateaux with remnant chalk downland and extensive areas of beech hanger woodland. Cut by a network of valleys whose intimacy contrasts with the expansive and open plateaux. Scattered settlements and farmsteads, some of which are of ancient and medieval origin.

Local (District)

LCA 214: Langley Valley. Relevant key characteristics are given below.

Summary description from North Hertfordshire District LCA

- 4.31 The LCA identifies main characteristics of LCA 214 as follows. A large scale rolling landform, predominantly under arable cultivation, but with pockets of grazing on the steeper slopes in the north and near the settlements of St Ippolyts and Langley. Field sizes are variable, with extensive arable cultivation southwest of Hitchin and smaller fields often associated with grazing. The landscape structure is defined by well-trimmed hedges with remnant mature trees, including a high proportion of stag heads in places. Settlement pattern is scattered and includes farmsteads, plus discrete areas of commercial land use. Parklands are a notable feature across the character area.
- 4.32 The TLP study identifies the following inherent landscape and visual sensitivities at the district LCA level. In landscape terms the area is identified as having a moderate sensitivity due to the gently undulating landform, but with sensitivity reduced due to urban influence. In terms of visual sensitivity, this is identified as being moderate-high. The study identified important features to be panoramic views along the valley, which would be sensitive to the introduction of built features.

Policy context and designations; relationship to designated landscape interests

4.33 The landscape unit includes a small area of the Chilterns AONB in the west. Pirton Road allotments in the south east of the unit are a district wildlife site; Oughtonhead Lane SSSI is located at the northern boundary, partially within landscape unit OP1; also within OP1 is Oughtonhead Common LNR, located adjacent to the northern boundary of L3.

Landscape functions

4.34 Primary functions of landscape unit L3 are productive arable agriculture, and as a landscape buffer for the Chilterns AONB. The area also provides landscape setting to Hitchin, and the area to the east of L3 provides important open space and ecological functions for Hitchin urban area.

Sensitivity analysis

Criteria	Comment
Landscape	
Special qualities of the Chilterns AONB	The south western corner of the unit falls within the Chilterns AONB. Some elements of the special qualities can be seen within the landscape of the unit, especially closer to the western section. In the vicinity of Hitchin Road, the open views of arable farms and rolling "scarp foothills" in combination with enclosed lanes with hedgerows and the presence of some mature trees, present a feeling of tranquillity, though to a lesser extent than within the AONB on the whole. There are a few public rights of way. In general, the unit is considered as more of a 'setting' to the AONB than particularly displaying its special qualities (which include steep chalk escarpment, flower-rich downland, ancient woodland, commons, tranquil valleys, ancient route networks and a rich historic environment).

Criteria	Comment
	the setting it forms to the AONB and as it possesses some elements of character and value that are in common with the Chilterns AONB. The east of the unit towards the settlement edge of Hitchin displays fewer AONB special qualities and would therefore be less sensitive.
Landscape scale	Relatively large open fields result in expansive views across the undulating valley landscape. Generally well-managed field boundaries of hedgerows and some semi-mature trees. The A505 is also a large scale feature that integrates relatively well with the landscape. The expansive scale of the landscape (due to comparative scarcity of structural landscape features) would be vulnerable to residential and mixed use development.
Landform and topography	Undulating and sweeping landform characterised by a broad, undulating valley which rises gently to the west and east to around 90m, falling to 65m in the mid-north of the landscape unit. The ridge to the east defines the edge of the Hitchin urban area, which forms a perceptible urban edge in contrast to its rural surroundings, particularly view of houses on the rising ground of Half Acre when viewed from the A505
	The nature and variation of the landform would be sensitive to new development due to its influence on long distance panoramic views.
Landscape pattern and complexity	A simple landscape, with relatively large fields and generally well-managed hedgerow/ tree-lined boundaries. An area of deciduous woodland east of Gainsford House is a UK BAP habitat.
	Generally an east-west orientation of field boundaries is also reflected in the major transport routes the A505 and Pirton Road, and three public rights of way.
	The landscape becomes more rural and more attractive towards the north and west, and is influenced more by the urban characteristics of Hitchin towards the south and east, particularly around the A505 dual carriageway. These intrusions reduce the sensitivity of the landscape to residential and mixed use development, in terms of landscape pattern.
Cultural pattern and time depth	The HLC identifies primary historic landscape types in the landscape unit to be 19 th century enclosures in the north and centre of the unit and some areas of modified enclosures. More intact tracts of enclosure would be most sensitive to residential and mixed use development, due to the potential impact on the integrity of such features. There are no designated heritage assets within the landscape unit.
Settlement and human influences	The outer urban edge of Hitchin in the east of the unit has a typical suburban and urban fringe character, with housing estate, recreation ground and mobile home site. The edge is however integrated with the wider landscape by field boundary hedgerows such as at Lucas Lane; however where development occupies higher ground such as at Half Acre, this forms a more prominent boundary edge to Hitchin settlement. The A505 is present at the southern boundary, cutting through

Criteria	Comment	
	the arable field landscape. The remainder of the unit is characterised by dispersed farmsteads and a distinctly rural feel. This low level of settlement would be sensitive to the introduction of residential and mixed use development.	
Skyline character	Long, expansive views create a distant horizon. Focal points in views are a mixture of semi-mature trees lining the crests of hills in views to the west, and the undulating residential edge of Hitchin in views to the east. The undeveloped skylines to the west in particular would be sensitive to residential and mixed use development, due to the potential for change to character this could introduce. Hitchin's settlement edge is prominent in views such as those from the A505, especially where development is located on higher ground. This reduces sensitivity of the character unit locally.	
Perceptual/experiential qualities (colour/texture/light/reflection, movement, tranquillity, remoteness)	A distinctly rural character dominates the western part of the landscape unit, with enclosed country lanes adjacent to large open arable fields. The undulating topography within the broad valley landform creates a juxtaposition of long views and enclosed spaces when travelling through. The urban edge of Hitchin appears well defined and contained within landform and tree belt in views to the east, except where development occupies higher ground such as at Half Acre, becoming more visually prominent, especially from the A505. The rural green lanes which sit behind suburban development at Lucas Lane and Crow Furlong provide a valuable green infrastructure link and buffer to the rural and more open countryside beyond. The tranquil rural character would be especially sensitive to residential and mixed use development.	
Visual		
Visual relationships and views (including key vantage points from designated landscapes)	The open nature of the landscape creates expansive views across arable fields and into the Chilterns AONB to the west. Gateway views to Hitchin's settlement edge occur at higher points of the A505 and Pirton Road, where residential properties sit on undulating landform, integrated with semimature tree planting. The open areas of the landscape would be visually sensitive to residential and mixed use development.	
Level of intervisibility: - With AONB - With other landscape character areas	The landscape unit has a high level of intervisibility with the Chilterns AONB, a small part of which sits within the unit. There are also strong visual links with unit L2 to the south from the A505, and views to the urban edge of Hitchin. The intervisibility with the AONB (setting to the protected landscape) would be sensitive to the introduction of residential and mixed use development.	
Overall landscape sensitivity	Justification and judgement The landscape of L3 possesses many elements of value, some of which are associated with the AONB. L3 is considered to have a high overall sensitivity to residential and mixed development owing to its open landscape, panoramic views of rural attractive countryside and proximity to the Chilterns AONB. Its importance as a landscape buffer to the AONB, and	

Criteria	Comment
	as a significant aesthetic, ecological and recreational resource for the Hitchin urban area are also noted.

Landscape guidance and recommendations

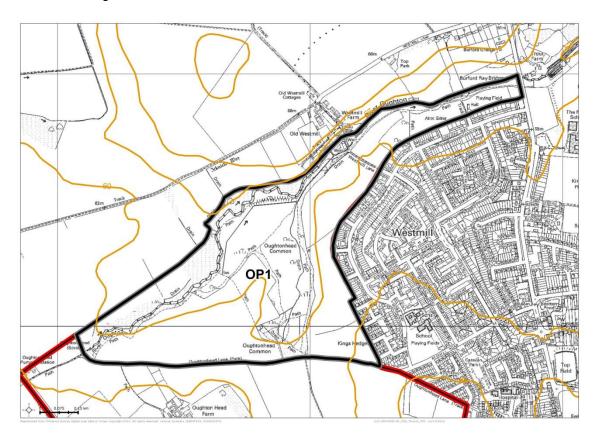
- 4.35 Key recommendations for this landscape unit are:
 - In general, it is considered that any new development within L3 would be difficult to accommodate due to the open, rural nature of most of the area, and its proximity to the Chilterns AONB.
 - The land to the south and east of the unit displays characteristics that are less sensitive in landscape terms, including a more visually prominent settlement edge such as at Half Acre that is less well integrated into the landscape. The eastern edge of the unit also contains a recreational resource and green infrastructure amenity for the urban area in the form of rural green lanes, sports pitches and allotments.
 - The remainder of the urban edge of Hitchin is currently well defined, situated on higher ground and generally integrated with the landscape with tree and hedge planting including rural green lanes such as Lucas Lane and Crow Furlong. Any extension of this urban edge should be carefully considered in relation to topography and the extensive views to the opposite valley particularly the AONB. Any further woodland cover for future settlement edge integration would be unlikely to be appropriate in this largely open chalk landscape.

Landscape character unit: OP1

Baseline

Location

4.36 This landscape unit is located at the northernmost extent of the study area, at the north western edge of Hitchin. Its northern boundary is defined by the River Oughton and the parish boundary, with the wider district LCA Pirton Lowlands (218) lying partially within the study area but continuing further to the north; its southern edge adjoins landscape unit L3 (wider LCA Langley Valley, 214), extending along Oughtonhead Lane. The eastern boundary is defined by the outer settlement edge of Hitchin urban area.



LCA context

National

Area 110: Chilterns. Chalk hills and plateaux with remnant chalk downland and extensive areas of beech hanger woodland. Cut by a network of valleys whose intimacy contrasts with the expansive and open plateaux. Scattered settlements and farmsteads, some of which are of ancient and medieval origin.

Local (District)

LCA 21: River Oughton and Purwell Valleys. Relevant key characteristics are given below.

Summary description from North Hertfordshire District LCA

4.37 The LCA identifies main characteristics of LCA 217 as follows. Grazed water meadows with poplar, willow and ash trees along the watercourses. Meandering watercourses with linear woodland banks alongside them, and associated ponds and water bodies. An area with mature landscape character, well defined by the urban edge of Hitchin.

Policy context and designations; relationship to designated landscape interests

4.38 A flood zone is present in the north of the landscape unit around the River Oughton. Oughtonhead Common Local Nature Reserve (LNR) and district wildlife site covers a large proportion of the centre of the unit. Priority habitats are present within the LNR including fens and lowland meadows. Oughtonhead Lane SSSI is located at the southern boundary with landscape unit L3. The unit is located approximately 250m from the AONB boundary at its nearest point in the south western corner.

Landscape functions

4.39 The OP1 landscape character unit has a largely ecological function as described within the North Hertfordshire District LCA, with Oughtonhead Common and Nature Reserve containing one of the largest fen woodlands in Hertfordshire, with importance for carr woodland habitat with associated birds, bats and harvest mouse. The woodland and wet woodland also act as buffers for flooding, and the area provides a landscape buffer and green infrastructure feature for Hitchin and buffer for the nearby AONB. The Oughton Valley is also one of the key GI zones identified in the North Herts GI Plan.

Sensitivity analysis

Criteria	Comment
Landscape	
Special qualities of the Chilterns AONB	The western edge of the landscape unit falls in close proximity to the Chilterns AONB, and some of the special qualities of the designation are reflected in the landscape of this area. Key characteristics include a sense of tranquillity and remoteness created by the dense woodland cover, the chalk river valley and a rich historic environment which includes common land. The historic Icknield Way is located in close proximity to the north of the unit. The east of the unit adjacent to Hitchin's urban edge however, displays fewer of the special qualities typical of the AONB, though there are distant views of the AONB across the valley. The landscape unit would therefore be sensitive to development (though less so in the land adjacent to Hitchin's urban edge) as it possesses elements of value and character in common with the nearby Chilterns AONB.
Landscape scale	A landscape of a mixture of scales including a high proportion of tree cover, Oughton River, large arable fields and a general

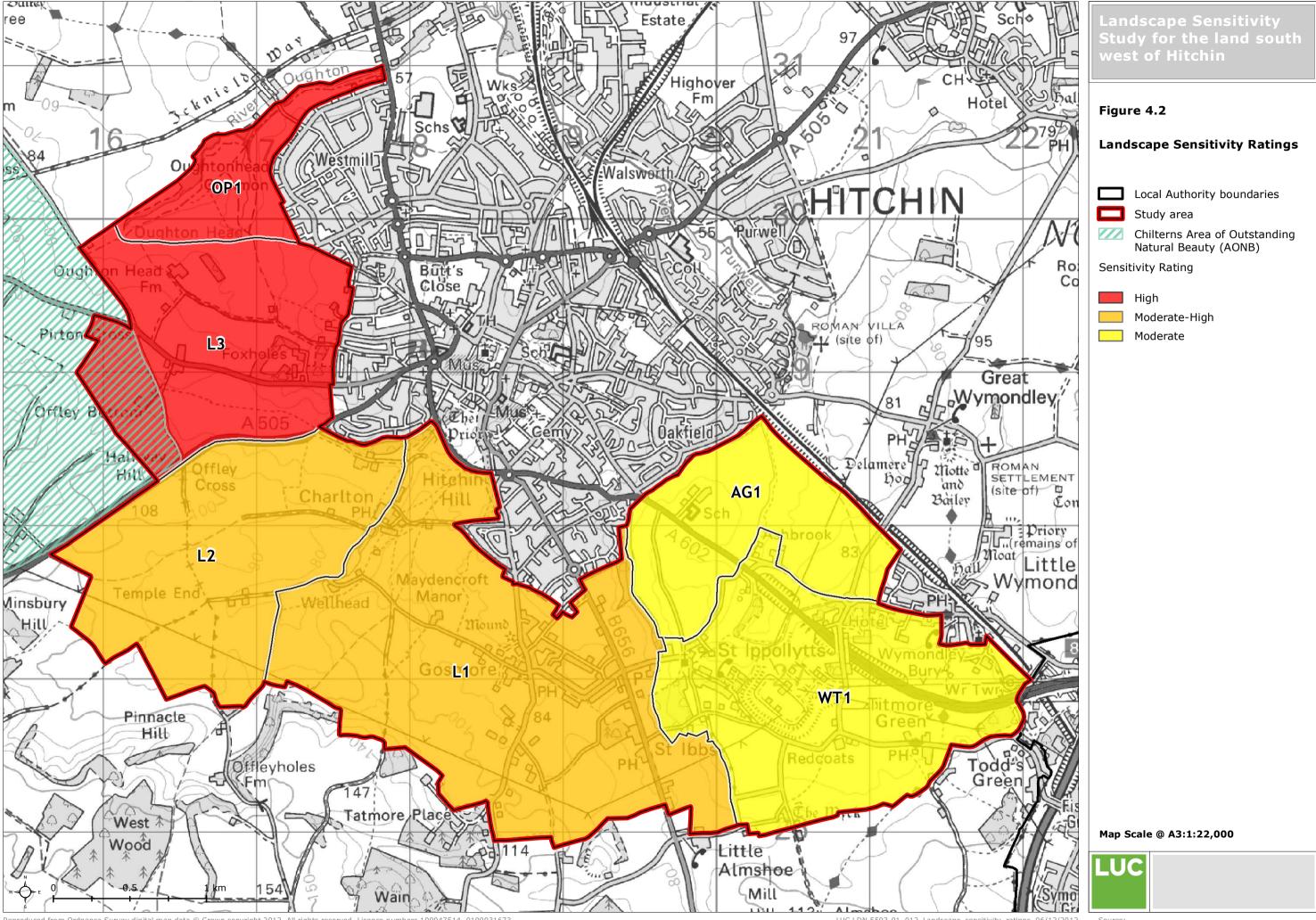
Criteria	Comment	
	lack of development. Large arable fields would be sensitive to residential and mixed use development.	
Landform and topography	A river floodplain landscape, which is orientated north east – south west, is largely flat or gently undulating between 65m and 75m AOD. The relative absence of landform variation reduces sensitivity to residential and mixed use development.	
Landscape pattern and complexity	Generally a complex landscape with a particular diversity and variety of landscape features that contribute to important and nationally rare habitat, including fens and lowland meadows. The River Oughton is well defined by its surrounding woodland, creating an enclosed and intimate landscape, experienced generally only on foot along the public right of way that links to both the Icknield Way and Mill Way. The large arable fields surrounding the nature reserve are characterised by well-defined hedge and tree-lined boundaries, which contribute to a more simple and ordered landscape pattern which would be less sensitive to residential and mixed use development.	
	The intimate and enclosed nature of the landscape character would therefore be sensitive to residential and mixed use development, whilst the more simple field pattern adjacent to Hitchin's urban edge would be less sensitive to development.	
Cultural pattern and time depth	Principal historic landscape character types identified by the HLC in this landscape unit are commons and heaths as at Oughton Common, plus 19 th century enclosures, with modified 19 th century enclosures on the gently undulating valley sides to the north of the river (extending beyond the landscape unit). The integrity of such historic landscape types as common and areas of intact enclosure would be sensitive to residential and mixed use development. In the eastern part of the area historic landscape types including horticulture (allotments) and leisure uses (recreation ground) would have lower sensitivity in these terms although their green infrastructure value is recognised.	
	There are no designated heritage assets within the landscape unit.	
Settlement and human influences	There is a perception of a lack of human influence in the unit, except for paths and areas of land in the north east and eastern section of the unit, adjacent to Hitchin's urban edge and with some land used for recreation and allotments. The urban edge of Hitchin is present along the entire eastern boundary of the unit, often screened by vegetation within the remainder of the character unit.	
	The visual presence of the urban edge of Hitchin reduces the sensitivity of the landscape in the east of the character unit. However the predominantly unsettled character of much of the landscape of this unit would be sensitive to residential and mixed use development.	
Skyline character	Trees provide enclosure to most views. Wooded skylines and undeveloped skylines to the north would be sensitive to the introduction of residential and mixed use development which	

	OPI	
Criteria	Comment	
	would change this character.	
Perceptual/experiential qualities (colour/texture/light/reflection, movement, tranquillity, remoteness)	Intimate footpaths and dense tree cover create a sense of a secluded river valley as do the lush vegetation and naturalistic/wildlife features. Some qualities of naturalness and tranquillity typical of the nearby AONB are present here. The sense of wildness is especially prominent within the Nature Reserve itself, which is accessible through green links from residential streets of the edge of Hitchin, such as Swinburne Avenue which form a key part of the green infrastructure network for the urban area. Public rights of way including the footpath alongside the River Oughton which links to both the Icknield Way Trail and Mill Way are generally the only way to experience the landscape. The urban edge boundary separating large fields from residential streets is more suburban in character as fields used for sport, allotments and cultivation back on to 20 th century detached and semidetached houses along Moss Way and Swinbourne Avenue. The sense of tranquillity here is diminished, and the boundary is fragmented in places.	
	The wildness and intimate quality of the sense of place are considered sensitive to residential and mixed use development, though this is less so in the east of the landscape unit at the urban edge of Hitchin.	
Visual		
Visual relationships and views (including key vantage points from designated landscapes)	An intimate and enclosed landscape character predominates. Short distance views with focal points in the foreground focus attention on nature including wildlife, trees and the river. The degree of containment reduces sensitivity to residential and mixed use development in visual terms.	
Level of intervisibility: - With AONB - With other landscape character areas	The river valley itself is intervisible with some higher viewpoints both within the AONB to the west, and from the adjacent L3 character unit through the distinctly linear cluster of dense woodland. The generally limited intervisibility reduces sensitivity in these terms although the visual relationship to the AONB is sensitive to residential and mixed use development.	
Overall landscape	Justification and judgement	
sensitivity	This landscape is considered to have a high sensitivity to residential and mixed use development. Its ecological value and its landscape value as a setting for the AONB and green infrastructure element for Hitchin are key features of the landscape unit. Other aspects which contribute to the sensitivity judgment are the intimate landscape scale, and rich diversity of pattern and texture associated with riparian features. The landscapes outside of the wildlife designated sites show less of this sensitivity, including the land in the east of the unit adjacent to Hitchin's urban edge. This would be less sensitive in landscape terms.	
	The large amount of tree cover and valued habitats would be sensitive to removal or development that would impact upon	

Criteria	Comment
	them. However the proximity of the edge of Hitchin and the less-managed and less attractive quality of this boundary reduces the sensitivity of the far eastern edge.

Landscape guidance and recommendations

- 4.40 Key recommendations for this landscape unit are:
 - The natural heritage value of the Oughton Valley is a special element in the regional context, which displays many characteristics defined in the special qualities of the nearby Chilterns AONB including common land, historic influences and natural beauty. The Oughtonhead Common and Nature Reserve are key features to protect and enhance, and would be sensitive to development.
 - The intimate, enclosed nature of the wooded valley is considered sensitive to development, whilst the surrounding landscape provides an important buffer function.
 - A key aim for this landscape unit is therefore to conserve it as an integral part of Hitchin's multi-functional green infrastructure network.
 - Seek to enhance the boundary with Hitchin's settlement edge whilst ensuring any interventions respect the sensitive context of the surrounding landscape especially in relation to views to the west and the AONB.



5 Summary and conclusions

- 5.1 This section sets out the conclusions and recommendations in relation to development within land to the south-west of Hitchin, in response to the landscape sensitivity analysis presented at **section 4**.
- The sensitivity analysis indicates that large parts of the study area are sensitive to residential and mixed use development by virtue of landscape pattern, undeveloped skylines, lightly settled character and, in the case of the north western and western most landscape units, proximity to the Chilterns AONB. The landscape sensitivity is assessed as being at least moderate (landscape units LW1 and WT1) and for all others it is either moderate-high or high.
- 5.3 As such ability to accommodate residential and mixed development in a number of these areas is relatively low in landscape terms due to the reasons set out for each area in section 4 above and the function of the landscape in providing separation between settlements and the AONB.
- The landscape units most able to accommodate residential development with fewer potential adverse landscape and visual issues are LW1 and WT1, although within these there are areas of higher sensitivity as described in section 4. Careful attention should be given to visual prominence issues in relation to rising landforms around St Ippolyts and the perceived sense of separation between Hitchin, smaller outlying settlements and Stevenage New Town to the south.
- 5.5 In landscape terms, the majority of the other landscape units in the study area are able to accommodate only a small quantum of development in lower lying areas close to the Hitchin settlement boundary. In the case of landscape unit OP1 it is suggested that the landscape unit is conserved as an integral part of the local green infrastructure network due to its sensitivity and quality and highly limited physical ability to accommodate viable development.
- 5.6 More detailed principles for mitigation and consideration of development in landscape terms, are provided in a separate paper.

ⁱ Chilterns Conservation Board **Chilterns AONB Management Plan 2008-2012: A Framework for Action**

ii NHDC, 1995 River Hiz Development Guidelines SPG

Appendices

Appendix 1: Field survey template

5593 LAND WEST OF HITCHIN - FIELD SURVEY FORM

Date:	Weather:	Photos:
Time:	Surveyors:	
Landscape unit:		
District LCA context:		
LCA name and number:		
Key characteristics:		
Condition (from LCA matrix):		
Robustness (from LCA matrix):		
Evaluation (from LCA description):		
Relevant landscape policies/designations:		
Landscape functions:		

Sensitivity analysis		
Criteria (and supporting survey prompts)	Landscape values, comments and judgements	Landscape guidance and opportunities (if applicable)
LANDSCAPE		
Representation of special qualities of the Chilterns Area of Outstanding Natural Beauty (AONB):		
Steep chalk escarpment		
Flower-rich downland		
Woodlands		
Commons		
Tranquil valleys		
Chalk streams		
Ancient routes		
Historic environment e.g. hill forts, chalk figures		
<u>Landscape scale:</u>		
Presence/absence of human scale features		
Presence or absence of enclosing elements		
Field pattern, form and size		

Landform:		
Scarp slopes		
Ridge and valley		
U shaped valley		
Rolling/undulating/flat		
Level of landform variation		
Gradient/slope		

Landscape pattern and complexity:		
Cultural/time depth:		
Field pattern/earthworks		
Settlement influences		
Manors/parkland/estates/parks and gardens		
SAMs		
Roman roads		
Sunken lanes		
Landscape structure:		
Enclosure pattern		
Vegetation types, age and scale, density		
Habitats		
Colour/texture		
Others:		
Evidence of geological exposure		
<u>Hydrology:</u>		
Chalk rivers/streams		
Springs		
Seasonal winterbourne/'gutter'		

Settlement and human influences:		
Age of settlement		
Form, whether nucleated, linear/dispersed		
Scale		
Density and massing		
Materials palette		
Character of roads		
Settlement edge – characteristics/nature of		
Skyline character:		
Open/framed/screened		
Settled/developed		
Landmarks		

Perceptual qualities/experience:		
Colour and texture		
Light and reflection		
Movement		
Tranquillity		
Remoteness		
Rarity (from LCA description)		
Condition/management		
VISUAL		
Visual relationships and views:		
Nature of views, whether open/expansive, framed, foiled, glimpsed or screened		
Intervisibility with adjacent landscape units		
Intervisibility with the AONB and from key		
features/viewpoints within the AONB		

Overall sensitivity judgement and comments:		