

TYPE 12: CHALK VALLEYS

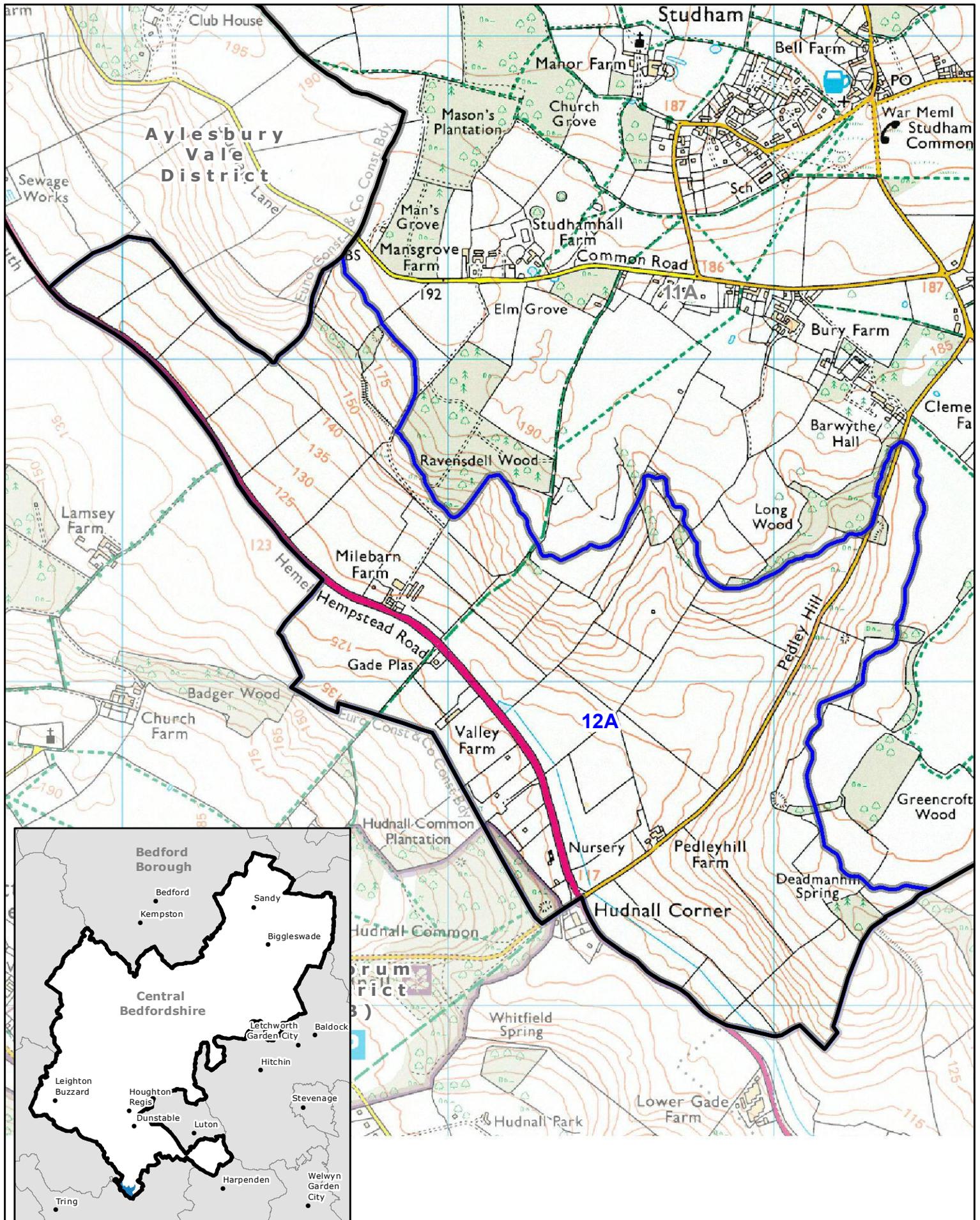
Key Characteristics

- A series of medium scale valleys (with distinct floodplains) having a semi-enclosed to enclosed character.
- Underlying solid geology of Middle Chalk, Upper Chalk and Alluvium with drift deposits of Valley Gravels.
- Land use characterised by both arable and pastoral farming.
- Road and rail links dominate the river valleys with a strong visible and audible presence.
- Wooded context with deciduous woodland blocks and shelterbelts aligning transport routes and channelling views.
- Rivers are often imperceptible but are picked out by vegetation aligning the watercourse.
- Luton Hoo House and Gardens imparts a designed character to the landscape.
- The Chiltern Way and the Lea Valley Walk cross two of the valleys.
- Generally unsettled aside from occasional individual properties.
- Bordered by the urban edges of Luton and Dunstable.

Location and Boundaries

- 12.1 The *Chalk Valleys* landscape type occurs across four separate areas of Central Bedfordshire - all located to the south of Luton. The boundaries of the landscape type are determined by the sloping landform that distinguishes these strongly articulated valleys from the adjacent plateaux landscape. Topographic change corresponds with changes in surface geology- fluvial processes having carved through the Upper Chalk to expose Middle Chalk as the predominant surface strata.

12A: Gade Chalk Valley



12A Gade Chalk Valley

Location and Boundaries

12A.1 This small landscape character area occurs in the south-west corner of Central Bedfordshire at the point where it meets Buckinghamshire to the north and Hertfordshire to the south. The valley extends into the adjoining counties and only a very small and unrepresentative part falls within Central Bedfordshire. The valley of the Gade forms a distinct geographic character area cutting through the chalk dip slope and is geographically separate from the other arterial valleys of the Ver and Lea to the north. The character area lies entirely within the Chilterns Area of Outstanding Natural Beauty (AONB).

Summary of landscape character: Key characteristics

- 12A.1.1 Small section of the Gade Valley within the southwest corner of the county adjoining Buckinghamshire to the north and Hertfordshire to the south
- 12A.1.2 A medium to large scale chalk valley landscape but with sense of enclosure created by the containment of the valley sides. Valley is wholly within The Chilterns AONB.
- 12A.1.3 Distinct valley landform with topography sloping relatively gently from 150m to 100m with a narrow valley floor/floodplain.
- 12A.1.4 River course imperceptible. Valley floor dominated by the busy A4146 road corridor; however, the road is not prominent in views from the upper valley slopes.
- 12A.1.5 Land cover is dominated by arable cropping - some smaller areas of pasture.
- 12A.1.6 Geometric field pattern with boundaries generally aligned perpendicular to the road running up the slope and accentuating the landform.
- 12A.1.7 The tops of the slopes are characterised by woodlands of beech, ash, maple and hazel and roadside wooded belts and beech hedgerows.
- 12A.1.8 Medium to long views channelled along the valley corridor are characteristic and contained by the rising valley sides.
- 12A.1.9 Development largely absent from the valley sides, apart from occasional farm buildings, but with occasional development (industrial, commercial and residential) along the road corridors.
- 12A.1.10 Former market gardening units converted to industrial uses with visually intrusive access splays. Small-scale quarrying/earth moving activity prominent within the small scale valley landform.
- 12A.1.11 One right of way crosses the valley linking higher dip slope- plateau areas to either side.

Landscape Character Description

Physical and natural landscape

- 12A.2 The Gade valley forms a medium scale chalk valley landscape in the south west corner of Central Bedfordshire, the valley continuing into the adjacent counties. The distinct v-shaped landform cuts through the adjacent chalk slopes; it is wholly within the Chilterns AONB. A sense of containment is provided by the relatively steep rising valley sides, although medium to long views channelled along the narrow valley floor are also characteristic. At this point the valley is dry and the valley floor is dominated by the route of the A4146 linking Hemel Hempstead and Milton Keynes. Land cover is, for the most part, under arable cropping, with some smaller areas of pasture. A distinctive feature is the hedgerow network with boundaries aligned perpendicular to the road and running up the slopes. A band of deciduous woodland characterises the tops of the slopes marking the transition to the adjacent chalk dipslope, as at Ravensdell Wood and Long Wood. A bridleway, forming part of the Icknield way Trail, running north-south across the character area, provides a linkage with the adjacent elevated dipslope landscapes.

Biodiversity

- 12A.3 The River Gade rises from chalk springs near Hudnall Corner, the upper part of the valley is dry. The chalk springs and watercourse itself is a significant biodiversity feature of the area, although the river is only seasonal in nature.
- 12A.4 Unimproved neutral grassland would have been a particular feature of the area in the past though much has been lost as a result of agricultural improvement and ploughing. Lowland calcareous grassland, can be found at isolated sites on the valley sides, being found at sites such as Hudnall Field and Ravensdell Wood Hill. Very small amounts of acid grassland were formerly present on the more acidic soils at sites such as Hudnall Common, though this site has become mostly overgrown with scrub and woodland.
- 12A.5 Farmland habitats such as arable field margins, hedgerows, improved grassland, ditches, ponds and road verges are a widespread feature in this character area and support a range of farmland species. Some of the hedgerows are ancient and species rich and contain numerous mature standards of oak, ash and beech.



Views of a rural agricultural landscape from Pedley Hill

Visual and perceptual character

- 12A.6 Development is largely absent from the valley sides but intermittent industrial, commercial and residential development follows the road corridor. Perceptions of the landscape are varied, with views of wholly rural agricultural landscape from the valley sides, contrasting with the busy

transport corridor and mixed development including quarrying and redundant market garden/nursery units of the valley floor.

Cultural pattern and historic character

- 12A.7 The field-name 'Kilbury Camp', on the crest of the valley side below Deadmanhill Spring, suggests an Iron Age fortification. There are cultivation terraces (lynchets) on the slopes below it, dating from the medieval period.
- 12A.8 The geometric field pattern appears to be the result of enclosure of former open field arable. The northward-pointing salient of the parish and county boundary, which incorporates an additional strip of land on the gravels in the valley floor, suggests there may have been more valuable pasture or meadow here historically, at a time when seasonal water-flow was greater and more reliable.

Settlement pattern; built character

- 12A.9 There is very little settlement within the Gade Valley in Central Bedfordshire. Development is limited to intermittent industrial, commercial and residential premises along the road corridor. The small hamlet at Hudnall on the western valley side falls within Hertfordshire.

Evaluation

Landscape Change

Past Change	Current and Future Change
<p>Transport corridors.</p> <p>Redundant market gardening/nursery units now abandoned or used as industrial/commercial premises often with poor access to the roads and incongruous boundaries creating a more urban character in places.</p>	<p>Renewable energy developments.</p> <p>Potential development/redevelopment along road corridor.</p>

Key positive landscape features/ strategic sensitivities of the landscape

- 12A.1.12 Clear chalk valley landform – forming one of the Chiltern' distinctive 'windgaps'.
- 12A.1.13 Open rural/agricultural valley sides.
- 12A.1.14 Cultivation terraces and a possible Iron Age fortification on the valley side.
- 12A.1.15 Woodland/tree cover which clothes the upper valley slopes and the undeveloped valley crests.
- 12A.1.16 Seasonal watercourse of the River Gade.
- 12A.1.17 Hedgerows and hedgerow trees provide some landscape patterning – boundary lines running down the slope perpendicular to the road are particularly important features.
- 12A.1.18 The right of way which connects the landscape to the adjacent dipslope areas.
- 12A.1.19 Remaining areas of pasture are sensitive to encroachment by arable fields.

Visual Sensitivity

- 12A.1.20 Clear chalk valley landform with channelled views through the valley 'gap' plus open rural views of the undeveloped valley sides.
- 12A.1.21 The upper valley skyline, with its intermittent tree and woodland cover.
- 12A.1.22 The areas with highest visual sensitivity are the undeveloped slopes of the valley sides and the transition at the ridge with the adjacent chalk dip slope landscape (11a Whipsnade).

Landscape Strategy

The overall strategy for the Gade Chalk Valley is to **enhance/renew** the chalk valley landscape. Landscape enhancement opportunities should focus on improving the condition and quality of the existing positive elements, such as the hedgerows and woodlands. There are also opportunities to recreate features of the valley landscape that have been lost such as valley pasture.

This small area continues within the adjacent counties and forms part of a wider chalk valley system. The landscape strategy should be co-ordinated and integrated across the catchment as a whole.

Guidelines for New Development

- 12A.1.23 Monitor redevelopment of roadside premises for commercial/industrial uses and implement guidelines to ensure that these uses respect their AONB location, for example in terms of boundaries, security measures, roadside access, tree planting etc.
- 12A.1.24 Conserve the undeveloped valley crests.
- 12A.1.25 Limit further infill/ribbon development along the road and maintain views to the undeveloped valley sides.

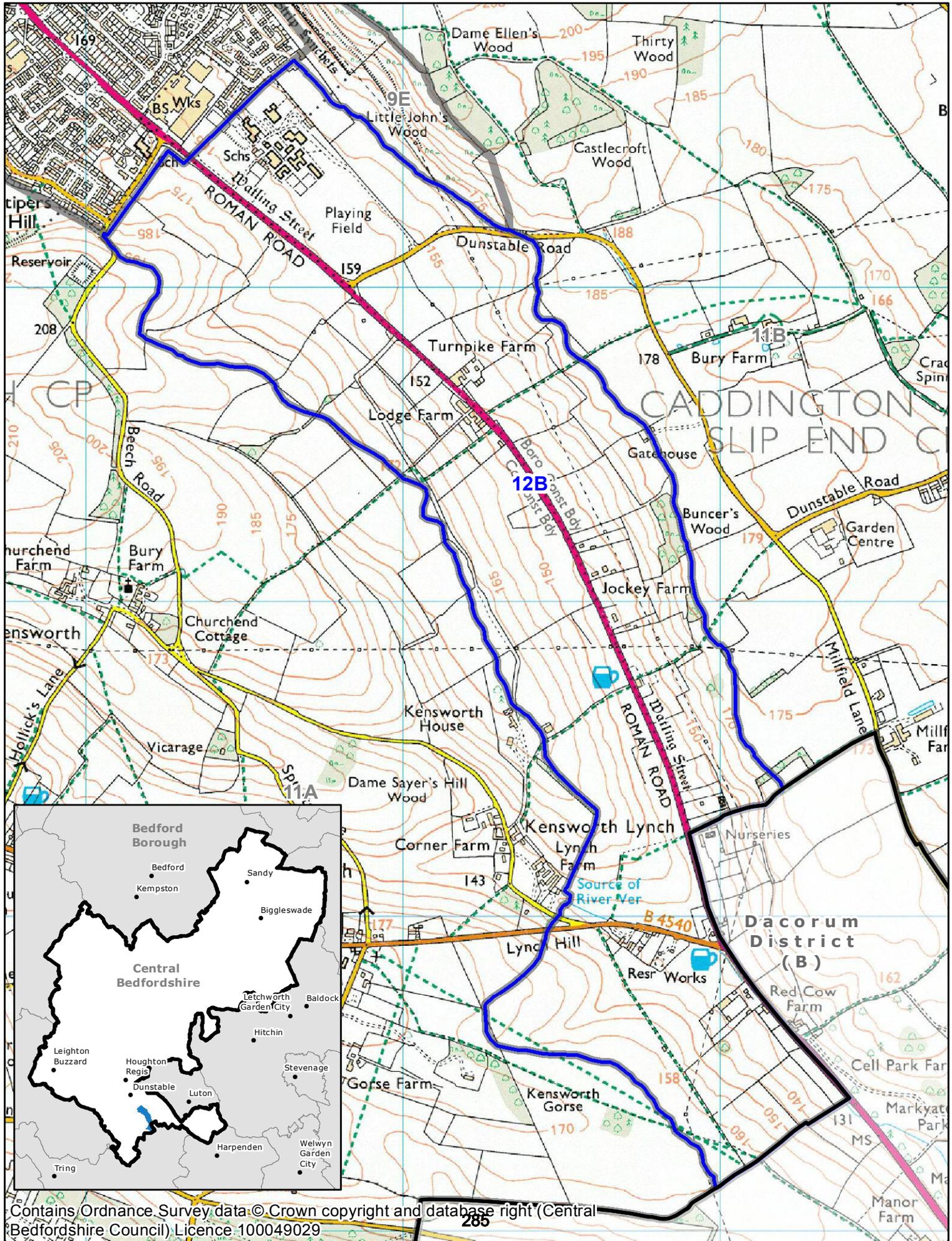
Landscape Management Guidelines

- 12A.1.26 Restore and improve the condition and structure of hedgerow boundaries. This is a key requirement along the road corridor. Renewal of some of the valley side hedgerows which run perpendicular to the road would reintroduce a stronger landscape pattern and help link the valley floor with the more wooded ridgelines.
- 12A.1.27 Conserve and enhance the woodland blocks that characterise the upper valley slopes and ridgeline (in the adjacent character area). Consider opportunities to enhance the woodland resource by extending and connecting areas of woodland.
- 12A.1.28 Explore opportunities for recreation of pasture along the valley floor, reintroduction of grazing and recreation of valley features including small blocks of floodplain woodland and waterside vegetation.
- 12A.1.29 Manage arable farmland on the valley sides to enhance landscape and biodiversity interest.
- 12A.1.30 Conserve the cultivation terraces, and any other surviving earthworks.
- 12A.1.31 Seek to ensure high water quality and water flows within the river Gade;

Also refer to the following documents:

- Luton and Southern Bedfordshire Green Infrastructure Plan.
- Chiltern's AONB Management Plan
- Chiltern's AONB Design Guide

12B: Ver Chalk Valley



12B Ver Chalk Valley

Location and Boundaries

12B.1 The *Ver Chalk Valley* incises the chalk dipslope and forms part of the chalk landscape defining the south of the county. It runs from the southern edge of Dunstable to the country boundary where it continues to flow south-east into Hertfordshire and becomes more densely settled. The valley is within the Chiltern Hills AONB, apart from the school site on the southern edge of Dunstable. The boundaries of the character area are defined by topography with the upper boundary following the crest as perceived in views from the valley floor.

Summary of landscape character: Key characteristics

- 12B.1.1 A medium scale, predominantly dry chalk valley, but containing the source and headwaters of the River Ver within the southern half of the area.
- 12B.1.2 The course of the Ver is imperceptible, the valley being dominated by the busy A5 - an urban road with traffic and street lighting, collision barriers, wide road junctions, pavements and large advertising boards.
- 12B.1.3 Uniform, relatively shallow-sloping valley sides that are open and undeveloped - predominantly under arable crop production but with some areas given over to grazing (both sheep and horses).
- 12B.1.4 Elevation predominantly ranging from 140 on the valley floor to 195m AOD on the crests.
- 12B.1.5 Narrow valley floor with scattered, low density development aligning the A5 - including farmhouses and associated barns/agricultural buildings, redundant market gardening units, storage, services and light-industrial uses.
- 12B.1.6 A pylon line, running across the shallow valley sides, parallel to the A5, is a dominant feature and interrupts the landform.
- 12B.1.7 Undeveloped ridgeline (with the exception of one property). The ridgeline is characteristically open but with some woodland blocks and belts (predominantly beech).
- 12B.1.8 Bordered by the market town of Dunstable.
- 12B.1.9 Surviving network of short-flailed (gappy) hedges running perpendicular to the A5 and forming a distinct geometric landscape pattern on the valley sides.
- 12B.1.10 Variable, untidy field boundaries aligning the A5 - broken hedgerows, walls bordering the caravan park, and a concentration of overgrown coniferous hedges marking property boundaries.
- 12B.1.11 Three public rights of way cross the valley, connecting it with the adjacent Dipslope (11b) and (11a), including the Ver Valley walk. Pavements along the A5 permit pedestrian access along the length of the valley.
- 12B.1.12 Within the northern half of the valley, the sloping valley side (to the east of the A5) becomes steeper, narrower and more elevated. At this point the character of the landscape changes to form the South Dunstable (9e) character area - creating a prominent backdrop.

Landscape Character Description

Physical and natural landscape

- 12B.2 Gently sloping sides contain this relatively shallow valley. The valley floor is dominated by the urbanised road corridor of the A5 on the line of the Roman Road Watling Street. The valley contains the source and headwaters of the River Ver - this is a seasonal watercourse and is largely imperceptible within the valley landscape.
- 12B.3 In contrast to the valley floor, the uniform sloping sides are free from development and largely given over to arable crop production, interspersed with areas of horse and sheep grazing. A line of early enclosure fields with more sinuous boundaries flanks the road. Although undeveloped, the slopes contain a prominent line of pylons - a conspicuous feature on the smooth and otherwise open slopes.
- 12B.4 The valley is defined by a strong ridgeline. Both smooth and tree-lined, the ridge provides clear views over the valley sides where the surviving geometric network of short flailed hedges is apparent.
- 12B.5 Development is dispersed along the A5 and comprises a mix of uses creating an urban-fringe edge to Dunstable. Building age, style and materials are highly varied, evoking an inconsistent character and lacking a clear sense of identity. The urban edge of Dunstable is visible in some views.

Biodiversity

- 12B.6 The majority of the valley is dry with the source of the Ver rising at Kensworth Lynch near the county boundary. Unimproved neutral grassland would have been a particular feature of the area in the past though much has been lost as a result of agricultural improvement.
- 12B.7 On the valley sides farmland habitats such as arable field margins, hedgerows, improved grassland, ditches, ponds and road verges support a range of farmland species. Some of the hedgerows are ancient and species rich and contain numerous mature standards of oak, ash and beech.

Visual and perceptual character

- 12B.8 An undeveloped ridgeline and uniform sloping valley sides, characteristically open but with some woodland blocks and belts. The urbanised road corridor of the A5 has a strong audible and visual presence and fragments the continuity of the valley form.



The A5 has a strong visual and audible presence in the valley floor



Open views of undeveloped valley sides with woodland blocks

Cultural pattern and historic character

- 12B.9 Neolithic/Bronze Age flint scatters and Roman finds have been recorded along the valley sides. The line of the Roman Watling Street, which ran from London and St Albans through the Roman town at Dunstable to the far north-west of the Province, is followed by the modern A5. It diverted slightly from its true direct alignment here to take advantage of the natural valley. It is not known if any of the original Roman structure survives under successive upgradings since the Turnpike era, but its alignment is still a feature of historic landscape significance.
- 12B.10 The line of Watling Street is flanked by fields deriving from early enclosure, in many places retaining the sinuous boundaries of the open field furlongs from which they were created. There has been removal of some of these boundaries on the west side of the road in the later 20th century.

Settlement pattern; built character

- 12B.11 The valley sides and crests are essentially free of any form of development apart from the line of pylons which run along the eastern valley side. In contrast the development on the valley floor follows the road route including a mix of farmhouses and associated barns/agricultural buildings, redundant market gardening units, storage, services and light-industrial uses creating an inconsistent edge to Dunstable with strong urban fringe characteristics. The character area is bordered by the market town of Dunstable. Some views can be gained of residential and industrial workings on the urban edge but screening is provided in places by overgrown hedges aligning the A5 and buffered by the transitional landscape of Manshead Secondary School and grounds.

Evaluation

Landscape Change

Past Change	Current and Future Change
<p>The A5 road corridor.</p> <p>Redundant buildings and land (e.g. areas of market gardening) aligning the A5 creating strong urban fringe character.</p> <p>Redevelopment of property along the A5 – often with inappropriate boundary treatments creates an urban fringe character.</p>	<p>Intensification of existing built form.</p>

Positive landscape features/ strategic sensitivities of the landscape

- 12B.1.13 Open, undeveloped sloping valley sides with hedgerows forming a strong geometric pattern. The sinuous field boundaries either side of the road retain the character of early enclosure of former open field arable.
- 12B.1.14 Predominantly undeveloped ridgeline – both open and wooded, forming a simple skyline.
- 12B.1.15 Public rights of way crossing the valley and providing a connection to the adjacent chalk landscapes.
- 12B.1.16 The source and headwaters of the River Ver – although these are imperceptible and are especially sensitive to over abstraction of the chalk aquifer.
- 12B.1.17 Forms part of the chalk landscape of the Chilterns AONB.

- 12B.1.18 Watling Street was a strategic Roman road central to the administration of the British province. While improved many times since the 18th century it has retained its alignment and character. It is sensitive further road improvements.
- 12B.1.19 Wooded context provided by the adjacent South Dunstable Chalk Escarpment (9e).

Visual Sensitivity

- 12B.1.20 The strong, simple skyline of the valley crest of open areas interspersed with woodland, which is vulnerable to any form of development.
- 12B.1.21 Views across the open pastoral and arable slopes.
- 12B.1.22 Views to the adjacent South Dunstable Escarpment.

Landscape Strategy

The strategy for the Ver Chalk Valley is to **enhance** the condition of the landscape (particularly the valley floor) and renew elements of the landscape that have been lost in order to strengthen the character overall. This valley has seen a significant amount of development along the road corridor which has subsequently fallen into decline. As such there could be scope for introducing new landscape elements (as well as enhancement measures) to improve the character and visual environment of the valley floor.

This small area continues within the adjacent counties and forms part of a wider chalk valley system. The landscape strategy should be co-ordinated and integrated across the catchment as a whole.

Guidelines for New Development

- 12B.1.23 Safeguard the Roman character and alignment of the A5 in the event of further proposed road improvement.
- 12B.1.24 Support schemes to reinstate the use of buildings lying derelict along the A5, but monitor redevelopment of roadside premises for commercial/industrial uses and implement guidelines to ensure that these uses respect the 'rural' location, for example in terms of boundaries, security measures, roadside access, tree planting etc.
- 12B.1.25 Limit ribbon development along the A5 that would lead to the valley becoming directly connected to, or encompassed within, the town of Dunstable.
- 12B.1.26 Conserve the open views across the undeveloped sloping valley sides.
- 12B.1.27 Monitor the introduction of prominent vertical structures, e.g. pylons or masts that would further fragment the valley form.
- 12B.1.28 Monitor road improvement/traffic schemes (and associated features) that would continue to urbanise this landscape i.e. road widening, street lighting and large scale advertising boards.

Landscape Management Guidelines

- 12B.1.29 Restore and improve the condition and structure of hedgerow boundaries. This is a key requirement along the A5 road corridor – where the aim should be to conserve and enhance the early enclosure field boundaries. Renewal of the valley side hedgerows which run perpendicular to the road would strengthen landscape pattern and visually integrate the valley floor with the slopes and ridgeline.
- 12B.1.30 Consider extending the surviving small pockets of woodland and connecting these with beech woodland on the adjacent *Chalk Dipslope* landscapes.

- 12B.1.31 Seek to improve the condition and consistency of the boundaries walls and fencing bordering properties on the A5.
- 12B.1.32 Conserve the undeveloped character of the ridgeline which is both smooth and open and silhouetted with trees.
- 12B.1.33 Explore opportunities for improving the ecological value of the valley and consider opportunities for extending and linking habitats beyond the site e.g. with the chalk escarpment of the adjacent *South Dunstable* character area (9e).
- 12B.1.34 Consider appropriate planting at the edge of Dunstable where the urban edge is harsh. Explore opportunities for developing green recreational and ecological links from the valley into the town.
- 12B.1.35 Explore possibilities for reinstating the headwaters of the Ver (where culverted) and re-establishing a pastoral floodplain and fringing vegetation.
- 12B.1.36 Seek to ensure high water quality and water flows within the river Ver.
- 12B.1.37 Conserve the character of the rural roads which cross the valley and limit urbanising influences - widening/kerbing and ensure that traffic management measures are sympathetic to the rural character.

Also refer to the following documents:

- Luton and Southern Bedfordshire Green Infrastructure Plan.
- Chiltern's AONB Management Plan
- Chiltern's AONB Design Guide

12C Slip End Chalk Valley

Location and Boundaries

12C.1 This small landscape character area occurs in the south of Central Bedfordshire, with a small part within Luton Borough. The valley extends from the southwest edge of Luton and follows a southeast course to the unitary authority boundary and continues into Hertfordshire. The valley of *Slip End Chalk Valley* forms a distinct character area, cutting through the chalk dipslope. It is geographically separate from the other chalk valleys of the *Gade* (to the west), *Ver* and *Lea* (to the east).

Summary of landscape character: Key characteristics

- 12C.1.1 A medium-scale dry valley forming part of the chalk landscape defining much of southern Bedfordshire. Elevation ranges from 110m on the valley floor - 165m AOD on the crests.
- 12C.1.2 Dominated by primary road corridors: the M1 (including junction 10), A1081 as well as the secondary Newlands Road - all have a strong visible and audible presence.
- 12C.1.3 A number of pylon lines cross the landscape - running the length of the valley floor as well as extending up the valley sides. These dominate the skyline.
- 12C.1.4 Land use predominantly characterised by arable land but with some pockets given over to horse and cattle grazing. Fields are predominantly bound by short-flailed hedges and post and rail fencing. Hedges are both gappy and overgrown in places.
- 12C.1.5 From the valley floor, there is often no perception of being within a valley system however the valley landform is clearly visible from the upper reaches of the slopes and ridge.
- 12C.1.6 A sense of semi-enclosure is provided by woodland belts aligning the A1081. There are some small areas of woodland on the valley sides e.g. Round Wood.
- 12C.1.7 Generally unsettled with the exception of individual farmsteads and a small group of cottages - built form generally comprising dark brown brick and slate. The valley becomes distinctly more settled in the southeast at Kinsbourne Green/Harpenden although this area of development is located on the north facing slope, falling within Hertfordshire.
- 12C.1.8 Recreational character - containing the golf course of Stockwood Park Country Park (that extends into the valley from the adjacent Luton Hoo Chalk Dipslope) and Luton Rugby Football Club - the pitch and sports club occurring adjacent to Newlands Road.
- 12C.1.9 Historic parkland at Stockwood Park - the edge of Stockwood Park Country Park is defined by a low brick wall running along Newlands Road.
- 12C.1.10 Gated and lodged entrance to the Luton Hoo with a prominent tree-lined avenue running up the valley sides, leading to the estate.
- 12C.1.11 Strong urban fringe character at the edge of Luton on the approach from Newlands Road - a number of small pockets of degraded land align the road.
- 12C.1.12 The valley ridges are characterised by open arable fields, settlement edge of Slip End and the woodland/parkland landscape of Luton Hoo, occurring on the adjacent Chalk Dipslope landscapes (11b and 11c).
- 12C.1.13 There are some public rights of way crossing and lining the slopes of the valley - providing connections to the adjacent Chalk Dipslopes.

Landscape Character Description

Physical and natural character

- 12C.2 This is a chalk valley landscape, but one where the distinct valley form has been greatly interrupted due to the dominance of road corridors. These roads, which include the M1 and junction 10 and 10A, have an engineered, urban character and are prevalent in most views and provide a constant source of background traffic noise. Pylons line a number of these routes and dominate the skyline.
- 12C.3 The valley is largely unsettled – containing just one farm and a group of cottages. However, the settlement of Slip End (on the adjacent Chalk Dipslope - 11b) brings small-scale settlement edge character to the valley ridgeline. The character area is delineated by the Central Bedfordshire unitary authority boundary, running along the A1081, and splitting the valley between counties. In reality the valley extends south and east into Hertfordshire where it is dominated by the town of Harpenden.
- 12C.4 Although having a strong urban fringe character (due to adjacent towns of Luton and Harpenden) the majority of the land area is given over to arable farming with some smaller pockets of pasture. A number of hedgerows have been lost and those remaining are frequently gappy or overgrown. Temporary field boundaries are in place marking horse paddocks. Tree cover is limited but the small copse (Round Wood), the edge of Stockwood Country Park and the woodland shelterbelt and tree lined avenue marking the boundary and gated entrance to Luton Hoo Estate, create some enclosure and wooded character. A gas installation unit - delineated by steel fencing and coniferous trees is an incongruous feature.



From Newlands Road, the M1 corridor provides an urban fringe influence in the landscape. Pylon lines are prominent on the skyline.



The tree lined avenue of Luton Hoo Estate, with arable fields and hedgerow boundary in the foreground

Biodiversity

- 12C.5 This is a predominantly dry valley with only seasonally wet ditches present. Unimproved neutral grassland would have been a particular feature of the area in the past though much has been lost as a result of agricultural improvement and ploughing. Areas of unimproved neutral grassland are still present at sites such as Stockwood Park where an acid grassland character is evident (largely within the adjacent character area (11c)). Extensive areas of improved and semi-improved neutral grassland are also present at Luton Hoo Park, although again these are largely within the adjacent character areas (11c and 12d).
- 12C.6 Farmland habitats such as arable field margins, hedgerows, improved grassland, ditches, ponds and road verges are a feature in this character area and support a range of farmland species. Some of the hedgerows are ancient and species rich and contain numerous mature standards of oak, ash and beech.

Visual and perceptual character

- 12C.7 There is a strong urban fringe character to this area, as a result of the influence of the adjacent towns of Luton and Harpenden and primary road corridors which cut through the landscape including the M1 (and junction 10) and the A1081. They have a strong audible as well as visual presence in the otherwise largely unsettled, arable landscape.

Cultural pattern and historic character

- 12C.8 Apart from the perimeter of Luton Hoo (registered grade II*) and Stockwood Park, the historic roads which followed this valley were lined by fields deriving from early enclosure, with sinuous boundaries reflecting the open field furlongs from which they were created.
- 12C.9 South of Luton Hoo these boundaries have been lost through agricultural improvement. The perimeter planting of Luton Hoo still lines the route of the A6, and Stockwood Park's perimeter follows the line of the road which diverges north-west from the A6 and originally followed the valley along Caddington's historic parish boundary. North of Junction 10, the M1 has all but obliterated the historic road line, the irregular early enclosure field pattern, and the historic boundary between Caddington and Luton.
- 12C.10 Round Wood may have been part of the wider designed landscape of Luton Hoo, possibly forming part of the view across the valley from the house.

Settlement pattern; built character

- 12C.11 The area is generally unsettled with the exception of individual farmsteads and a small group of cottages - built form generally comprising dark brown brick and slate. The valley becomes distinctly more settled in the southeast at Kinsbourne Green/Harpenden although this area of development is located on the north facing slope, falling within Hertfordshire.
- 12C.12 Large scale infrastructure in the form of the M1 and associated junction, plus lines of pylons are dominant built features within the valley setting.

Evaluation

Landscape Change

Past Change	Current and Future Change
<p>Stockwood Park golf course extending from the adjacent Chalk Dipslope landscape to the valley sides.</p> <p>Development of the embanked M1 that fragments and dominates the valley.</p>	<p>Potential for further settlement growth at Luton and Harpenden.</p> <p>Further transport/infrastructure improvements linking main settlements. Growth of the wider area, particularly around Luton may further increase traffic on the road network.</p>

Key positive landscape features/ strategic sensitivities of the landscape

- 12C.1.14 The woodland belts abutting the A1081.
- 12C.1.15 Stockwood Park (golf course) extending from the adjacent Chalk Dipslope, bringing a parkland character to the valley, plus edges of Luton Hoo Park.
- 12C.1.16 The largely undeveloped valley sides and ridgeline.
- 12C.1.17 The rural character in the southeast.
- 12C.1.18 The function of the valley which plays an important role in separating the settlements of Luton and Harpenden.
- 12C.1.19 Consistent use of building materials - dark red/brown brick with slate tiles characterising farms and outbuildings.
- 12C.1.20 The public rights of way crossing and lining the valley sides.
- 12C.1.21 Occasional small surviving woodland copses on the valley sides e.g. Round Wood, which has added importance as a possible component of the wider designed landscape around Luton Hoo.

Visual Sensitivity

- 12C.1.22 Views to surviving woodland copses on the valley sides.
- 12C.1.23 The area of open undeveloped valley crest and transition to the chalk dipslope landscape.
- 12C.1.24 Views across the valley associated with the wider designed landscape of Luton Hoo – for example the view across to Round Wood
- 12C.1.25 Views up to the north-eastern valley sides to the parkland landscape of Stockwood Park.

Landscape Strategy

The overall strategy for the Slip End Chalk Valley character area is to **enhance/renew** with distinct opportunities to **recreate** lost features. Landscape enhancement should focus on improving the condition and quality of the existing positive elements, such as the woodland belts aligning the A1081, the hedgerows and the brick boundary wall surrounding Stockwood Park County Park. There are opportunities to recreate features of the valley landscape that have been lost and **introduce new landscape elements** where small areas of agricultural land have fallen into decline e.g. small scale woodland planting.

This small area continues within the adjacent counties and forms part of a wider chalk valley system. The landscape strategy should be co-ordinated and integrated across the catchment as a whole.

Guidelines for New Development

- 12C.1.26 Limit the extension of Luton into the valley along Newlands Road.
- 12C.1.27 Safeguard the perimeters of Luton Hoo Park and Stockwood Park from further encroachment from development or road improvement schemes.
- 12C.1.28 Maintain views to the generally undeveloped valley sides. Additional development would further disguise the valley landform. The aim should be to resist urbanisation of the more sensitive parts of character area to the north of Slip End and manage any extension of Luton in a way that avoids impacts on valley crests (such as at Kinsbourne Green, Thrales End and Slip End) and takes account of existing tree belts.
- 12C.1.29 Prevent further cluttering of the skyline by resisting development of large scale vertical structures such as pylons and masts.
- 12C.1.30 Any new development should respect the consistent use of the dark brick and slate tiling.

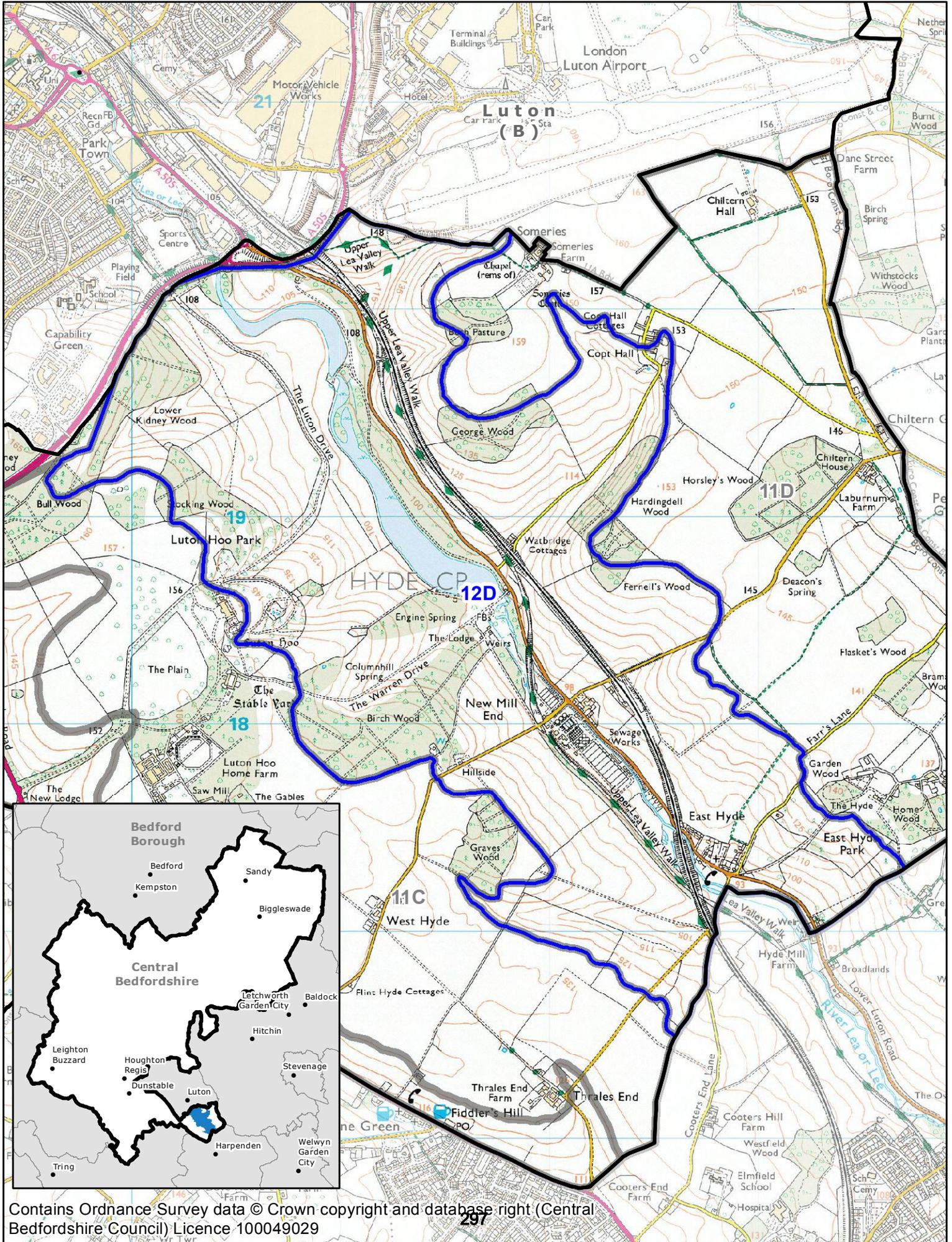
Landscape Management Guidelines

- 12C.1.1 Restore and improve the condition and structure of hedgerow boundaries. This is a key requirement along the road corridors. Renewal of some of the valley side hedgerows would reintroduce a stronger landscape pattern.
- 12C.1.2 Conserve and enhance any surviving remnants of historic boundaries; create new boundaries of similar character where possible.
- 12C.1.3 Consider opportunities to enhance the woodland resource by extending and connecting areas of woodland into the valley. Ensure the design of new planting respects and enhances the wider designed landscape.
- 12C.1.4 Promote active management of pockets of marginal land and explore opportunities for introducing new landscape elements to these neglected spaces e.g. woodland planting.
- 12C.1.5 Restore elements of the parkland landscapes associated with the adjacent historic parks at Luton Hoo and Stockwood Park – in particular seek to restore the boundary wall around Stockwood Park.
- 12C.1.6 Conserve Round Wood so as to retain its significance with the Luton Hoo wider landscape.
- 12C.1.7 Develop a strategy for mitigation the visual intrusion of road corridors cutting through the valley.

Also refer to the following documents:

- Luton and Southern Bedfordshire Green Infrastructure Plan.

12D: Lea Chalk Valley



12D Lea Chalk Valley

Location and boundaries

12D.1 The *Lea Chalk Valley* landscape character area adjoins the south-east edge of Luton, extending south-eastwards to the unitary authority boundary with Hertfordshire. The west and east boundaries are defined, respectively, by the ridgeline with the *Chalk Dipslope* (11c and 11d). The valley forms a distinct cutting through the chalk and is geographically separate from the other arterial river valleys of the Ver and the Gade to the west. The character area is distinguished by its particularly wooded context and the perceptible winding course of the River Lea.

Summary of landscape character: Key characteristics

- 12D.1.1 Valley containing the upper course of the River Lea also containing route of B653 linking Luton and Harpenden and main rail line.
- 12D.1.2 A medium scale valley landform with a narrow valley floor and wide and gently sloping valley sides extending to the ridgeline (c.150m) of the adjacent chalk dipslope landscapes (11c and 11d).
- 12D.1.3 The winding course of the river is perceptible at East Hyde where the floodplain is characterised by wet meadow.
- 12D.1.4 Land use characterised by small scale fields of pasture on the valley floor with medium arable fields on the valley sides. Valley side fields have remnant hedgerows running down the valley slopes.
- 12D.1.5 A complex and fragmented landscape interrupted by regular changes in land use including utilities e.g. Thames Water sewage works and transport links which dominate the valley floor.
- 12D.1.6 Large mixed woodland blocks and shelterbelts e.g. Birch Wood, George Wood, Hardingdell Wood together with the significant extent of ancient woodland in the parkland of the Luton Hoo create a strong wooded context.
- 12D.1.7 Luton Hoo Park imparts a designed character to parts of the valley. Views to Luton Hoo on the adjacent plateau (11c) are afforded from more elevated locations on the valley sides.
- 12D.1.8 Predominantly contained and enclosed along the valley floor by sloping valley sides and woodland, with channelled views along rural roads flanked by woodland belts and hedgerows. From the upper slopes there are semi-enclosed, wider views across open, arable fields into the valley.
- 12D.1.9 Skyline views to the adjacent ridgeline of the Luton Hoo character area (11c) vary from that of an open ridgeline to woodland blocks or to rows of silhouetted trees.
- 12D.1.10 The busy B653 and Midland Mainline railway cut through the Lea valley with a strong visible and audible presence. In particular, the railway embankment encloses views from the valley floor. Large viaduct bridges add a distinct engineered character to the valley and frame views.
- 12D.1.11 Generally unsettled, apart from occasional individual properties of mixed style – some traditional, along the roadside e.g. Watbridge cottages, and the small settlement of East Hyde along the B653.
- 12D.1.12 The Upper Lea Valley Walk provides an important recreational route from Luton's urban area along the Lea River Valley linking into the extensive recreational network of the Lea Valley to the south.
- 12D.1.13 Framed views to the urban edge of Luton along the B653 together with more distant views across to Capability Green industrial business park along the valley side road from Copt Hall to the B653. In general views are buffered by woodland. Quick transition from a semi-rural

to urban environment.

- 12D.1.14 Large parts of the area, in particular within the grounds of Luton Hoo, are inaccessible both physically and visually.

Landscape Character Description

Physical and natural landscape

- 12D.2 The River Lea has carved a distinctive valley through the underlying chalk creating a narrow valley floor with wide and gently sloping sides.
- 12D.3 The valley has a complex and varied landscape character, in particular, there is a notable contrast in land use associated with the upper slopes and the valley floor. The upper slopes are typically characterised by medium scale arable fields and blocks of woodland forming the transition between the slopes of the valley and the adjacent Chalk Dipslope landscape (11d, 11c).
- 12D.4 The valley floor is more complex in character. The winding course of the river is most perceptible at East Hyde where characteristic features of the floodplain including areas of wet meadow and wetland birds are visible and the river divides into of millstream. Elsewhere the river is less apparent and land use is characterised by pockets of pasture and less sympathetic features such as the conspicuous Thames Water Sewage Works, the B653 road corridor – linking the settlements of Luton and Harpenden - and the Midland Mainline railway line featuring landmark railway viaducts. There is a distinct 'designed' quality to the landscape as a result of the wooded grounds of the Luton Hoo Park, the red-brick perimeter walls and gateways lining much of the B653, are a key feature.

Biodiversity

- 12D.5 The River Lea is the only permanent watercourse within South Bedfordshire's chalk valleys. The valley contains associated habitats such as mature willow pollards, willow` and other scrub, and wetland vegetation. The River Lea could support otter, and water vole are known to be present upstream on the River Lea in Luton.
- 12D.6 Semi-improved neutral floodplain grassland is present in the area, though much of the grassland here has been affected by past agricultural improvement and drainage. The majority of the grassland is dry for most of the year but is prone to flooding, though small areas of marshy grassland and other wetland vegetation are present in permanently wet conditions near East Hyde.
- 12D.7 Unimproved neutral grassland would have been a particular feature of the area in the past though much has been lost as a result of agricultural improvement and ploughing. Extensive areas of improved and semi improved neutral grassland are present at Luton Hoo Park. Improved neutral grassland is of little biodiversity value but can retain archaeological features of interest. The large areas of parkland also contain old/veteran trees which provide an important habitat.
- 12D.8 The Lea Valley is distinguished by the presence of ancient semi-natural woodland on the valley sides such as George Wood, dominated by a mix of species including oak, ash, beech, birch and wild cherry. The areas of beech woodland are particularly important as they are an unusual woodland type for Bedfordshire. Conifers have been planted on some stands of ancient woodland.

Visual and perceptual character

- 12D.9 Views within the landscape are varied. The valley floor is typically contained and enclosed by sloping valley sides and large woodland blocks associated with ancient woodland in the parkland of the Luton Hoo and shelterbelts aligning the B653. Views to the urban edge of Luton are generally from a close range and channelled along rural roads as a result of the surrounding woodland belts and hedgerows. In contrast, the valley sides are less enclosed with wider views typically from upper slopes across open arable fields into the valley.
- 12D.10 Skyline views to the adjacent ridgeline of the Luton Hoo character area (11c) vary from that of an open ridgeline to woodland blocks or to rows of silhouetted trees.
- 12D.11 The busy B653 and Midland Mainline railway cut through the Lea valley with a strong visible and audible presence. In particular, the railway embankment encloses views from the valley floor. Large viaduct bridges add a distinct engineered character to the valley and frame views.



The railway passing through the valley and woodland blocks on the valley slope near East Hyde, from Thrales End Lane



The river Lea and floodplain near the B653 and Thrales end lane

Cultural pattern and historic character

- 12D.12 Luton Hoo Park has been a dominant influence on the character of the historic landscape in this area. At its maximum extent in the 18th century, its perimeter included the east slope of the valley, and George Wood. Where the River Lea ran through the Park, it was altered in the 18th century to create a series of artificial lakes.
- 12D.13 South of Luton Hoo Park, the landscape of the valley (which was probably originally an irregular pattern of early enclosure fields) was rationalised in the late 18th/early 19th century by the re-alignment of roads and field boundaries. East Hyde is small planned settlement of this period, perhaps created to re-house people displaced by the expansion of East Hyde Park.
- 12D.14 The Great Northern Railway was built through the valley in 1860, following a slightly different route from the later Midland Railway. It served a station at New Mill End. Its line is now historic landscape feature in its own right.

Settlement pattern; built character

- 12D.15 The valley is predominantly unsettled despite the large number of transport routes which cross the area, and forms a strong contrast with the adjacent built-up urban edge of Luton. Settlement comprises the small planned hamlet of East Hyde together with a number of properties along the roadside. There are in addition occasional scattered farmhouses and halls such as Copt Hall - these properties have mostly retained a traditional character, closely associated with the Chilterns landscape- red brick, clay tiles being the key building materials.
- 12D.16 The valley is predominantly unsettled forming a strong contrast with the adjacent built-up urban edge of Luton.



Luton Hoo viewed from the opposite side of the valley, on Copt Hall Road

Evaluation

Landscape Change

Past Change	Potential Future Change
<p>Thames Water sewage works.</p> <p>Development of the Midland Mainline railway line through the Lea valley.</p> <p>Urban expansion at Luton and Luton airport including the East Luton relief road and residential development.</p>	<p>Potential growth within Luton Borough, in the south and at Luton Airport.</p> <p>Potential of linear development from East Hyde towards Harpenden (Hertfordshire).</p> <p>Further extension of businesses behind main railway line and increasing urban fringe character.</p>

Key positive landscape features/ strategic sensitivities of the landscape

- 12D.1.15 The natural winding course of the River Lea with its associated floodplain characteristics and areas of pasture.
- 12D.1.16 Distinct river valley landform with a narrow valley floor and sloping valley sides.
- 12D.1.17 Extensive wooded areas (some of ancient origin e.g. George Wood) plus trees and tracts of woodland associated with the Luton Hoo Park, which characterise the valley floor and sides and increase the sense of enclosure.
- 12D.1.18 Remaining hedgerows and hedgerow trees running down the valley sides perpendicular to the main road which create the characteristic landscape pattern.
- 12D.1.19 Mature trees on road embankments – exposed roots are liable to weakening and eventual collapse with potential loss of trees leaving a much more open road corridor.
- 12D.1.20 The designed parkland landscape of Luton Hoo Park, including extensive boundary walls and gateway plus woodland planting visible within, and strongly influencing the character of the valley.
- 12D.1.21 The abandoned line of the Great Northern Railway is of interest as a demonstration of the fierce competition of the railway age and is a historic feature in its own right and now a Sustrans route.
- 12D.1.22 Viaduct bridges of the railway.
- 12D.1.23 Predominantly unsettled character.
- 12D.1.24 Recreational access along the Upper Lea Valley Walk from/to the urban edge ; Luton – Harpenden Greenway cycle route provides a link to the urban areas.
- 12D.1.25 Strong semi-rural character over much of the area despite proximity to the urban edge (woodland and land use limits view to Luton). Some inaccessible areas that could be described as peaceful.

12D.1.26 The role of the valley as a semi-rural corridor between Luton and Harpenden.

Visual Sensitivity

12D.1.27 Views to the viaduct bridges.

12D.1.28 Views from within the valley to the extensive walls and the designed parkland landscape of Luton Hoo.

12D.1.29 Views to the wooded valley sides.

12D.1.30 Views to and from the undeveloped ridgeline with the adjacent Chalk Dipslope (11c and 11d) – are also particularly sensitive to the introduction of buildings and tall structures.

Landscape Strategy

The overall strategy for the Lea Chalk Valley character area is to **enhance** the valley system as a whole, with some opportunities to renew/recreate features that have been lost. The aim should be to conserve its semi-rural character and strong contrast with the adjacent urban area of Luton. Landscape enhancement should focus on improving the condition and quality of the existing positive elements of the valley system including the wet meadows, areas of pasture, management of woodlands and restoration of historic features associated with Luton Hoo Park. There are key opportunities to enhance the interface with the transport corridors and sewage treatment works.

Guidelines for New Development

12D.1.31 Conserve the visual connection with the ridgeline of the adjacent plateau landscapes and avoid development along this visually sensitive ridge.

12D.1.32 Conserve the largely unsettled and undeveloped valley sides. Further incremental urban development along the road corridor and up towards the higher land of the valley sides would not be appropriate.

12D.1.33 Conserve sensitive views to Luton Hoo from the valley sides.

12D.1.34 Conserve the semi-rural character by ensuring that development does not expand along the B653 maintaining the rural\urban transition between the edge of Luton and the Lea River Valley.

12D.1.35 Monitor the development of businesses behind the railway line, ensuring their appropriateness in terms of scale and boundary treatment.

12D.1.36 Consider enhancement of sewage treatment works boundary.

12D.1.37 Ensure the use of traditional building materials for new development e.g. dark brick, slate roofs and ensure appropriate boundary treatment.

12D.1.38 Conserve and enhance access and connections from the urban area into the landscape, notably the Upper Lea Valley walk.

12D.1.39 Ensure new boundary or woodland planting respects and enhances the wider designed landscape around Luton Hoo Park and East Hyde Park.

12D.1.40 Consider opportunities for the creation of woodland along the Midland Mainline/Thameslink railway embankment and to buffer noise and visual intrusion.

12D.1.41 Conserve the mature roadside trees, in particular along the B653 and consider opportunities for further planting.

12D.1.42 Ensure appropriate and sensitive treatment of boundaries, in particular avoid industrial style boundary fencing that impacts on the rural quality of the river valley.

12D.1.43 Conserve the former line of the Great North Railway.

12D.1.44 Retain 'peaceful' areas of the landscape – in particular within the grounds of Luton Hoo.

Landscape Management Guidelines

- 12D.1.45 Conserve and enhance the character and quality of the wet meadow grazing landscape on the floodplain and valley floor of the River Lea and consider opportunities to extend the area of pasture.
- 12D.1.1 Restore the historic features associated with the Luton Hoo Park which have a very visible presence within the area. Restoration of boundary walls and gateways with appropriate building materials is a priority.
- 12D.1.2 Enhance the character of the road corridors and limit urbanising influences - widening/kerbing and ensure that traffic management measures are sympathetic to the rural character.
- 12D.1.3 Enhance the condition and structure of the hedgerow boundaries, by focussing hedgerow restoration between remaining sections so as to strengthen the landscape pattern - in particular those perpendicular to the river valley ascending up the valley sides and those linking into areas of woodland. The restoration and management of hedgerows along the road corridor is a further priority.
- 12D.1.4 Monitor extraction of water from the River Lea and seek to ensure high water quality and water flows.
- 12D.1.5 Conserve the well-wooded character of the valley, in particular conserve the woodland blocks of George Wood, Birch Wood, Hardingdell Wood, Graves Wood and apply an appropriate management strategy to enhance ecological interest. Consider opportunities to extend and connect areas of woodland by hedgerow restoration or woodland creation.

Also refer to the following documents:

- Luton and Southern Bedfordshire Green Infrastructure Plan.