

9 Waveney - St Olaves to Burgh Castle

The Burgh Castle Roman Fort, a Scheduled Ancient Monument, is one of a series of Roman coastal forts. Lesser remains of another are sited across the former estuary at Caister.

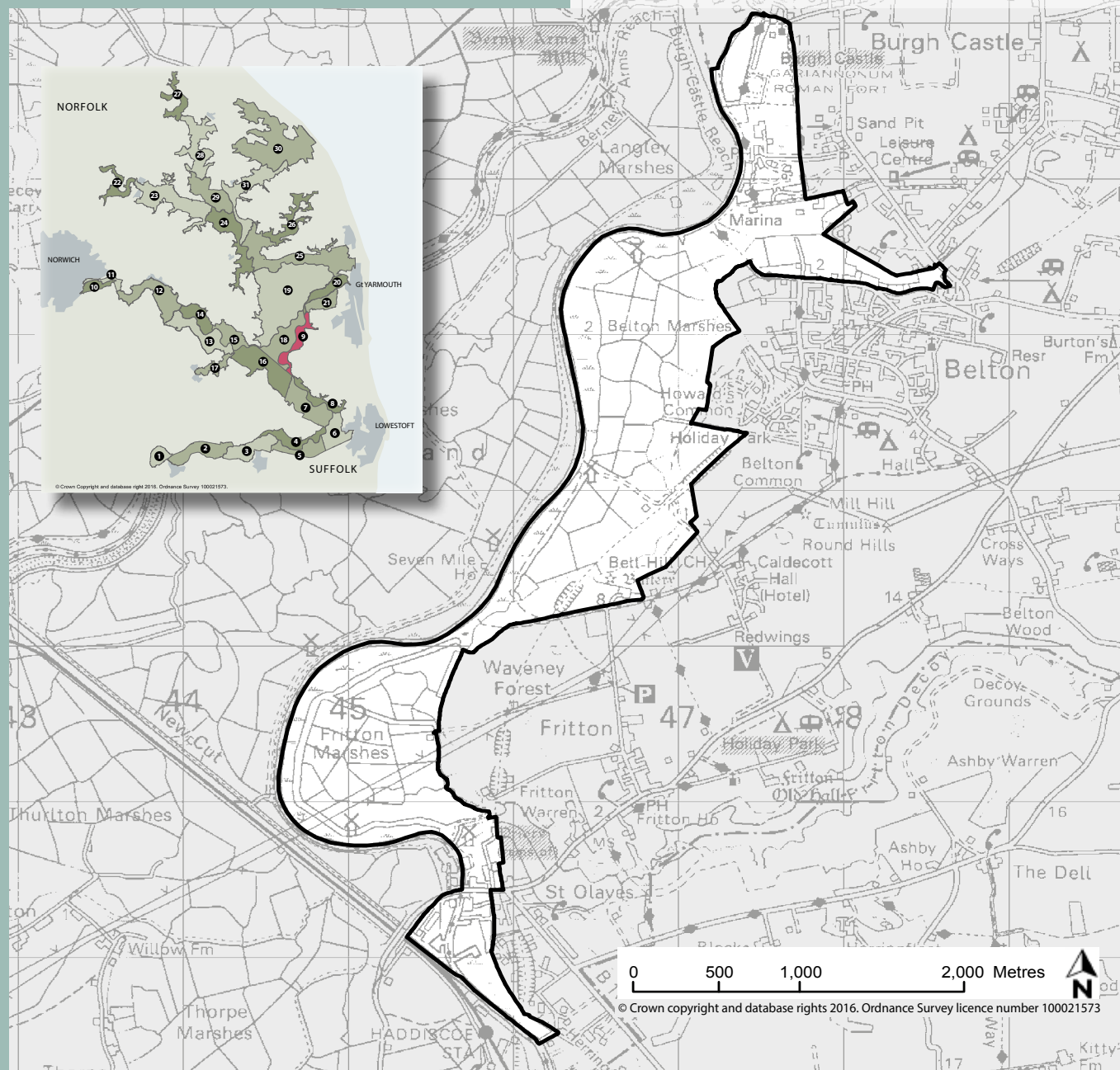
Why is this area special?

Although this area comprises of relatively small areas of silty clay marshland, this landscape has strong visual connections with the panoramic marshland landscapes of Haddiscoe Island and Halvergate Marshes lying to the west of the River Waveney. Despite the presence of localised areas of development, much of this area has quite a bleak and remote feel.

The area has a wooded backdrop to the east; large floodbanks and wide reed ronds to the west with some large scale boatyard/marina complexes to the most northern and southern ends of the area. This means that although the area has broadly the same physical characteristics as LCA 8 lying to the south, it is subject to far greater impacts from built development and tourism.

The adjacent upland originally comprised large areas of sandy heathland which was common land or large managed rabbit warren. The heathland today, where it is not under the plough, is either covered in coniferous plantation or put to various leisure uses including golf courses and holiday parks. There is one relict gorse-covered, open access area at Belton.

The gradient of the valley sides tend to be more gentle here than in the adjacent LCA 8, other than at Burgh Castle Roman Fort where instead of the usual marsh and peat fringe, a deposit of glacial till surrounded by sand sits close to the river. The extents of the Burgh Castle Fort remains here are striking, with walls and bastions surviving to full height on three sides of the rectangular plan. The western wall is thought to have long since tumbled into the marshland below. The remains are a feature in the landscape across a wide area. For visitors, the absence of the western wall has

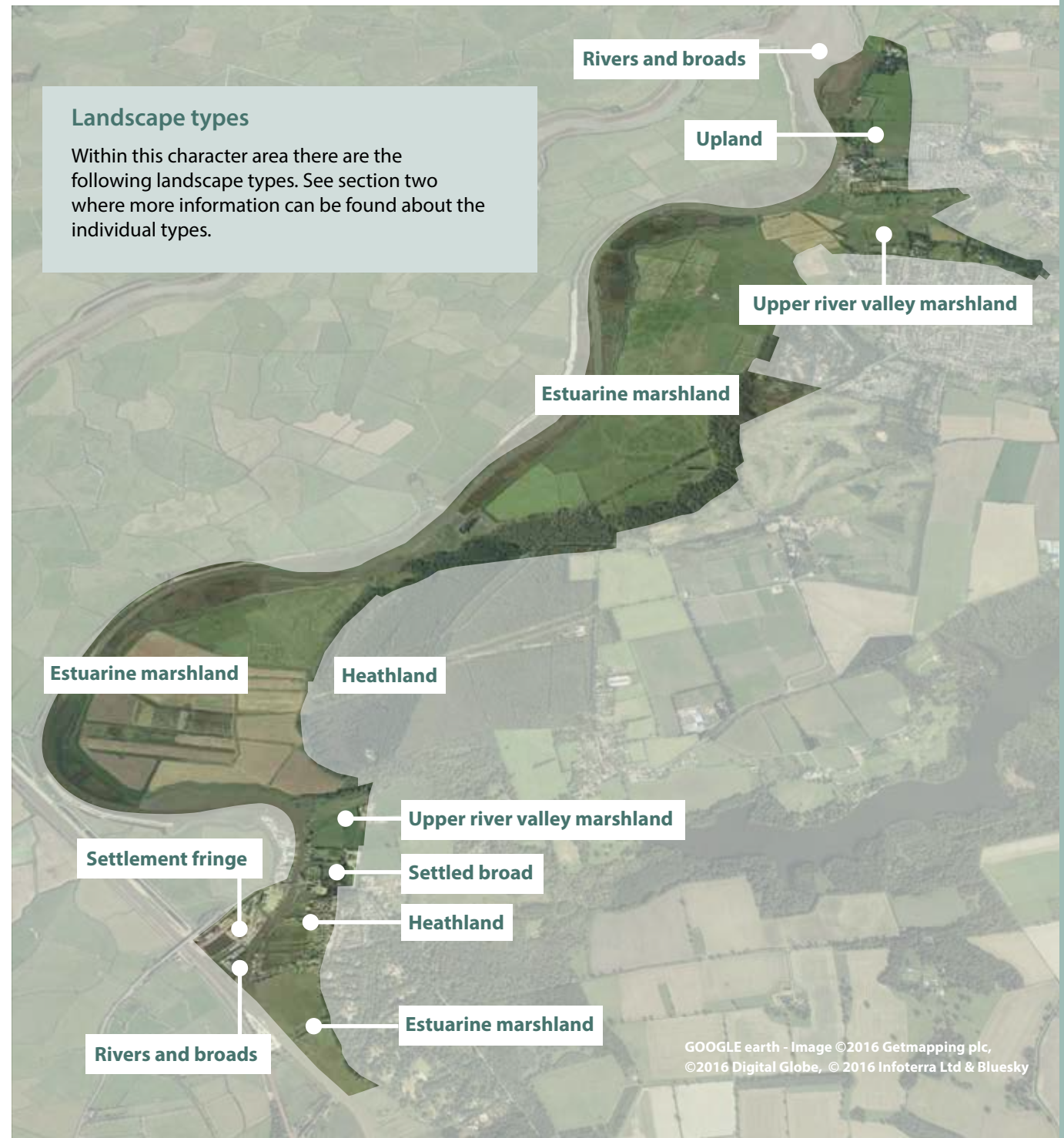


the effect of opening the structure out to the river, reedbed and marshland beyond. This vantage point provides exceptional views out across the Halvergate Marshes and Haddiscoe Island from which it is not difficult to visualise the former Roman estuary. The site is now in the care of Norfolk Archaeological Trust.

LCA 8 and 9 have a series of side valley tributaries (or former tributaries). Belton Fen and Fritton Decoy both of which relate to this area. These long watery fingers are generally excluded from the Broads Authority's Executive Area however the western end of Belton Fen has been included here. Fritton Decoy, which is hydrologically detached from the Broads network, has not. The scale and varying leisure uses of Fritton Decoy/Lake and its mature wooded environs means it has developed its own distinct identity.

The long distance footpath route, the Angles Way, skirts much of the area following a route on the higher ground to the west. However, at the northern end of the area the route drops down the valley side to pass alongside boatyards. The River Waveney meanders relatively close to the valley side offering boat users long distance views across the area to the "upland".

The relatively interrupted skylines created by the wooded valley sides in this area provide an exceptionally important backdrop in long distance views eastwards across the marshes. These are in total contrast to those available of the more developed skylines of Gt.Yarmouth.



Topography and skyline

On this eastern side of the river Waveney the narrow floodplain, ranges in width from 700-900m., and lies at around -1m to 1m OD with a series of tributary valleys incised through the higher ground to the east. The wooded ridge to the east rises up to between 8-10m OD.

The area is an open landscape, with panoramic views over the Waveney towards the River Yare and Breydon Water. Skylines to the west are predominantly of simple, open, undeveloped character (marshes and expansive valley floor), whilst the wooded ridge to the east forms a prominent and distinctive skyline element.

Vertical elements such as drainage mills at Berney Arms and those on the Halvergate Marshes, are prominent skyline elements, as are pylons. These pylons are prominent in views in the southern part of the area as the cables are elevated on very tall structure to cross the valley floor.



Drainage mills are a feature of the landscape in this area helping to reinforce the visual connection with Haddiscoe Island and Halvergate marshes.

The exceptionally tall pylons are visible for many miles.
Ashley Dace - geograph.org.uk



There are some elevated vantage points such as those from the Angles Way adjacent to the ruins of Burgh Castle to the north eastern part of the character area, from where views are available across the river confluence. The wooded ridge on which Burgh Castle is sited, defines the extent of views to the east.

The views to the west are longer than in the adjacent LCA 8 as the valley opens up with settlement at Reedham and Cantley factory visible.

Geology and soils

The marshland area is Breydon formation silty clay for the most part bounded by a narrow band of peat at the upland edge of the floodplain. The valley sides and upland here are part of an extensive area of sand.

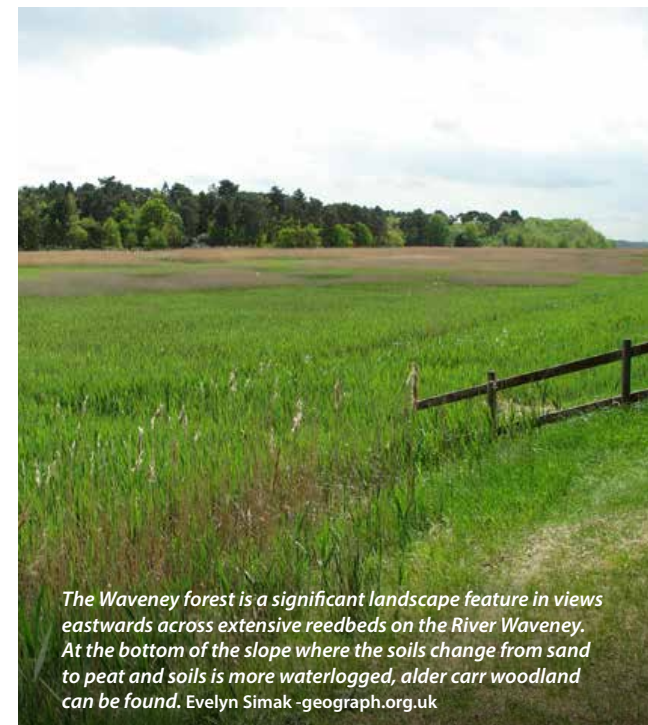
Enclosure, scale and pattern

Despite the area's narrowness, it is a landscape with a clear sense of openness to the west, south west and north, due to the open marshland character and visual connection with adjacent marshland landscapes, the horizons of which are punctuated with drainage mills. The area is contained and enclosed by the river to the west and a wooded ridge and valley sides to the east (the escarpment on which Burgh Castle is sited), and which creates a sense of enclosure. This is reinforced by the presence of Waveney Forest and associated perceived narrowing of the valley at this point.

Depending on the tide, the vast expanse of open water which is created by the course of the River Waveney and its confluence with the Yare, which forms the start of Breydon Water, creates a considerable sense of reflectivity in the landscape.

The patterns and textures of the "natural" landscape are simple and colours muted. These are created by marshes, dyke networks, arable crops, the coniferous plantations and carr woodland at the base of the valley sides together with the reed ronds fringing the River Waveney.

Built development introduces less simplistic patterns and textures at either end of the area, interrupting the overall simplicity of the landscape.



The Waveney forest is a significant landscape feature in views eastwards across extensive reedbeds on the River Waveney. At the bottom of the slope where the soils change from sand to peat and soils is more waterlogged, alder carr woodland can be found. Evelyn Simak - geograph.org.uk

Main features of land cover and use

Much of the area is grassland used as **grazing marsh** however there is a significant proportion now being used for **arable** purposes. **Coniferous plantation** and **heathland** is found on the sandy soils of the upland with a **carr woodland** fringe on the peat soils at the toe of the valley side. There are also large areas of **reed ronds** associated with the river corridor. There are varying forms of **infrastructure** in this area the most significant being the exceptionally tall pylons which carry the electricity wires across the Waveney valley and the road and rail links at St Olaves. The St Olaves Bridge is an early and important example of cast iron bowstring girder bridge and site of an ancient ferry crossing.

The Marshes and Ronds

This area comprises two main areas of marshland, Fritton and Caldecott/Belton. Fritton Marshes have been subject to large scale conversion to arable use and consequently a large number of drainage dykes have been infilled and associated boundary features - the gates and 'wings' have been lost. The Belton/Caldecott Marshes by contrast appears to have seen rather less change and retain a number of sinuous dyke boundaries.

Both areas retain their drainage mills, which along with the large number visible across the river make this a significant feature of this area. Public access to much of this area is very limited with no floodwall footpaths in the marshland area. This area contains other smaller areas of grazing marsh around St Olaves – the Priory Marshes (formerly drained by the small boarded skeleton mill there) and Scale Marshes to the south of the Beccles road. The western end of Belton Fen which has been drained and grazed over a long period is also visually similar to the adjacent grazing marshes.

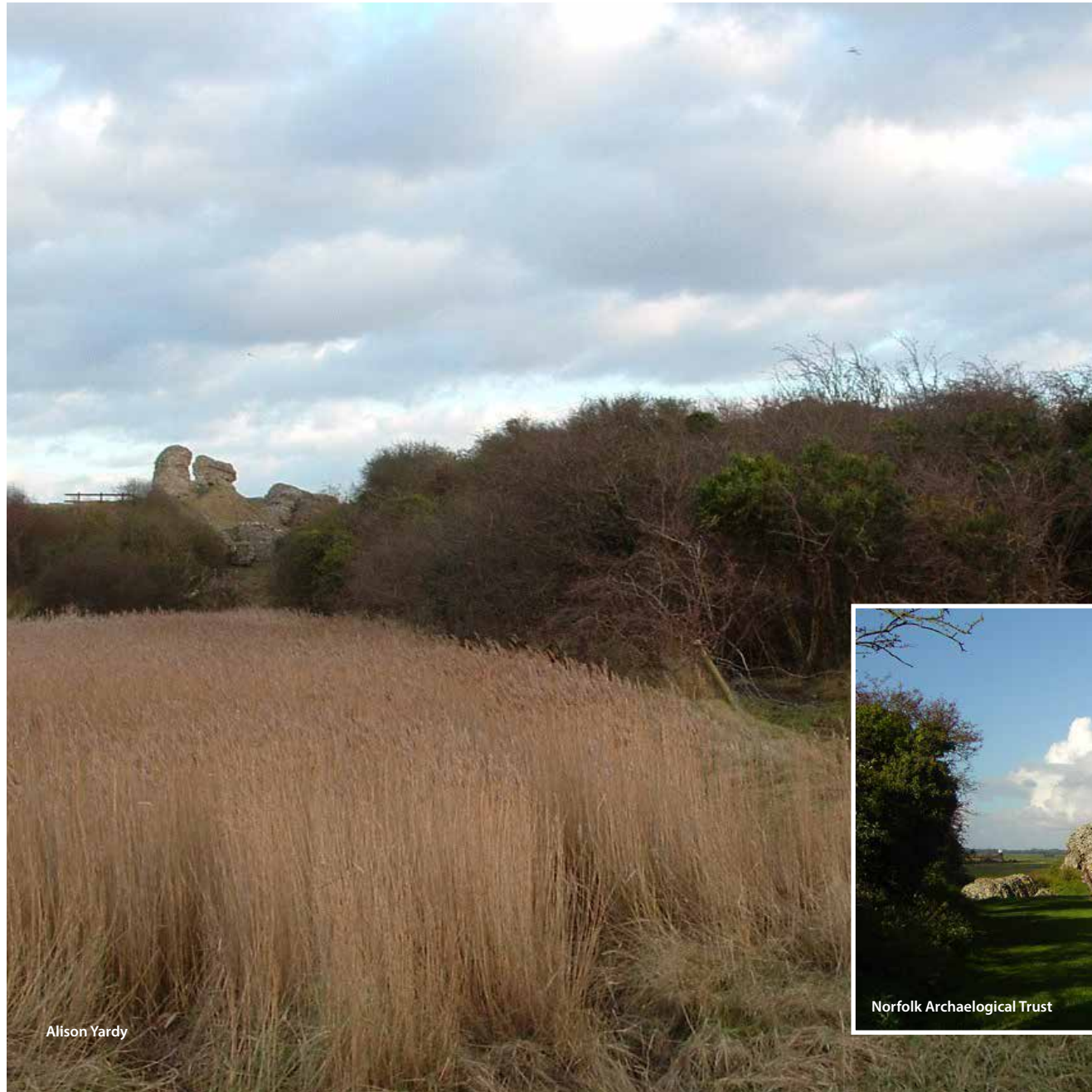
The commercially managed wide reed ronds along the lower Waveney are also a distinctive feature of this area. The floodwalls have been established quite a distance from the river to provide an area of washland. Some have been grazed in the past but are more commonly managed for reed today.

Extensive views towards Cantley and Reedham are available across the arable pasture at Fritton marshes.
Lesley Marsden



Some of the marsh areas are still used for grazing.
Lesley Marsden





Alison Yardy



Norfolk Archaeological Trust

The two main areas of **settlement** and development are at Burgh Castle and St Olaves. Both have dominant, industrial scale boatyard/marina areas with an abundance of metal security fencing. Both also have historic areas at their core. The Roman fort at Burgh Castle is one of the most important historic sites in the county while at St Olaves are the remains of an Augustinian Priory, and an old waterside settlement core including the Bell Inn and a cluster of older dwellings opposite (albeit heavily modernised).

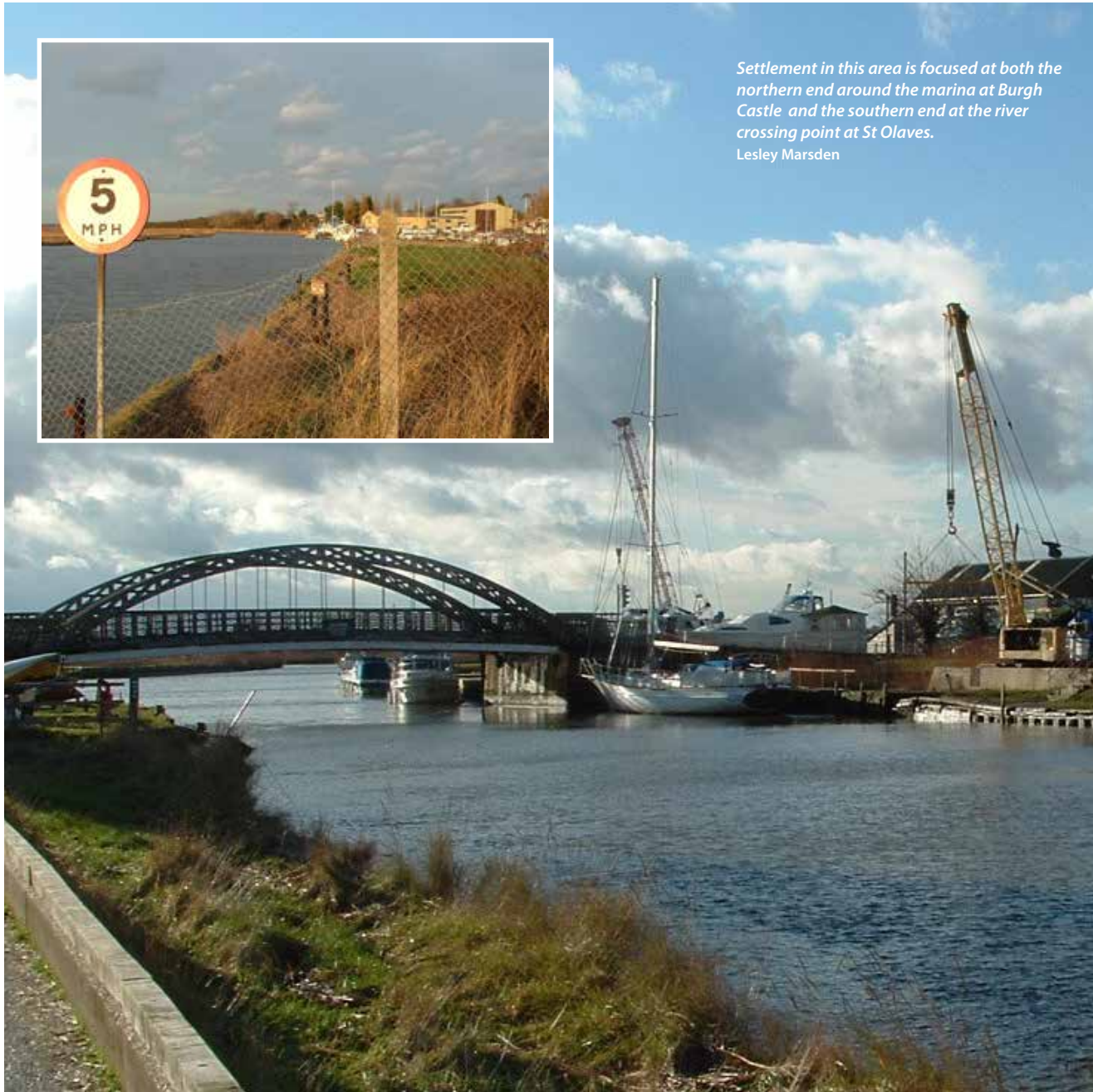
Both too have holiday chalet and caravan areas. These potentially more visually intrusive caravan park developments are generally well screened. St Olaves has a run of timber chalets, none of which appear particularly old. At Burgh Castle, the holiday area is far more extensive. The Marina caravan park comprises a marina for over 100 boats along with static caravans, touring pitches, and lodges. Adjacent to this is a holiday park consisting of around 100 chalets. These areas link up to larger static caravan parks that have become such a feature of the upland to the north of Fritton Decoy.

Burgh Castle Fort lies on the crest of the valley side, with alder carr woodland and extensive reedbeds located at bottom of the slope.



Settlement in this area is focused at both the northern end around the marina at Burgh Castle and the southern end at the river crossing point at St Olaves.

Lesley Marsden



Helping to keep it special

Care needs to be taken when landscape change occurs, to ensure that those positive characteristics that contribute to an area's unique sense of place are conserved and enhanced. What follows are examples of local issues and opportunities.

Landscape - The landscape of this area has a relatively strong sense of tranquillity with a mostly rural character. However, there are local intrusions at Belton and the A143 which adversely influence the sense of tranquillity. Other localised intrusions include development such as pylons, large scale boatyards and caravan parks – most of which are in adjacent character areas within Great Yarmouth Borough.

Pressures for re-development or the extension of facilities tend to be generated mostly by these leisure/recreational industries that are located within the settled areas. The impacts on the landscape may vary and can be significant if not carefully assessed and appropriately mitigated.

Aggregate extraction has in the past been proposed for the Waveney forest although this option has now been considered inappropriate for future county mineral supplies.

Enhancement opportunities exist to; improve dilapidated boundaries and external areas of commercial areas; reinforce planting on the valley side to filter views of developments; and promote schemes to remove the overhead electricity cables.

Nature conservation – The condition of the area is poor from an ecological perspective with areas of dried out fen, arable marshes and only small relict areas of heathland remaining. Opportunities to make improvements could be considered as part of any new development proposals.

10 Yare - Whitlingham Lane and Country Park

Whitlingham chalk workings used to be located in this area. It was a large industrial concern which included lime kilns and a narrow gauge railway. Some of the chalk extracted was burnt on site and some transported by wherry to other riverside sites in the Broads. The chalk deposit has meant that this area has a distinctive local building material used in both the medieval buildings and the later estate cottages.

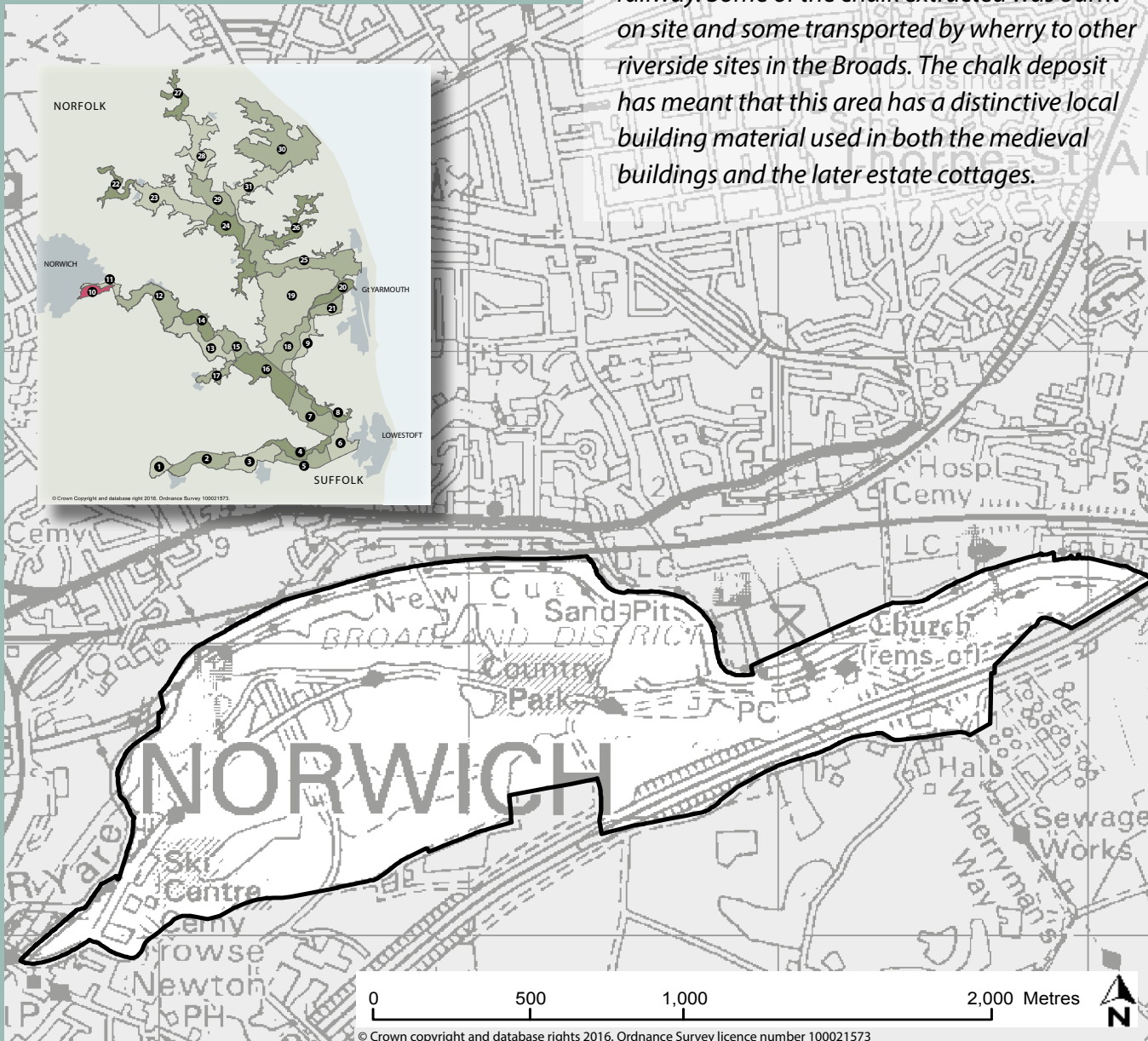
Why is this area special?

Whitlingham Country Park is an important open space on the edges of Norwich. It is a mixture of modern sports facilities within a late 18th and 19th century parkland setting. The area was originally called Crown Point Park, and it was developed successively by the Money, Harvey and Colman families, surrounding a house rebuilt in the 1860's. In 1955 the house and grounds were sold by the Colman family to become Whitlingham Hospital and later redeveloped as flats, while the wider estate was retained.

Parkland features are still evident throughout as witnessed by the lime tree avenue which runs between Whitlingham Lane and Crown Point Hall and the early 19th century parkland plantation (Coronation Belt) which covers the ridge within the park. To the west the area has remained as grazing land with mature parkland trees

At a similar time to the building of Crown Point Hall, Trowse Newton Hall, a mid-15th century country house of the Priors (later Deans) of Norwich Cathedral, was deliberately ruined to form a feature in the landscape park.

This area also contains the remains of medieval church of St Andrew, Whitlingham set on the hillside surrounded by overgrown chalk pits. Although the church was in ruins from the early 17th century, it must also have been adopted as a picturesque ruin in the 19th century as contemporary photographs show Victorian window tracery and the masonry tidied up. On the eastern boundary of the parkland there was a popular tavern called Whitlingham White House which also marked the site of a ferry across the Yare (shown on Faden's Map published 1797 and later maps). In 1845 it was noted that 'Pleasure parties often visit this spot to enjoy its romantic scenery



and remarkable echo' (White's Directory, 1845). By the 1880's it had been pulled down and its site annexed to the Crown Point Estate. The present rebuild may be the work of architect Edward Boardman who certainly carried out alterations to the main Hall and Gardens in the early 1900's. This area with its rich variety of subject matter was a well-known beauty spot and favourite of many of the Norwich School artists including J.S Cotman, J.J Cotman, M.E. Cotman, Stannard and Ninham.

In relatively recent years, the Norwich southern bypass cut through the park and a major aggregate extraction scheme was completed at the northern side of the area. The Whitlingham Broads, now providing a popular recreation area, are a product of the scheme.

The area is busy all the year but is especially so during the summer period, as a greater number of water sports activities, including sailing, take place on the Great Broad and the camping site becomes busy. A dry ski slope is located to the western end of the area. As a result of the area's popularity, car traffic can be significant.

There is a definite 'edge of city' feel to the area but the presence of large areas of scrub and woodland help to diffuse the effects of the urban environment on the landscape. The Country Park provides an important transition zone between the City and countryside.

The area lies on the boundaries of Norwich City and provides an important open space for local residents. The broads formed by gravel extraction are significant landscape features in the area and along with the river, cater for a range of water sports /activities.



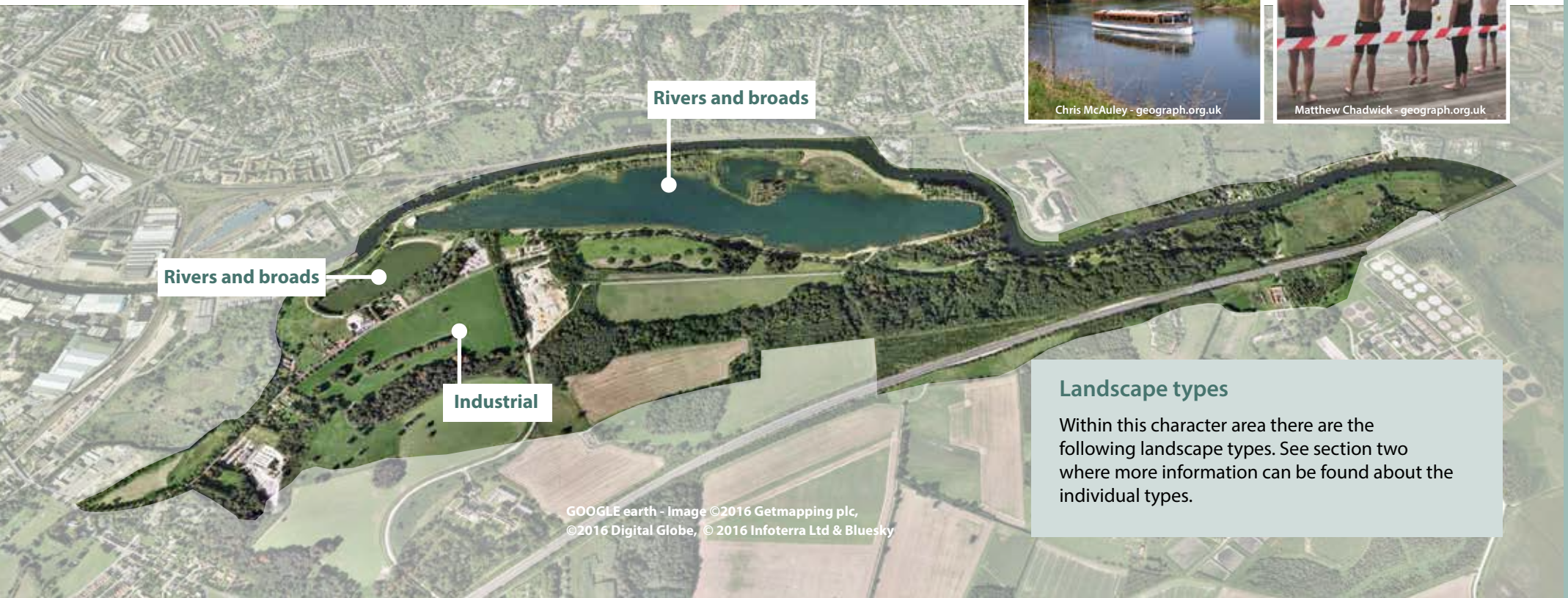
Evelyn Simak - geograph.org.uk



Chris McAuley - geograph.org.uk



Matthew Chadwick - geograph.org.uk



Rivers and broads

Rivers and broads

Industrial

GOOGLE earth - Image ©2016 Getmapping plc,
©2016 Digital Globe, © 2016 Infoterra Ltd & Bluesky

Landscape types

Within this character area there are the following landscape types. See section two where more information can be found about the individual types.

Topography and skyline

The valley floor of the southern side of River Yare floodplain lies at around 0 OD. The northern valley side rises up relatively steeply to crest at around 40-45m OD, whilst the valley side to the south rises gently to low wooded ridge (20-25m OD) where Whitlingham Hall is located. The overall width of the valley floor is approximately 700 metres making it relatively narrow in Broad's terms.

The skylines to the north area are defined by the settled, wooded south facing slopes and valley tops within Norwich. The slopes are mostly developed and a complex skyline character has been created by the mixture of residential roofs and mature structural and garden vegetation. This has a significant influence of the character of this area due to its close proximity and the availability of views. The flood embankments along the river valley can truncate lower level views.

The late 18th and 19th century parkland provides a historic backdrop to the leisure and sporting activities today.
Alison Yardy



The presence of the A47 flyover at the eastern end of the area, adversely affects the landscape character, impacting on the area's tranquillity and creating a dominant urban feature in views.

To the south, skylines are defined by the gently rising parkland on the southern valley slopes which terminate in the low wooded ridge at Coronation Belt. To the west, taller buildings and industrial development within Norwich are prominent skyline features, as are pylons.

Views out from the area are often framed due to the wooded nature of the parkland and the embankments to the edge of Whitlingham Great Broad, although large scale development associated with the urban edge is visible from within the area (pylons and taller buildings within Norwich to the west). The parkland within and beyond the Country Park is essentially severed visually and aurally from the wider Broads landscape by the southern bypass (A47).

◀ *The valley side to the south (much of it woodland) gradually rise up to provide elevated long distance views across the area.*

Images, Evelyn Simak - geograph.org.uk



Geology and soils

Chalk underlies this area at an accessible depth. The valley floor is silty clay and sand and gravel river terrace deposits. The presence of both of these types have deposits have shaped the landscape of this area as over the centuries the rich deposits have been extracted.

Enclosure, scale and pattern

This is landscape of medium scale in Broads terms created by the mix of the land cover including the broads, areas of woodland and mature, vegetated parkland all within this relatively narrow stretch of the valley. A sense of enclosure is created by the wooded areas within Whitlingham Country Park which include wet woodland and relict parkland vegetation. This is reinforced by flood banks along the river and more widely by the wooded, south facing ridge overlooking the valley, within the Norwich settlement boundary, as well as by the low wooded ridge to the south.

The River Yare (both its historic course and the 'New Cut') and the Whitlingham Great and Little Broad are large areas of water within an otherwise wooded landscape. The interplay of these creates local variation in light, shade and reflectivity within the landscape.

The valley sides, which lie outside the area, make a significant contribution to the character of the area.



Evelyn Simak - geograph.org.uk



A mix of urban edge development, transport infrastructure corridors, water based recreational activity and amenity space has resulted in loss of cohesion of the original landscape patterns and much contrast is created by the sometimes abrupt juxtaposition of such elements.

Main features of land cover and use

The legacy of the recently finished extraction works is a prominent feature of the landscape, particularly on the northern side, as a result of the creation of Whitlingham Great and Little **Broads** which allied to the presence of the River Yare create significant areas of open water.



◀ A brick tunnel under Whitlingham Lane apparently through which chalk was taken along a railway to be loaded onto wherries.
Evelyn Simak - geograph.org.uk

Distinctive Colman estate cottages reflect the availability of flint from local chalk workings. Alison Yardy



Elsewhere, there is early 19th century **parkland** with a **woodland plantation** covering the valley ridge and orientated in a northeast/south-west through the park. Beyond this to the north, the land falls gradually towards the River Yare. Wet **carr woodland** and scrub vegetation on former industrial and boat yard sites can be found. To the west there is a good remaining area of "upland" **grazing** with **mature parkland trees** and estate type metal fencing along Whitlingham Lane.

The land use is predominantly leisure related - walking, water sports and dry ski slope but outside these specific uses, the area is managed for nature conservation. A camping site exists to the south of Whittingham Lane. Being an exceptionally popular area, large number of cars have needed to be accommodated in a series of **car parks** along the length of the park. The more extensive car parks being sited at the busier western end.

The area lies to the east and south of the main urban and suburban development of Norwich and Thorpe. **Settlement** within the area itself is largely confined to various (mainly Colman style) estate cottages along Whitlingham Lane. The tented water sports centre provides the focal point of the sports and leisure activities and was constructed at the edge of the Great Broad in 2005. This has added to existing facilities of dry ski slope in the western corner of the parkland and Norwich Rowing Club on Whitlingham Lane.



Trowse Newton Hall, a mid-15th century country house of the Priors was deliberately ruined to form a feature in the landscape park.
Graham Hardy - geograph.org.uk

Helping to keep it special

Care needs to be taken when landscape change occurs, to ensure that those positive characteristics that contribute to an areas unique sense of place are conserved and enhanced. What follows are examples of local issues and opportunities.

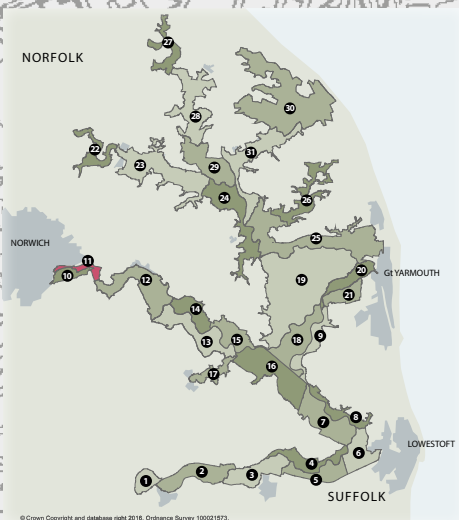
Landscape - elements such as the southern bypass, the railway, pylons and tall buildings are visible from within the character area and reduce the sense of tranquillity, although wet woodland in the valley floor and mixed woodland on the sides of the valley within the Country Park provides a degree of attenuation. Opportunities to improve the existing visual buffers between the park and the urban areas should be sought. The vast pylons which form a prominent feature in some views may be removed as, at the time of writing, UKPN are considering undergrounding the overhead wires the pylons support.

The valley sides, lying outside the character area, make a significant contribution to the area's character. Significant change within these areas as a result of development has the potential to affect the local landscape character.

Any development which intensifies or extends existing recreational or leisure uses within the park will need to carefully assess their effect on the area. Projects should consider mitigation proposals which help to reinforce traditional parkland features and limit the suburbanisation of the area.

Historic environment - The Grade II Listed ruins of St. Andrew's church on the buildings at risk register. Only the south side of chancel wall and east end remain along with south side of chancel arch. A tall fragment of the southwest nave wall also survives. The ruins are heavily overgrown and some consolidation of the masonry is needed.

11 Yare - Cary's Meadow to Postwick Grove/Whitlingham Marsh



The entire valley between Thorpe and Brundall with its steep and well wooded valley sides was once regarded as some of the most picturesque and desirable in the county. This area encompasses some renowned former beauty spots such as Postwick Grove which was a very popular beauty spot for picnicking and was exceptionally well photographed and painted throughout the 19th century.

Suffling (1895) describes it as 'a long red sand hill, covered with gorse and wild plants, and crowned with patriarchal oak and elm trees... the surroundings are such as to frame the picture formed by the picnic party and their craft'.

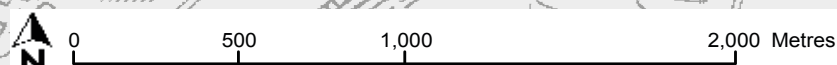
In more recent years many of the sites they depicted have been revisited by renowned artist Colin Self who came to prominence with the Pop Art movement in the 1960's and who is strongly influenced by the changing landscape. The Tate holds an extensive collection of his work.

Why is this area special?

This area provides an important buffer zone between the growing City of Norwich and the open countryside. Once it would have been more closely associated in character with the Whitlingham Park area (LCA 10) but now the two areas have a separate identity. The area accommodates a chain of urban uses (some existing and some defunct) interspersed with grazing marsh which creates a landscape mosaic which has surprising diverse habitat. Despite, some significant landscape detractors such as the Postwick flyover (noise and visual) the area provides important urban fringe recreational areas.

Some of the areas which have been subject to intensive urban uses have been reclaimed or evolved into valuable habitat. Cary's Meadow was used during the 60's and 70's as a tip for building materials - adding considerably to the height of the land whilst Whitlingham Marsh is a former Victorian refuse site for the city. Refuse was apparently brought here by river and road and moved via a narrow gauge railway. A wooden gantry and sunken barge are still visible. Despite high levels of field boundary loss, today these areas have returned to traditional grazing with some areas of scrub and carr woodland. Both sites are run as nature reserves and recreational spaces but because of the tendency to scrub up, they are lightly grazed by cattle – rather an unexpected sight on the edge of Norwich.

Thorpe Island resulted both from construction of the 'New Cut' – a navigable section of the Yare - and from the railway in the 1840's. The historic vernacular settlement at Thorpe River Green lies immediately to the north, alongside the old course of the Yare. This area and the adjacent riverside built development south of A1242 also form part of the Broads Authority's Executive Area, however



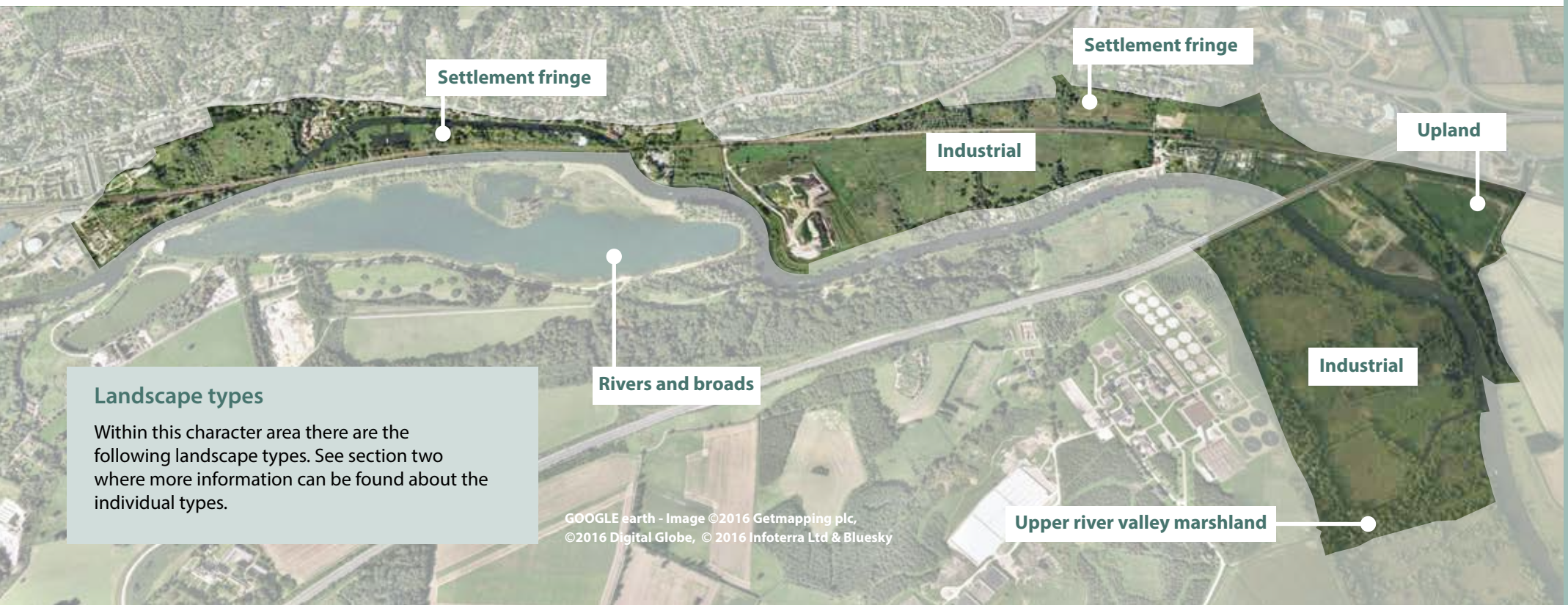
© Crown copyright and database rights 2016. Ordnance Survey licence number 100021573

their character is more associated with that described in the neighbouring Broadland District Council character area appraisal.

Access to the river is available via Thorpe River Green, associated historic pubs and moorings and by public footpaths which run down to and alongside the river. A public footpath runs south through this area leading to a former ferry crossing at Woods End, Bramerton which itself had extensive pleasure grounds in the 19th century. Other areas are more 'private' e.g. the wooded Thorpe Island and associated moorings and house boats. The area is well used for recreational boating, with the river front being served by a number of boat yards.



The former beauty spot of Postwick Grove painted by John Joseph Cotman (1814 -1876) from the Norwich Castle Museum collection.



Landscape types

Within this character area there are the following landscape types. See section two where more information can be found about the individual types.

GOOGLE earth - Image ©2016 Getmapping plc,
©2016 Digital Globe, © 2016 Infoterra Ltd & Bluesky



Thorpe Marshes (an old gravel extraction site) and Whitlingham Marshes (an old refuse disposal site) are now being managed for nature conservation.
Jeremy Halls - geograph.org.uk

Topography and skyline

The area forms part of upper river valley floodplain with average ground levels being 1-2m OD, but land has frequently been disturbed and land levels changed. The valley sides are quite steep in part. The northern valley crest at 15m OD lies within the character area, with the foot of the slope ending in a relatively narrow valley floor. The southern slopes rise more gradually with the crest lying at 20m OD, outside of the Executive Area, and broadly following the route of the Wherryman's Way at this point.

The meandering course of the river, the relatively narrow valley and well-defined valley sides have the effect of framing views, although there is a degree of visual connection with areas beyond the Broads Authority Executive Area. For example, to the north of the river, the wooded skylines within the Broadland District Council area are visible. To the south and west, woodland and valley sides provide a greater degree of visual filtering, truncating views here.

Development and built structures characterise a number of elements of the skyline in this area. The most prominent skyline feature is the Postwick Viaduct, which dominates the eastern horizon when sailing downstream. Other detractors include the sewage works within the valley floor and which is clearly visible, forming part of the southern skyline.

Geology and soils

This area is underlain by chalk at an accessible depth, river terrace deposits of sands and gravels, silty clay for most of Thorpe Marshes and upriver, and peat for the remainder. However, a number of these areas are disturbed or made up ground.

Enclosure, scale and pattern

In the Broads context, this is a medium scale landscape due to structural tree belts and boundary vegetation.

The area is formed by a steep, well wooded section of the Yare Valley, the valley floor being around 800m in width. It is a relatively enclosed landscape due to the wooded nature of the skyline on the valley sides to the south and west of the river (presence of well wooded gardens and former landed estates beyond the character area), and due to vegetation associated with waterside properties on the northern side of the river.

Original land patterns has been largely erased through the changing nature of land use. Today a diverse landscape pattern (not all positive in landscape terms) is created by the mix of the river and wetland vegetation, areas of open water, industrial sites, boatyards, plus the vernacular and mixed settlement at Thorpe River Green and Bungalow Lane.

The River Yare provides considerable variation in light, reflectivity and movement in this otherwise enclosed, landscape which has little variation in light and shade.



Within this narrow stretch of the valley, development lying outside the Broads executive area can affect the landscape.
Alison Yardy

Main features of land cover and use

There are significant areas of **industrial and post-industrial** sites some, as at the Utilities Site to the west, are derelict and are awaiting redevelopment. The former extraction site at Thorpe Marshes has now been worked out and is now managed by the Norfolk Wildlife Trust. It is a mix of habitat types including flower-rich marshes crossed by dykes that are home to many dragonfly and damselfly species, including the rare Norfolk hawk, and the even larger emperor dragonfly. Several species of common butterfly can also be encountered on a good day. The reserve contains a large area of open water, the former gravel working which is known as St Andrew's Broad. This hosts a variety of waterbirds, particularly in winter, including great crested grebe, pochard, cormorant, grey heron, gadwall and tufted duck. The surrounding scrub and **carr woodland** is home to reed buntings and a few Cetti's warblers.

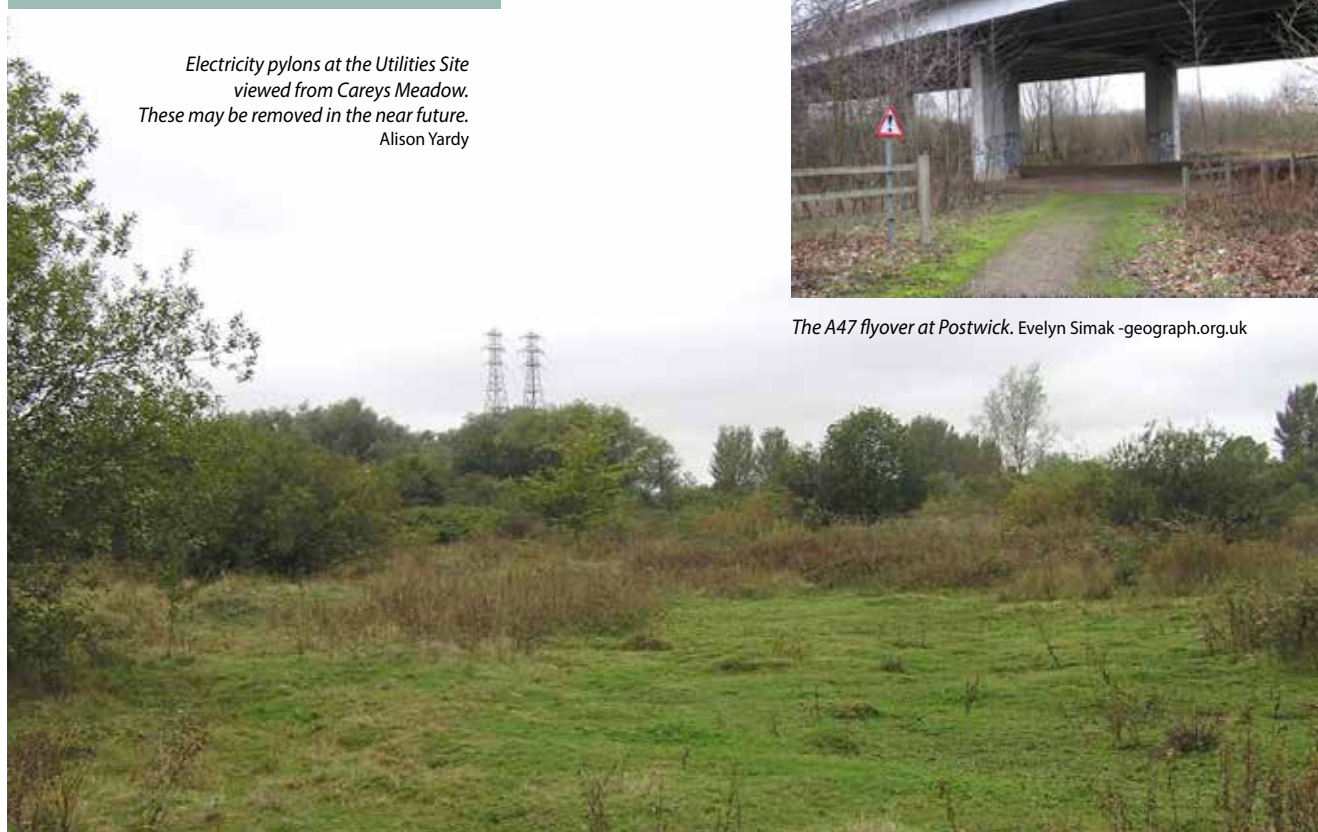
With the exception of the traditional small scale riverside **settlement** at Thorpe River Green, the area is otherwise relatively lightly settled but varied in type and includes **riverside chalet** development such as at Bungalow Lane, **small boat yards** and **mooring basins** and commercial uses such as the Broads Authority's own dockyard at Griffin Lane. The yard contains a small Listed timber thatch building latterly occupied by May Gurney's yard foreman John Fox (the previous owners of the site), but originating as a Victorian summerhouse. The building was once in danger of demolition but has now been restored and relocated to his location.

Postwick Grove was a famously photographed and painted 'beauty spot' during the 19th century. It displays evidence of it having once been used as a sand pit. However, part of the area is now used as a **dredging disposal site** for depositing material dredged from the river. Those areas not in use for this purpose, have maturing woodland vegetation and overgrown grassland.

Infrastructure in the area, such as the Postwick flyover and the railway line, introduce significant features into the landscape. The construction and use of features such as this has extensively modified the character of this area. These two features alone have; effected existing landscape patterns and land use; visually separated parts of the area; had an adverse impact on both the tranquillity (noise generated by train and road traffic) and the visual amenity of the area. The presence of the A1242 on the northern boundary compounds the noise impacts.

Infrastructure development within the area not only dominate the landscape at certain locations, it can be visible for a considerable distance.

Electricity pylons at the Utilities Site viewed from Careys Meadow. These may be removed in the near future.
Alison Yardy



The A47 flyover at Postwick. Evelyn Simak -geograph.org.uk

Thorpe Island was created from part of Trowse Marsh when the railway line was built in the 1840's and a new section of river, the New Cut, was dug to the south of that. The island has a number of buildings including a derelict boatyard complex, a mooring basin and other **Settlement fringe** activities and land uses.



Thorpe "island" (to the left of the picture) lies opposite Thorpe River Green. Prior to the construction of the "New Cut" and the railway line the area was part of Trowse marshes (now Whitlingham Country Park).
Bob Crook - geograph.org.uk

Boat yards and boat moorings are some of the land uses in the area.



Lesley Marsden

Helping to keep it special

Care needs to be taken when landscape change occurs, to ensure that those positive characteristics that contribute to an area's unique sense of place are conserved and enhanced. What follows are examples of local issues and opportunities.

Landscape – The connection between the different sites in this area is a result of the adverse effects on the landscape caused by development (of all types) over the years. These effects include noise and visual intrusion from pylons, the flyover, sewage works, aggregate works (now ceased), dredging disposal and at the eastern half of this Character Area, the visual impacts caused by some buildings in the Broadland Business Park area (including lighting).

The area will continue to face a number of challenges relating to its proximity to a growing city, land use (past, present, and future) and effects (adverse) caused by communication routes. However, positive landscape change is gradually happening in some locations as gravel extraction and domestic landfill operations in the area have now ceased. These areas are now developing a new character as they are being managed for nature conservation and recreational purposes.

The construction of the railway line along with the construction of the "New Cut" created major landscape change in the area.

As of the time of writing UKPN are proposing to underground the overhead electricity cable that crosses the river to the west of the area. The removal of the pylons will be very beneficial to LCA 10 and 11.

Proposed development of the Utilities Site will have a significant effect on the landscape in the vicinity. Care will need to be taken in relation to ensuring any built element - does not dominate the area; that their external areas provide an effective foil to the development and they are of a scale and extent to balance the built form; and that in undertaking the external landscaped areas seek to integrate urban and open countryside features. On a smaller scale, opportunities should be sought to promote appropriate landscape enhancement of river frontage development – both commercial and domestic. This could have the potential to reduce the urbanising effects of some of the developments in this area and create a more effective transition from the urban environment to the open countryside.

Nature conservation – areas previously extracted for gravel or used for landfill, have now been restored. Management of these areas is now primarily for conservation management providing valuable space for nature and people in a semi-urban environment.

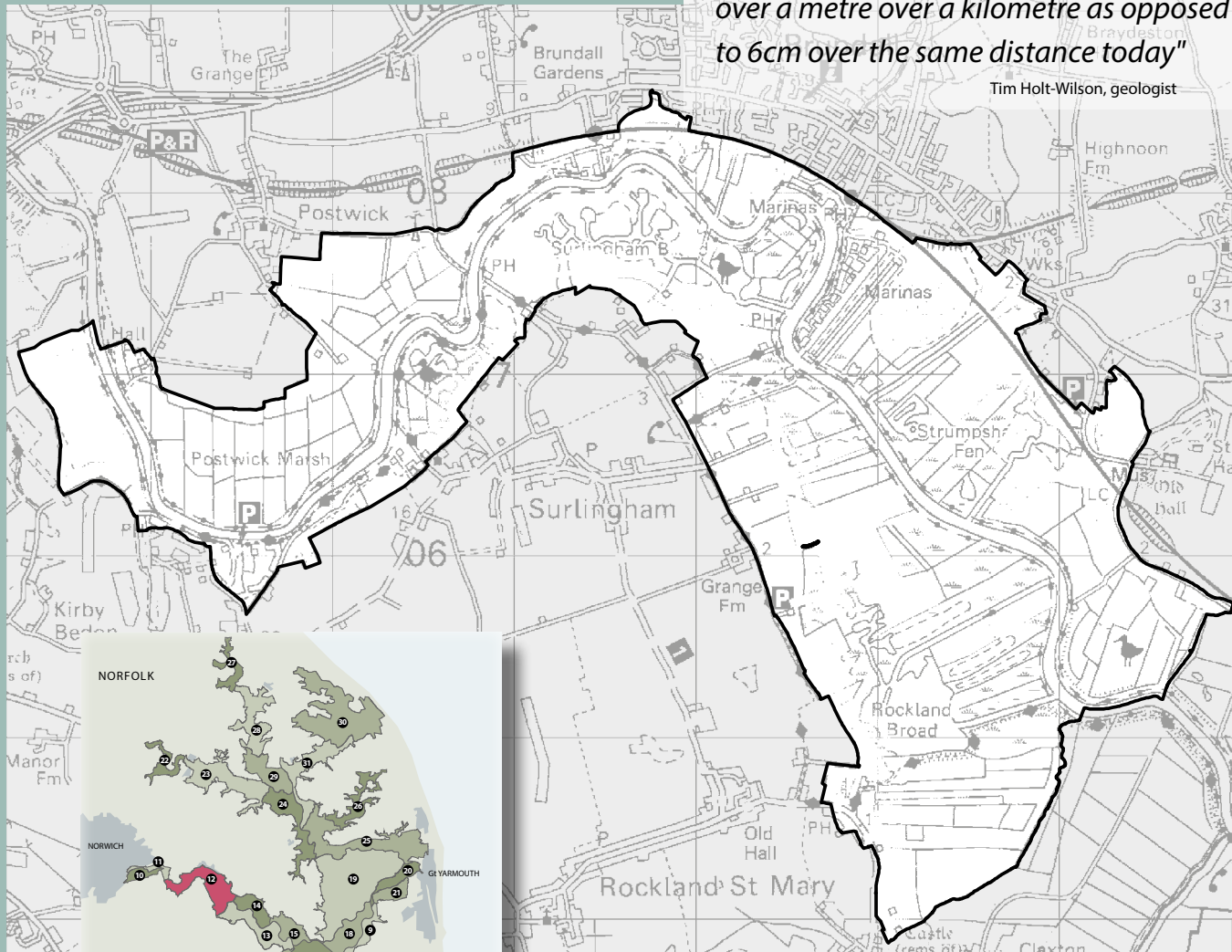


Pierre Terre - geograph.org.uk

12 Yare Valley - Kirby/Postwick to Rockland/Strumpshaw River Yare

"8,500 to 10,000 years ago the Yare between Postwick and Surlingham was a steep sided fast flowing river with falls of over a metre over a kilometre as opposed to 6cm over the same distance today"

Tim Holt-Wilson, geologist



Why is this area special?

It includes both sides of the narrowing valley of the river Yare and is completely different in character to the open grazed marshes to the east and the areas lying further upstream to the west, whose character is influenced to a far greater extent by development around Norwich.

It is a remarkably diverse area in the patterns in the landscape and the various habitats which is in part a result of the mix of soils and geology.

Aside from areas of open fen vegetation, this area includes a series of small broads, considerable carr woodland and grazing marsh. The area has an enclosed and inaccessible feel because of this untamed carr woodland which is a significant feature of the area.

Rockland Broad, on the south side of the river, is a flooded medieval peat extraction site. It is now the largest area of open water in the Yare Valley. The line of parallel islands to the northwest of the broad are the overgrown hulks of wherries sunk in 1931 and later, to improve tidal scour. It is one of the lesser known broads in the system and can be accessed from the River Yare by Short Dyke and the Fleet Dyke.

Much of the land within this area is now under the ownership or management of nature conservation bodies and is subject to many nature conservation designations covering most of the area. Wheatfen, located between Rockland and Surlingham is the former home of the famous local naturalists Ted and Phyllis Ellis. Ted being widely regarded as Norfolk's greatest naturalist.



In 1912 a thirty-one and a half pound Pike was landed at Brundall

The large settlement of Brundall lies on the steep valley side to the north of the river. Its proximity and good rail links have led to an extensive development along the river's edge known as Brundall Riverside which is a curious mix of small chalets on one side of the road and marine businesses and moorings on the other.

In the past, the area was associated with former beauty spots and pleasure grounds which made the most of the steep valley sides and the views that they provided.

Other than the traffic noise which occasionally can be heard and the effects of the bustling

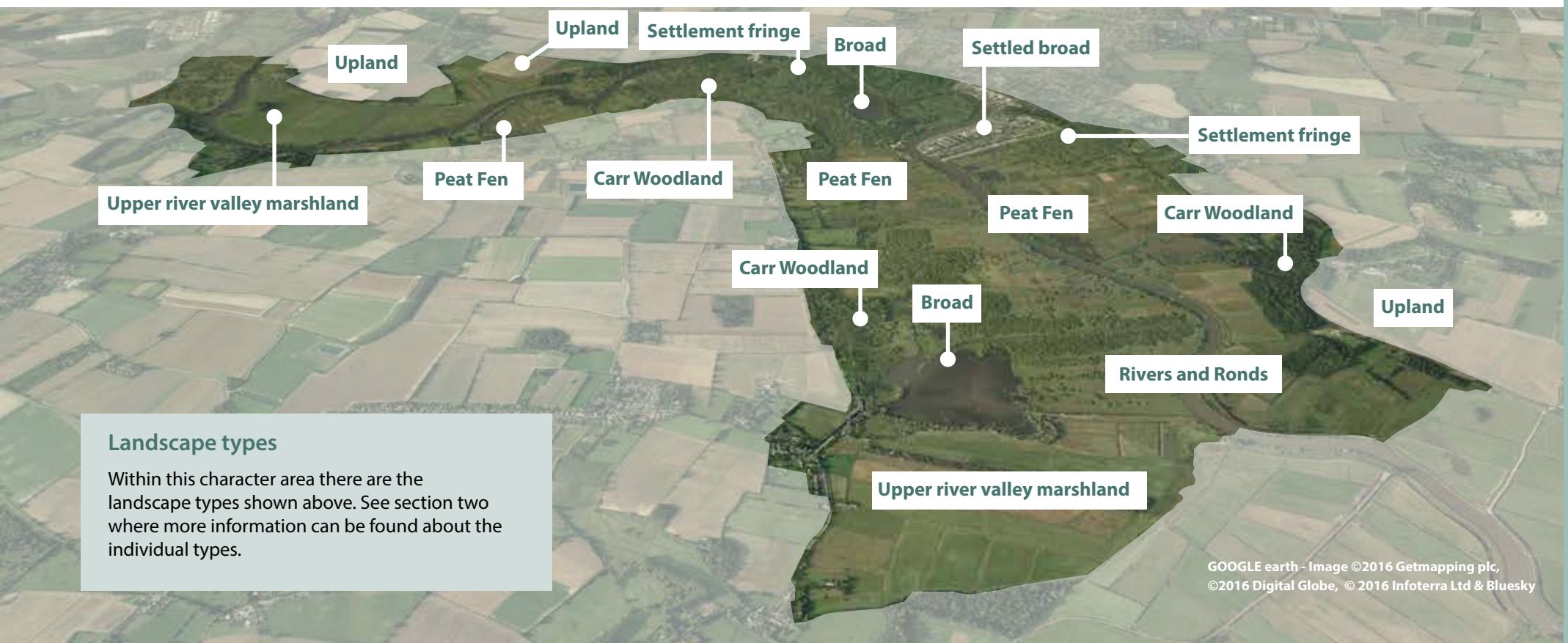
Brundall Riverside, the area as a whole is relatively tranquil.

The area is popular for fishing bream, roach, tench, perch as well as pike. In 1912 a thirty one and a half pound pike was landed.

There are few public rights of access into this area. Tracks down to the Ferry House and Coldham Hall pubs on the southern side of the river, offer the opportunity to view the river as does the road which hugs the river from the Woods End pub at Bramerton which leads to Bramerton Common. Even the Wherrymans Way has to turn inland to follow the higher ground before being able to re access the river south of Rockland Broad.



Bramerton Common. Peter Tarleton - geograph.org.uk



Landscape types

Within this character area there are the landscape types shown above. See section two where more information can be found about the individual types.

Topography and Skyline

The valley floor at around 0 OD, narrows the further upstream you travel. Around 1.5 km at its widest and 0.5 km at its narrowest. On the southern side of the river the valley slopes rise shallowly up to high points around Rockland St Mary at about 25 to 30 metres above OD. On the northern bank the river tucks itself into the valley side at Brundall with the slopes rising steeply up to around 15 metres above OD.

Despite the proximity of development in the area and because extensive intervening carr woodland vegetation in the valley bottom, the skylines in views out of the area are remarkably free of development of any form adding to the sense of isolation. Within the more open grazing marsh areas on lying on the eastern and western edges of the area there will be some glimpsed views of major power lines in views lying to the south and other development on the skyline.

Geology and Soils

The area has generally peat soils with sands and gravels towards the uplands. The extraction of peat has created the open water bodies in the area. On the southern valley side around Bramerton shelly silts and sands known as Norwich Crag can be found. The area is of particular importance as Bramerton Common Pit has been recognized as the type site for the Norwich Crag. This is recognised in its status as a SSSI. Nineteenth century maps indicate that there were sand and gravel pits on the valley sides and the vegetation in these areas today is characteristic of such sandy conditions.

Enclosure Scale and Pattern

The central part of the area has a generally enclosed feel to the landscape, with steep valley sides in part and a narrowing valley floor allied to dense blocks of woodland. In contrast the landscape opens up at the most easterly (Rockland Marsh) and westerly (Postwick Marsh) ends of the area. There is a rich landscape mosaic of landscape patterns formed by long parallel dykes and

small rectilinear grazed blocks interspersed with large blocks of carr woodland, fens, water bodies, open grazing and settlement, creating a complex pattern which is not necessarily evident in views at ground level. Whilst the Yare, following a meandering course through the area, has a reflective quality which is a distinct contrast to often wooded areas of the landscape.

Main features of land cover and use

Most of the land cover in this area is a mix of untamed **carr woodland** interspersed with **open fen, marsh** and small **broads**. The large percentage of these areas are owned by nature conservation organisations and managed for wildlife. The plethora of flora and fauna that these habitats support have resulted in international, national and local designations covering much of the area.



Brundall Church Fen. Alison Yardy



Surlingham Church Marsh. Evelyn Simak - geograph.org.uk

Kirby Marshes is an area appears to have been drained, presumably for use as rough grazing in the past. There is still a rectilinear dyke pattern and a drainage mill is marked on the 1st edition 6inch map where it is shown as rough ground. It has since scrubbed up although there are still open clearings and the site may be managed for shooting. The site is private with no public access and little information is readily available.

Brundall Church Fen designated as a Local Nature Reserve and is a tangle of wet woodland, Brundall Broad and more open fen areas containing Brundall Dyke lined with moorings and a snaking area of dyke with a number of semi - derelict houseboats.

Strumpshaw Fen which is managed by the RSPB. It was previously navigable to a staithe near the upland. The area which forms Strumpshaw Fen today was once drained and used as marshland apparently until the 1912 floods damaged the mills and sluices. The best surviving steam engine house in the Broads area is situated within the fen area with good views available from across the river in Rockland.

Surlingham Church Marsh which is another RSPB site. It is a mixture of open water, overgrown reed and scrub. It is understood that the area was formerly drained by 4 mills and was grazed until the 1950's

when there was a failure in the floodwall. To the west of Surlingham there is strong contrast between steep valley sides and valley floor. The ruins of St Saviours Church make a striking feature in the landscape. Norwich and District Parabellum & Full Bore Club have a lease on an area here and shoot into a quarried area in the valley side that was formerly part of a brickworks. Between Church Marsh and Surlingham Broad, there is an area of privately owned land excluded from the National Nature Reserve (NNR) designation.

Surlingham Broad and Wheatfen

The majority of this area appears never to have been drained. Both enclosure and tithe maps show a striking pattern of doles. These presumably were marked by uncut baulks of peat (as appears to be the case on Upton Broad). The lines can still be discerned on aerial photographs, particularly earlier ones. The site is owned by Norfolk Wildlife Trust and leased to the RSPB who operate a management policy of non-intervention. Much has succeeded to carr woodland. The basin of the main broad has shrunk considerably. The Surlingham parish dyke access is suitable only for canoes although other boats can enter part of the area via two dykes from the river. Boating appears to be concentrated on the Bargate area. The area mapped as Bargate Broad and the Outmeadows at the eastern end does appear to have been drained in the past and is still relatively open today. There is no land-based access within this entire area.

Ruin of the Church of St Saviour at Surlingham.
Evelyn Simak - geograph.org.uk



The Surlingham Broad area is flanked by Public House/ Ferry crossing sites. That at the 18th Century Surlingham Ferry Public House was a chain ferry that ceased operation in 1939 after a collision with a coaster. At the eastern end, the Coldham Hall Ferry was a rowing boat 'foot ferry', which crossed between the Public House and Brundall. The area around Coldham Hall is largely open with tall and sometimes scrubby fen vegetation becoming increasingly wooded towards the Wheatfen Nature reserve, a 102 acre site of mixed land cover – fen, carr woodland, open water, dry woodland, which was the former home of naturalists Ted and Phylis Ellis from 1946.

Fen Channel, Wheatfen Nature Reserve



Graham Hardy - geograph.org.uk



Surlingham Broad and Brundall Riverside. This area has generally an enclosed inaccessible feel in part due to the extensive areas of Carr woodland. Brundall Riverside is a completely contracting landscape forming a very congested area of development.
Mike Page

Rockland Broad

Rockland Broad is managed by the RSPB but is rather more accessible than some of the other Yare Valley sites. The southern side of the Broad has scrubbed up and has recently been enclosed in a hard concrete floodwall leading to a bird hide. Beyond the hide the scrub vegetation opens up towards short dyke where the public footpath leads to the river and there are open views across to Strumpshaw on the north side of the river. The broad itself is quite colourful and gently active, attracting fishermen and sailors. It is the route to Rockland staithe a popular mooring place for boats.



Rockland Staithe and sculpture. Adrian Hodge - geograph.org.uk

Grazing marsh used to be more predominant in the area as at one time the area it was drained for grazing being well populated with drainage windmills, which were probably short-lived timber skeleton types.

Postwick Marsh lying on the western end of the area appears something of an anomaly in this location. Its appearance is of typical grazing marsh with some areas of carr woodland. It is in fact peat like its neighbouring areas but appears to have been drained over a long period. The drainage pattern is one of long parallel strips possibly doles although rationalised in recent years. The only other significant area of truly open grazing marsh lying at the eastern end of the area is Rockland marsh which lie adjacent to Rockland Broad. Within these marshes are a series of fossilised fen doles. The grazing marshland is excluded from the various designations applying to this wider area.

Settlement is only significant in this area of the Yare Valley at Brundall Riverside. Origins of this area seem to be in the establishment of Brundall as a boatbuilding centre in the late 19th century. The area is the home of Broom Boats established in 1898 and being one on of the first companies in the Broads to start up a hire fleet in the early 1900's.

Until that time Brundall was little more than a hamlet with a population of only 58. The Yare Public House, a brick and slate roofed building dates from the later nineteenth century when it was the Yare Hotel, a favourite angling centre.

The Riverside estate occupies what was formerly part of parish wet common, and is quite an intensively developed area relating to the riverside location in three quite distinct roughly linear zones. One is a development of waterside chalets alongside the River Yare. These were first developed by the firm of J. S. Hobrough in the 1930's although most appear to have now been replaced by modern versions. Running down through the centre of the site and in an area between the railway and the river is a more industrial area of boatyards and boatbuilding. The third area is the more recent marina development. Within the site, there is a strong sense of enclosure.



Footbridge and level crossing at Brundall station.
Hugh Venables - geograph.org.uk

The railway line has separated the main residential area of Brundall from this holiday/leisure area and the density of chalets and their tall rear fencing prevents any visual connection with the river. The footpath that runs along the rear of the chalets was to the Coldham Hall ferry crossing although this area too seems to have now been developed. The intensive development of the site makes the fragments of semi-natural and other vegetation particularly important as over the years there has been

gradual encroachment on the carr woodland that fringes the built up area to the east. Numerous overhead wires are particularly apparent as are the variety of roofing materials, boundary treatments and road surfaces, all of which create a lack of cohesion from within the site although from the waterside perspective, much is hidden and softened by the backdrop of carr valley side vegetation.

Over the last few decades the size of the area of moorings has expanded as both the size and private boat numbers have increased. Some isolated boat yards exist amongst the carr woodland at Brundall Gardens marina. These too have recently expanded their operations building larger and consolidating smaller mooring basins and developing very large boat sheds.

Brundall Gardens

Brundall Gardens was probably the largest and most significant of a series of late nineteenth/early twentieth century pleasure grounds on the River Yare. The Brundall Pleasure Gardens, consisted of 76 acres of designed landscape including an Arboretum, a series of tiered ponds and large lake. These were established by Dr Michael Beverly in the 1890's on the site of Brundall Wood and later popularised by Frederick Cooper. The height of their popularity was during the interwar period attracting 60,000 people in 1922 (Muter, 1987). A Brundall Gardens Steamship Company was formed and the Brundall Gardens rail halt opened in 1924. Pleasure steamers could stop at a landing stage near a vast tearooms (demolished 2005/6) on the waterside.

The site was later requisitioned by the War Office and a pillbox is still set into the hillside overlooking the lake. Redclyffe House (right) burnt down in 1969. Today the site is in fragmented ownership. A series of substantial dwellings have been built around the northern perimeter of the site, while the riverside area has become integrated into boatbuilding/marina development. Part is designated a Historic Garden by Broadland District Council while part of the garden owned by the Lake House are opened under the National Gardens Scheme.

Helping to keep it special

Care needs to be taken when landscape change occurs, to ensure that those positive characteristics that contribute to an area's unique sense of place are conserved and enhanced. What follows are examples of local issues and opportunities.

Natural Heritage - Much of the area is owned and managed by nature conservation groups which have led to sites within the area of very high nature conservation value. Water quality is one aspect which is less within the control of the organisations. Poor water quality can have detrimental effects on the flora and fauna.

Built heritage – the focus within this area has tended to be on the natural environment and as such built and cultural heritage has sometimes been neglected. The area is rich heritage features and cultural history. Opportunities to conserve the built heritage and capture the cultural history of the area should be sought.

Settlement - Brundall Riverside Estate and adjacent boatyards has an unusual and unique character borne out of its location, mixed use and piecemeal development. Future and existing development need to ensure that the impacts on the landscape character, particularly in relation to effects on the carr woodland, peat resources, water quality and visual amenity are minimised.

Old Redclyffe House Broadland Memories



Alison Yardy

13 Yare Valley - Claxton to Hardley Marshes

The ancient Hardley Cross at the junction of the Yare and Chet marks the historic boundary between jurisdiction of the City of Norwich and Great Yarmouth.

Why is this area special?

The marshes form an extensive area of low lying grazing marshes of Claxton, Langley and Hardley with blocks of woodland towards the upland on the southern side of the River Yare.

An embanked parish boundary between Rockland and Claxton to the west, the River Chet to the east and the River Yare to the north separates this area from the adjacent character areas.

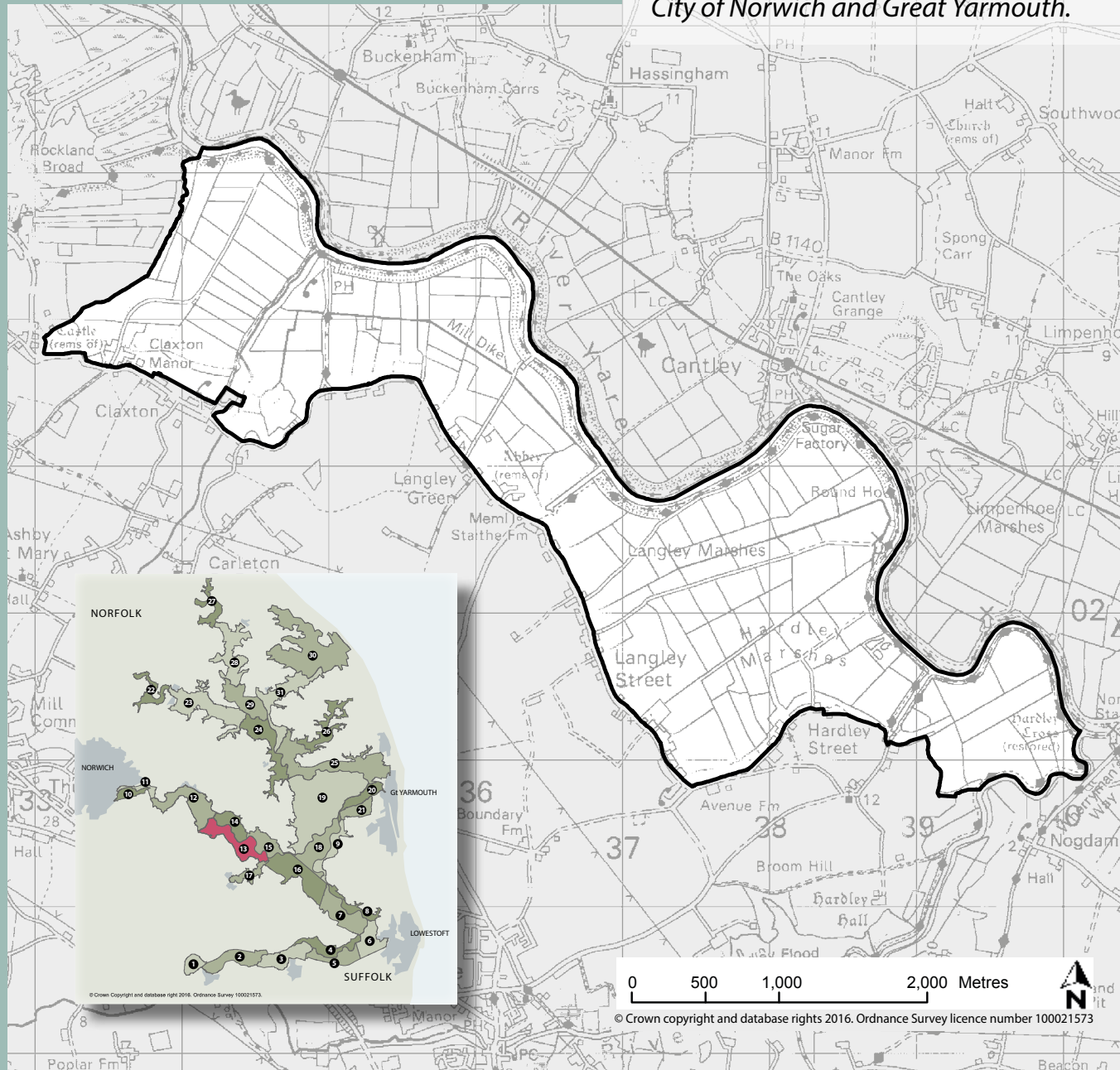
Unusually for the Broads, this was an area where windmills were replaced by stand-alone steam plant from the mid nineteenth century (all now demolished). Hardley Mill is an exception and it has recently been restored and has a visitor centre

The settlement in the vicinity (much of it located just outside the National Park boundary) and much of ancient in origin, lies in a ribbon of development along the valley edge road influencing the character of the area.

There are 3 scheduled ancient monuments in and on the edge of the area. These are Hardley Cross, Claxton Castle and Langley Abbey.

Hardley Cross.

Evelyn Simak - geograph.org.uk



Surprisingly there used to be a small railway in the marshes.

A number of the local buildings have been built in a distinctive Langley estate style with distinctive decorative drip mould dressings around windows and decorative barge boards.

There are two navigable dykes terminating in staithes at Langley and Hardley. These were created probably in mediaeval times to provide access to the rising land of the valley side for the easier transport of goods and materials by boat.

There is a strong sense of tranquillity and wildness within this remote landscape, albeit with localised encroachment of valley settlements and their ancillary land uses and the dominating presence of Cantley Sugar Factory in certain views on the northern side of the valley.

Topography and Skyline

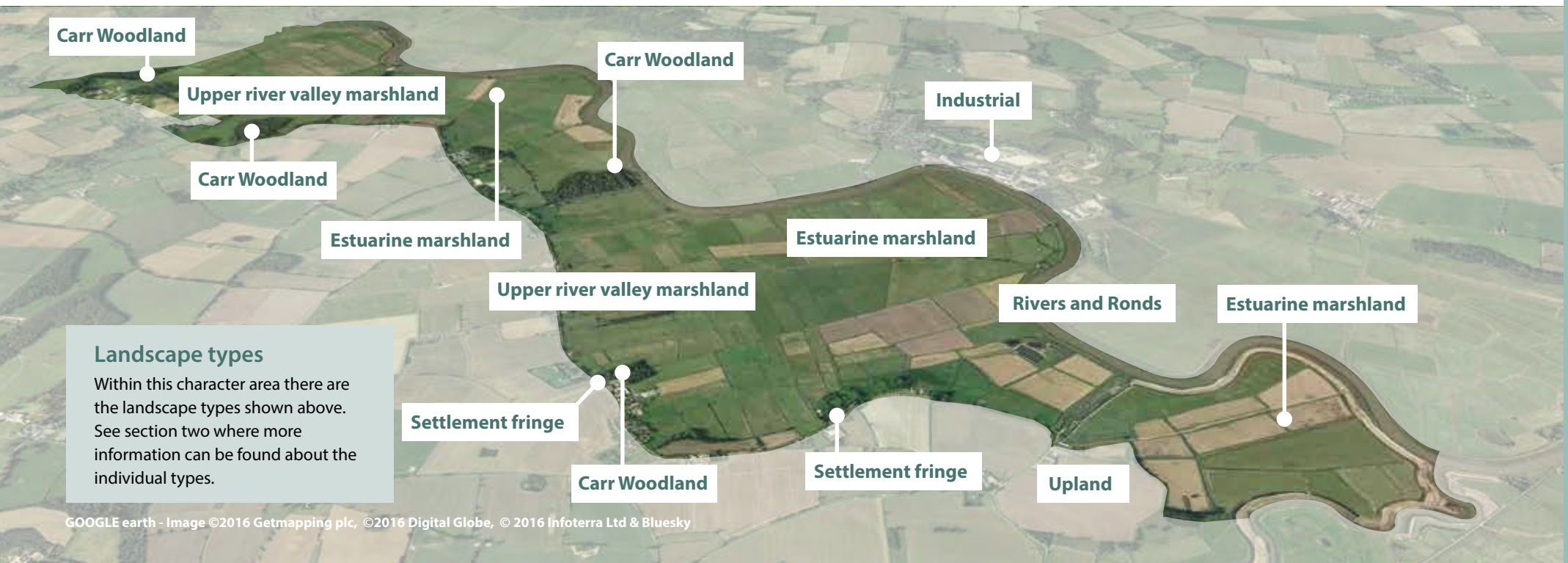
The area is part of the level southern valley floor of the Yare floodplain. This is some of the lowest-lying land in the Broads area. The majority is between 1 to 2 metres below OD although lower in part. The land gently rises to around 1-2 metres above OD along the low lying road following the valley edge to the south.

The skyline to the north is formed by the rising land to the north of the Yare. The woodland, mainly the blocks of carr, are important features as they filter views of settlements and any development in the area. The only exception being the vast mass of Cantley Sugar Factory. To the south, woodland blocks to both "upland" and lowland, interrupted by occasional intervening vegetation on the marshes, create the skyline.

There are wide open views available under "big" skies with the river and its flood banks forming a strong visual division between the north and south bank when on the lower land of the marshes.



View toward Cantley across the marshes.
Adrian Pye - geograph.org.uk



Geology and soils

Forming the lower strata there are sands and gravels of the Crag group with a lens of clay silt and sand lying to the south of Cantley.

The soils in general are a mixture of silty clays and peats. In general, the clays are located closest to the river grading into peats towards the upland and along the tributary valleys.

Enclosure, scale and pattern

The low lying landscape has generally an open character although, where carr woodland exists, a greater sense of enclosure prevails. There is a strong rectilinear dyke pattern evident within this large scale marshland landscape and parallel doles are apparent throughout. The River Yare which has a wide meandering course in this part of the valley contributes to the reflective qualities of the area.

Hardley Mill. Evelyn Simak-geograph.org.uk



Claxton Manor and marsh.
The area still has a significant proportion of grazing marsh.
Claxton Manor Estate

The wide reedbeds, and reeded ronds and soke dykes, tree lined tracks down to the river, historic dykes with their associated staithes and small clusters of carr woodland all provide localised variation in colour and texture.

Main features of land cover and use

The area has a significant proportion of **grazing marshland** with its **dykes** networks used by commercial farming concerns. The Langley tithe map of the 1840's shows a number of sinuous dykes still present, however by the 1880's these had been replaced by the rectilinear type.

Unusually for the Broads, this was an area where windmills were replaced by stand-alone steam plant from the mid nineteenth century. As a result the only remaining **drainage mill** is Hardley Mill.

Much of this area was formerly part of the Beauchamp Proctor family's Langley Park Estate and until such time as the estate was broken up, was farmed by tenant farmers. This area was also until relatively recently, a dairy farming area (the Langley Conservation Area Appraisal refers to 22 dairy herds in the 1950's) with the Cantley Sugar Beet factory built in 1912, providing additional employment.

The decline of the dairy industry has meant a significant proportion of the former grazing marsh has been become

arable land put under the plough to grow cereals. This arable land tends to be more of a feature of the silty-clay areas closest to the river, which are better able to be more successfully drained.



The decline in the dairy industry has brought about crop changes in the area.
Evelyn Simak - geograph.org.uk

On the peat fen areas towards the upland, a number of relict fen characteristics can be found. There are areas of former dole ground which retain their close-set parallel dyke pattern, albeit now in a more subdivided form. There are also various named blocks of **carr woodland**. The sites around Claxton Castle on the basis of map evidence, appear to be more than 200 years old. Faden's Map also shows there was rather more carr woodland in this area in the 1790's marking a block that ran most of the eastern

side of Langley Street as 'Alder Cars'. One of the blocks of woodland at Claxton Castle appears to have contained a decoy while the site of the former Carleton Broad is now engulfed in woodland.

Poplar Farm Marshes, the only area with a conservation designation in the area and is a small 'island' of spring fed **calcareous fen vegetation** near the margin of the floodplain at Langley.

Today the **settlement** in the area is mainly linear marsh-edge development which continues from Claxton through to Hardley and consists of mainly farms or former farmsteads and cottages. The road between the settlement affording views across the marshland.

Much of the settlement along Langley Street is located on the west side of the road and outside the Broads Executive Area. However it contributes to this area's character.

The decline in the dairy industry has brought about crop changes in the area.

Evelyn Simak - geograph.org.uk



A number of the local buildings have been built in a distinctive Langley estate style with distinctive decorative drip mould dressings around windows and decorative barge boards.

The area includes Claxton Manor and Castle. The Castle was castellated in 1333 by William de Kerdiston. A 40 metre section of wall and five bastions survive and earthworks give evidence of a complex structure which incorporates an inner moat and possibly an outer ditched enclosure. In the late 16th or early 17th century a mansion with a porch tower was built at right angles to the remaining castle wall. The mansion was demolished and replaced with Claxton Manor.

Claxton Manor and Castle.
Evelyn Simak - geograph.org.uk



Model of the old Langley Abbey

Langley Abbey was founded in 1195 and dissolved in 1536. Some of the buildings are still standing and are included in the present farm buildings.

Remains of Langley Abbey today.
images,
Evelyn Simak - geograph.org.uk



Settlement fringe activities are tending to encroach on the marshland environment which are having an effect locally on the grazing marsh character of the area. These activities include horse keeping, allotments, parish facilities and excavation for ponds and shooting areas.

The **flood banks** in the area along the River Yare with their associated soke dykes and reed ronds are a prominent linear feature in the area. As well as acting as functioning flood defences for the marshes, the banks are the location for the Wherryman's Way which follows much of the flood bank within this area providing elevated views of the marshland to the north and south of the river.

The River Yare meandering through an ever widening valley, brings a reflective quality to the landscape. Evelyn Simak - geograph.org.uk

There are two major well-used **staithe**s in this area, lying perpendicular to the river and providing a connection to the upland. Staithe (derived from the Old English *steath* "landing place") were once used for loading and unloading goods and materials transported around the Broads and beyond. They are now home to the moorings for boats used for recreation and also provide access for fishing. Langley Dyke is quay headed and private although a public footpath runs along the east side of it. Hardley Dyke is not quay headed and instead has a number of landing stages which are in various states of repair. Both staithe have had their old functional staithe buildings demolished, apparently only in recent years.



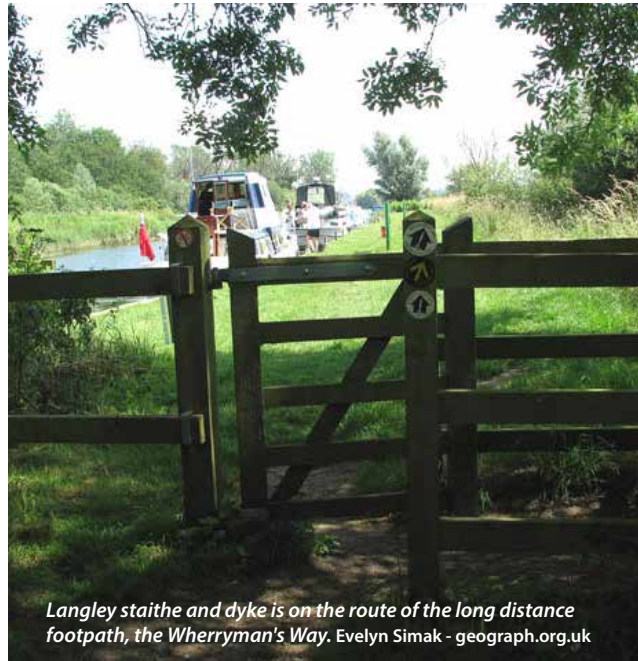
Hardley Staithe and dyke is not quay headed. The mooring facilities being provided by small landing stages for each boat.
Evelyn Simak - geograph.org.uk



Reed bank at Hardley marshes

There has been greater connection between north and south of the river in the past with three former ferry sites in this area. The most significant was that between the Beauchamp Arms and Buckenham known as Buckenham Ferry, which is marked on Faden's Map of 1797. The approach routes to this are still clearly defined both sides of the river. Another ferry site was located opposite Cantley Reedcutters PH which allowed those south of the river to make use of Cantley Railway station. A further later site existed near the Round House which was used to transport workers to the Cantley factory (latterly a self-service rowing boat).

A narrow gauge railway used to cross the marshes to the river from the "upland" along what now serves as an access road to Claxton Manor Farm. Operating between 1926 and 1936 it ran 1.6 kilometres from Claxton Manor Farm to the south bank of the River Yare using a converted Model T Ford as motive power. The railway transported sugar beet which were loaded onto wherries and transported to the Cantley sugar factory which is situated 3.5 miles to the south-east.



Langley staithe and dyke is on the route of the long distance footpath, the Wherryman's Way. Evelyn Simak - geograph.org.uk



Helping to keep it special

Care needs to be taken when landscape change occurs, to ensure that those positive characteristics that contribute to an area's unique sense of place are conserved and enhanced. What follows are examples of local issues and opportunities.

Natural heritage - Much of the area is used as grazing marsh or for arable purposes. The water levels and quality of the drainage dykes affect the habitat value of these dykes. There are opportunities to enhance the habitat value of the area through farming practices sympathetic to the environment.

Built heritage - Hardley Mill has recently undergone extensive renovation. A "friends" group has now been established with the purpose of ensuring the Mill's survival for generations to come.

Landscape - promoting landscape enhancement schemes to enhance the positive physical characteristics of the area such as removal of overhead power lines within the open grazing marshes.

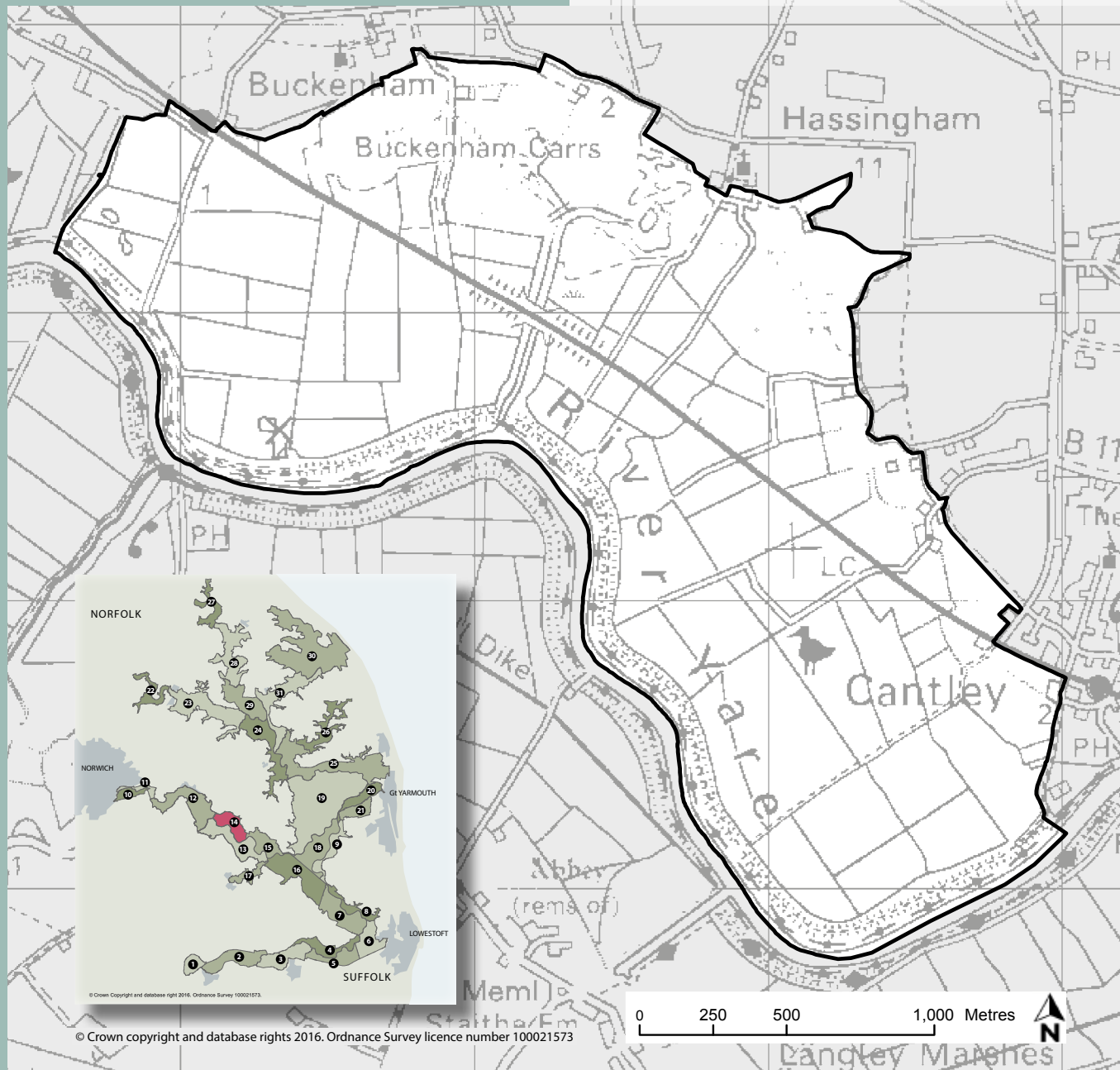
Settlement - Ensuring that any changes to land use close along the linear settlements from Claxton to Hardley are both appropriate and well designed to enhance the landscape character and not have an impact on the prevailing character of the marshland environment. Ensuring that farm development located along the valley edge is of a scale and layout to minimise any landscape impacts.

◀ *The Beauchamp Arms Public House was the past location of a ferry which provided passage to the Buckenham on the north bank.*
Dave H - geograph.org.uk

14 Yare Valley - Buckenham and Cantley Marshes and Carrs

The area is home to "one of the most astonishing natural spectacles of the season"

Simon King - BBC Autumn Watch of the event of around 55,000 rooks roosting overnight in the area



Why is this area special?

This is a character area of extensive grazing marsh and dyke networks managed sensitively for nature conservation purposes resulting in a range on international and national nature conservation designations. There is an abundance of wildlife, particularly birds some of which are rare to our shores, which are attracted to the matrix of wetland habitats.

The nature of the local landform provides panoramic views of grazing marsh framed by carr woodland at the valley edges and long distance views to landscape beyond the Broads whilst water in both the dykes and river provide reflective qualities all under "big skies".

It is often remote and tranquil landscape with few 20th/21st century visual intrusions other than at locations at the eastern end of the area where the village of Cantley and the Cantley Sugar Factory complex are located.

The area has a sense of mystery, as its past importance in relation to the "uplands" has been hinted at as a result of the findings of the English National mapping programme.

It is home to the spectacular event of thousands of rooks flying in to roost during the winter period.



Grazing marsh dyke at Cantley Marshes, Lesley Marsden

Topography and Skyline

The area is an expanse of open grazing marsh sited within a 1.2 km wide valley floor. It is low lying land even in Broads' terms, between 1 and 2.6 metres below OD. The northern valley side rises to about 20 metres above OD where arable farming predominates.

The skyline in both views north and south is formed by landscape outside the Broads area. On the northern valley side woodland tends to feature in views. To the eastern edge of the area the massive buildings at the Cantley Sugar Factory break this skyline. To the south woodland and arable fields tend to form the skyline but in very long distance views, electricity pylons can be seen.

Geology and Soils

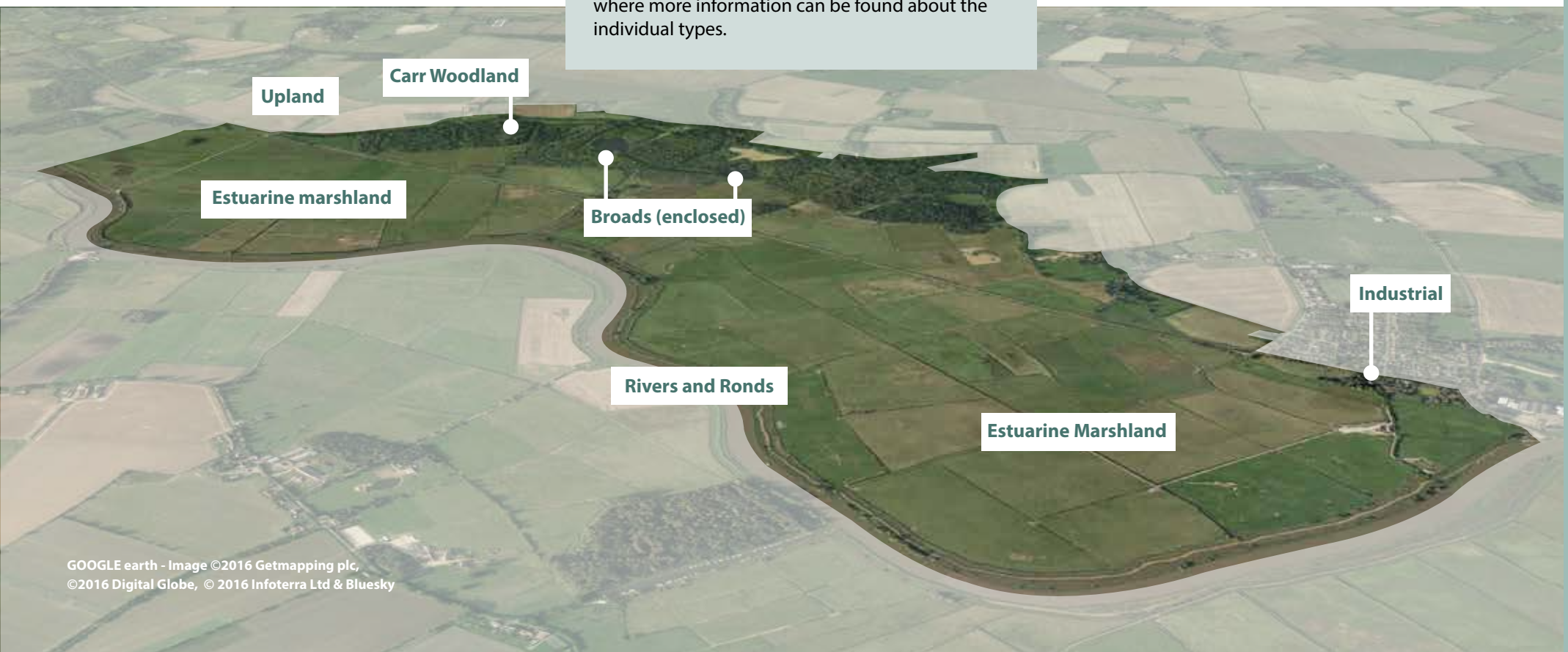
The underlying strata are of the sands and gravels of the crag group with a lens shaped are to the south of Cantley of clay silt and sand. To the west of the main track to the river at Buckenham peat soil predominate as they do to the north of the railway line. In these areas there is a large block of carr woodland which enclose two broads, which were originally connected to the River Yare via Fleet dyke. The remainder of the valley floor has a silty, clay soil typical of the estuarine marshes landscape type.

Landscape types

Within this character area there are the following landscape types. See section two where more information can be found about the individual types.



Views southwards towards the valley side in South Norfolk are extensive.
Jeremy Halls - geograph.org.uk



Enclosure, scale and pattern

The area has a simple landscape pattern created by the rectilinear dyke networks which at the most western and eastern extents of the area have been simplified into larger blocks. The typical grazing marsh feature of timber marsh gates and sloping wing walls identify the crossing points of the dykes. At the valley edge and on peat soils, the dyke network pattern is masked by alder carr woodland

Whilst walking at the lower level of the marshes, the floodbanks with their associated soke dykes and reed ronds can create more of a sense of enclosure, but this sense is lost once walking on the footpaths on the banks as the full extent of the valley width can be appreciated.

Main features of land cover and use

The majority of the area is down to grass. The marshland being seasonally grazed by cattle. Most of it is owned by the RSPB and traditionally managed for nature conservation. At various types of the year it is home to large numbers of breeding wading birds, ducks and geese in winter. The Buckenham Reserve boasts the only regular winter flock of bean geese in England (November to February), together with white-fronted geese and up to 10,000 widgeons. The area is a magnet for birdwatchers.



Widgeons grazing at Buckenham RSPB reserve



Carr woodland, located on peat soils, surrounds small broads at the valley edge. Alison Yardy

Buckenham and Hassingham Carrs which are privately owned, comprise 220 acres of predominantly carr woodland. Within this secret area there is a mosaic of habitats including: reedbeds, clearings, 'rides', mature and young woodland and managed and unmanaged areas and is used for shooting and nature conservation purposes. The ground is spongy underfoot and reputedly contains a depth of 17 feet of peat. To the north on the higher ground, the woodland species change and there is more ornamental planting and metal estate fencing alongside the roadside. The woodland and its immediate surrounds are primarily managed for shooting purposes. Throughout the winter period a spectacular sight can be seen as around 55,000 rooks fly in en masse on an evening to use this woodland and its surrounds to roost at night. This makes it possibly the largest rook roosting population in the UK.

Water bodies have different forms and uses in this area. The River Yare, although not the busiest area on the Broads is important for boating. It is also a popular area for fishing. The water levels in the dykes in this area are managed to promote nature conservation interests on the marshes although the aquatic habitat is important in its own right therefore good water quality is important to maintain. The small broads in the carr woodland were created within the when peat was extracted during the medieval period and scrapes (very shallow excavations)

created by the RSPB to attract particular bird species. During the winter period much of the marsh is covered by water purposely to provide suitable habitat for overwintering birds.

Flood banks along the River Yare with their associated soke dykes and reed ronds are a prominent linear feature in the area. As well as acting as functioning flood defences for the marshes the banks are the location for the main footpath routes in the area with occasional footpaths/tracks crossing the marshes to meet up with them.



Broadland Flood Alleviation Project has resulted in change to the flood banks and soke dykes over the past 10 years. Jeremy Halls - geograph.org.uk

Settlement is limited within the floodplain other than at Cantley. It tends to be located on higher ground on the valley sides. The settlements were traditionally built on the lower more sheltered valley sides in close proximity to the the river which used to provide a transport route. However as the pressure for more housing has increased, development has moved higher up the slopes sometimes impinging on the skyline in views from the Broads. Cantley Red House (Public House) is located on the river's edge – traditionally a popular fishing base and well photographed by all the Broadland photographers. The building today has been painted white and is now called The Reedcutters.

Infrastructure such as sewerage works (near Cantley) and power supply lines are all relatively recent introductions to the landscape. Wind power for water management in the dykes was originally generated by drainage mills such as the one at Buckenham.

Fadens Map shows a drainage mill in the same place as this mill which is the furthest mill upriver on the Yare both then and now, although the present mill dates from an 1823 rebuild. The 1880s O.S map shows this mill later operated in partnership with a steam engine sited to the west (now gone). The mill that drained the Cantley Marshes is lost although its site is still marked by a cut from the river at the end of a long mill drain. Today the water is pumped from the marshes via electric powered pumps housed in small brick buildings along the rivers edge.



The railway at Buckenham Station. Glenn Denny - geograph.org.uk

The "Wherry" railway line bisects the area. Built in 1844 by the Yarmouth & Norwich Railway it was the earliest railway in Norfolk and was built for the carriage of coal (which would arrive at Yarmouth by sea), bricks, iron, stone, fish and cotton as well as passengers.

The River Yare has a large number of former ferry crossing points, some simple rowing boat 'foot ferries', others such as Surlingham Ferry were more substantial chain ferries that could move vehicles. The former Buckenham Ferry was of the latter type. The crossing site south of the river is marked by the termination of the riverside footpath opposite the Beauchamp Arms Public House. The track to the ferry on the Buckenham side survives although was previously tree-lined and ran to a staithe/ferry house (now lost). This is one of the few former ferry routes not marked by public footpath. Another ferry crossed between Cantley and Langley Marshes to allow those living south of the river to use Cantley Railway station.



The old windmill at Buckenham Ferry and the electric pumping station at Cantley marshes. Hugh Venables - geograph.org.uk



Helping to keep it special

Care needs to be taken when landscape change occurs, to ensure that those positive characteristics that contribute to an areas unique sense of place are conserved and enhanced. What follows are examples of local issues and opportunities

Natural Heritage - much of the area is owned and managed by nature conservation groups which have led to sites within the area of very high nature conservation value. Nature conservation activities need to be carefully considered to ensure that they are not of detriment to historic landscape features.

Water quality - is one aspect which is less within the control of the organisations. Poor water quality can have detrimental effects on the flora and fauna.

Built heritage - exploration of new uses/ purposes for Buckenham Mill to ensure its future survival as a landscape feature.

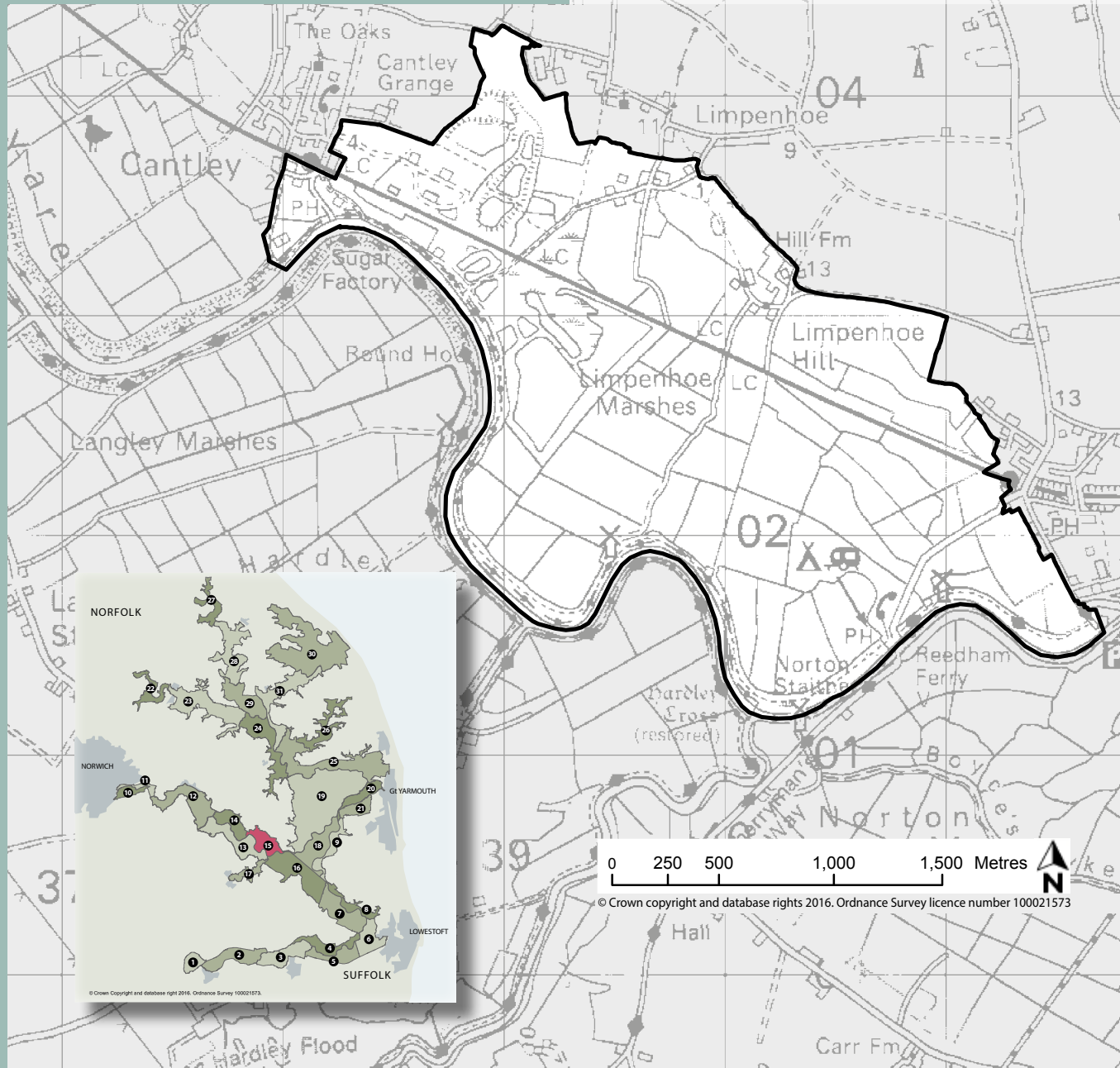
Landscape - promoting landscape enhancement schemes to enhance the positive physical characteristics of the area such as removal of overhead power lines within the open grazing marshes.

Settlement - ensuring that any changes to land use close to the settled area on the edges of the marshes (settlement fringe) are appropriate and well designed to enhance the landscape character.

◀ Views northwards from the marshes are panoramic. The skyline only interrupted by the Cantley Sugar Factory. Lesley Marsden

15 Yare Valley - Cantley to Reedham

The Cantley Sugar Factory built in 1912 was the first to be built in Britain.



Why is this area special?

This character area forms part of the northern floodplain of the river Yare. The area is flanked by the waterside settlements and developments at Cantley and Reedham.

British Sugar's Cantley Factory is one of the most significant built features in the Broads landscape, being visible from an astonishing amount of the Broads network. The water vapour rising from the tall chimneys formed from the processing of the beet can be seen from even further afield.

To the east of the area the River Yare meanders to the edge of the valley side and it is here that the settlement of Reedham lies on the steeply rising ground to the north. A significant proportion of the residential properties lie adjacent to the River Yare behind flood defences. Those set back from the river often have open views of the marshes and the land southwards as a result of their elevated position.

Lying in between the two settlements is an area of grazing marsh, which is bisected in an east west direction by the Norwich to Yarmouth railway.

This area includes Reedham Ferry, the last remaining vehicle crossing on the River Yare between Norwich and Great Yarmouth.

It is an accessible area. The road to the ferry crossing allows access across the marshes. The ferry itself provides a connection between north and south of the river for vehicles and it is the crossing point for the long distance Wherryman's Way footpath. There is a riverside footpath along this entire area and surprising good access through the Cantley complex giving an intriguing glimpse of operational activities at the factory.

Topography and Skyline

Much of the area lies in level floodplain marshland at around -1m below OD with quite steep valley sides rising to around 20 metres at the valley crest outside the Broads area. A small tributary valley extends to the north through the village of Limpenhoe.

The skyline to the north at the western edge of this area is dominated by the sugar factory complex. Otherwise intermittent woodland lying on the valley side forms much of the skyline between Cantley and Reedham. However the large farm complex at Hall Farm Limpenhoe is very prominent in views where this woodland is not present.

The skyline in to the south is formed by a landscape of woodland and arable field with the occasional pylons. Most of these features lie on land outside the Broads area.

Geology and soils

The underlying strata are of the sands and gravels of the crag group with a lens shaped area to the south of Cantley of clay silt and sand. The remainder of the valley floor has a silty, clay soil typical of the estuarine marshes landscape type.

Enclosure, scale and pattern

The marshland area has generally a simple landscape pattern. One long sinuous dyke running north-south between Limpenhoe Hill and the river separates the more rectilinear dykes to the west from those of a more curvilinear form to the east. The marshland to the west however has been greatly modified by the formation of settlement lagoons for the Cantley factory.

Reedham village located on the rising land of the northern valley side of the River Yare. Katy Walters - geograph.org.uk

Within the marshland environment some sense of enclosure is provided by the valley sides lying at about 2 kilometres apart. Within the proximity of the settlements of Reedham and Cantley that sense of enclosure is marginally increased.



Landscape types

Within this character area there are the following landscape types. See section two where more information can be found about the individual types.



Main features of land cover and use

Although the much of the area is in use as grazing marshland the **industrial** land use of the Cantley Sugar Factory with its associated buildings, plant, chimneys and lagoon facilities dominates the area. The sheer scale of the industrial buildings, particularly the six vast silos dwarf domestic scale structures in Cantley village. The sense of remoteness and tranquillity of this area is as a consequence strongly influenced by the factory.

A number of the settling basins for the Cantley factory have been established in what was formerly part of the Limpenhoe Marshes. The drainage arrangements for these marshes was detailed by J E G Mosby in the 1930's as part of the Land Utilisation Survey for Britain as a case study of how the broadland marshes were drained and worked.

The huge size of the Cantley factory buildings dominate the river Yare frontage and it can be seen from miles around.
Adrian S. Pye - geograph.org.uk



This aerial of the Cantley Sugar factory shows the extensive and diverse nature of its operations and its effect on the wider landscape. Mike Page

The Cantley factory was built in 1912 as the first sugar beet factory in Britain. The site originally provided important winter employment for the local agricultural workforce. Today it employs 110 people rising to 155 during the 140-day processing 'campaign'. Until recent years a self-service ferry (consisting of several rowing boats) brought workers across from south of the river near the Round House on Langley Marshes.

During the campaign period, the site operates round the clock accepting 380 lorry loads of beet each day. The unfortunate by-products of this are a strong acrid smell, noise, steam plumes and widespread light pollution.



The large village **settlements** of Reedham and Cantley and the smaller settlement at Limpenhoe Common can be found in the area. Farms can be found dotted around the marshes as well as on the valley sides. These include the farm complexes at Limpenhoe which lie in a visually prominent location.

Large farm buildings at Limpenhoe dominate the skyline.
Nigel Thompson - geograph.org.uk



View southwards from the valley side of the historic rail bridge at Reedham and the marshland on the south side of the river.
Evelyn Simak - geograph.org.uk

The marshland between Cantley and Reedham were originally the Limpenhoe, Southwood and Reedham Marshes known as the Limpenhoe, Emeris and Reedham Levels. Two mills survive in this area, one (Limpenhoe) is derelict but internally is largely complete, the other (referred to by Mosby as Gurney's Mill, has been rather elaborately converted into a house.

To the north of the **railway line** (see LCA 14), there is one heavily designated part of the marshes, Limpenhoe Meadows comprising 28 acres of unimproved fen grassland. The site marks the transitional area between peat fen where springs emerge and the alluvial clays of the valley floor. It is home to a range of vegetation types.

To the west of Reedham is a pollarded willow lined road leading to Reedham Ferry and the 18th century Public House. The road was realigned into two straight sections following the Reedham enclosure of 1840. A small **leisure area** has developed around the ferry including the Reedham Ferry Public House and a touring caravans and camping site. The latter is partly enclosed by trees.

Flood banks along the River Yare with their associated soke dykes and reed ronds are a prominent linear feature in the area. As well as acting as functioning flood defences for the marshes the banks are the location for the main footpath routes in the area with occasional footpaths/tracks crossing the marshes to meet up with them. Within the village of Reedham at the quay the flood defence is formed by a small wall. In times of flood the access points have to be manually closed off.

View towards the converted drainage Mill at Reedham.
Alison Yardy



Helping to keep it special

Care needs to be taken when landscape change occurs, to ensure that those positive characteristics that contribute to an area's unique sense of place are conserved and enhanced. What follows are examples of local issues and opportunities.

Landscape – The landscape and visual impacts (adverse) of the Cantley factory are documented above. Technological and economic drivers dictating new plant and facilities will continue to be a force for change. There are also visual impacts from settlement built on high ground at Reedham, recent residential development at Cantley and a series of large agricultural buildings on the valley side at Limpenhoe. Opportunities to mitigate existing and future impacts should be sought where necessary through the planning application process.

It is important that changes to land use close to the settlements (settlement fringe) and farm buildings are appropriate and well designed to enhance the landscape character.

The pollarded willows on the road to Reedham Ferry are now discontinuous and invaded by scrub opportunities could be sought to reinforce this feature.

Woodland located on the valley edge provided a valuable landscape (physical and visual) buffer between the Broads and the arable land beyond.

The sense of remoteness and tranquillity is strongly influenced by the Cantley Sugar Beet Factory complex to the west of the area, visually, aurally and through traffic intrusion, and also seasonally during the 'campaign' when the sugar beet is processed, with the resultant steam cloud visible for many miles. Light pollution is also a by-product of the factory's operation.

Natural Heritage – The grazing marsh landscape with their historic network of drainage ditches and dykes are a significant landscape feature and have the potential to provide a valuable wildlife habitat. Much of the marsh area is managed through traditional grazing techniques some of which may be the subject of agricultural subsidies.

Built heritage – The drainage mills are nationally, and perhaps internationally, an important landscape and historic feature. Opportunities to conserve and enhance these structures for future generations should be sought. The historic Reedham rail swing bridge on the Wherry railway line, opens to allow taller boat traffic to travel along the Yare. Over the years it has become increasingly unreliable and it may need to be replaced at some time in the future. The design of any new structure will need to take account of its prominence within the landscape.

Archaeology – The hinterland to Cantley and Reedham appears (national mapping project) to be a rich source of undiscovered archaeology.

The BFAP scheme has introduced very wide foldings (the area between the flood bank and the soke dyke), should these not be managed in the long term by grazing or cutting scrub could develop.

Ensuring that development outside the area (the landscape setting of the Broads), both north and south of the river, does not impact adversely the special character of the area as it provides its setting.