



- 1.4 The site was visited by a Chartered landscape architect on 17<sup>th</sup> January 2013. The site visit noted intactness, density and quality of structural vegetation in relation to the main 'gate points' and junction points of the road layout. The visit also sought to understand layout in relation to topography and where changes to grading may occur, and therefore to understand potential visual issues. The main issues in relation to the proposed highway layout are noted below and on drawing SK\_1, appended to this paper.
- 1.5 The opportunity was also taken to identify opportunities for additional landscape structure planting/mitigation in relation to the proposed development edge, considering the function the site currently serves as a visual and functional gap between Letchworth and Stotfold. These opportunities are identified on the annotated plan SK\_1, attached.

**Key landscape and visual issues associated with the proposed road layout submitted by the Letchworth Garden City Heritage Foundation**

- 1.6 These are cross referenced alphabetically to drawing SK\_1:
- A. **Junction with Norton Road.** As currently shown this would result in the loss of a small copse of cherry and field maple at the entrance to the double hedged green lane which forms part of the Letchworth Greenway. This loss should be avoided, to help enhance landscape structure connectivity and retain features which contribute to local landscape character. The copse may also have habitat/protected species potential, and it is recommended that ecological advice is sought in relation to the proposals, noting potential 'survey windows' for protected species nesting seasons. The copse is shown on photos 1 and 2 below, with the adjacent greenway at photo 3.



1



3



2

*Images 1 and 2 show the copse at Norton Road, image 3 the double hedgerow at the adjacent Letchworth Greenway, with the copse and potential roundabout location in the foreground*

In terms of potential alternatives for the roundabout junction, it would be undesirable to locate it further north, since this would result in an awkward intersection with the greenway and associated double hedgerow, and further vegetation loss. However to locate it further south on the ascending slope of Norton Road would create potential sight line issues and would also be awkward with regard to local topography (hedgebank and associated 1.2m change of level), plus hedgerow loss.

It may however be possible to locate the junction immediately south of the copse, as landform variation could be addressed relatively easily here, and this would also minimise vegetation loss (a small section of hedgerow only). Provided levels were built up in the copse's root protection area and 'no dig' construction techniques were used, this option

(shown on dwg SK\_1) could avert the loss of this landscape feature. It is recommended that additional levels survey and feasibility work is done in relation to this as part of further design work on site.

**B. Intermediate roundabout associated with loop road in the eastern part of the site.**

This appears to be well sited in relation to existing topography, and is unlikely to result in expansive or difficult/unattractive re grading. However, photograph 4 below shows that the slope rising to the south from the roundabout is exposed and visually prominent. The proposed development would extend down this slope and beyond the line of pines which currently form the horizon. As such the edge of the proposed development would benefit from additional hedgerow and hedgerow tree planting to soften the development edge/create more of an 'interlaced' skyline to help visually absorb potential development, as shown on drawing SK\_1. This treed skyline could also be reinforced by large grade tree/avenue planting along the road route, as shown on drawing SK\_1.



4

**C. Proximity of the loop road to the root protection zones of the belt of pines forming the perimeter to Grange Playing Fields.** Currently it is likely that the road layout will interfere with the root protection areas of the pine trees forming the boundary to the Grange Playing Fields to the south, although an arboricultural survey and impact assessment (to BS 5837:2012) should be used to confirm this. It is recommended that the road layout is moved slightly north of its current location to avoid the root protection area, if this can be achieved within a viable development layout. Alternatively, no dig construction methods (build ups) should be investigated to avoid potential adverse impacts on root protection areas.

**D. Gate point with hedgerow in the south western part of the site.** This would result in a loss of a small section of dense thorn hedgerow and is not a significant loss in landscape terms. However protected species potential should be investigated. Drawing SK\_1 shows locations of potential compensatory native hedgerow planting. The hedgerow is shown to the right hand side of photograph 5 below.



5

**E. Gate point with Western Way, within Letchworth urban area.** The roundabout proposed in this location would result in some localised loss to scrub vegetation, which is not judged to be significant. Also potentially in the loss of a small number of ornamental street trees in the greenspace off Western Way (shown in photograph 6 overleaf).



6

## **Other considerations**

### *Landform*

- 1.7 Specific issues in relation to landform impact have been identified by gate point, where relevant, above. As the majority of the road layout appears well designed with regard to landform and 'runs with the contours', few other landscape issues are anticipated at this stage, although this will of course be subject to detailed design evolution.

### *Relationship of the road to the Letchworth Greenway*

- 1.8 As shown on plan SK\_1, the proposed road intersects the Letchworth Greenway at several points. This appears unavoidable, although could be mitigated to a degree by traffic calming in the form of home zones and integrated public realm at such points. Drawing SK\_1 also identifies a potential additional western spur to the greenway to create an enhanced range of shared use access loops in relation to the potential new development. This would also enable the route to take advantage of locally important and interesting views identified in the landscape sensitivity study, such as those to Fairfield Park to the west.

### *Potential new development edges*

- 1.9 The landscape sensitivity study identifies the site to be of relatively low sensitivity to residential development (low and low-moderate landscape sensitivity). However, careful consideration will be needed in relation to landscape mitigation as part of the site design, and through part of the detailed landscape and visual impact assessment (LVIA) process that is likely to be required as the scheme develops. Some initial considerations and opportunities for effective landscape mitigation to help integrate future development/maintain a sense of visual separation with Stotfold, are set out on the annotated drawing SK\_1, appended.



[www.landuse.co.uk](http://www.landuse.co.uk)

# **Land north of Letchworth: Landscape sensitivity study**

**Final Report to North Hertfordshire District Council  
Prepared by LUC, January 2013**



**Project Title:** Landscape Sensitivity Study for land north of Letchworth

**Client:** North Hertfordshire District Council

Version	Date	Version Details	Prepared by	Checked by	Approved by Principal
1	14/12/12	Draft Report	Kate Anderson, Andrew Tempany	Andrew Tempany	Kate Ahern
2	16/01/13	Final report	Kate Anderson, Andrew Tempany	Andrew Tempany	Kate Ahern



# Landscape Sensitivity Study for land north of Letchworth

Final Report for North Hertfordshire District Council  
Prepared by LUC  
January 2013

Planning & EIA  
Design  
Landscape Planning  
Landscape Management  
Ecology  
Mapping & Visualisation

LUC LONDON  
43 Chalton Street  
London NW1 1JD  
T 020 7383 5784  
F 020 7383 4798  
london@landuse.co.uk

Offices also in:  
Bristol  
Glasgow  
Edinburgh



FS 566056  
EMS 566057

Land Use Consultants Ltd  
Registered in England  
Registered number: 2549296  
Registered Office:  
43 Chalton Street  
London NW1 1JD

LUC uses 100% recycled paper

# Contents

<b>1</b>	<b>Introduction</b>	<b>1</b>
<b>2</b>	<b>Methodology</b>	<b>3</b>
<b>3</b>	<b>Study area: Landscape and Environmental Context</b>	<b>7</b>
<b>4</b>	<b>Sensitivity Analysis and Guidance</b>	<b>11</b>
	<b>Landscape character unit: NL1</b>	<b>15</b>
	<b>Landscape character unit: NL2</b>	<b>21</b>
<b>5</b>	<b>Summary and conclusions</b>	<b>29</b>

## **Appendices:**

Appendix 1: Field survey form

## **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.

Mapping in this report is reproduced from Ordnance Survey information with the permission of The Controller of Her Majesty’s Stationery Office, Crown Copyright, Land Use Consultants, Licence Number 100019265.

# 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 north of Letchworth. The study area is shown at **Figure 1.1** below.

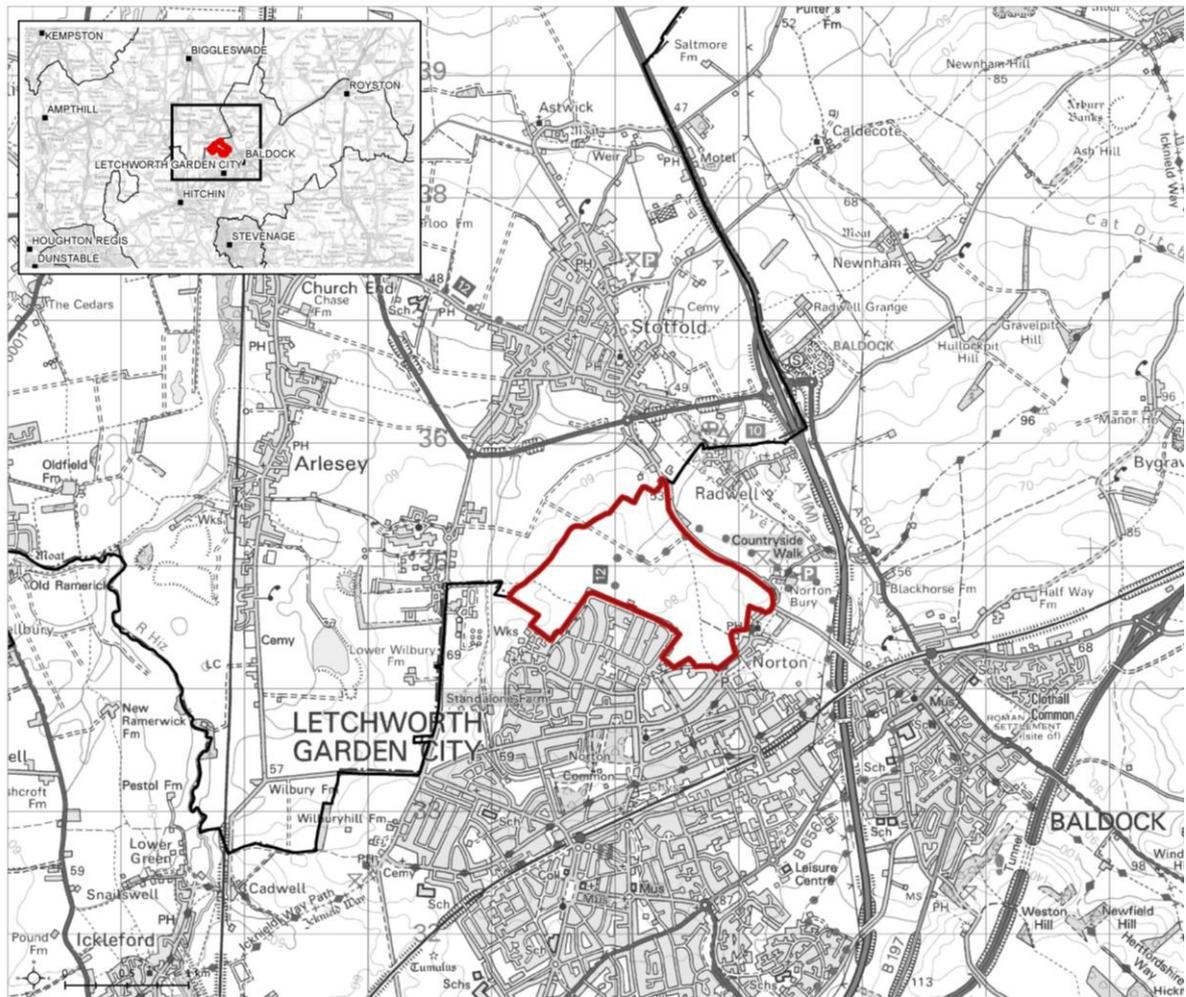


Figure 1.1: Site location and context

- 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 Letchworth was founded in 1903 by First Garden City Ltd as the world's first garden city. Located in the south east of England, it lies approximately 33 miles north of central London. Nearby settlements include Hitchin to the south west and Stotfold to the north.
- 1.4 The setting of Letchworth is characterised by open rolling chalk farmland, mostly under arable cultivation.
- 1.5 The study area covers an area of Green Belt land located immediately to the north of Letchworth and bordered by the Letchworth Greenway, a Millennium access capital project implemented by the Letchworth Heritage Foundation.
- 1.6 The study area comprises a simple rural landscape of medium to large scale arable field overlaid upon a rolling topography which slopes down to the wooded River Ivel valley to the north east. To the east are the village and Conservation Area of Norton, with Norton Pond falling within the eastern most part of the site. The Grange Playing Field falls within the southern part of the site, bordered by the mid-late 20<sup>th</sup> century settlement edge of the Garden City. Further information on landscape character is provided in **section 3**.

## Key study objectives

- 1.7 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

- 1.8 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.
- 1.9 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)
- 1.10 Reference has also been made to the North Hertfordshire District Green Infrastructure (GI) Plan (LUC, 2009) in developing landscape guidance and recommendations, as appropriate, 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 Letchworth 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 Babbie, 2004 and the Landscape Sensitivity and Capacity work by The Landscape Partnership, 2011]
- LUC, 2009, North Hertfordshire District Green Infrastructure Plan
- Relevant saved Local Plan policies from the North Hertfordshire District Local Plan

### Landscape classification

2.3 The existing district landscape character area in which the site lies was 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 A series of criteria have been defined to focus the analysis. These make 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. The criteria have also been informed by our knowledge of the area through the Green Infrastructure Plan and the earlier landscape sensitivity work at Stevenage North and Hitchin south west.

2.5 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

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

### *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 key views, visual relationships and inter-visibility within and across the landscape units and with significant features of the wider landscape.

## 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 Letchworth north. 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 spine road to serve the development, and associated access points to the existing road network. This is addressed in a separate supporting paper.

## 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
<b>High</b>	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.
<b>Moderate-high</b>	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.
<b>Moderate</b>	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.
<b>Moderate-low</b>	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.
<b>Low</b>	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 December 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 December 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. Relevant information on 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**.

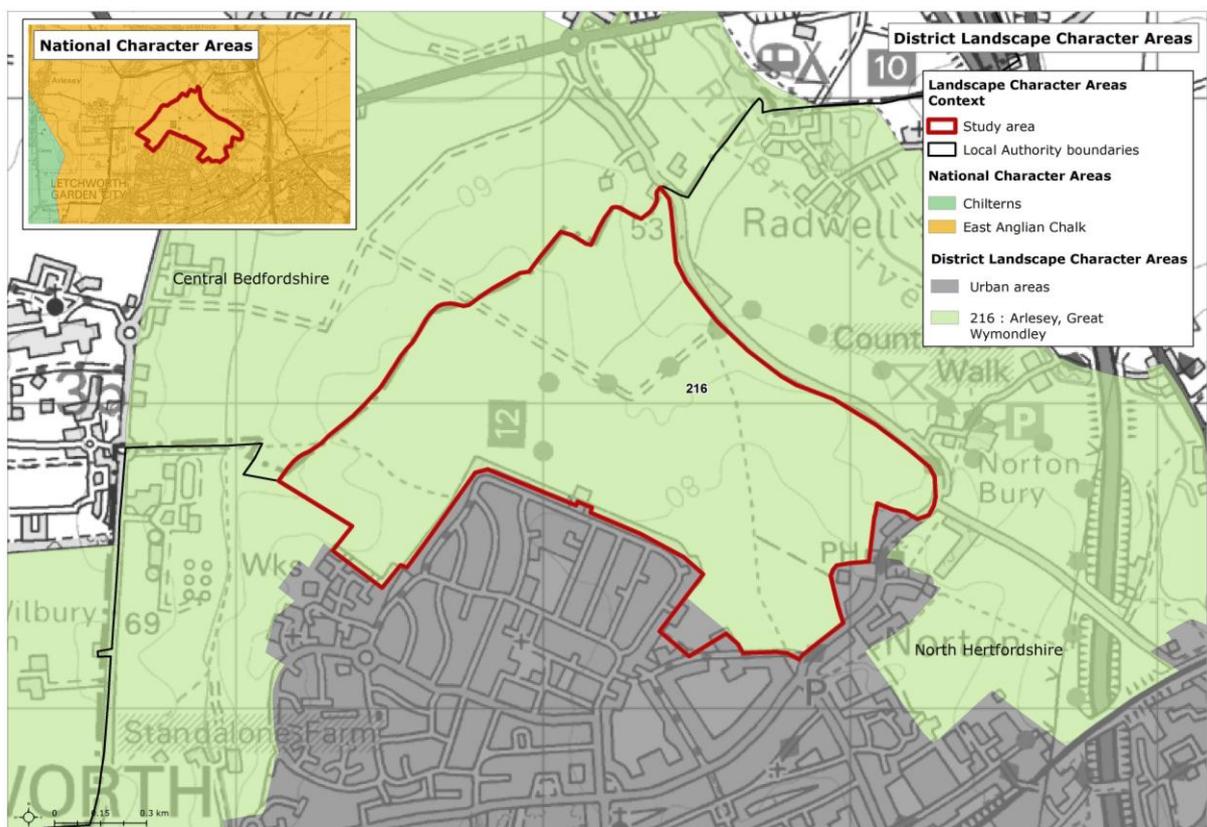


Figure 3.1: Landscape character context

### National character context

- 3.3 The study area lies within National Character Area (NCA) 87: East Anglian Chalk. The key characteristics relevant to the study areas are as follows:

#### *NCA 87: East Anglian Chalk*

- 3.4 A landscape defined by distinctive open variable/rolling topography – a continuation of the Chilterns. Rolling chalk downlands are now mainly under arable cultivation with distinctive roadside and hilltop beech belts and clumps and ash woodlands. The landscape is crossed by a network of long straight roads, such as the A505 and the A1(M), and settlement pattern is defined by isolated farmsteads and nucleated valley villages, with a few larger towns associated with large

transport corridors e.g. Baldock, Letchworth. A number of villages still retain a sense of rural character. Ancient routes such as the Icknield way are a feature of the landscape.

## Local landscape character

- 3.5 The North Hertfordshire and Stevenage Landscape Character Assessment is the source of baseline information on the landscape character of the study area. The landscape character area within the study area is LCA 216 Arlesey- Great Wymondley. The LCA identifies this as a rolling arable landscape characterised by large scale fields with occasional scattered plantations and copses. It covers an area surrounding Letchworth Garden City.
- 3.6 Pockets of horse grazing and other 'edge' influences such as golf courses and caravan parks can be found on settlement edges within the character area, although they do not characterise the study site. 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.
- 3.7 This character area has a sparse covering of recorded nature conservation sites.

## Green infrastructure

- 3.8 The North Hertfordshire District Green Infrastructure Plan (GI Plan) identifies a number of characteristics, opportunities and principles for green infrastructure in and around Letchworth's urban-rural fringe. Relevant points noted in the GI Plan are summarised below:
  - To manage and conserve key wildlife habitats such as Norton Pond
  - To conserve grazing lands around the northern settlement edge which act as a buffer between valuable habitats such as Norton Pond and the arable farmlands north of town
  - Recognition of the importance of the Letchworth Greenway

## Nature conservation designations

- 3.9 The nature conservation interest of the site is shown at **Figure 3.2** and relates mainly to the District Wildlife Site at Norton Pond.

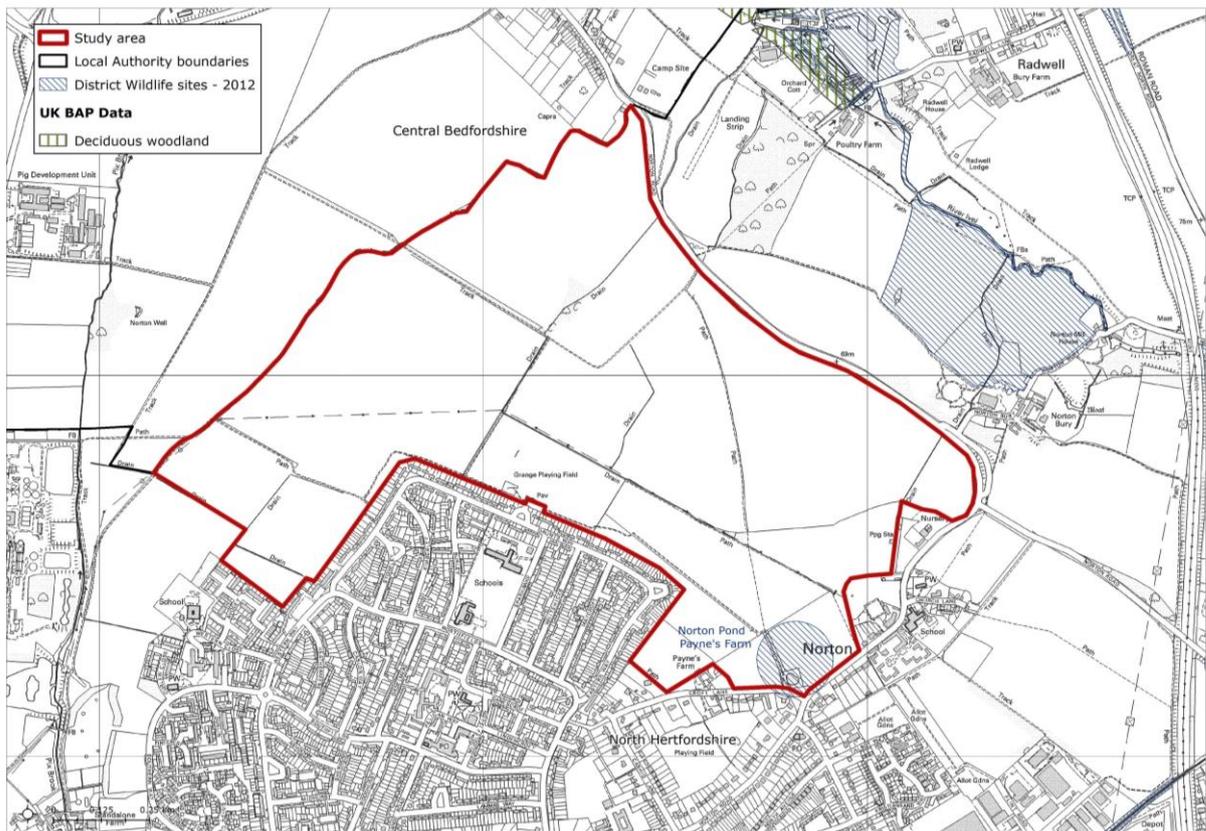


Figure 3.2: Nature conservation context

## Cultural heritage

- 3.10 The cultural heritage context and historic landscape character types from the Hertfordshire Historic Landscape Characterisation (HLC) are shown on **Figure 3.3** overleaf. This shows that the central part of the study area is defined by 18<sup>th</sup> and 19<sup>th</sup> century Parliamentary Enclosure field systems, although there is widespread mid-20<sup>th</sup> century boundary loss elsewhere.



## 4 Sensitivity Analysis and Guidance

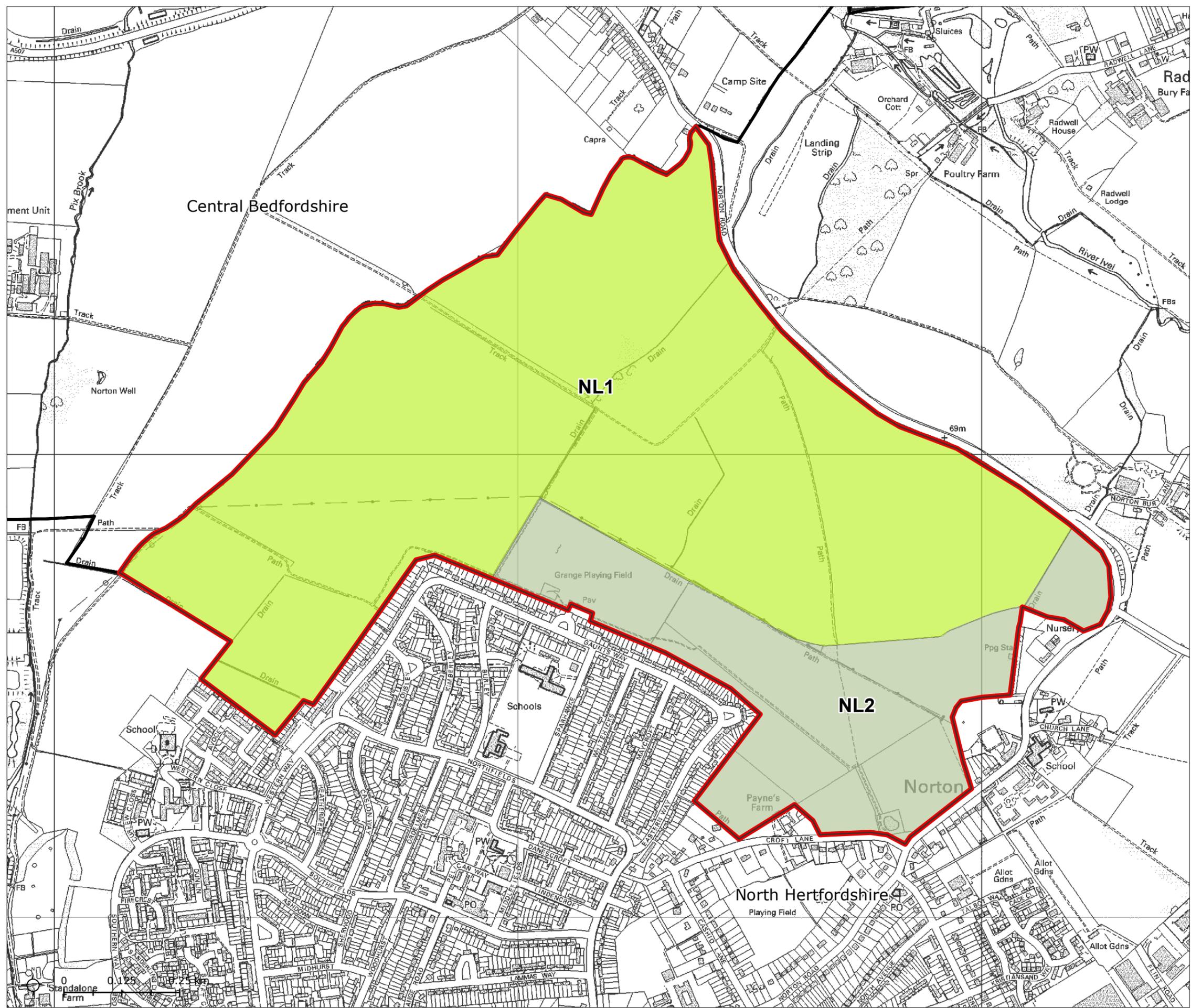
- 4.1 This section sets out the sensitivity analysis for the two landscape units with the study area. The sensitivity analysis has applied the criteria presented at **section 2**, together with the 5 point sensitivity scale. The sensitivity analysis has been undertaken with reference to medium to high 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 drawing SK01 in a separate supporting paper. Consideration has also been given, in the paper, to potential infrastructure proposals where relevant, such as a potential access road.
- 4.2 For the purposes of this study, the district landscape character area 216 Arlesey-Great Wymondley has been used, sub-divided into two 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 as follows:
- NL1 (North Letchworth 1): Covering the areas of larger landscape scale and more rural character in the north and west of the landscape unit
  - NL2 (North Letchworth 2): Covering the smaller scale landscapes and field patterns associated with historic settlement such as Norton village and with the northern edge of Letchworth
- 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**.

# Landscape Sensitivity Study for Letchworth

Figure 4.1

## Landscape Units for Analysis

-  Study area
-  Local Authority boundaries



Map Scale @ A3:1:8,000

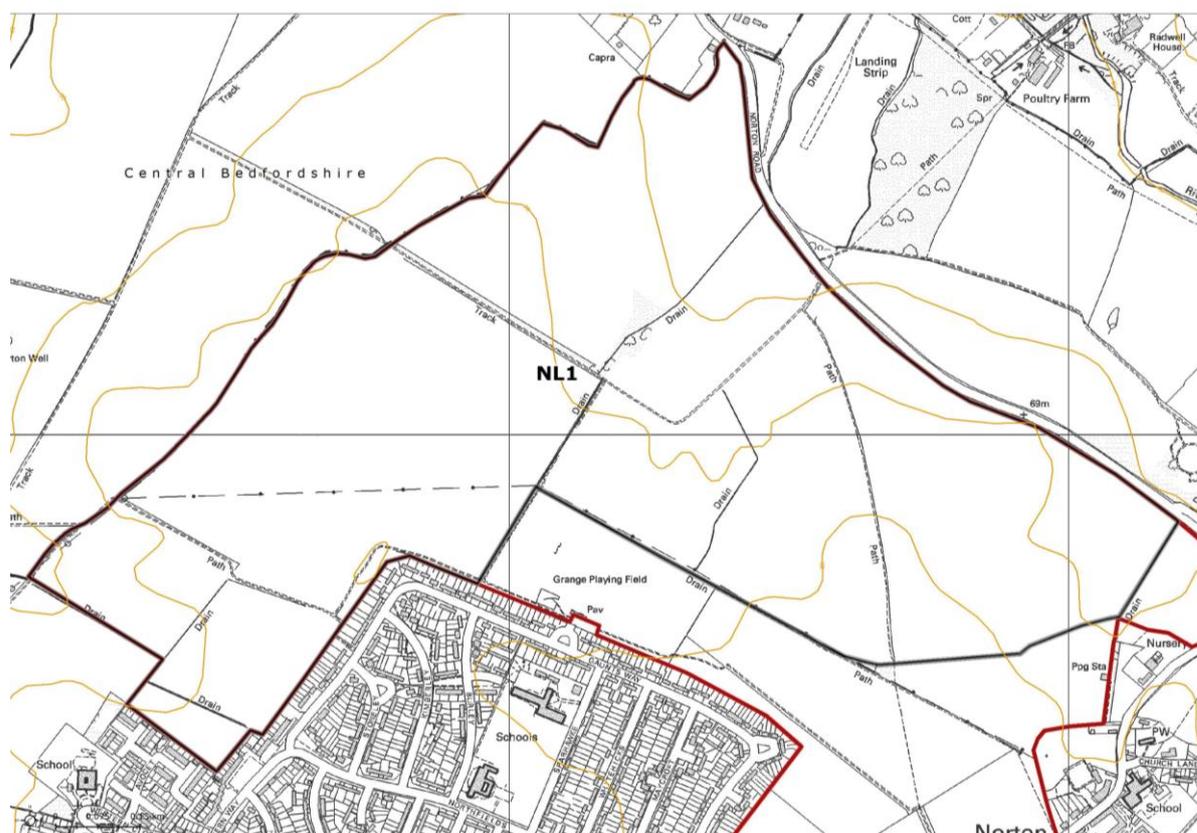


## Landscape character unit: NL1

### Baseline

#### Location

- 4.6 This landscape unit to the north of Letchworth is located in the northern section of district LCA 216 – Arlesey-Great Wymondley. The unit is bounded to the north by the district boundary with Central Bedfordshire (Stotfold and Norton Road) and to the south and east by field boundaries marking the edge of landscape unit NL2 (the subsection divided for the purposes of this study). The south western corner of the landscape unit is adjacent to Letchworth's settlement edge at Western Way.



#### LCA context

##### National

Area 87: East Anglian Chalk. A distinctive and open topography (a continuation of the Chilterns) and large scale chalk downland, now mainly under arable cultivation. The landscape is cut by minor chalk river valleys such as the Ivel and the Rhee and crossed by long straight roads and ancient Roman routes such as the Icknield Way, with the A1 and A1(M) corridor partly following the route of the ancient Great North Road. Settlement is limited to a few large towns on key routes, and to compact nucleated valley villages of rural character.

### 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.

#### **Landscape functions**

- 4.10 The principal function of this area is as separation between Letchworth and Stotfold: its rural and open character and public footpaths, byways and cycleways that form part of the wider Letchworth Greenway provide a popular recreational and green infrastructure resource for the surrounding settlements. The land is also used for productive agriculture.

## Sensitivity analysis

Criteria	Comment
<b>Landscape</b>	
Landscape scale	<p>The landscape broadly consists of a large scale arable field pattern, with fields similar in size and appearance, and defined by hedgerow boundaries. The settlement edge of Letchworth is separated by a mixture of trees, hedge and scrub vegetation, which in addition to the occasional field oak, provide the few references of human scale. The field pattern is eroded, with post 1950s hedgerow removal.</p> <p>The large scale landscape would generally have a low sensitivity to residential and mixed use development.</p>
Landform and topography	<p>The landform is gently undulating, with a broadly flat and elevated northerly edge to Letchworth. Landform falls away towards the north west (toward Pix Brook) and the north and north east of the landscape unit (toward the Ivel Valley). Heights vary between 80m AOD in the southern section of the landscape unit, to 55m AOD at Norton Rd in the north as it drops down to the Ivel Valley.</p> <p>The broad uniformity of the landform would have a relatively low sensitivity, in landscape terms, to residential and mixed use development footprints.</p>

Criteria	Comment
Landscape pattern and complexity	<p>A relatively simple landscape pattern with large open fields defined by neat hedgerows though these are largely eroded due to post 1950s boundary loss. Houses making up the north of Letchworth's urban edge sit behind a line of scrub and woodland which achieves a relatively well integrated settlement edge on the generally flat plateau land to the south of the landscape unit. Interesting roof lines and prominent turrets of the large scale residential development at Fairfield Park to the west provides a focal point and local landmark.</p> <p>The relatively simple landscape pattern is considered to be of low sensitivity to residential and mixed use development.</p>
Cultural pattern and time depth	<p>The district wide landscape sensitivity study notes prehistoric, Roman and medieval elements located north of Letchworth, including earthworks and a medieval settlement. This is most likely referring to the historic church of St Nicholas and its adjacent field outside the study area to the east, and the area south of Radwell outside the study area to the north. There are no obvious historic or cultural landscape elements within the landscape unit itself though relict elements are possible in close proximity.</p> <p>The Historic Landscape Characterisation (HLC) identifies formal C18th parliamentary enclosure and pre- C18th unenclosed common arable land though the landscape has been affected by post 1950s boundary loss, which reduces the landscape's sensitivity to residential and mixed use development.</p>
Settlement and human influences	<p>The landscape unit itself is undeveloped but is managed as arable fields and as a recreational green infrastructure path and cycle network (Letchworth Greenway). It also provides rural views to the adjacent housing in the Grange Estate. This housing consists of modern, mid to late C20th brick housing that is mostly well integrated with the landscape by the topography and scrub/ woodland boundary to back gardens.</p> <p>Though it has an open and rural character, the settlement edges of Letchworth (to the south), Fairfield Park (to the west) and Stotfold (to the north) are visible beyond the boundaries of the landscape unit. Transport corridors including the A1 (M), A507 and Norton Road also have an influence on the character of the landscape unit through views of traffic movement, noise and pylons.</p> <p>The presence of development and infrastructure in views reduces the sensitivity of the landscape unit to further residential and mixed use development. However, the landscape unit also contributes to a sense of separation between settlements and its undeveloped nature therefore carries some importance in this regard.</p>
Skyline character	<p>The landscape unit is characterised by distant views (for instance the water tower at Edworth is visible on the horizon approximately 5km to the north). Skylines are typically complex and formed by a range of development, rising up valley sides to the north, including rooftops of Stotfold within the valley, and treelines. Large scale and prominent</p>

Criteria	Comment
	<p>development at Fairfield Park stands out as a landmark feature on the skyline to the west. More rural skylines comprising the wooded corridor of the Ivel Valley are present to the north east. Transport corridors and the electricity pylons which run along the A1 (M) are also features of the skyline to the north east.</p> <p>The presence of development in skylines reduces the landscape unit's sensitivity to residential and mixed use development, though existing undeveloped and rural skylines are important to the sense of openness from the edge of the urban area.</p>
<p>Perceptual/experiential qualities (colour/texture/light/reflection, movement, tranquillity, remoteness)</p>	<p>The landscape unit is relatively tranquil and exposed though the traffic noise and movement of the A1 (M) to the north east impinges upon this. The sparseness of vegetation and minimal presence of mature tree cover creates a relatively muted and simple colour palette, with an uncomplicated composition. The landscape feels eroded and fragmented in places due to the post 1950s loss of field boundaries, dominance of large arable fields and views of settlement and infrastructure. There is some noise and movement from wildlife within hedgerows, back gardens and scrub/ wooded boundaries.</p> <p>Part of the Letchworth Greenway runs within the landscape unit, also linking to the settlements of Arlesey, Stotfold and Norton. The popular walking and cycling route is used as a way of experiencing the outdoors, countryside and wildlife and is easily accessible from the surrounding settlements. The open and rural characteristics of the landscape are therefore an important aspect of the landscape unit's peri-urban amenity value.</p> <p>The local green infrastructure value of the landscape is important to surrounding settlements, although the presence of development and infrastructure outside the landscape unit reduces its sensitivity to residential and mixed use development.</p>
<b>Visual</b>	
<p>Visual relationships and views (including key vantage points from designated landscapes)</p>	<p>Expansive open views are present from the landscape unit to the east, north and north west, where the land slopes away towards Pix Brook and the River Ivel, and across the far sides of the river valleys which rise in the distance to the north. Views to the north for example, stretch beyond 5km to the water tower at Edworth. Views to Fairfield Park and St Nicholas Church in Norton are existing features of reference in the landscape.</p> <p>The expansive open nature of views, many of which are across arable fields and part framed by vegetation, heightens the landscape's sensitivity to development.</p>
<p>Level of intervisibility: With other landscape character areas and settlements</p>	<p>Distant and panoramic views, especially to the north west, from both the far west of the unit and the far north east, include the eastern part of the Chilterns AONB within their visual envelope. Views into Letchworth are limited by the housing along the urban edge, though the church tower of St</p>

Criteria	Comment
	Nicholas in Norton to the south east forms a locally prominent landmark, as do the turrets of Fairfield Park to the south west.
<b>Overall landscape sensitivity</b>	<p><b>Justification and judgement</b></p> <p>Overall landscape sensitivity to residential and mixed use development is judged to be <b>low - moderate</b>. Elements such as the expansive open views and the Letchworth Greenway green infrastructure setting of the landscape would be sensitive to change. Other aspects such as visibility of development, the intrusions created by transport infrastructure and the simple, generally flat and eroded landscape condition of field boundaries, reduce landscape sensitivity.</p> <p>The strategic function of the landscape unit serves as part of the green wedge between Letchworth, Stotfold and Norton, which would be sensitive to inappropriate development. Landscape elements and key views such as to St Nicholas Church in Norton and to Fairfield Park, as well as the existing well-integrated settlement edge to Letchworth would be sensitive to further development.</p>

## Landscape guidance and recommendations

### 4.11 Key recommendations for this landscape unit are:

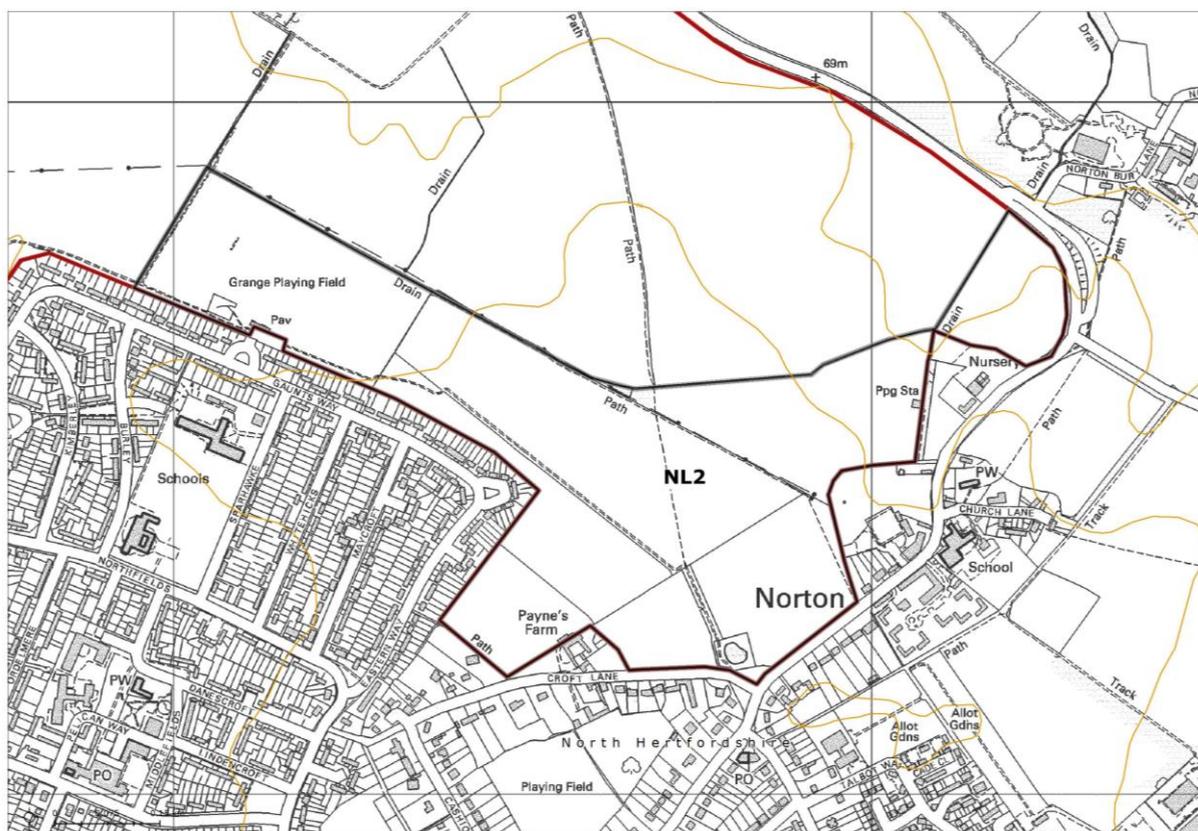
- The landscape unit's strategic function as separation between the settlements of Letchworth, Stotfold and Norton should be respected and enhanced. Potential development is therefore likely to be most easily accommodated adjacent to existing development, without causing settlements to merge. This may create opportunities to enhance existing landscape structure and field boundaries to maintain the sense of rural open character and the 'green gap'.
- The Letchworth Greenway should be protected and enhanced as a valuable recreational and landscape amenity. There may be opportunities for enhancement and expansion of public footpath and cycle routes as part of future development, as well as creation of additional recreational resource in the form of integrated porous green space.
- Development should consider the prominent, exposed and open nature of the landscape unit in relation to the wider landscape, and potential impact of any new development on the existing expansive views. Elements of rural views should be conserved, and key characteristics of the landscape's open rural character promoted and enhanced.
- Key views and local landmarks such as St Nicholas Church in Norton and Fairfield Park should be protected and enhanced in any new development to provide a sense of context and orientation.
- Buffer and reinforce existing habitats such as scrub, copse and hedgerows as essential green infrastructure links for potential new development.

## Landscape character unit: NL2

### Baseline

#### Location

- 4.12 This landscape unit is located directly to the north of Letchworth's settlement edge, in the northern section of the district LCA 216 – Arlesey-Great Wymondley. Lying south east of unit NL1 (divided for the purposes of this study), it is bounded to the north by hedge field boundary, to the south by the residential edge of Letchworth at Gaunts Way and to the south east by the village of Norton.



#### LCA context

##### National

Area 87: East Anglian Chalk. A distinctive and open topography (a continuation of the Chilterns) and large scale chalk downland, now mainly under arable cultivation. The landscape is cut by minor chalk river valleys such as the Ivel and the Rhee and crossed by long straight roads and ancient Roman routes such as the Icknield Way, with the A1 and A1(M) corridor partly following the route of the ancient Great North Road. Settlement is limited to a few large towns on key routes, and to compact nucleated valley villages of rural character.

### Local (District)

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

#### *Summary description from North Hertfordshire District LCA*

- 4.13 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.
- 4.14 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**

- 4.15 There are no designated landscapes within the part of the character area covered by the landscape unit. Norton Pond is a District Wildlife Site.

#### **Landscape functions**

- 4.16 The landscape unit acts as a buffer to the settlement edges of Letchworth and Norton and as separation between Letchworth and Stotfold: its rural and open character and public footpaths, byways and cycleways that form part of the wider Letchworth Greenway provide a popular recreational and green infrastructure resource for the surrounding settlements. The land is also used for productive agriculture.

## Sensitivity analysis

Criteria	Comment
<b>Landscape</b>	
Landscape scale	<p>The landscape is smaller in scale than the adjacent unit NL1, with generally smaller scale fields separated by trees and hedgerows, and a closer relationship with human scale features including the Grange Playing Field and Norton Pond, as well as the vegetated settlement edges of Letchworth and Norton. The field pattern is partly eroded, with post 1950s hedgerow removal.</p> <p>The medium-large scale landscape would generally have a low sensitivity to residential and mixed use development.</p>
Landform and topography	<p>The landscape unit is located at the plateau top, either flat or gradually rising toward the settlement edge between 75-90 AOD.</p> <p>The broad uniformity of the landform would have a relatively low sensitivity, in landscape terms, to residential and mixed use development.</p>
Landscape pattern and complexity	<p>A relatively simple landscape pattern with rectilinear fields but smaller in size and more enclosed than in landscape unit NL1. Hedge and tree-lined field boundaries create an element of structure in the landscape, as do the traditional village of</p>

Criteria	Comment
	<p>Norton and influences of Letchworth's residential edge of the Grange Estate at Gaunts Way which are relatively well integrated with a wooded boundary edge. Footpaths, including those linking to the Letchworth Greenway follow the hedge field boundaries. Norton Pond is a local wildlife site, and is an important local feature in the landscape.</p> <p>The relatively simple landscape pattern is considered to be of relatively low sensitivity to residential and mixed use development footprints, although aspects such as Norton Pond would be more sensitive.</p>
Cultural pattern and time depth	<p>The district wide landscape sensitivity study notes prehistoric, Roman and medieval elements located north of Letchworth, including earthworks and a medieval settlement. This is most likely referring to the historic church of St Nicholas and its adjacent field (both features just outside the landscape unit to the east), and the area south of Radwell outside the study area to the north. There are no obvious historic or cultural landscape elements within the landscape unit itself though relict elements are possible in close proximity.</p> <p>The Historic Landscape Characterisation (HLC) identifies C18th – C19th enclosure, pre- C18th unenclosed common arable land but with post 1950s boundary loss, reducing the landscape's sensitivity to residential and mixed use development.</p>
Settlement and human influences	<p>The landscape unit itself does not contain built development, but contains recreational amenity through the Grange Playing Fields and the signposted footpaths and cycle routes that connect with the Letchworth Greenway. It also provides rural views to the adjacent housing in the Grange Estate, though they are not always high quality. This housing consists of modern, mid to late C20th brick housing that is mostly well integrated with the landscape by the topography and scrub/ woodland boundary to back gardens.</p> <p>The settlement edges of Letchworth (to the south), the traditional village of Norton (adjacent to the south east) and Stotfold (to the north) are visible from the higher ground in the unit, over the hedgerows and between gaps in vegetation. Noise and pylons along the A1(M) are also notable characteristics of the landscape unit.</p> <p>The presence of development within views and the eroded condition of the landscape in places (including post 1950s boundary loss) limits the sensitivity of the landscape unit to further residential and mixed use development. However, the landscape unit also contributes to a sense of separation between settlements and its undeveloped nature is of value as part of the setting to Letchworth and Norton.</p>
Skyline character	<p>Smaller field sizes bordered by hedges and trees provide more enclosure to the landscape, creating shorter distance views and less distinctive skylines than landscape unit NL1. Pylons associated with the A1 (M) remain visible, and glimpses of long views to the north west are achievable in some locations. Existing undeveloped and rural skylines are important to the</p>

Criteria	Comment
	sense of openness from the edge of the urban area. These would be sensitive to residential and mixed use development.
<p>Perceptual/experiential qualities (colour/texture/light/reflection, movement, tranquillity, remoteness)</p>	<p>A lack of development within the landscape unit itself creates a sense of openness and rural tranquillity. However, telegraph wires and noise from transport corridors such as the A1 (M) to the north detracts from this. A strong northern boundary edge with landscape unit NL1 is defined by a stream, hedge and tree planting including line of tall Scots pine on the northern boundary of the playing field. This contributes to a more enclosed and intimate landscape than NL1, with a greater influence on character from the residential edge at Gaunts Way and Croft Lane to the south.</p> <p>The landscape feels eroded and fragmented in places due to the post 1950s loss of field boundaries, dominance of large arable fields and views of settlement and infrastructure. The Letchworth Greenway and the playing fields are important green infrastructure components of the landscape unit. The Greenway provides a well-used signposted route, accessed from Letchworth and Norton via the gateway point at Norton Pond. The open, rural and accessible characteristics of the landscape are therefore an important aspect of the landscape unit's peri-urban amenity value.</p> <p>The presence of infrastructure and settlement in views reduces the sensitivity of this landscape in perceptual terms, though its context in relation to the urban edges and recreational amenity value should be considered.</p>
<b>Visual</b>	
<p>Visual relationships and views (including key vantage points from designated landscapes)</p>	<p>Views are partially contained by tree and hedgerow planting along the field boundaries that run west-east as well as the vegetated settlement edge at Gaunts Way and Croft Lane. St Nicholas Church in Norton provides the main focal point to the east, presenting an attractive and historical element in views. More distant views are possible in places, including that of pylons along the A1(M) to the north east as well as the more rural wooded corridor of the Ivel Valley between and over hedgerow and tree planting in the fields of the landscape unit.</p> <p>The more contained nature of views reduces the landscape's sensitivity to residential and mixed use development in comparison to NL1.</p>
<p>Level of intervisibility: With other landscape character areas and settlements</p>	<p>Views are often contained by field boundary planting, creating a stronger visual relationship to the south with the urban edge of Letchworth and Norton, nestled behind wooded and scrub boundary planting.</p> <p>The higher level of visual containment decreases the landscape unit's sensitivity to residential and mixed use development.</p>

Criteria	Comment
<p><b>Overall landscape sensitivity</b></p>	<p><b>Justification and judgement</b></p> <p>Overall landscape sensitivity to residential and mixed use development is judged to be <b>low</b>. A smaller landscape field pattern and vegetated field boundaries which limit distant views, in combination with the relatively flat topography, and proximity to development of Letchworth provides a stronger relationship in character with the residential settlement edge at Gaunts Way to the south.</p> <p>Important landscape elements include Norton Pond and views to St Nicholas church in Norton, as well as the existing landscape structure of hedge and tree planting and the footpaths associated with the Letchworth Greenway. Providing that such features are respected and enhanced through appropriate mitigation, this landscape unit could potentially accommodate a degree of residential and mixed use development.</p>

## Landscape guidance and recommendations

### 4.17 Key recommendations for this landscape unit are:

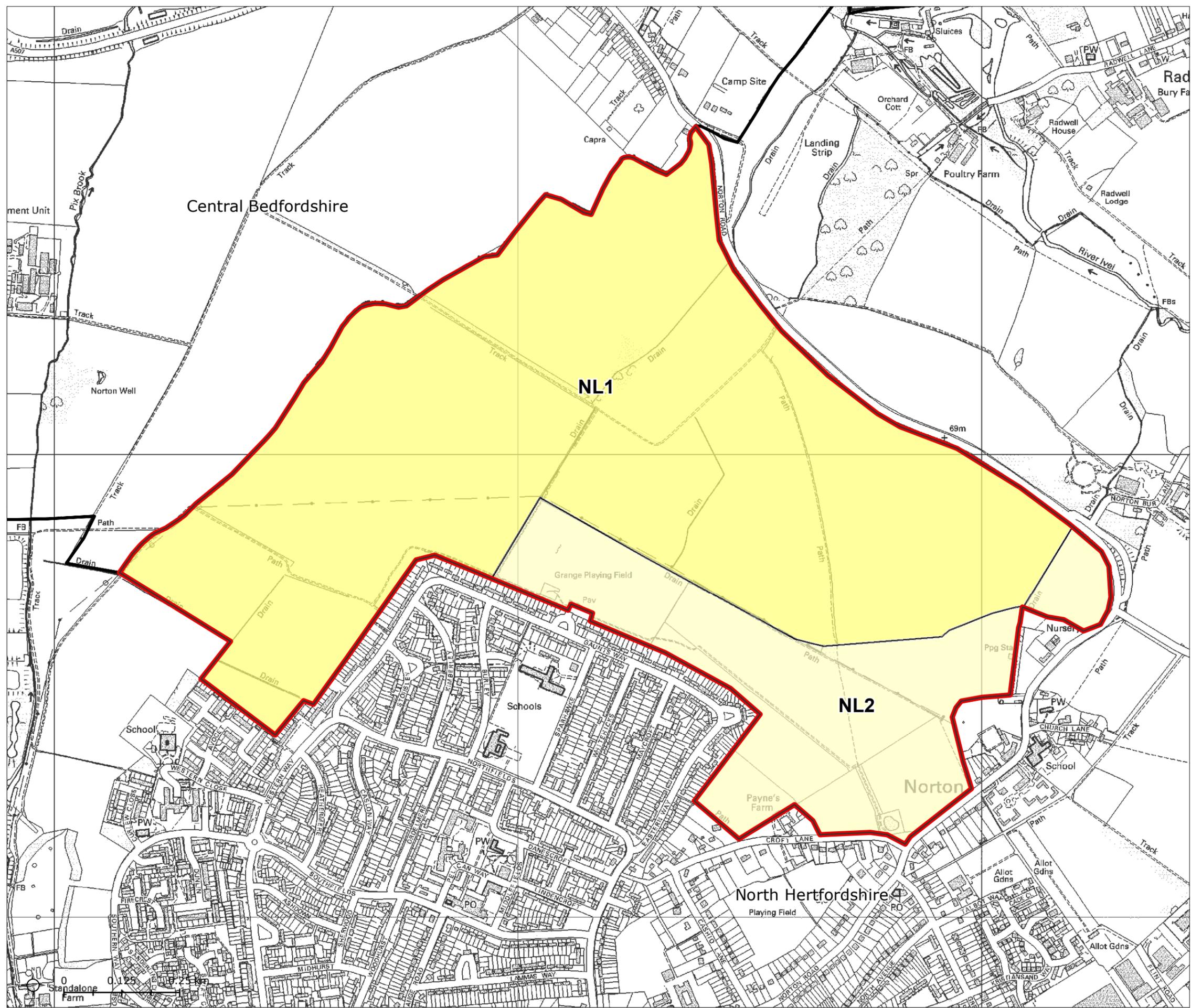
- Protect and enhance the key wildlife and landscape resource of Norton Pond. New development may seek opportunities to integrate Norton Pond as a key focal point, utilising it as an opportunity for extending the existing green infrastructure network and integrating additional biodiversity and landscape elements as well as enhancing access opportunities.
- Maintain and enhance views to landmarks such as St Nicholas Church in Norton.
- Protect and enhance the walking and cycle routes associated with the Letchworth Greenway. Potential opportunities for mitigation include the extension and improvement of existing routes to improve access, recreational experience and landscape structure.
- Maintain and enhance existing landscape structure in the form of field boundaries of hedgerow and tree planting that serve to contain existing views. Removal of existing boundaries is likely to result in increasing the visual sensitivity of the landscape unit through opening up views to the north. Potential development may seek to utilise existing boundaries – such as the strongly defined boundary at the northern edge of the landscape unit – as a key boundary edge to development.
- Potential development should be appropriate in scale, density and should respect the context of existing landscape features, including the existing rural character and recreational amenity value. This may include incorporation of 'green wedges' and porous green space.

# Landscape Sensitivity Study for Letchworth

**Figure 4.2**

## Landscape Sensitivity Ratings

-  Study area
-  Local Authority boundaries
- Sensitivity Rating**
-  Low - Moderate
-  Low



Map Scale @ A3:1:8,000



## 5 Summary and conclusions

- 5.1 This section sets out the conclusions and recommendations in relation to development within land to the north of Letchworth, in response to the sensitivity analysis presented at **section 4**.
- 5.2 The sensitivity analysis indicates that large parts of the study area are of relatively low sensitivity to residential and mixed use development by virtue of landscape scale, landscape pattern and intrusions in the form of the A505, A1(M) and the southern edge of Stotfold. However some parts of landscape unit NL2 are of higher sensitivity due to landscape scale and more complex pattern – the area around Norton Pond for example. Within the sensitivity analysis, it is also recognised that open visual character across much of the north of the study area is important, as is the function this helps provide in maintaining a sense of separation between North Letchworth, Norton and Stotfold.
- 5.3 As such, any residential and mixed use development would be better concentrated in the southernmost parts of the study area, in closest proximity to the existing settlement edge, but ensuring conservation of locally valued green infrastructure elements as Norton Pond and Letchworth Greenway, and the strong landscape structure which surrounds the settlement in this area. This could form a template for re-connection and reinforcement of field boundaries immediately north of Letchworth to help foil/integrate future development and maintain the idea of a strong visual gap between settlements.
- 5.4 These principles are embodied in **drawing SK\_1** in the separate supporting paper, which identifies the least constrained locations for potential development, in landscape and visual terms, and opportunities for landscape and visual mitigation, as well as key views, visual relationships and features to conserve. Based on the least constrained locations shown in yellow on **drawing SK\_1**, the site would potentially yield the following:
- 765 dwellings at a net residential density of 30 dwellings per hectare (dph) or a gross density of 15 dph (e.g. including roads and green infrastructure).
  - 1020 dwellings at a net residential density of 40 dph, or a gross density of 20dph.

# Appendices

Appendix 1: Field Survey Template

**5593 LAND NORTH OF LETCHWORTH – FIELD SURVEY FORM**

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

<b>Sensitivity analysis</b>			
<b><i>Criteria (and supporting survey prompts)</i></b>	<b><i>Landscape values, comments and judgements</i></b>		<b><i>Landscape guidance and opportunities (if applicable)</i></b>
<b><i>LANDSCAPE</i></b>			
<u>Landscape scale:</u> Presence/absence of human scale features Presence or absence of enclosing elements Field pattern, form and size			
<u>Landform:</u> 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

Hydrology:

Chalk rivers/streams

Springs

Seasonal winterbourne/'gutter'

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

<u>Perceptual qualities/experience:</u> Colour and texture Light and reflection Movement Tranquillity Remoteness Rarity (from LCA description) Condition/management			
<b><i>VISUAL</i></b>			
Visual relationships and views: Nature of views, whether open/expansive, framed, foiled, glimpsed or screened Intervisibility with adjacent landscape units			
<b>Overall sensitivity judgement and comments:</b>			