

TYPE 1: CLAY FARMLAND

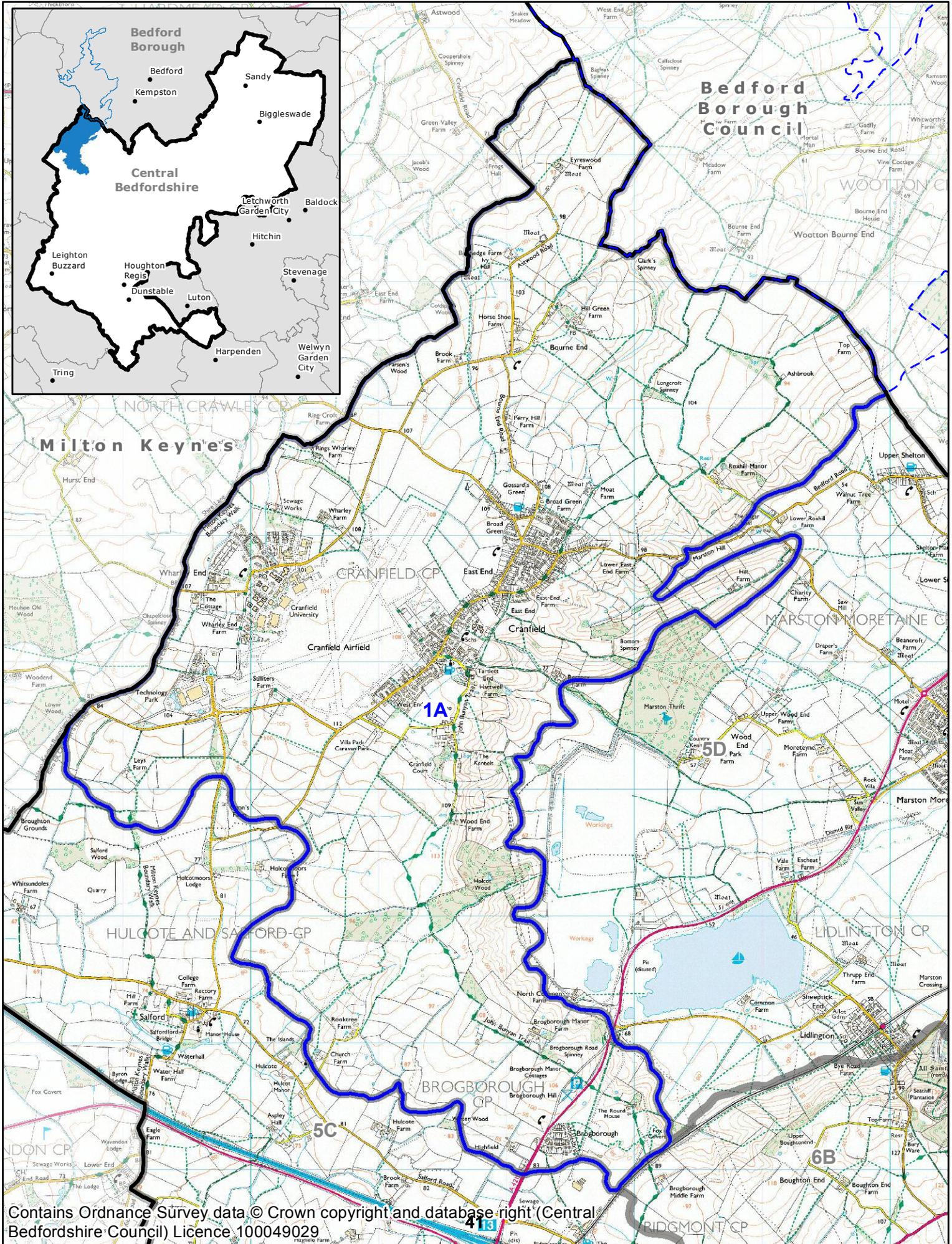
Key Characteristics

- A large scale landscape with an open and exposed character intersected by subtle wooded valleys.
- Gently undulating landform levelling out to areas of flat plateaux on highest ground.
- Underlying solid geology of Oxford Clay with extensive drift deposits of Boulder Clay and localised areas of Alluvium and Valley Gravels.
- Large scale, intensive arable crop production dominates the land cover.
- Tributaries, brooks and rivers cut through the plateaux forming a series of subtle valleys - tree-lined and a focus for settlement.
- Dispersed woodland (some ancient) – predominantly mixed and deciduous - some having significant nature conservation value and SSSI status.
- Significant hedgerow loss leaving variable and inconsistent field and roadside boundaries.
- Active and disused airfields located on areas of higher, level ground.
- Business and technology parks and new housing development frequently form a blunt interface with the open countryside.
- Water towers, village churches and former mills are strong landmark features.
- Settlement is of low density, dispersed across the landscape and predominantly of linear form.
- Green lanes of significance for recreation and wildlife

Location and Boundaries

- 1.1 The *Clay Farmland* landscape type occurs across two main areas within the east and west of Central Bedfordshire although the landscape type is more prevalent in Bedford Borough – refer to the companion Landscape Character Assessment (LCA) for Bedford Borough. The boundaries of the landscape type are defined by geology and topography – the drift deposits of Boulder Clay and gently undulating, elevated terrain distinguishing the landscape from the adjacent *Wooded Wolds, Limestone Valleys* and the *Clay Vales*. The key characteristics of the type extend into Bedford Borough, Cambridgeshire and Northamptonshire beyond the Central Bedfordshire boundary.

1A: Cranfield to Stagsden Clay Farmland



1A Character area 1A: Cranfield to Stagsden Clay Farmland

Location and boundaries

- 1A.1 The landscape character area is located in the far northwest of Central Bedfordshire. (The northern part of this lies in Bedford Borough – refer to the companion Landscape Character Assessment for Bedford Borough). Within Central Bedfordshire the character area extends from the local authority boundary in the north to the boundary with the *Mid Greensand Ridge* (6b) at Brogborough in the south. The eastern boundary runs along the base of the slopes that descend onto the lower lying areas of *North Marston Clay Vale* (5d). Part of the area is within the Forest of Marston Vale.

Summary of landscape character: Key characteristics

- | | |
|---------|--|
| 1A.1.1 | A medium - large scale plateau landscape, an open and exposed character with long distant views. |
| 1A.1.2 | Gently rolling landform predominantly underlain by Oxford Clay, levelling out to areas of flat plateaux on highest ground such as around Cranfield Airfield which form local skylines. Significant elevation range - from 40 -117m AOD. |
| 1A.1.3 | Predominantly under arable cropping contained within large open fields but with pockets of horse paddocks - particularly associated with the settlements. |
| 1A.1.4 | A number of ancient semi-natural woodlands have been retained (such as Holcott Wood) located predominantly along the eastern boundary, on slopes falling towards the North Marston Vale. Small spinneys are frequently dispersed across the arable landscape but are of insufficient extent to produce a sense of enclosure. |
| 1A.1.5 | Strong visible presence of Cranfield Technology Park and University with its associated urban infrastructure is visible from the adjacent Clay Vales due to its elevated location – although woodland and shelterbelt planting buffers some views. |
| 1A.1.6 | Audible and visual presence of Cranfield Airfield located on an area of level plateau adjacent to the University. Large warehouses in Milton Keynes are also visible. |
| 1A.1.7 | Variable field boundaries including short flailed and gappy hedges, overgrown hedgerows, and some areas where all boundaries have been removed. Mature standard oak trees often mark old hedgerow lines. |
| 1A.1.8 | Settlement is concentrated at Cranfield – an elevated village characterised by red and buff brick housing of a mix of styles and ages. Occasional large individual farmsteads are frequently in view. |
| 1A.1.9 | Small scale rural lanes cross the landscape although extensive areas are only accessible via the rights of way network. The A421 crosses through a section of the landscape in the south, resulting in visible and audible detractions locally. |
| 1A.1.10 | Recreational routes cross the area including the Milton Keynes Boundary Walk and John Bunyan Trail - running along the ridge of the plateau where it slopes away to the <i>Salford - Aspley Clay Vale</i> (LCA 5c). |

Landscape Character Description

Physical and natural landscape

- 1A.2 This is a medium-scale elevated landscape; rising above the adjacent low-lying Clay Vales to form a broad ridge (with a flat plateau-like top) that provides distant views to the wooded horizons of the Wooded Greensand Ridge. The landform is gently rolling, levelling out to flat plateau on highest ground.
- 1A.3 The higher, flatter areas correspond with the occurrence of built development at Cranfield – the airfield, technology park and university forming a focus of built form and infrastructure. This development core forms a marked contrast with the predominantly agricultural character of the landscape. Despite some buffering with planting, commercial/institutional buildings are conspicuous particularly when viewed from the adjacent lower-lying *Clay Vales*.

Biodiversity

- 1A.4 Farmland habitats are widespread in this area including arable field margins, hedgerows, ponds, ditches and improved grassland. There are also scattered blocks of ancient semi-natural woodland dominated by oak and ash. Unimproved grassland would have been a feature of this area in the past and small areas remains such as the species rich neutral grassland at Cranfield Manor Farm Meadow. Wetland habitats include minor tributaries of the Great Ouse, woodland and farmland ponds and field ditches.



Distant views across arable fields from higher ground to the south of Cranfield Airport. Built development in Milton Keynes is visible on the horizon



Cranfield Airfield is a visual and audible urbanising presence on an area of level plateau adjacent to Cranfield Technology Park and University.

Visual and perceptual character

- 1A.5 This landscape has strong skylines and big horizons. There are some urbanising influences including built development at Cranfield and views to warehouses outside the character area in Milton Keynes. Road corridors such as the A421, communications masts near Brogborough and the frequent occurrence of other 'fringe' land uses such as horse grazing, the industrial estate at Brogborough and degraded pockets of land add to this. Denuded hedges and prominent coniferous shelterbelt planting are recurring features.

Cultural pattern and historic character

- 1A.6 Historically this area was dominated by small irregular fields, created during the medieval period out of woodland on the Boulder Clay upland. There was a large area of common open field at the centre of the Cranfield plateau (the area later to be occupied by the airfield which was built in 1936 in anticipation of World War II), and some open fields in the Ouse tributary valleys around the village of Stagsden. The Brogborough landscape, though originally an area of small irregular

fields, was reorganised into a more regular pattern by the Bedford estate in the 19th century. The areas of former open field have been subject to significant loss of field boundaries in modern times.

- 1A.7 The nucleated villages of Cranfield and Stagsden are medieval in origin. They are complemented by a number of 'ends' in Stagsden and isolated medieval farmsteads around the edge of the Cranfield plateau. Many of the ends and farmsteads have surviving settlement earthworks and moated sites, of which those at Boxhedge Farm, Ivy Hall and Moat Farm (all in Cranfield) are scheduled monuments. At Park Farm, Brogborough, a medieval ringwork castle site (also scheduled) occupies a dominant position overlooking the Marston Vale to the north-east.

Settlement pattern; built character

- 1A.8 The character area is generally sparsely settled with scattered farmsteads and the main village of Cranfield. Cranfield, situated on the higher, flatter ground has a varied character with a mix of building materials, age and style. It is also linked to the Cranfield Technology Park and Cranfield University and large scale modern developments at the western edge of the character area.



Dispersed houses overlooking an arable field in Bourne End

Evaluation

Landscape Change

Past change	Potential Future Change
<p>Technology and University Park development at Cranfield.</p> <p>Development of Cranfield Airfield.</p> <p>Post war development and suburbanisation of villages.</p> <p>Stark coniferous shelterbelt planting sometimes associated with farmsteads.</p> <p>Industrial development at Brogborough.</p> <p>Significant housing development at Cranfield.</p>	<p>Eastward expansion of Milton Keynes extends the urban influence in views.</p> <p>Construction of permitted housing at Cranfield; pressure for additional growth.</p> <p>Potential further linear expansion of development along road corridors.</p> <p>Renewable energy – e.g. potential for visibility of wind turbines in long skyline views from this open character area.</p> <p>Potential expansion of Cranfield University and its associated technology parks.</p>

Key positive landscape features/ strategic sensitivities of the landscape

- 1A.1.11 Landscape pattern is provided by the remaining hedgerows and mature hedgerow trees despite their poor condition. This is vulnerable to erosion from further loss of hedgerows and hedgerow trees and lack of management.
- 1A.1.12 The open and exposed character with long distant views and strong skylines.
- 1A.1.13 Scattered spinneys and blocks of ancient woodland such as Holcott Wood.
- 1A.1.14 Areas of surviving small irregular fields are vulnerable to further loss due to agricultural reorganisation.
- 1A.1.15 Unscheduled medieval earthworks and pockets of ridge and furrow are unprotected from conversion to arable, and therefore potentially vulnerable to loss in light of changes to agricultural practice.
- 1A.1.16 High level of recreational access via rights of way network including Milton Keynes Boundary Walk and the John Bunyan Tail/ Sustrans Route 51 which forms a connection with the Greensand Ridge Walk.
- 1A.1.17 Small scale rural lanes plus large areas only accessible via rights of way.
- 1A.1.18 Strong rural character over much of the area, which is vulnerable to urban influence for instance the visible and audible impact of roads and large scale development.

Visual Sensitivities

- 1A.1.19 Local skylines created by subtle changes in topography which are vulnerable to cluttering by vertical development and notably demand for wind turbine development (e.g. views to potential turbines on skylines).
- 1A.1.20 Long ranging views to the wooded horizons of the *Mid Greensand Ridge (6b)* and across lower lying rural landscape of the *North Marston Vale (5d)* and *Salford – Aspley Clay Vale (5c)*.

Landscape Strategy

The overall strategy for the *Cranfield to Stagsden Clay Farmland* character area is to **enhance and renew** the landscape and conserve its rural agricultural character. Enhancement should focus on opportunities to strengthen the landscape pattern to create interconnected green infrastructure networks including woodland links at Holcott Wood to Salford Wood to provide structure in the context of urban expansion on the edge of Milton Keynes, and habitat links such as new woodland, grassland and hedgerow corridors along the ridge to the north and east of the character area and the adjacent character area *5d North Marston Clay Vale* including further woodland creation to the east of Cranfield.

The Forest of Marston Vale Forest Plan should be referred to as the endorsed strategy for environmentally- and green infrastructure -led regeneration of that part of the area which falls within the Forest.

Guidelines for New Development

- 1A.1.21 Potential for further woodland creation - expanding and linking the existing woodland resource through woodland and hedgerow planting e.g. further woodland planting along the urban edge of Cranfield village and University/Technology Park to enhance the interface with the adjacent rural fields. Appropriate species are likely to include field maple and hazel.
- 1A.1.22 New planting/ hedgerow restoration and woodland planting along the edges of new development where appropriate will help to integrate it with the rural landscape.
- 1A.1.23 Conserve the largely rural, undeveloped character of the area e.g. conserve the character of the rural roads and limit urbanising influences – widening/kerbing and ensure that traffic management measures are sympathetic to the rural character.
- 1A.1.24 Retain views from elevated areas to the lower lying Clay Vales (5c, 5d) and to the *Wooded Greensand Ridge* (6b) and conserve views to undeveloped horizons.
- 1A.1.25 Ensure that landscape and visual effects of the eastward expansion of Milton Keynes are assessed and respected in the context of views from this open, elevated landscape. Mitigate effects of increased development in views through sensitively designed development and appropriate mitigation such as woodland planting to avoid harsh interfaces with the rural landscape.
- 1A.1.26 Avoid further linear expansion at Cranfield and ensure that cumulative effects of further development at Cranfield University and Technology Park and Airfield together with potential future development does not impact on the rural character and highly visible highest ground on the plateau.
- 1A.1.27 Monitor the introduction of large scale industrial style agricultural buildings into the landscape. Integrate new large scale buildings into the landscape with appropriate broad leaved planting.
- 1A.1.28 Conserve strong skylines. Avoid introducing large scale vertical features where these will detract from undeveloped skylines, key views or characterising landmarks.

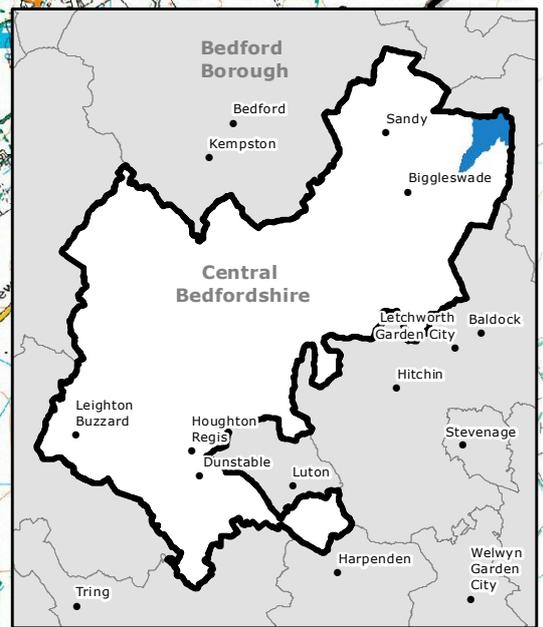
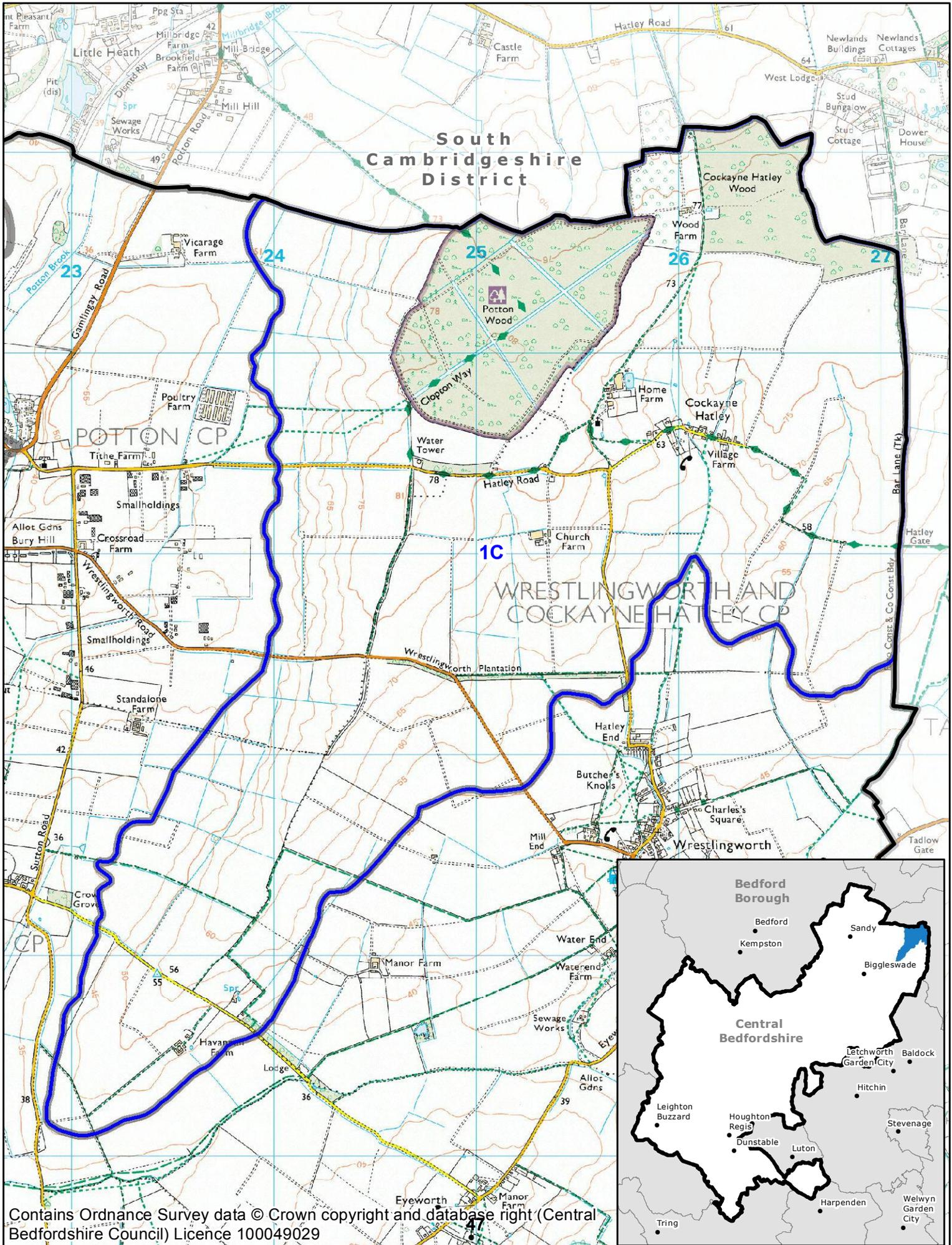
Landscape Management Guidelines

- 1A.1.29 Ensure mid-long range views across the landscape are retained and that the historic grain of the landscape is respected.
- 1A.1.30 Conserve the ancient woodland blocks and spinneys e.g. Holcott Wood and apply an appropriate management strategy to enhance ecological interest e.g. reintroduce coppice management.
- 1A.1.31 Maintain and enhance surviving historic boundaries, and enhance the condition and structure of hedgerow boundaries by focussing hedgerow restoration between remaining sections so as to strengthen the landscape pattern – this is a key requirement alongside field boundaries and roads.
- 1A.1.32 Enhance the historic landscape setting of Brogborough Park Farm ringwork, currently isolated within former brickfields.

Also refer to the following documents:

- Bedford Borough Landscape Character Assessment: Character Area 1A: Cranfield to Stagsden Clay Farmland for the landscape character description of the area lying within Bedford Borough
- Mid Bedfordshire Green Infrastructure Strategy
- The Forest of Marston Vale

1C: Cockayne Hatley Clay Farmland



1C Cockayne Hatley Clay Farmland

Location and Boundaries

- 1C.1 *Cockayne Hatley Clay Farmland* character area is located at the eastern edge of Central Bedfordshire. The change in topography marking the transition to *Dunton Clay Vale* (5g) defines the western and southern edges of the area with boundaries following contours at the base of the slope down from the plateau to the north east. To the east the edge of the unitary authority forms the boundary and the clay farmland continues on into Cambridgeshire.

Summary of landscape character: Key characteristics

- 1C.1.1 Gentle rolling slopes rising to a low plateau founded on Gault Clay overlain by Boulder Clay.
- 1C.1.2 A peaceful, open, large scale landscape.
- 1C.1.3 Predominantly arable farmland with woodland on the plateau and shelter belts along some rural roads.
- 1C.1.4 Large geometric fields are bounded by hedgerows with some hedgerow trees.
- 1C.1.5 Hedgerows are varied in condition with some gaps; hedgerow trees are present including young trees.
- 1C.1.6 Substantial blocks of woodland on the level ground to the north including Potton Wood SSSI, a medieval deer park, now ancient ash-maple woodland of high biodiversity value.
- 1C.1.7 Dispersed and low density settlement consists of the village of Cockayne Hatley and a few scattered farmsteads, buildings materials include brick, stone and render.
- 1C.1.8 The church and water tower form landmarks that are highly visible in the open landscape of the slopes.
- 1C.1.9 A few rural roads cross the area and there is a good network of footpaths and bridleways with the Clopton Way traversing the north eastern section.
- 1C.1.10 Parkland and old enclosures are associated with the relict core of Cockayne Hatley village.
- 1C.1.11 There is a strong sense of elevation and wide, distant views from the plateau towards the southeast.

Landscape Character Description

Physical and natural landscape

- 1C.2 The area forms a spur of ground rising from 40m AOD to 75m AOD above the more level *Dunton Clay Vale* to a plateau at the north of the area. The open arable slopes form an unsettled, rural backdrop to the *Vale* and from the higher sections of the area there are panoramic views to the south east. Large blocks of woodland dominate the plateau to the north including the ancient woodland of Potton Wood. Elsewhere narrow shelter belts hug the straight rural roads bringing some enclosure to the open landscape. The large geometric fields are bounded by hedgerows in mixed condition and with some hedgerow trees including newly planted trees along roads. Orchards were formerly a feature of the area but have been lost.

Biodiversity

- 1C.3 The landscape is predominantly arable farmland including habitats such as arable field margins, hedgerows, ditches and improved grassland. Potton Wood SSSI is ancient woodland with rides through the wood particularly valuable in supporting neutral grassland which is rich in flora. The woodland is of wet ash-maple type and includes areas of coppiced ash, hazel and field maple with ash and oak standards. Small ponds provide further habitats.



Rural character of a minor road winding through arable fields west of the village of Cockayne Hatley. The loss of hedgerows has increased the openness of the landscape.

Visual and perceptual character

- 1C.4 *Cockayne Hatley Clay Farmland* character area is a peaceful, rural area with little settlement and few minor roads and tracks. From the higher sections of the area there are panoramic views to the south east.

Cultural pattern and historic character

- 1C.5 The Boulder Clay ridge which dominates this area is known from cropmark evidence to have been settled in prehistoric or Roman times, but was dominated by woodland into the middle ages. A medieval deer park, established in what was probably wood pasture, developed to become Potton Wood; substantial woodbanks survive, with other earthworks which may possibly be of pre-medieval origin. The northern part of the former parish of Cockayne Hatley, contains further ancient woodland, with parkland and old enclosures associated with the relict core of Cockayne Hatley village. To the south and west, the former open fields were enclosed in the 18th and 19th centuries.

Settlement pattern; built character

- 1C.6 Settlement within *Cockayne Hatley Clay Farmland* character area consists of the small village of Cockayne Hatley nestling into an undulation of the slope up to the plateau, plus a few scattered farmsteads. Building materials are mixed with brick, local greensand and render in evidence. St John Baptists Church, built of brown cobbles, and a water tower to the west of the village, form landmarks that are highly visible from the lower slopes of the area and from the surrounding low ground of *Dunton Clay Vale* (5g).



The small village of Cockayne Hatley



The water tower to the west of Cockayne Hatley is a prominent landmark

Evaluation

Landscape Change

Past change	Potential Future Change
<p>Agricultural intensification leading to creation of larger arable fields and loss of grassland, ponds and ditches.</p> <p>Decline in active management of woodland.</p> <p>Loss of orchards.</p>	<p>Demand for further infill and small scale development around Cockayne Hatley and the isolated farmsteads which could lead to a loss of their rural character.</p> <p>Renewable energy developments.</p>

Key positive landscape features/ strategic sensitivities of the landscape

- 1C.1.12 The surviving network of hedgerows (although gappy) and hedgerow trees which is vulnerable to further loss through lack of consistent maintenance.
- 1C.1.13 The woodland blocks, including ancient woodland of high biodiversity interest and shelter belts which require sustained management.
- 1C.1.14 The pattern of sparse dispersed settlement built of traditional materials of brick, stone and render.
- 1C.1.15 The isolated community of Cockayne Hatley, with some areas of surviving ancient enclosures and settlement earthworks.
- 1C.1.16 High level of access via public rights of way.
- 1C.1.17 The unified tranquil, rural nature of the landscape which is vulnerable to urban influence particularly large scale new development on its margins.

Visual Sensitivities

- 1C.1.18 The slope and its summit are highly visible from the lower ground to the south and west - from *Dunton Clay Vale* (5g) Cockayne Hatley Clay Farmland appears as a rural, unsettled backdrop.
- 1C.1.19 The water tower and church tower are landmarks on the skyline which is vulnerable to cluttering by development of tall structures.

1C.1.20 The panoramic views to the south from the plateau and upper slopes.

Landscape Strategy

The overall landscape strategy for the *Cockayne Hatley Clay Farmland* character area is to **conserve** the unified rural landscape with its small village, historic landscape features, scattered farmsteads of traditional local materials, its hedgerow network, and woodland of high biodiversity value while enhancing those elements which are in decline eg through replanting hedgerows or where there are gaps in existing hedgerows.

Guidelines for New Development

- 1C.1.21 Promote the use of locally appropriate species such as oak and field maple within woodlands and hedgerows and for shelter belts in preference to non-native conifers.
- 1C.1.22 Promote restoration/replanting of orchards.
- 1C.1.23 Conserve the scattered farmsteads and the village of Cockayne Hatley with their traditional building materials particularly the use of red brick, stone and render.
- 1C.1.24 Encourage the use of locally-sourced building materials for new development in order to integrate with traditional built development and strengthen the sense of place.
- 1C.1.25 Safeguard the setting of Cockayne Hatley village.
- 1C.1.26 Retain and enhance surviving areas of ancient enclosure.
- 1C.1.27 Monitor the development of structures which may lead to cluttering on the skyline of the slope up to the plateau.

Landscape Management Guidelines

- 1C.1.28 Conserve, enhance and restore the ancient woodlands through effective long term management to retain their historic character, ecological value and landscape setting. Promote co-operative management and habitat linkages across administrative boundaries e.g. at Potton Wood with nearby woodlands in Cambridgeshire to the north.
- 1C.1.29 Promote traditional woodland management techniques such as coppicing.
- 1C.1.30 Enhance the hedgerows by replanting and consistent management and resist development that will result in further loss/fragmentation of hedgerows.
- 1C.1.31 Promote restoration/replanting of orchards.

Also refer to the following documents:

- Mid Bedfordshire Green Infrastructure Strategy: Ivel Valley.