

Norfolk Vanguard Offshore Wind Farm Landscape Character Assessment Documents

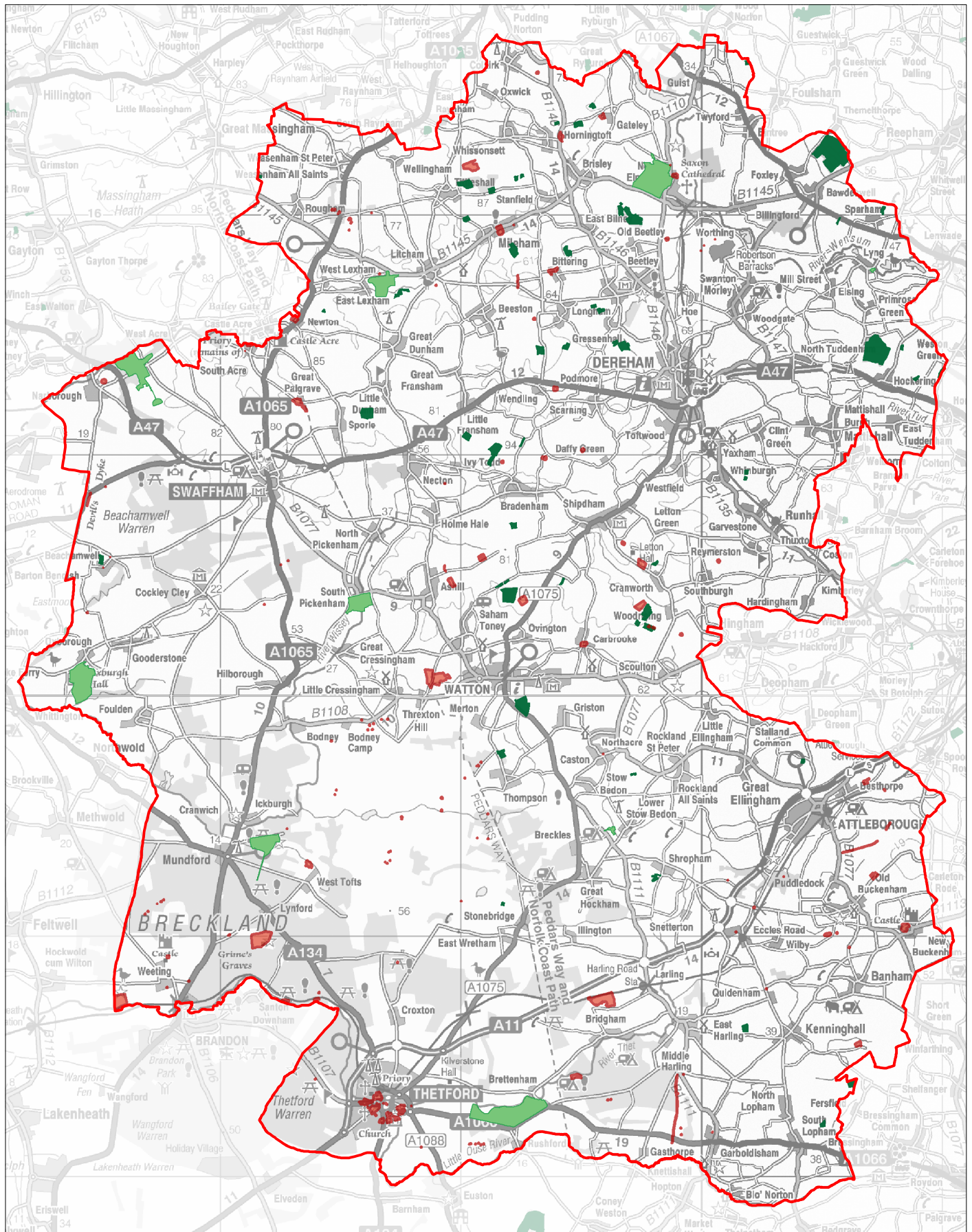
2. Breckland Council Part 3 of 5

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Photo: Kentish Flats Offshore Wind Farm

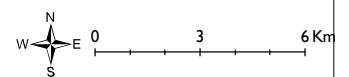




Breckland LCA
Figure 5.2 Historic Designations

Key

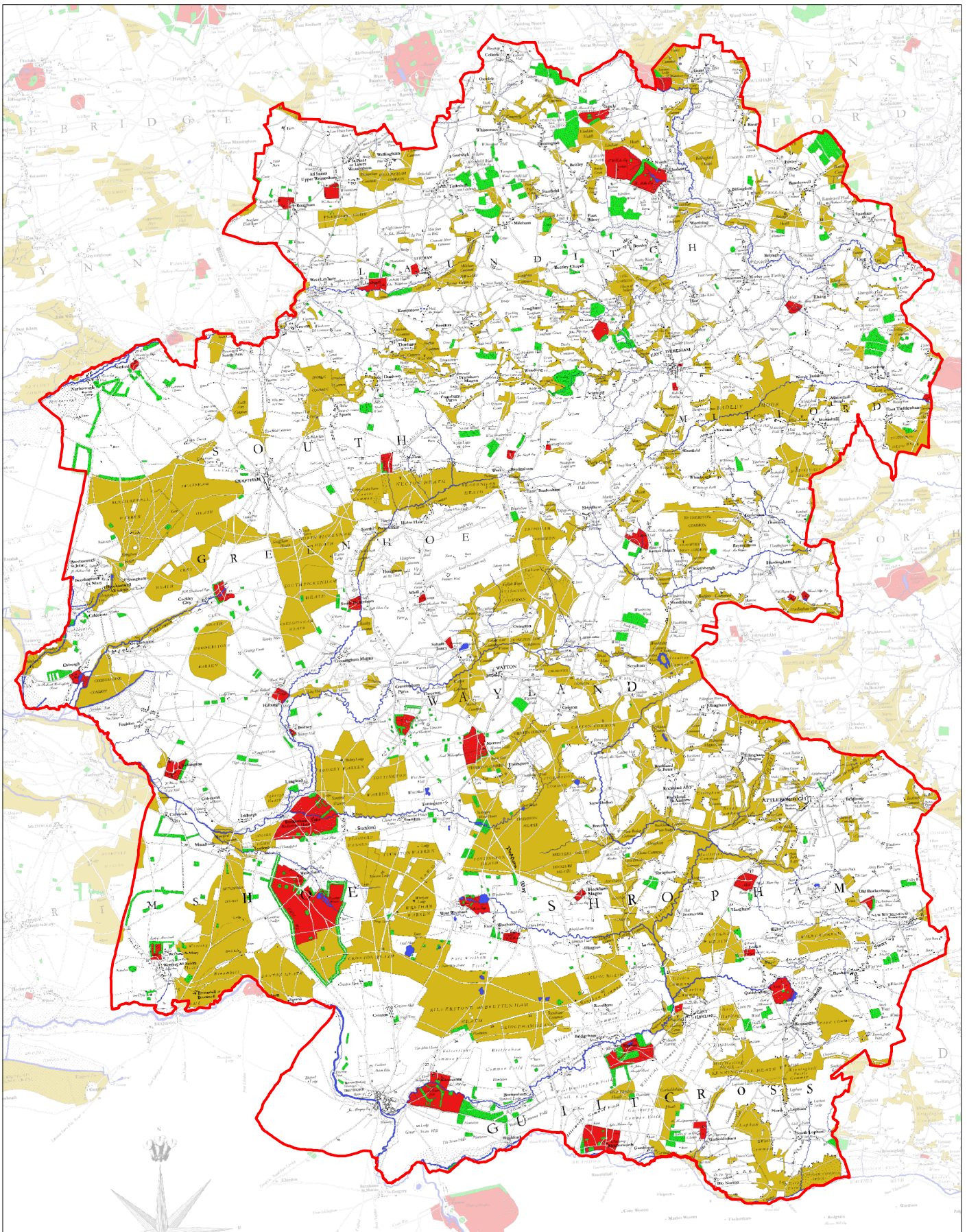
- Breckland Boundary
- Scheduled Ancient Monuments
- Historic Parks & Gardens
- Ancient Woodland



Source: Breckland District Council
 English Heritage








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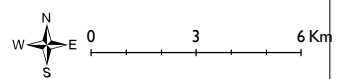




Breckland LCA
Figure 5.3 Extract from William Faden's 1797 Map of Norfolk

Key

-  Breckland Boundary
-  Parks of the Nobility & Gentry
-  Woods
-  Commons & Heaths
-  Parks of the Nobility & Gentry
-  Rivers
-  Great Roads



Source: Andrew Macnair (Fadens Map)

Date: 06/06/2007
 Revision:



6. CURRENT INITIATIVES

- 6.1. The Ecological Network Mapping Project has been described in section 4 above. Other key initiatives influencing the Breckland include the proposed Brecks Partnership, Forestry Enterprise Initiatives and local projects such as the Wensum Valley Project, in addition to the Ministry of Defence's Land Management objectives within their extensive land holdings at Stanta Heath.

Brecks Partnership

- 6.2. The cultural and historical value of the Brecks is recognised through the Brecks Partnership initiative, which aims to secure recognition for the Brecks in view of the cultural significance of the landscape and the potential for Green Infrastructure in light of Thetford's Growth Point status. The initiative considers the wider Brecks landscape across four adjoining authorities and has identified a range of objectives including recreation, leisure and tourism, in addition to Green Infrastructure opportunities, embedded within the unique landscape of the Brecks.

Forestry Enterprise

- 6.3. Forestry has been a dominant land use within the Breckland landscape due to the presence of Thetford Forest and with the acquisition of large areas of heathland and former landed estates by the Forestry Commission for the intensive afforestation programme from 1922. This was focused on commercial forestry for much of the 20th Century. A multi objective approach has been adopted in the last decade, in view of both recreational potential and the considerable biodiversity value of the Breckland Forest. As such the current Forestry Enterprise Strategy identifies not only a more diverse species palette for the rotational plantations but also a number of pilot projects for heathland restoration and also for re-creating wet meadows and grassland habitats in valleys where this habitat was previously lost to afforestation, e.g. the Thet Valley, as well as recreation opportunities.

Wensum Valley Project

- 6.4. The Wensum Valley, part of which is in the eastern part of Breckland District, has been acknowledged as one of the finest river valleys in Norfolk, due to the variety of landscape elements and its considerable ecological potential. As such the Wensum Valley Project was set up in 1994, and is advised by a Joint Advisory Panel, with the project's work being guided by a number of objectives which include maintaining and enhancing the character of the valley's landscape and ecological integrity.

Ministry of Defence – Stanta Heath

- 6.5. Large tracts of Breckland heathland and areas of historic parkland were preserved by the acquisition of Stanta Heath by the MOD in 1944. Land management objectives for this area have been developed with the primary aim of preserving areas of high and low cover for military training purposes, in addition to taking account of the requirements of the statutory nature conservation designations (SSSI) which cover the area. Much of the existing vegetation reflects the training objectives of the MOD and as such Stanta represents a very large area of historically and ecologically

important and intact heathland features, together with surviving parkland elements from former estates such as West Tofts.

PART 2: THE LANDSCAPE CHARACTER OF BRECKLAND DISTRICT

7. THE BRECKLAND DISTRICT LANDSCAPE CHARACTERISATION

INTRODUCTION

- 7.1. The physical and human influences described in the previous chapters have combined to create the unique and distinctive character of Breckland District. The district is characterised by a variety of landscapes represented by six **landscape types**.

Landscape Types within Breckland District

- A: River Valleys
- B: Settled Tributary Farmland
- C: Brecks Plantation
- D: The Brecks Heathland with Plantation
- E: Plateau Farmland
- F: Chalk River Valley

- 7.2. Each of the generic landscape types has a distinct and relatively homogenous character with similar physical and cultural attributes, including geology, landform, land cover, and historical evolution. For this district level study the landscape types are further sub-divided into component **landscape character areas**. These are discrete geographic areas that possess the common characteristics described for the landscape type. There are 27 individual character areas within Breckland District, each with a distinct and recognisable local identity.
- 7.3. The landscape classification for the district is set out in **Table 7.1** and illustrated on **Figure 7.1**. The figure has been prepared on a Geographic Information System (GIS), with mapping undertaken at a scale of 1:25,000.
- 7.4. The tables at **Appendix 3** show the derivation from and relationship of the landscape classification to the previous LUC Wind Turbine Study, together with an explanation of the boundary changes which were identified and required by this more detailed 1:25,000 scale study.

Table 7.1: Breckland District Landscape Classification

Landscape Type A: River Valleys	
Character Area	
A1	River Thet
A2	Upper Yare
A3	River Wissey
A4	River Wensum and Blackwater
A5	Upper Tud
Landscape Type B: Settled Tributary Farmland	
Character Area	
B1	Little Ouse Tributary Farmland
B2	The Buckenhams Tributary Farmland

- B3 River Thet Tributary Farmland
- B4 River Blackwater Tributary Farmland
- B5 River Wissey Tributary Farmland
- B6 River Wensum and Tud Tributary Farmland
- B7 River Nar Tributary Farmland
- B8 Gooderstone to Oxborough Tributary Farmland

Landscape Type C: The Brecks - Plantations

Character Area

- C1 The Brecks of Thetford Forest

Landscape Type D: The Brecks – Heathland with Plantation

Character Area

- D1 Swaffham Heath
- D2 Stanta Heath
- D3 Harling Heathlands

Landscape Type E: Plateau Farmland

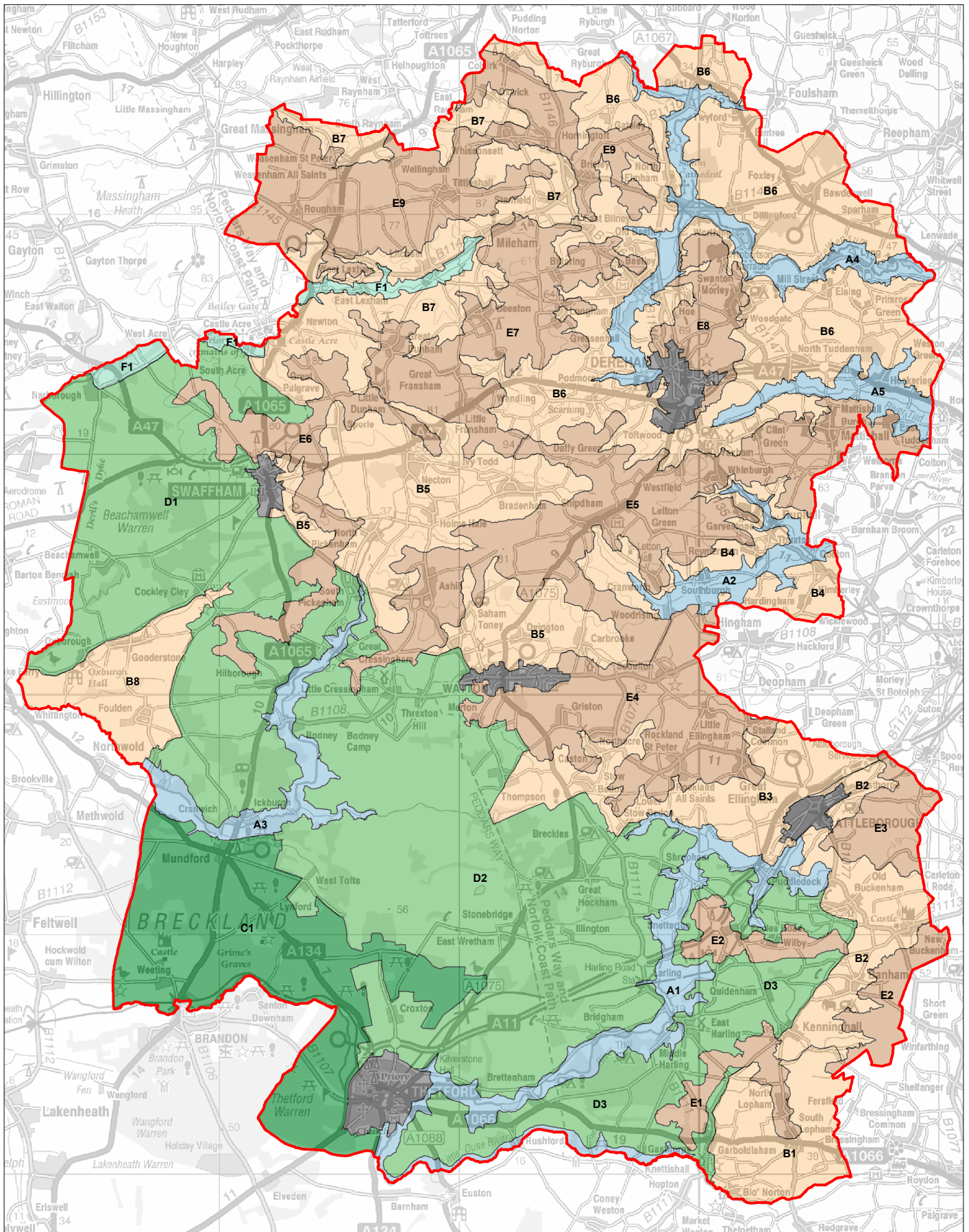
Character Area

- E1 Lophams Plateau
- E2 Snetterton Heath Plateau
- E3 Old Buckenham Plateau
- E4 Wayland Plateau
- E5 Central Breckland Plateau
- E6 North Pickenham Plateau
- E7 Beeston Plateau
- E8 Dereham Plateau
- E9 Whissonsett Plateau

Landscape Type F: Chalk Rivers

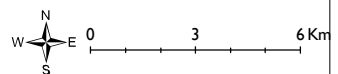
Character Area

- F1 River Nar Valley



Breckland LCA
Figure 7.1 Landscape Classification of Breckland

- Breckland Boundary
- Landscape Character Areas**
- A - River Valleys**
- A1: River Thet
- A2: Upper Yare
- A3: River Wissey
- A4: River Wensum and Blackwater
- A5: Upper Tud
- B - Settled Tributary Farmland**
- B1: Little Ouse Tributary Farmland
- B2: The Buckenham Tributary Farmland
- B3: River Thet Tributary Farmland
- B4: River Blackwater Tributary Farmland
- B5: River Wissey Tributary Farmland
- B6: River Wensum and Tud Tributary Farmland
- B7: River Nar Tributary Farmland
- B8: Gooderstone to Oxborough Tributary Farmland
- C - The Brecks - Plantations**
- C1: The Brecks of Thetford Forest
- D - The Brecks - Heathland with Plantation**
- D1: Swoffham Heath
- D2: Stanta Heath
- D3: Harling Heathlands
- E - Plateau Farmland**
- E1: Lophams Plateau
- E2: Snetterton Heath Plateau
- E3: Old Buckenham Plateau
- E4: Wayland Plateau
- E5: Central Breckland Plateau
- E6: North Pickenham Plateau
- E7: Beeston Plateau
- E8: Dereham Plateau
- E9: Whissonsett Plateau
- F - Chalk Rivers**
- F1: River Nar Valley
- Urban**

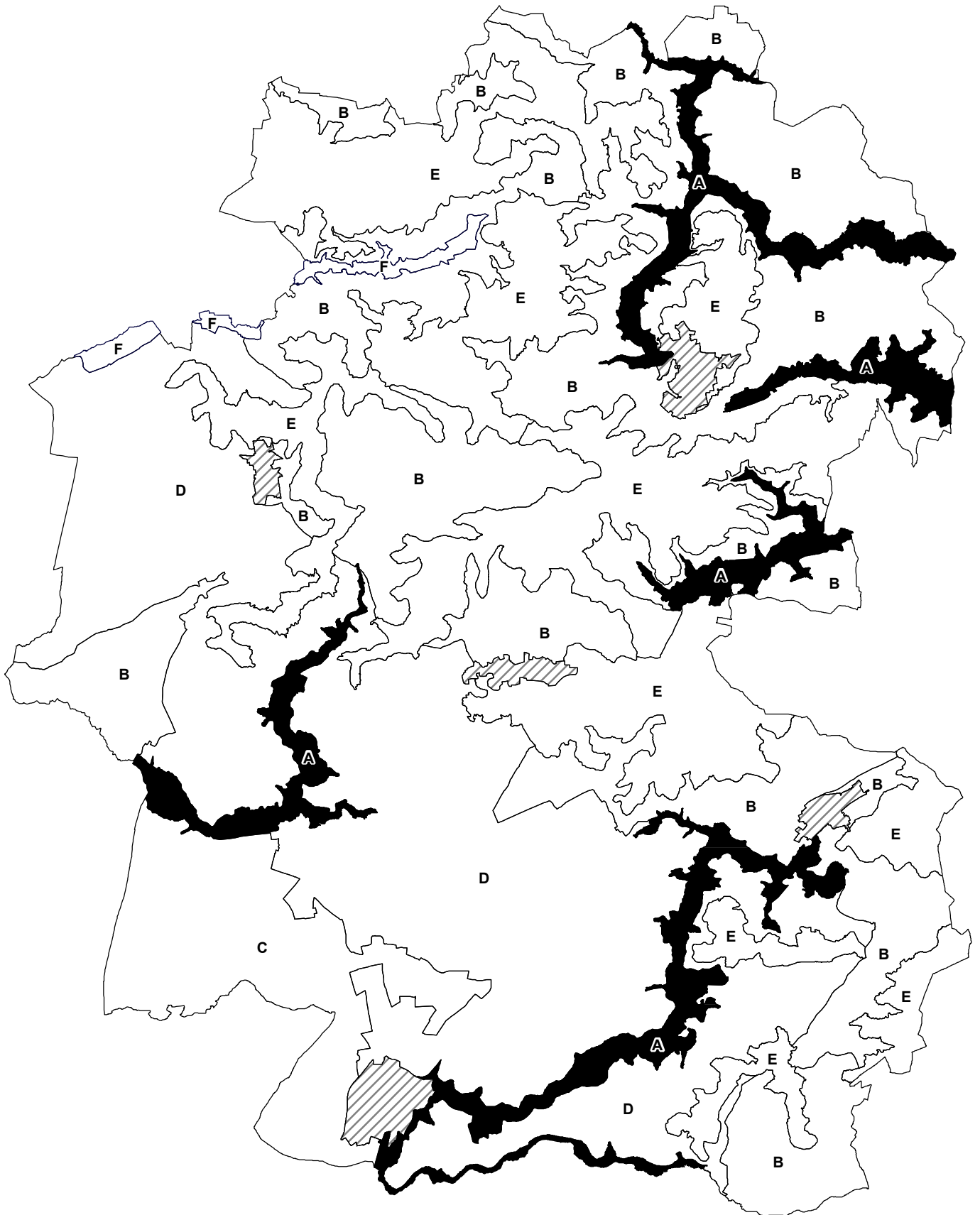


Source: Land Use Consultants

Date: 06/06/2007
 Revision: B



A. RIVER VALLEYS



LANDSCAPE TYPE A: RIVER VALLEYS

A1 This landscape type constitutes a series of distinct, broad and gently undulating chalk valley landforms carved by two periods of glacial activity, and which are defined both by historic land use, land cover and later sand and gravel extraction. They form a very distinct landscape type. It should be noted that there are a number of other minor river valleys (such as the Gadder) that have not been included within this landscape type. These river valleys relate more strongly to, and appear as features of, the surrounding landscape context as opposed to being landscape types in their own right. In addition the River Nar, being of a different (chalk) geological formation is defined as a separate landscape type and character area.

Key Characteristics

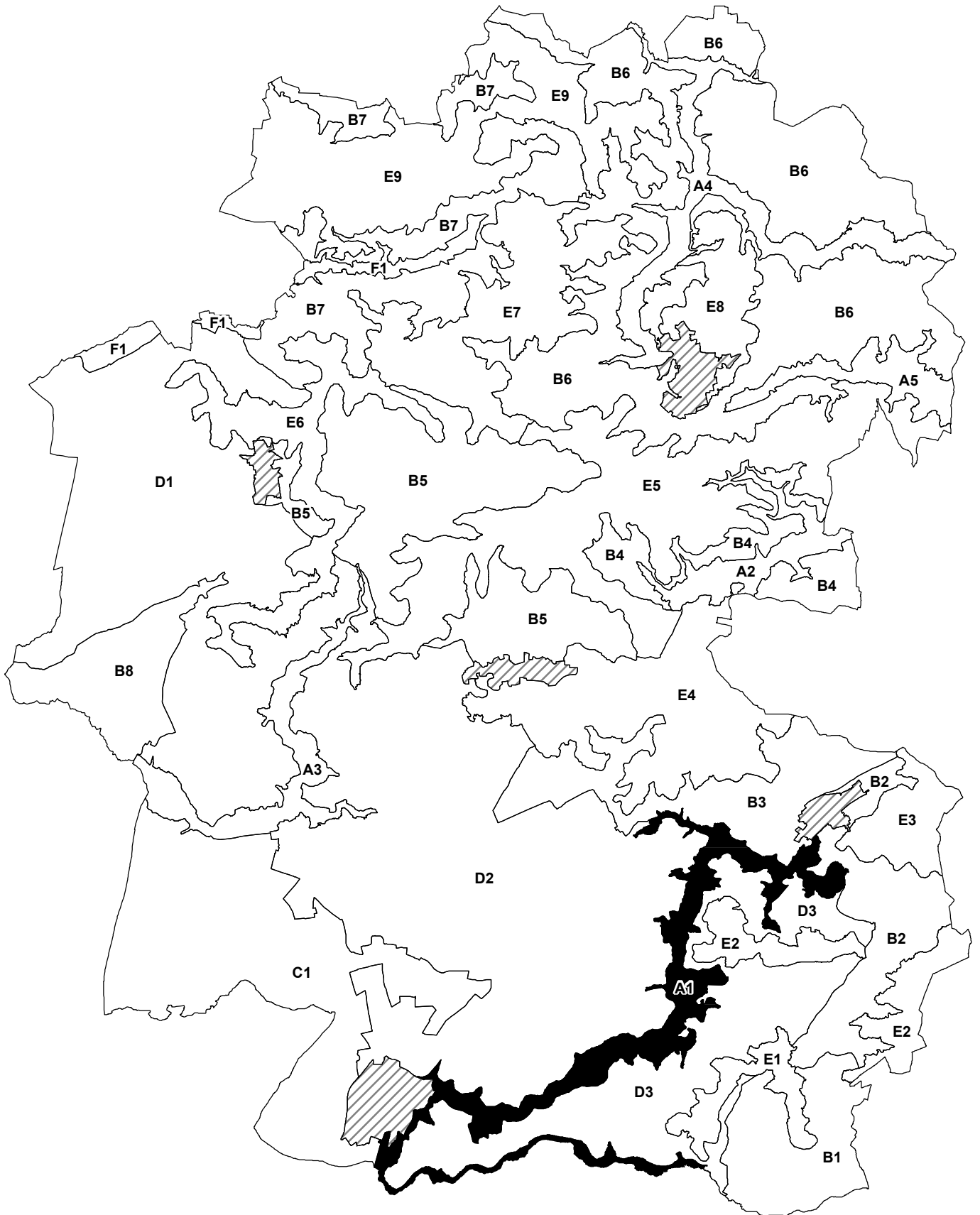
- A small scale landscape defined by shallow river valleys that offer a subtle sense of enclosure. Although sometimes across wider areas of floodplain, views are often channelled along narrow rural roads or restricted by waterside vegetation and woodland.
- Elevation predominantly ranges from 10m AOD (valley floor) to 40m AOD (valley crests). The transition from the surrounding areas is subtle.
- The *River Valleys* are dominated by pastoral farming. Fields are typically small to medium in size and bounded by hedges containing hedgerow trees. The fields are of varied shape and form, making an irregular land cover pattern.
- Settlement is infrequent and small scale, comprising individual properties and hamlets.
- The skyline is predominantly tree-lined. In some areas, the skyline is open, marking the ridge to the adjacent landscape types.
- There are few landmark features and visible structures, however churches (connected to the hamlets) and mills (on the banks of the rivers) provide surprise views and are key points of focus. Poplars are prominent vertical features aligning the course of the rivers.
- Views into adjacent landscapes are for the most part restricted by the ridges marking the limits of the valleys and the transition to the arable landscapes beyond.
- Although not remote, the pastoral character, low density of settlement and low levels of vehicle movement combine to form an intimate, tranquil landscape.

Landscape Type A: River Valleys

Character Area

- A1 River Thet
- A2 Upper Yare
- A3 River Wissey
- A4 River Wensum and Blackwater
- A5 Upper Tud

AI: RIVER THET



AI: RIVER THET

Location and Boundaries

A1.1 The *River Thet* valley is a broad, shallow valley carved through the chalk solid geology by glacial meltwaters. Glacial drift deposits of sand, gravel, clay and silt define the extent of the character area, which forms a south – westerly draining catchment within the south western and central part of Breckland District, meeting the River Ouse at Thetford. It is adjoined to the west by the *Stanta Heath* character area and to the east by the *Harling Heathlands*.

Key Characteristics

- A south westerly draining catchment carved into the chalk solid geology by glacial meltwaters, with glacial drift deposits of sand and gravel.
- These deposits have historically been exploited for mineral extraction. A number of these are still active although redundant workings have resulted in a distinctive chain of lakes in the northern part of the character area.
- In places, peaty soils overlay the drift geology and these are often associated with areas of fen and alder carr.
- Topography is that of a broad shallow valley, ranging from 15 – 30m AOD.
- Visual character is essentially enclosed with views across the character area framed by small blocks of wet woodland and localised blocks of mixed plantation woodland. There are occasional views to the urban edge of Thetford in the southern part of the character area and to landmarks such as churches.
- Landcover is variable throughout the character area, with small grazed fields divided by ditches and belts of willow and alder in the north, with denser areas of wet woodland in the south of the character area, in addition to areas of pasture and rough grazing, defined by post and wire fencing or remnant hedgerows.
- The ecological diversity of the character area is recognised in a number of sites which are designated as SSSI, including carr woodland, part of Breckland Forest and the fenland marshes and mere of Old Buckenham Fen.
- Historic sites within the character area illustrate the long history of human intervention, e.g. the ruined church at Thorpe Farm and associated moat/earthworks to the east.
- Areas of remnant common land are locally distinctive features, notably West Harling, although many have been absorbed within afforestation to the valley sides.
- Settlement is relatively sparse in distribution, being represented by a number of small hamlets at bridging points, either linear (Bridgham) or nucleated (Brettenham), in addition to occasional scattered farmsteads.

- This is a small scale, textured and varied landscape, often enclosed in character due to the density of field boundary vegetation and woodland cover. The landscape has a tranquil, rural quality, although the A I I in the north eastern part of the character area is visually discordant.
- Opportunities for recreation are provided by the wooded commons and associated open access land, in addition to a number of rights of way. Pedestrian access to the river is restricted.

LANDSCAPE CHARACTER DESCRIPTION

Physical/Natural

- A I.2 The River Thet has a south westerly draining catchment carved by two main periods of geomorphological activity, which has shaped the broad, shallow and clearly defined valley through which the river flows. The valley crests are typically defined by the 30m AOD contour, with the change in character defined also by vegetation cover.
- A I.3 Drift deposits of sand and gravel were deposited by glacial meltwater and are a characteristic feature of the valley sides. A long history of mineral extraction has resulted from the exploitation of these deposits. The drift deposits have a strong influence on the soils in the valley and have significantly influenced both the early colonisation and the development of agriculture and mineral workings. In places the glacial drift material is overlain with peat dominated soils and associated areas of heathland and common.
- A I.4 Traditionally managed pasture and rough grazing is the predominant landcover, although there are areas of fen, carr and wet woodland resulting in a varied mosaic of habitats including flood meadow, neutral grassland, marsh, fen and swamp. Areas of wet woodland to the southern part of the character area are often associated with a decline in pastoral grazing.
- A I.5 In terms of biodiversity, the character area supports a number of priority habitats within the Norfolk BAP, notably floodplain grazing marsh, some localised areas of reed bed vegetation and the alder and willow carrs/wet woodland. The carrs in particular are a long established component of the landscape, with alder woodland having been recorded in Norfolk since the 13th Century. This habitat is also apparent in the colonisation of the former mineral workings sites within the character area.
- A I.6 The ecological value of the character area is recognised through SSSI designations at Old Buckenham Fen and part of Breckland Forest which supports a wide assemblage of scarce flora and fauna including red squirrel. The Norfolk Ecological Network Mapping Project has identified the Thet Valley as falling within one of the core ecological areas due to the presence of locally scarce fen systems and associated vegetation. In addition areas of remnant heath within the character area fall within the EcoNet Enhancement Area for Heathland creation.

Historic Character

- A I.7 The Historic Landscape Characterisation (HLC), identifies historic processes including the creation of woodlands from the 18-20th centuries, areas of mineral extraction and relatively late (20th Century) Enclosure. A number of areas of field

boundary loss and relict field boundaries are identified, particularly in the northern end of the valley. This and the relatively late Enclosure are reflected in the present field boundary pattern which is often defined by post and wire fencing and patchy hedgerows with variable management regimes.

- A1.8 Faden's 1797 Map identifies parklands and planned estate landscapes associated with halls as falling within the character area, including at Shadwell and West Harling, occupying the transition between the crest of the valley slopes and the adjacent *Harling Heathlands* Character Area. These have largely disappeared, with the hall at West Harling demolished in 1931 and its parkland absorbed within subsequent Forestry Commission afforestation, although small areas of halls and parklands remain, as at Kilverstone.
- A1.9 Commons are also illustrated on the 1797 map, notably at Bridgham, Eccles and Harling and Shropham. These have largely been lost to subsequent mineral workings apparent as ponds and lagoons, particularly in the northern part of the character area.

Settlement and Built Character

- A1.10 Settlement is generally confined to farmsteads and small, linear hamlets associated with the rural road network and river crossing points (e.g. Brettenham and Bridgham). These are predominantly long established and characterised by a distinct and strong vernacular tradition in terms of building materials and visual appearance, with brick, flint and red tile all evident. Flint and dressed stone churches are locally distinctive, as at Brettenham. Thetford is the key settlement of the valley developing at a river crossing point. The town is not considered in detail by this rural landscape assessment.
- A1.11 A number of other human influences are apparent within the character area, such as land drainage works in the northern part of the character area, and the historic mineral/aggregate extraction which is apparent in the lagoons and pools in the north. The A11 widening scheme in the north eastern part of the character area is a locally divisive and visually discordant element within the landscape.

Perceptual/Visual

- A1.12 The character area retains a strong sense of enclosure due to the woodland blocks, hedgerows and areas of scrub vegetation on the valley floor and the rural lanes bounded by mature hedgerow and hedgerow trees. As such views are framed, although there are occasional views to landmark buildings within the valley sides, notably the church at Brettenham, in addition to views to and from the encroaching settlement edge at Thetford.
- A1.13 Together, the meandering river course, associated wetland habitats, small scale grazed pastures and network of ditches create a strong character. It is an intimate, varied and distinctly textured landscape.
- A1.14 Although the river and immediately surrounding grazed pasture creates a tranquil landscape, occasional views of waterbodies associated with the former mineral extraction reduce the intactness of parts of the valley, as does the localised

afforestation within the valley sides. The AII is visually discordant in the north eastern part of the character area.

EVALUATION

Positive Landscape Features of Significance and Inherent Landscape Sensitivities

The following are judged to be the key inherent landscape sensitivities which are fundamental to the character of the landscape.

- Natural meandering course of the River Thet and associated floodplain habitats and landscapes which are especially sensitive to river engineering and changes in water quality and water flows;
- Riparian vegetation on the valley floor including willow and alder carr, grazed pastures and meadows which represent the traditional, historic land use, contribute to the small scale character of the valley and provide a notable biodiversity resource;
- A tranquil rural character which is sensitive to incremental small scale change;
- The areas of open water within the valley and the need to ensure sensitive restoration and after use of sand and gravel workings;
- Low density of settlement comprising occasional scattered farm buildings and small, essentially linear hamlets clustered at bridging points;
- The varied field pattern, including the small scale fields associated with the settlements and the pastures enclosed by ditches on the valley floor;
- Network of narrow rural lanes and small scale river crossing points.

Visual Sensitivities

A1.15 Key visual sensitivities of this landscape character area include the framed views, the river crossing points, and views to the valley crests. The urban edge growth at Thetford to the south west of the character area, is both visible from within the character area and has partially extended into the valley.

Current State of the Landscape

A1.16 The landscape of the character is broadly representative of the landscape type, and has localised area of intact lowland river landscape characterised by a natural river course and historic landscape elements including alder carrs and fen. However, the character area also has an interrupted quality, due in part to past sand and gravel exploitation, the local presence of the AII and afforestation in the valley sides.

Landscape Change

Past Change

- Extraction of sand and gravel, plus restoration of schemes, and associated loss of common land and heath;
- Loss of parklands and former commons to afforestation/Forestry Commission plantings;
- Colonisation of wet woodland both on former minerals sites, and in areas where traditional pastoral management is in decline;
- Recent road widening works to the A11 transport corridor in the north eastern part of the character area, which are both divisive and visually discordant;
- Forestry Enterprise initiatives have recently involved pilot schemes for heathland restoration and restoration of grazing pasture on areas where the plantations have reached the end of their productive cycle.

Future Change

A1.17 Potential future changes could occur as a result of the current forestry strategy, which incorporates proposals for heathland and riverine habitat restoration. Thetford's Growth Point Status and future urban expansion could have implications for the landscape to the south western edge of the character area, adjacent to Thetford.

LANDSCAPE STRATEGY

The overall management objective should be to conserve the tranquil, pastoral, undeveloped character of the *Thet Valley* and to manage and where appropriate increase natural floodplain habitats such as grassland, reedbeds, fens and grazing marsh, in addition to maintaining and enhancing the areas of alder carr, other wet woodland and heathland. The ditch systems and associated hedgerows should be conserved, ensuring that the intimate scale, sense of historic character and enclosure are maintained.

Guidelines

Landscape Management

- Maintain hedgerow and hedgerow tree boundaries of the rural roads and fields on the valley sides to maintain habitat connectivity and ensure succession of hedgerow tree cover;
- Use appropriate and sensitive management regimes to maintain the alder carrs in the valley floor;
- Maintain the predominantly grazed pastoral valley floor and area of flood meadow, wet pasture and rough grazing;

- Encourage opportunities for the creation of further areas of reedbed associated with existing wetland habitat, in area of low biodiversity interest, to assist in meeting the objectives of the Norfolk BAP;
- Seek to conserve the water levels and water quality within the river and associated ditches and the fen systems;
- Maintain the small scale field pattern, particularly the historic small scale fields surrounding settlements;
- Encourage the reversion of plantations in the valley sides to grazing land and heathland as appropriate, when such plantings reach the end of their productive cycle, and in accordance with Forestry Enterprise objectives.
- Explore opportunities to create visual and physical connections with the adjacent settled tributary farmlands.

Development Considerations

- Conserve the historic character of nucleated settlements on the valley floor associated with the churches and rural road network;
- Conserve views of the wooded character of the valley crest;
- Monitor the expansion of the small settlements within the valley, and suburbanising built elements which could affect their small scale, vernacular and rural character;
- Seek to create a well integrated edge of Thetford with the valley landscape;
- Explore opportunities for the sensitive after use of gravel pits;
- Maintain the rural road network, resisting upgrading works which could have an urbanising influence and paying particular attention to the historic river crossing points;
- Improve connectivity between the character area and the river to make use of its potential as a recreational resource. Ensure that any recreational development takes into consideration the number of ecologically important habitats in the character area and is appropriate to its landscape setting in terms of scale and building materials.



A2: UPPER YARE



A2: UPPER YARE VALLEY

Location and Boundaries

A2.1 The *Upper Yare Valley* is located in the north eastern part of Breckland District, at the confluence of the River Yare and the Blackwater Tributary. The River Yare flows in an easterly draining catchment into the neighbouring Broadland District. The valley crests are defined primarily by topography, in addition to the change in vegetation from floodplain and riparian to arable agriculture.

Key Characteristics

- An easterly draining catchment carved into a chalk solid geology, overlain with boulder clay, silt, sand and gravel glacial drift deposits and chalky till/glaciofluvial drift soils.
- Topography ranges from 30-50m AOD, with the Blackwater Tributary forming a narrow, relatively steep sided valley, and the Yare, in contrast having a broad valley floor.
- Views are intermittent due to the density of native hedgerow vegetation along the rural lanes traversing the character area, and the presence of former hedgebanks, although localised views are available to the valley sides and to areas of open water.
- Land cover is predominantly pastoral and rough grazing, but with some paddocks and areas of arable agriculture partially encroaching into the valley sides at points.
- Small to medium scale, irregular field pattern, with enclosure provided by mixed native Enclosure hedges, which are of varying density and condition, and sometimes with hedgerow trees.
- Historic features include Calverley Hall and Parkland, the remains of a moated site near Cranworth, the church at Southburgh and the churchyard of the isolated church at St George's Mount.
- A mosaic of different woodland types including both wet woodland and coniferous species is a distinctive feature of the valley floor. Wetland habitats close to the river represented in a number of CWS, plus small SSSI at Potters Carr.
- The Mid Norfolk Railway crosses the eastern half of the character area at Thuxton. Water bodies associated with former mineral extraction are apparent in the eastern half of the character area.
- Settlement pattern is of low density comprising either linear villages (e.g. Garvestone, partly outside the character area) or small hamlets and groups of houses centred on key road junctions (e.g. Thuxton).

- A small scale, enclosed landscape, of a varied and textured character due to the range of land cover elements. Peaceful and rural in character and little disturbed by settlement or road pattern.
- Opportunities for recreation are afforded by a number of rights of way and the fisheries in the western part of the character. Access to the river is generally limited to the historic crossing points.

LANDSCAPE CHARACTER DESCRIPTION

Physical/Natural

- A2.2 The *Upper Yare* is an easterly draining catchment carved by two main periods of geomorphological activity and lying in a broad, shallow but well defined valley. The boundaries of the *Upper Yare* character area are topographically defined by an elevation ranging from 40-50m A.O.D, with the lowest point of the valley floor located at 30m AOD.
- A2.3 Drift deposits of sand and gravel were deposited by glacial meltwater and are a characteristic feature of the valley floor. The drift deposits have a strong influence on the soils in the valley (defined by chalky till and glaciofluvial till) and have significantly influenced both the early colonisation and the development of the valley.
- A2.4 Land cover within the valley is defined predominantly by pasture and rough grazing, in addition to areas of mixed woodland, which includes both the typical carrs/wet woodland as well as areas of coniferous planting. The pastoral fields on the valley floor are small to medium sized and irregular, defined primarily by mixed hedgerows, some with hedgerow trees, in addition to ditches. The higher ground of the valley sides is characterised by medium sized, geometric fields, some of which are now under arable cultivation. Paddocks also occur across the character area.
- A2.6 Much of the course of the Upper Yare as it flows through Breckland District, and that of the associated Blackwater Tributary, has experienced relatively little disturbance other than the creation of the historic crossing points and a weir at Thuxton, although the eastern part of the character has in the past been used for sand and gravel extraction. A number of open waterbodies with wooded edges are apparent in the valley floor in this area.
- A2.7 Wetland woodland is a particular feature along the river and includes Potter's Carr SSSI at Cranworth and numerous County Wildlife Sites (CWS). In addition the calcareous grassland apparent within the character area is identified as a priority habitat within the Norfolk BAP. The Upper Yare Valley is also identified as having one of the largest distributions by area of reedbed, which is another priority habitat. In view of this habitat potential, the watercourse has been identified as one of the Core Areas within the Ecological Network Mapping Project, with the remainder of the character area falling within an Enhancement Area for heathland, grassland and woodland creation.

Historic Character

- A2.8 Reference to Faden's 1797 Map of Norfolk identifies a number of historic elements within the character area, including areas of common at Butlers Common and

Hardingham Low Common, in addition to a windmill at Hardingham and Hardingham Old Hall, on the periphery of the character area. Faden shows a small scale settlement pattern of linear village and hamlets which persists today.

- A2.9 Subsequent agricultural enclosure has largely resulted in the loss of the commons. The minor parkland of Hardingham Old Hall is extant on the boundary of the character area, as is the 17th Century timber framed Calverley Hall occupying the south facing valley slopes overlooking the Blackwater.
- A2.10 The Mid Norfolk Railway line which runs through parts of the *Upper Yare Valley* was an historically important feature, linking the area to the rest of Norfolk. The line no longer forms part of the mainline rail network, having been developed for recreational purposes by the Mid Norfolk Railway Group.

Settlement and Built Character

- A2.11 Settlement is essentially of low density and linear in formation, often comprising of small groups of houses aligned with rural roads, small hamlets focussed on key road junctions or river crossings (e.g. Southburgh, Thuxton) and a small number of compact linear villages to the valley sides, such as Garvestone. Areas of settlements display a varied vernacular in terms of materials and building styles, with colour render and whitewash apparent. Settlement edges are generally well wooded and effectively contained by the valley landform.

Perceptual/Visual

- A2.12 This is an enclosed landscape of small scale, and of a relatively unified character in terms of land cover elements, with the exception of the large areas of open water in the eastern part of the character area, which are a legacy of past mineral extraction. In view of the varied range of land cover types it has a textured quality, albeit with a muted palette of colours, partly influenced by the coniferous planting within the valley floor.
- A2.13 Views are intermittent in nature, due to landform and the sense of enclosure provided by field boundary hedgerows, in addition to the mixed and coniferous woodland planting within the valley floor, which forms a distinctive element of the landscape.

EVALUATION

Positive Landscape Features of Significance and Inherent Landscape Sensitivities

The following are judged to be the key inherent landscape sensitivities which are fundamental to the character of the landscape.

- Wooded valley floor which provides a sense of enclosure;
- Areas of wet meadow and grazing pasture indicate traditional landscape management practices;
- Vernacular buildings provide a sense of historical continuity and character;

- The small scale, linear settlement pattern;
- Quiet rural character.

Visual Sensitivities

A2.14 The key visual sensitivities within this character area are the views to the valley sides and crest. The tower of the church in the adjoining settlement of Reymerstone, forms a prominent skyline element. Coniferous planting within the valley floor is a visually distinctive and detracting element.

Current State of the Landscape

A2.15 With the exceptions of coniferous planting to the valley floor and the water bodies created by mineral extraction, the landscape has a clearly defined and generally undisturbed landscape character. In terms of ecological integrity, this is variable, with the watercourses and floodplain grassland which form part of the EcoNet Core Area being relatively strong, although biodiversity has been weakened by the coniferous woodland and by the encroachment of arable agriculture.

Landscape Change

Past Change

- The construction of the Mid Norfolk Railway in the 1860s;
- Re-alignment of the tributaries and associated loss of floodplain grassland;
- Sand and gravel extraction within the floor of the Yare Valley;
- Arable cultivation and attendant changes to field boundaries within the upper valley sides;
- Coniferous planting in the valley floor and associated loss of floodplain landcover and habitats.

Future Change

A2.16 Future change may result from the ongoing after use design of former mineral extraction sites. There is also likely to be pressure for small scale residential expansion of the settlements.

LANDSCAPE STRATEGY

The overall management objective for the *Upper Yare Valley* is to conserve its quiet rural character, in addition to maintaining traditional management practices such as grazing pasture. Lowland wetland habitats such as the carrs, wet woodland and floodplain meadow/grassland should be conserved to maintain historic character and ecological integrity.

Guidelines

Landscape Management

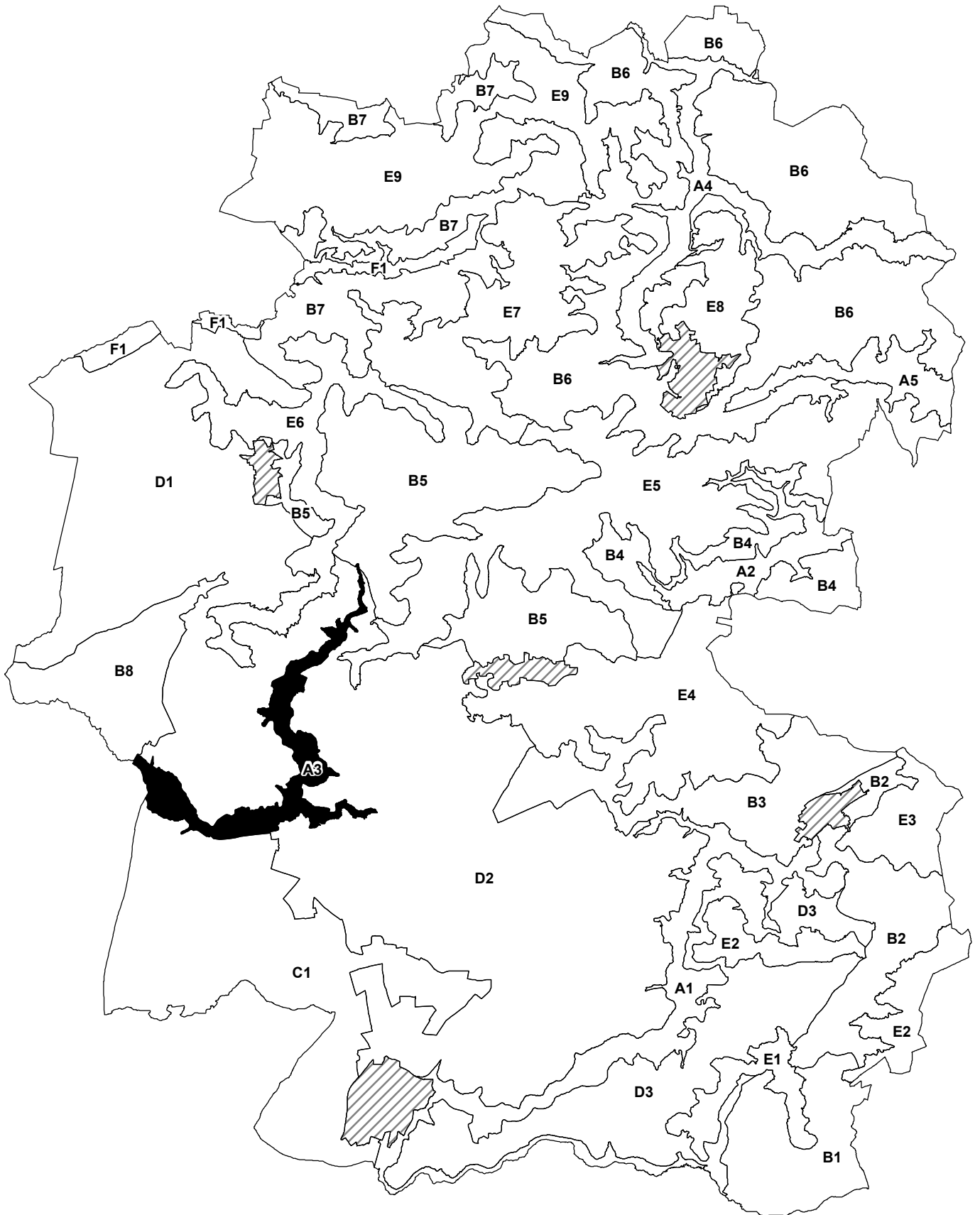
- Encourage opportunities to replace coniferous tree planting within the valley floor with appropriate and native wet woodland species;
- Conserve existing alder carr woodland through active and appropriate management;
- Explore opportunities to re create floodplain grassland/meadow where this has been lost.
- Seek opportunities to create a more natural edge/buffer to tributary watercourses and to incorporate marginal vegetation/habitats, in accordance with EcoNet objectives.
- Conserve traditional landscape management practices e.g. grazing pasture/rough grazing;
- Where arable agriculture has encroached upon the valley sides, encourage reversion to pastoral agriculture;
- The restoration of mineral workings should be subject to an appropriate and sympathetic after use design and ongoing landscape management.

Development Considerations

- Monitor new development within the character area, ensuring that it does not encroach further upon the valley floor and associated riparian/floodplain elements;
- Ensure that any new development reflects the existing in terms of scale, style and materials palette;
- Ensure that new domestic boundary planting to the edge of areas of settlement does not have a sub-urbanising influence in terms of species;
- Conserve the exiting network of narrow rural roads and river crossing points, resisting traffic upgrade or calming measures which could have an urbanising influence;
- Conserve views to valley crests;
- Explore opportunities for recreational access to the watercourses, ensuring that they enhance the character of the river corridor and associated vegetation.



A3: RIVER WISSEY



A3: RIVER WISSEY

Location and Boundaries

- A3.1 The River Wissey flows in a south-westerly draining catchment in the west of Breckland District rising at Bradenham flowing south through Breckland and then west into Kings Lynn and West Norfolk Borough. The character area is composed of the floodplain and valley sides of the River Wissey, being defined by the extent of drift deposits and by topography - the 30m -40m contour broadly marking the valley crest. The upper valley beyond South Pickenham is not clearly defined within the landscape and is included in the adjacent character area - B5: *River Wissey Settled tributary farmland*.

Key Characteristics

- A south westerly draining catchment underlain by the Upper Chalk and overlying chalky boulder clay, with glacial drift deposits of sand, gravel, clay and silt plus later alluvial sediments.
- Landform is that of a broad shallow valley. With a flat valley floor and gentle valley sides rising to 30 – 40m AOD.
- The river follows a natural meandering course. Open water bodies, notably near Ickburgh are the legacy of past mineral extraction and exploitation of drift deposits within the valley floor. A chain of lakes also forms part of the designed landscape at Didlington Hall.
- On the valley floor, land use is characterised by a mosaic of permanent pasture fields and a variety of woodland types planting including semi-natural wet woodland, carr and dense plantation.
- Presence of woodland creates an enclosed character with framed views, particularly across the flat valley floor, and along the rural road network, although there are occasional views to the valley sides and crests.
- Pig farming is a small scale but visually prominent land use on the valley sides within the predominantly pasture and wooded landscape.
- Pasture fields on the valley floor are divided by water-filled ditches or post and wire fencing. Willows, alder and poplar frequently fringe the watercourse and boundaries.
- A mosaic of wetland habitats – carr woodland, reedbed, meadow, neutral grassland and fen defined as SSSI and County Wildlife Sites contribute to a strong valley character. The valley also contains part of the Breckland Forest SSSI west of Ickburgh and a section of Breckland Farmland within the Stanford Training Ground.
- Evidence of historical occupation and land use is scarce, although several parklands (e.g. Langford and Ickburgh) are marked on Faden's Map and a number remain today as at Didlington.

- Settlement within the valley character area is scant, the largest settlement being the linear village of Ickburgh. Other built form incorporates scattered Halls and farm buildings and former mills.
- Settlements are generally located on the valley crest as at Great Cressingham, Hilborough and Mundford and included within the adjacent character areas.
- A generally tranquil character area with occasional roads crossing the valley rather than running along the valley floor. The A1065 is locally dominant close to Ickburgh.
- Recreational access is facilitated by a number of rights of way, although there is little direct access to the river, other than at the historic crossing points with small scale bridges and fords.

LANDSCAPE CHARACTER DESCRIPTION

Physical/Natural

- A3.2 The River Wissey has a narrow westerly draining catchment underlain by Upper Chalk and later glacial drift deposits of chalky boulder clay and sands and gravels. The drifts deposits together with later alluvial sediments have a strong influence on the soils of the valley and land use. As the river flows and gains momentum, the meanders become more defined and the valley becomes broader. The valley crests are delineated by the 30m contour.
- A3.3 Drift deposits of sand and gravel have provided a resource for excavation as at Ickburgh. The typical humic sandy gley soils are prone to waterlogging and erosion. Landcover within the valley floodplain is defined primarily by plantation woodland, alder and willow carrs and permanent grass pasture under traditional grazing management, plus localised areas of fen associated with field boundaries and drains/ditches. In addition to the pastoral land use, small areas of the valley sides are used for pig raising. Although hedgerows form part of the network of field boundaries, post and wire fences and ditches are also a common feature.
- A3.4 The mosaic of natural habitats, including flood meadow, neutral grassland, marsh, fen and swamp are important both in terms of ecological value and in defining landscape character. They include stands of wet woodland and carr woodlands e.g. Bodney Carr and Blacksmith Carr, reedbeds (Didlington Lakes SSSI), meadows (Hooks Wells Meadows SSSI) and fenland (Great Cressingham SSSI) all form part of the mosaic of ecologically important wetland habitats. All of these habitats are priority areas of the Norfolk Biodiversity Action Plan. The section of Breckland Forest SSSI within the character area is largely coniferous with small blocks of broadleaf woodland. The Wissey supports a range of species including crayfish. The EcoNet project has identified the Wissey Valley as a Chalk Valley Core Area.

Historic Character

- A3.5 Faden's 1797 Map of Norfolk shows Halls to be a characteristic feature of the upper valley sides of the Wissey e.g. Hilborough Hall, Didlington Hall and Bodney Hall. Elements of the parkland character survive today particularly associated with Didlington Hall. The Faden map also shows substantial areas of former common

and heath associated with settlements for example Mundford Common, Lynford Heath, and Ickburgh Heath. Only Bodney Warren, with its history of use for rabbit cultivation during the medieval period, is still extant. Elsewhere plantation woodland has resulted in the loss of commons and heath.

- A3.6 The Historic Landscape Characterisation (HLC) identifies the 18th-20th century as being a period of extensive change with a significant impact upon the landscape. Plantation woodland was planted, creating the dominant land use. In addition meadows were enclosed during this period, creating small and medium pastoral fields. On the whole this field pattern has been retained, although the HLC data shows some 20th century boundary loss, particularly on the upper valley sides.
- A3.7 The most significant recent human interventions to the character area are the route of the A1065 and the past excavation of sand and gravel deposits south of Didlington.

Settlement and Built Character

- A3.8 Settlement within the valley character area is scarce, the largest settlement being the linear village of Ickburgh. Other built form incorporates scattered Halls and farm buildings and former mills.
- A3.9 Although Ickburgh is the only settlement located on the valley floor, other settlements such as Mundford have spread over the crest of the valley from the adjacent *Great Cressingham* character area, with predominantly modern 20th century edge development.
- A3.10 Traditional building materials are red brick and flint, with some thatch. St Peter's Church at Ickburgh is an example of this local vernacular, being flint with brick detailing.

Perceptual/Visual

- A3.11 The meandering river course and mosaic of wetland habitats and pasture create a strong valley character. The river course is generally crossed by only minor roads and lanes with small scale bridges or fords and settlement is limited. The valley has a peaceful, natural character breached only by views to coniferous plantation woodland and occasional interruptions such as the A1065.
- A3.12 Views within the character area are framed, partly by the valley sides, but more significantly by the woodland blocks, both the large-scale plantation blocks and smaller scale stands of wetland woodland and carrs.

EVALUATION

Positive Landscape Features of Significance and Inherent Landscape Sensitivities

- Natural meandering course of the River Wissey which is especially sensitive to river engineering and changes in water quality and water flows;
- The mosaic of wetland habitats associated with the river course and floodplain, which are sensitive to change in water quality and water flows;

- Traditionally managed pasture and meadow on the valley floor, which are vulnerable to changes in farming practices and loss of grazing;
- Consistent use of vernacular red brick and flint building materials;
- Minor roads and river crossing points (bridges and fords);
- The parkland setting of Didlington Hall;
- The areas of open water associated with historic parklands and gravel extraction sites;
- Tranquil, rural undisturbed character of much of the valley.

Visual Sensitivities

A3.13 The sloping valley sides and large blocks of plantation woodland restrict views both within the character area and to adjacent character areas. Views to the more open valley crests are sensitive due to the largely undeveloped skyline interrupted by occasional woodland blocks. There are also some key channelled views along the valley floor.

Current State of the Landscape

A3.14 This is a functional landscape that is traditionally managed by grazing. However, some elements are not representative of the valley landscape including areas of pig raising on the valley sides and plantation woodland.

A3.15 Although non-native coniferous woodland is dominant, blocks of wet woodland and carrs are present on the valley floor. The mosaic of wetland habitats represented by the SSSIs and Country Wildlife Sites demonstrate the ecological diversity and integrity of much of the valley.

Landscape Change

Past Change

- The introduction of coniferous plantations on former estate parklands e.g. Tofts Park and heathland and commons;
- Loss of common land as a result of agricultural enclosure;
- Twentieth century boundary loss, notably on the valley sides;
- Introduction of post and wire fencing to the pastoral fields of the floodplain;
- The exploitation of drift deposits for mineral extraction.

Future Change

A3.16 Potential future landscape change may result from emerging Forestry Enterprise strategy, such as the reversion of woodland on the valley side to grazing pasture, in addition to the ongoing restoration of mineral extraction sites. Reed and grazing

marsh habitats are proposed along the course of the Wissey as part of the Norfolk Biodiversity Action Plan, to link the Broadland and Fenland sites.

LANDSCAPE STRATEGY

The overall landscape strategy should be to conserve the tranquil, pastoral, undeveloped character of the *River Wissey* and to manage and where appropriate enhance and create natural floodplain habitats such as grassland, reedbeds, watermeadows, and grazing marsh, in line with the Norfolk Biodiversity Action Plan objectives.

Guidelines

Landscape Management

- Replace coniferous species in the valley floor with native wet woodland species, or where appropriate consider reversion to grazing pasture (or heathland);
- Replace post and wire fencing with native, species rich hedgerows or ditches to improve habitat connectivity;
- Maintain the traditional grazed pastoral valley floor and area of flood meadow, wet pasture and rough grazing;
- Maintain the small scale parliamentary enclosure field pattern where it exists and seek to enhance/replace hedgerow boundaries to conserve the pattern and improve habitat connectivity;
- Encourage opportunities for the creation of reedbed associated with existing wetland habitat, to assist in meeting the objectives of the Norfolk BAP;
- Seek to conserve the water levels and water quality within the river and associated ditches and the fen systems;
- Ensure that infrastructure (e.g. signage) associated with recreational use of the river banks is sensitively designed;
- Encourage the reversion of plantations in the valley sides to grazing land and heathland as appropriate, when such plantings reach the end of their productive cycle, and in accordance with Forestry Enterprise objectives.

Development Considerations

- Conserve the unsettled rural character and views of the undeveloped, wooded valley crests and skyline;
- Monitor the expansion of the small settlements within the valley, and suburbanising built elements which could affect their small scale, vernacular and rural character;
- Monitor changes/expansion of villages within adjacent areas – ensuring the development extensions do not extend into this otherwise largely undeveloped rural valley.

- Ensure recreation facilities and associated buildings/infrastructure respects the landscape and visual character and existing landscape elements. Explore opportunities for the sensitive after use of gravel pits;
- Conserve small scale river crossing points (bridges and fords)
- Improve connectivity between the character area and the river to make use of its potential as a recreational resource, ensuring that any recreational development takes into consideration the number of ecologically important habitats in the character area.



