

Carbrooke Neighbourhood Plan

Environment and Nature Recovery

Evidence Paper

May 2026

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Context

This evidence paper brings together environmental evidence relevant to the Carbrooke Neighbourhood Plan. It covers landscape character, settlement pattern, green infrastructure, habitats and nature recovery, flood risk, water features and dark skies.

The paper is intended to provide a factual baseline. It draws on national planning policy, the adopted and emerging Breckland Local Plan, the Norfolk Local Nature Recovery Strategy, Breckland Council's Green and Blue Infrastructure Study (2025), Environment Agency flood mapping, CPRE dark skies mapping, and evidence gathered locally through Neighbourhood Plan work.

National Planning Policy Framework (NPPF)

The National Planning Policy Framework sets out national planning policy for England. It is relevant to this evidence paper because it includes policy on conserving and enhancing the natural environment, biodiversity, green infrastructure, flood risk, climate change, access to open space, landscape character and light pollution.

The NPPF also recognises the intrinsic character and beauty of the countryside and supports planning approaches that improve biodiversity, manage flood risk and respond to climate change.

Local Nature Recovery Strategy (LNRS)

The Norfolk Local Nature Recovery Strategy identifies priorities and opportunities for nature recovery across Norfolk and includes a Local Habitat Map.

The LNRS is relevant to neighbourhood planning because neighbourhood plans are now required to take account of relevant Local Nature Recovery Strategies. It provides evidence about existing areas of biodiversity importance and areas that could become “of importance” for biodiversity in the future.

The LNRS should not be treated as a site-specific ecological survey or as a new planning designation. It does not prevent development from taking place in mapped areas. However, it is a useful evidence source for understanding habitat networks, biodiversity priorities and opportunities for improving green and blue infrastructure.

The LNRS identifies the importance of:

- habitat connectivity
- enhancement of ecological networks
- restoration and creation of priority habitats
- improving the resilience of landscapes and ecosystems
- supporting multifunctional green and blue infrastructure

Breckland Local Plan

The adopted Breckland Local Plan is part of the statutory development plan for Carbrooke. It includes policies relevant to the natural environment, biodiversity, green infrastructure, landscape character, flood risk, sustainable drainage, open space and design.

The emerging Breckland Local Plan is also relevant because it is at an advanced stage and sets out the Council's current direction of travel on future growth and environmental planning. It continues to address themes including climate change, biodiversity enhancement, green and blue infrastructure, flood risk, water management, habitat connectivity and landscape quality.

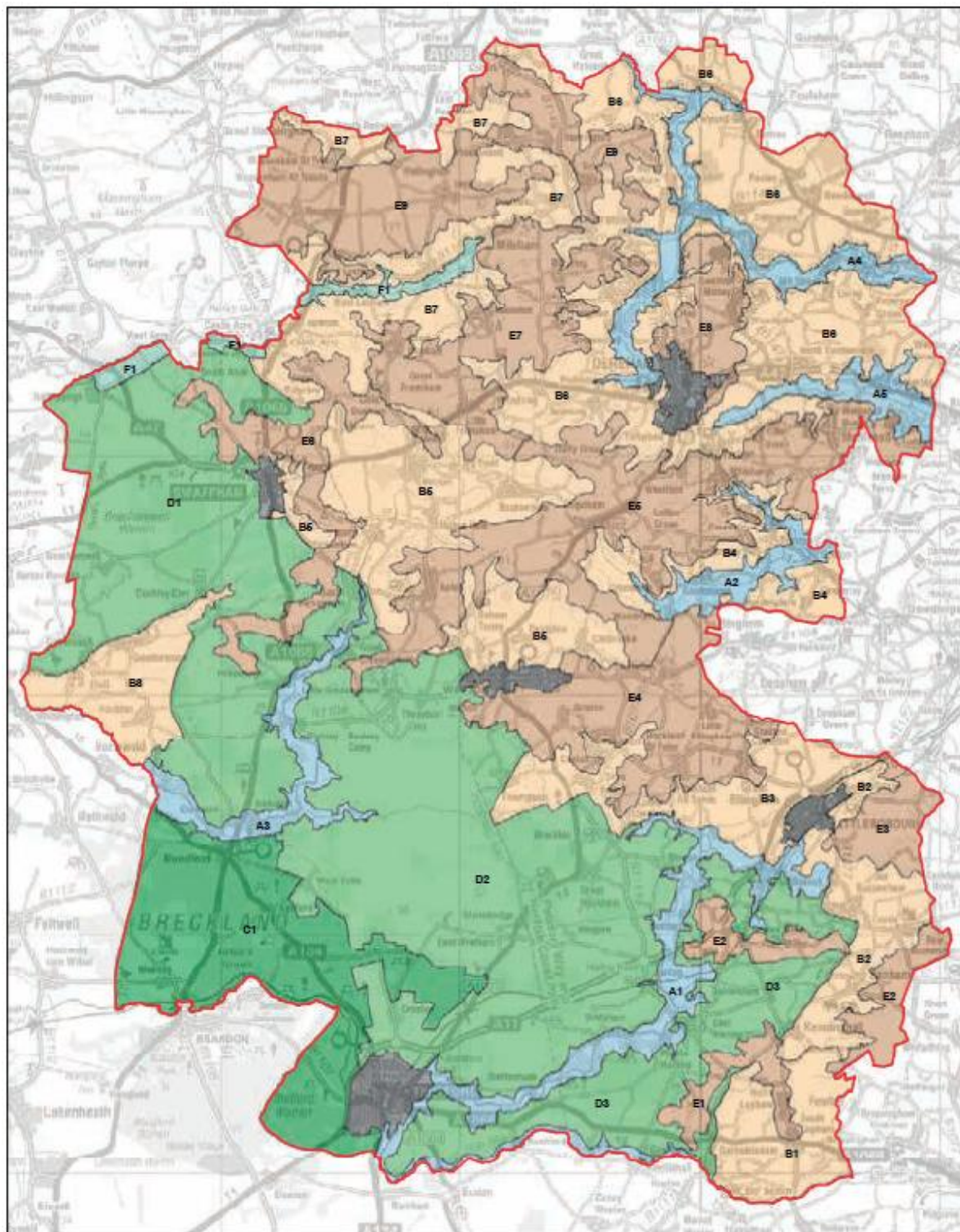
The emerging plan also identifies strategic growth at Watton within and adjoining Carbrooke parish. This makes the environmental relationship between Carbrooke, Watton and the surrounding rural landscape particularly relevant to this evidence paper.

Landscape Character

Carbrooke parish lies within the Breckland landscape and is characterised predominantly by agricultural land, dispersed settlement patterns and a network of rural lanes, hedgerows and field boundaries.

The Breckland Landscape and Settlement Character Assessment identifies most of the parish as lying within the "Settled Tributary Farmland" landscape type. A smaller area toward the southern edge of the parish falls within the "Plateau Farmland" landscape type.

Figure 1: Breckland Landscape Character Assessment Map



Breckland LCA

Figure 7.1 Landscape Classification of Breckland



The Settled Tributary Farmland landscape is characterised by medium-scale arable farmland, vegetated field boundaries, dispersed settlement patterns and mature hedgerows and trees. Church towers are identified within the assessment as important landmark features within views across the landscape. Carbrooke displays many of these characteristics. The parish is predominantly rural in character, with open agricultural land, hedgerows, drainage ditches and scattered tree cover forming the wider landscape setting of the village.

Community consultation responses also identified the parish's rural and agricultural character as one of its defining features, with residents frequently describing Carbrooke as "rural", "quiet", "peaceful" and "historic".

Agricultural land forms the dominant land use across much of the parish and contributes significantly to local landscape character and settlement setting. The wider landscape around Carbrooke is characterised by medium to large arable fields, mature hedgerows, vegetated field boundaries and gently undulating farmland.

Agricultural land within and around the parish also contributes to:

- landscape openness
- rural setting
- habitat connectivity
- drainage and water management

The Norfolk Local Nature Recovery Strategy identifies farmland, grassland and freshwater environments as important components of wider ecological networks and nature recovery.

Settlement Pattern

The settlement pattern of Carbrooke reflects its agricultural origins and historic development along rural routes. The Breckland Landscape and Settlement Character Assessment identifies Carbrooke as an "Agricultural Village" in origin character terms. Historically, Carbrooke developed as a "Continuous Rural Row" village and is now described within the assessment as an "Interrupted Rural Row" settlement.

The village follows a broadly linear pattern along:

- Shipdham Road
- Church Street
- Broadmoor Road
- Mill Lane
- Drury Lane

The relationship between the village and surrounding countryside remains evident in many parts of the parish, particularly around the older village core where settlement edges often transition directly into open agricultural land. More recent development has expanded parts of the parish, particularly south of Norwich Road, creating a contrast between the historic village core and newer suburban-style development areas.

Trees, Hedgerows and Vegetation

Trees, hedgerows and vegetated field boundaries form an important part of the parish landscape and contribute strongly to the transition between settlement and countryside. The parish contains a network of mature hedgerows, field margins and roadside vegetation associated with its agricultural landscape character. These features help define field patterns, filter views and contribute to habitat connectivity. Several areas of public open space within the parish also contain established tree planting and vegetation, including Millennium Green, the churchyard and recreational open spaces. Community consultation responses identified strong support for environmental improvements including tree planting, wildlife enhancement and protection of green spaces.

The Woodland Trust Ancient Tree Inventory¹ identifies recorded ancient, veteran and notable trees. The inventory is based on survey work and public records and provides an indication of important tree assets within and around the parish. It should not be treated as a complete tree survey, but it provides useful evidence of known trees with age, biodiversity, landscape or cultural value. The map below shows ancient, veteran and notable trees in and around Carbrooke.

There are a number of Tree Preservation Orders (TPOs) within the parish, shown on the maps below. TPOs are used by the local planning authority to protect trees and woodland considered important to the character, appearance or amenity of an area. The maps identify trees and woodland within the parish that are protected by TPOs, reflecting their contribution to landscape character, visual amenity and the local environment. In Carbrooke the TPOs are concentrated in two areas - around Broadmoor Road in Carbrooke Village and in the newer housing developments south of Norwich Road in the south of the parish.

¹ [Ancient Tree Inventory - The Woodland Trust \(webpage\)](#)

Figure 2: Ancient, veteran and notable trees in Carbrooke and the surrounding area (Woodland Trust)

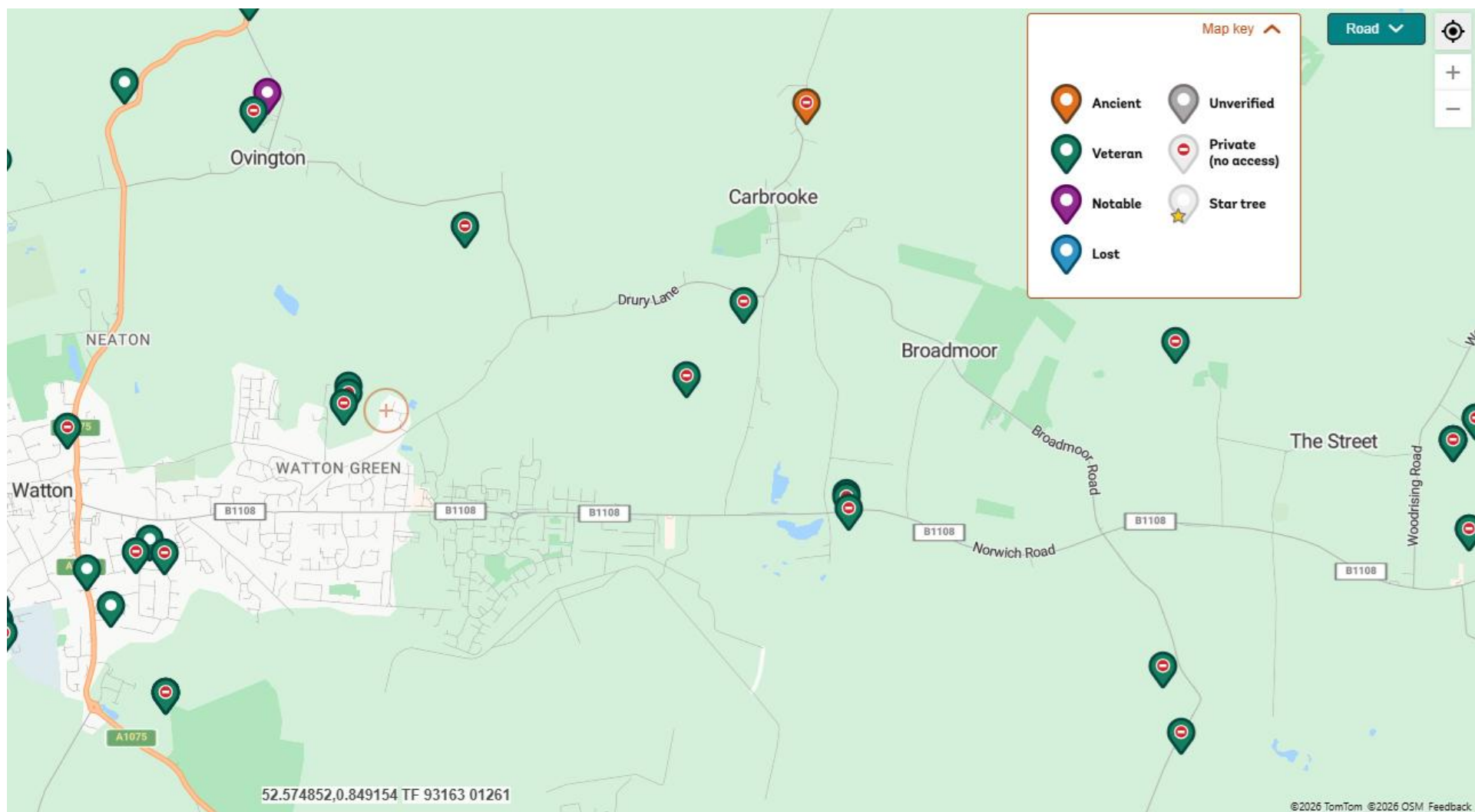


Figure 3: Tree Preservation Orders around Broadmoor Road (Breckland Council)

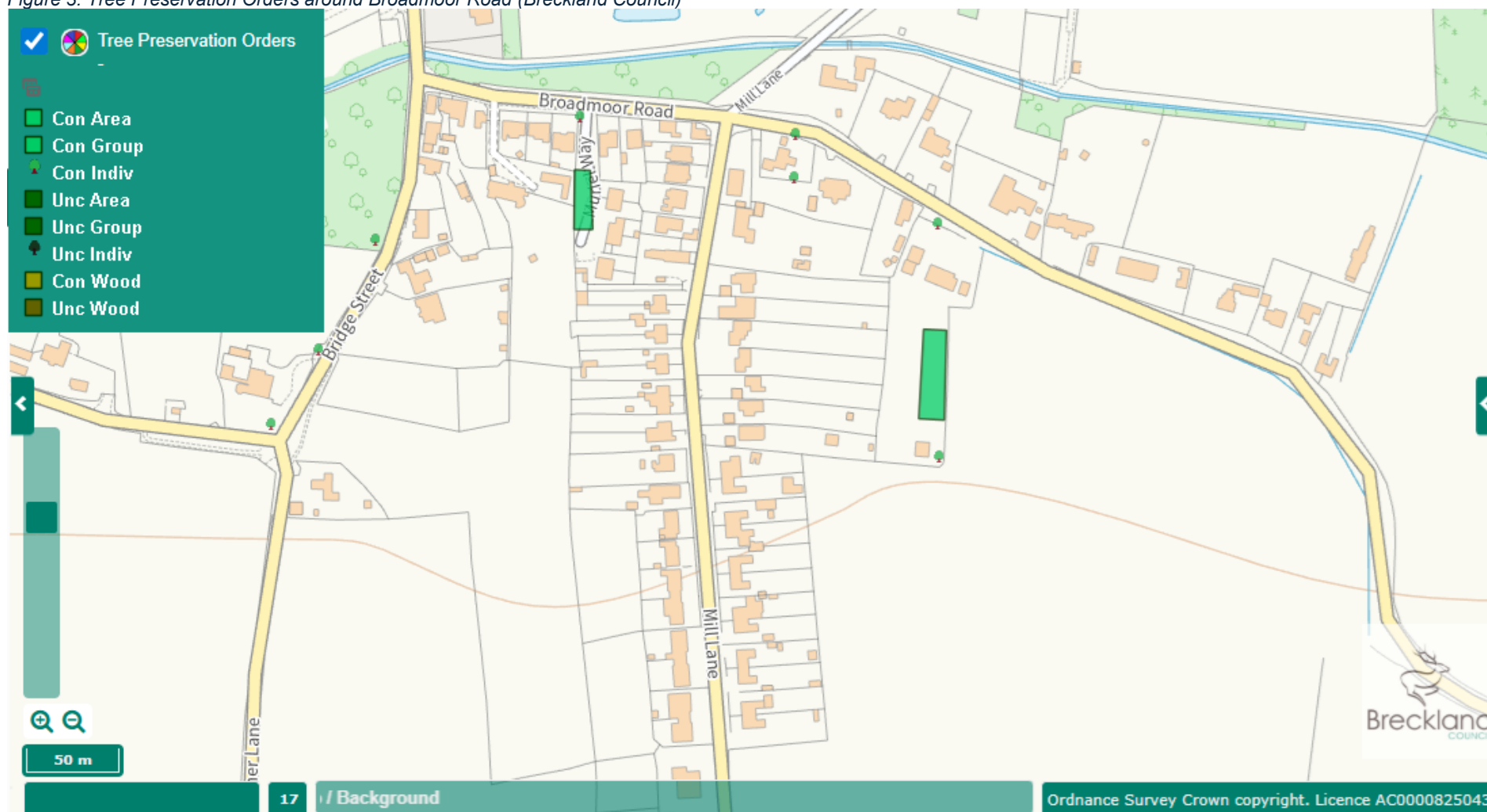


Figure 4: Tree Preservation Orders south of Norwich Road (Breckland Council)

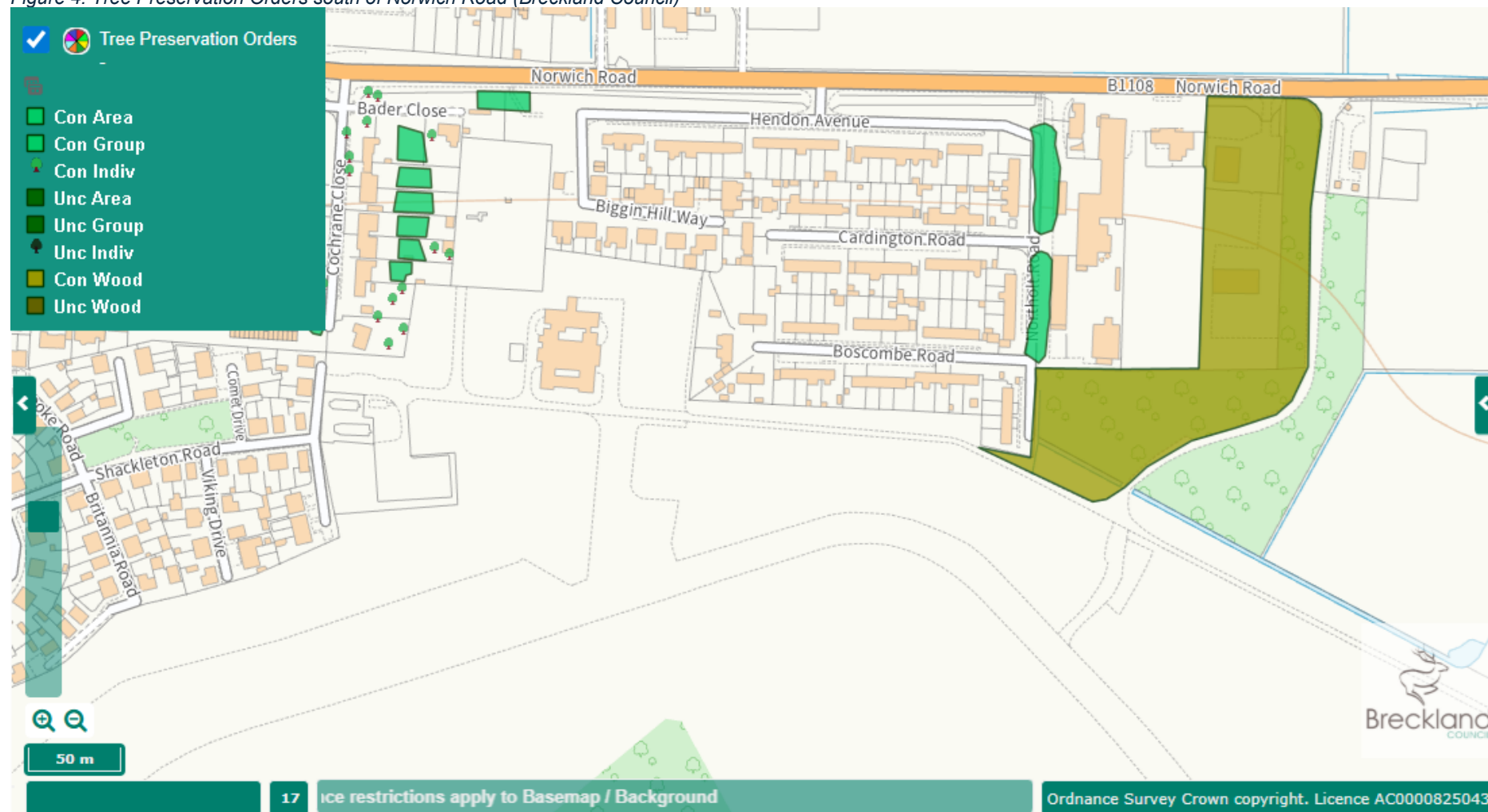


Figure 5: Tree Preservation Orders south of Norwich Road (Breckland Council)

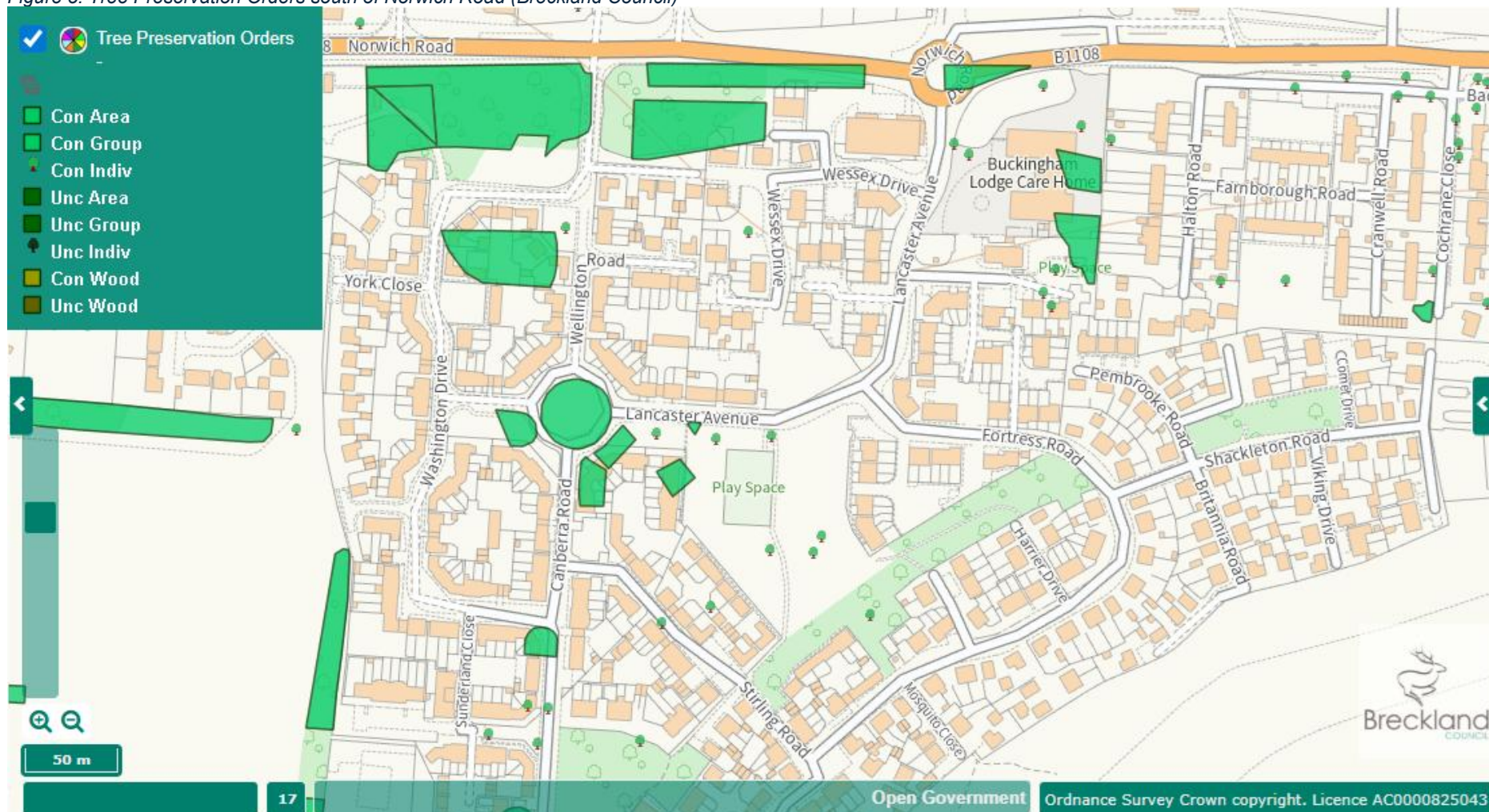


Figure 6: Tree Preservation Orders around Elworthy close (Breckland Council)



Summary

- Carbrooke is predominantly rural in character and lies mainly within the Settled Tributary Farmland landscape type.
- The parish has a dispersed and historically linear settlement pattern associated with its agricultural origins.
- Agricultural land forms the dominant land use across much of the parish.
- Hedgerows, mature trees, drainage features and vegetated field boundaries contribute strongly to local landscape character.
- Recorded ancient, veteran and notable trees are present within and around the parish.
- Tree Preservation Orders are concentrated around Broadmoor Road in the older village and within newer housing areas south of Norwich Road.
- Existing environmental features support landscape structure, biodiversity, drainage and recreation.
- Public open spaces within the parish include green spaces, recreational areas, ponds and planted areas.

Green Infrastructure

Green infrastructure is a network of natural and semi-natural spaces and features. In Carbrooke this includes public rights of way, open spaces, hedgerows, trees, ponds, drainage ditches, field boundaries and areas of agricultural land that contribute to habitat connectivity, drainage or landscape structure.

Breckland Council's Green and Blue Infrastructure Study (2025)² identifies the importance of connected green and blue infrastructure networks. It describes the role these networks can play in supporting biodiversity, recreation, access to nature, climate resilience, flood risk management, landscape character and health and wellbeing.

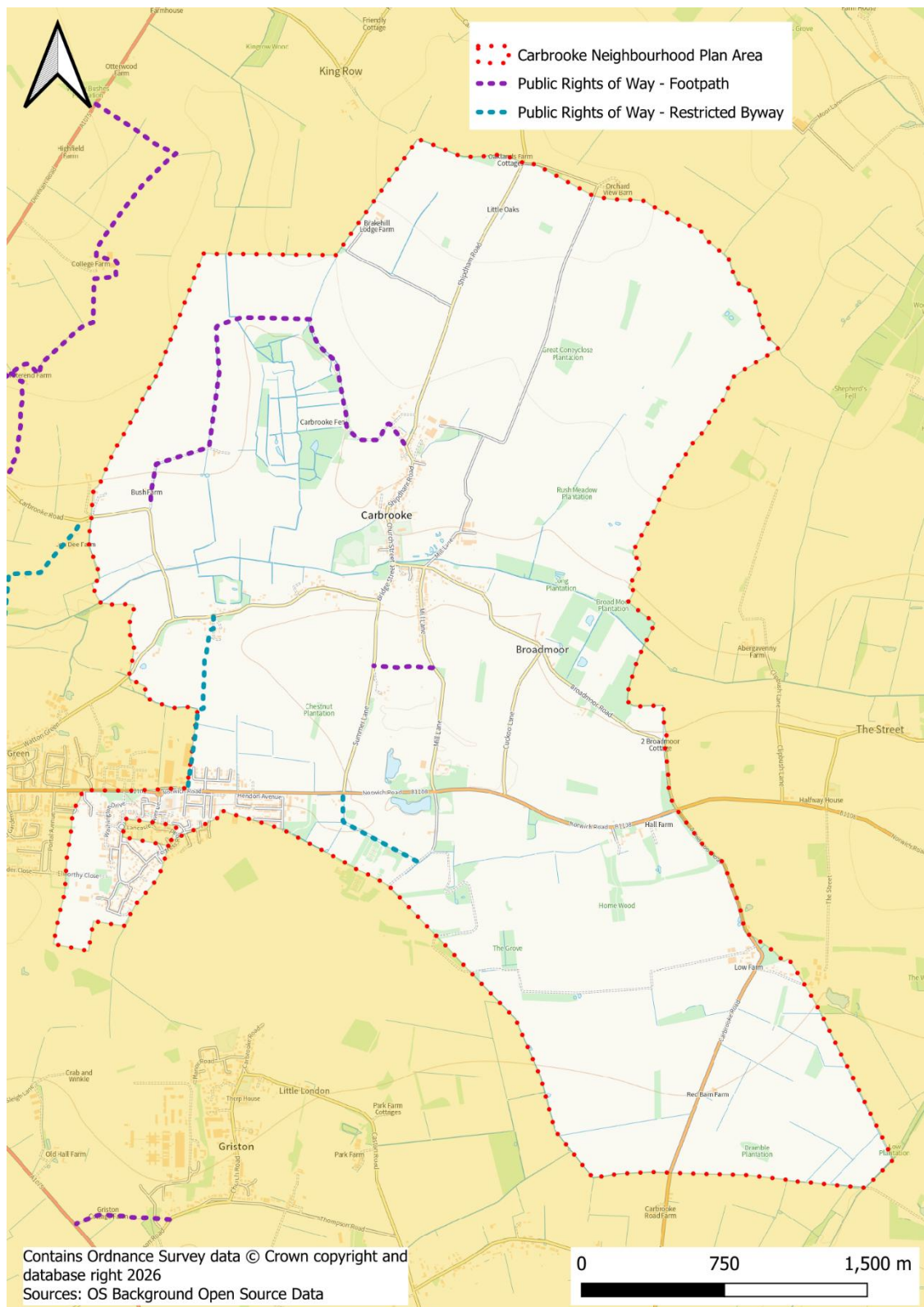
Carbrooke's green infrastructure reflects its rural and agricultural character. The parish contains a network of rural lanes, public rights of way, hedgerows, drainage features, open spaces and field boundaries. These features are found both within the built-up parts of the parish and in the surrounding countryside.

Public Rights of Way and Access

The parish contains a network of public rights of way connecting parts of Carbrooke with the surrounding countryside and neighbouring settlements (see map below). The network includes public footpaths and restricted byways.

² [Breckland Council Local Plan Evidence Base Documents \(webpage\)](#)

Figure 7: Public Rights of Way in Carbrooke (Norfolk County Council 2025)



Footpaths form the majority of routes within the parish. The network is concentrated primarily around the western side of the parish and around Carbrooke Fen, with additional routes connecting toward Watton and Griston.

The map also shows that:

- several routes follow field boundaries and drainage corridors
- east-west connectivity across parts of the parish is relatively limited
- some newer residential areas south of Norwich Road have fewer direct connections to the wider countryside network

Public rights of way allow residents and visitors to access the countryside and enjoy recreation and walking, as well as forming part of the wider green infrastructure within the parish. Community consultation responses identified support for safer walking routes, improved pedestrian connections, green spaces and countryside access.

Open Spaces and Recreational Green Spaces

The Local Green Space Assessment identifies several established green spaces within the parish, including:

- Millennium Green
- the green space surrounding St Peter and St Paul Church
- the Buckingham Road community hub play area
- the Blenheim Grange play area

Millennium Green is one of the main public green spaces in the parish. It includes open grass, play areas, orchard planting, a wildlife meadow, pond, walking routes, seating and recreation areas. The churchyard is also a significant green space within the historic core of the village. Newer development areas south of Norwich Road include recreational open spaces, including the Blenheim Grange play area and the community hub play area.

Green and Blue Infrastructure

Breckland Council's Green and Blue Infrastructure Study (2025)³ identifies the importance of connected green and blue infrastructure networks and recognises that green infrastructure can provide multiple functions simultaneously, including:

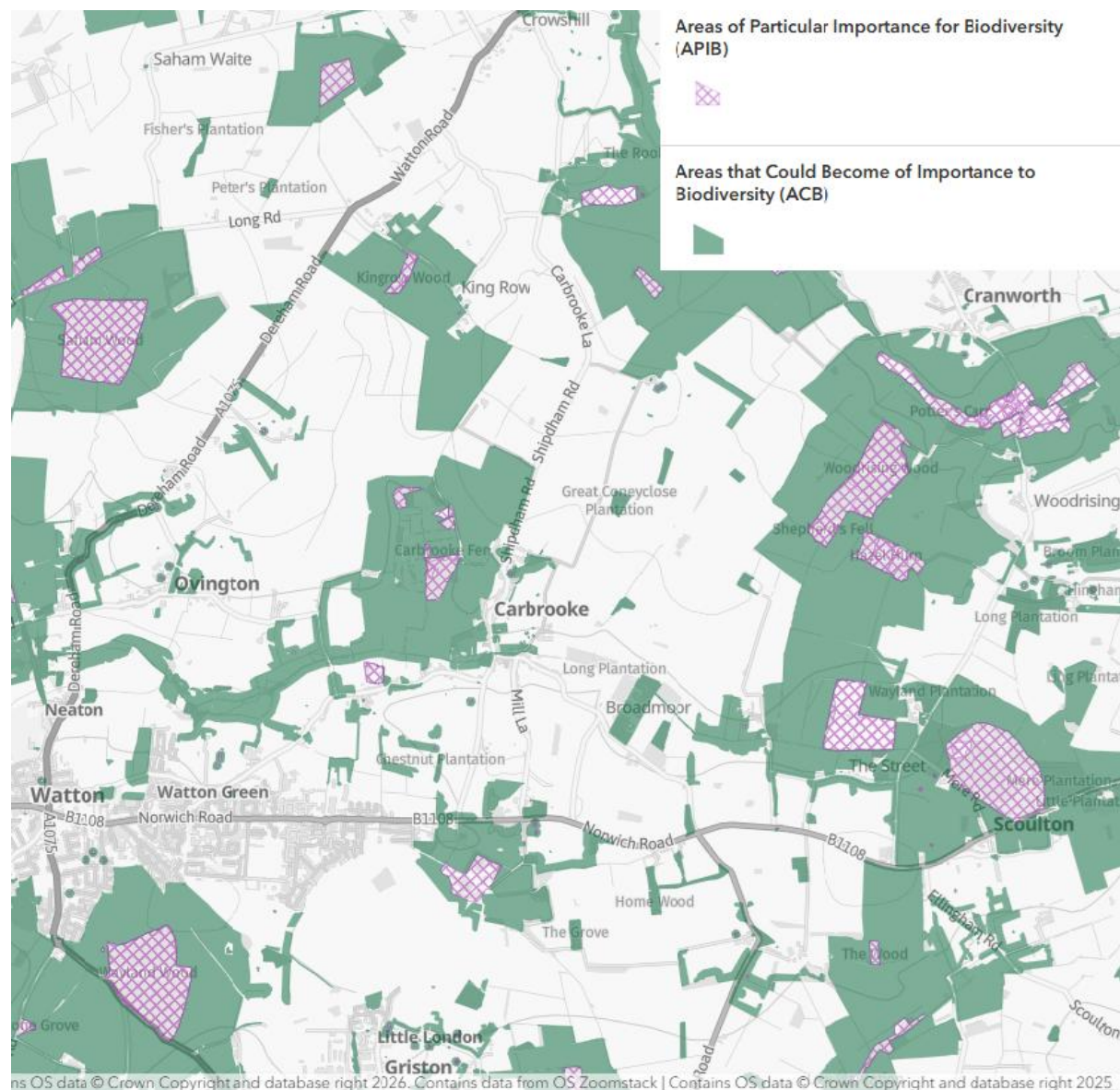
- recreation and access to nature
- biodiversity support
- flood risk management
- climate resilience
- contribution to landscape character
- health and wellbeing benefits

Green and blue infrastructure features in the parish include hedgerows, field boundaries, public open spaces, drainage ditches, ponds, watercourses, trees and roadside vegetation. Several of these features perform more than one function. For example, hedgerows contribute to landscape character, habitat connectivity and visual filtering. Ponds and drainage ditches support biodiversity as well as water management. Public open spaces provide recreation, community space and environmental benefits.

³ [The Green Infrastructure Study – Breckland Council \(PDF\)](#)

The map below, which is taken from the LNRS Local Habitat Map, adds wider context by showing Areas that Could Become of Importance to Biodiversity around Carbrooke, Watton, Ovington, Broadmoor and Sculthorpe. The mapping also shows more limited Areas of Particular Importance for Biodiversity in the wider area. This suggests that green infrastructure in and around Carbrooke forms part of a wider environmental network, rather than being limited to individual sites. The LNRS mapping should be treated as strategic evidence rather than a site-specific ecological survey. It identifies broad areas and opportunities for nature recovery but does not create new designations or prevent development.

Figure 8: Norfolk Local Habitat Map (Norfolk County Council 2025)



Summary

- Carbrooke contains a network of green and blue infrastructure features including open spaces, public rights of way, hedgerows, trees, ponds and drainage features.

- Publicly accessible green spaces include Millennium Green, the churchyard green space and recreational play areas.
- The parish contains a network of footpaths, restricted byways and byways open to all traffic, although routes are unevenly distributed across the parish.
- Green and blue infrastructure features contribute to recreation, biodiversity, drainage, landscape character and environmental connectivity.
- The LNRS Local Habitat Map shows that land around Carbrooke forms part of a wider mapped environmental network.

Points to consider

- Whether opportunities exist to improve links between newer development areas and the wider public rights of way network.
- Whether gaps in east-west pedestrian connectivity should be explored further.

Habitats, Biodiversity and Nature Recovery

Carbrooke parish contains a range of habitats and landscape features associated with its predominantly rural and agricultural character. These include:

- agricultural land
- hedgerows and field margins
- ponds and drainage features
- tree belts and small woodland areas
- grassed open spaces
- planted areas and wildlife habitats within public open spaces

The wider landscape surrounding the parish is part of the Breckland ecological landscape, which includes a range of farmland, grassland, woodland and freshwater habitats.

Wildlife designations

Natural England mapping indicates that there are no internationally or nationally designated ecological sites within the Carbrooke Neighbourhood Area.

The parish does not contain any Ramsar sites, Special Areas of Conservation (SACs), Special Protection Areas (SPAs), Sites of Special Scientific Interest (SSSIs), National Nature Reserves, or Local Nature Reserves.

Three Sites of Special Scientific Interest are located outside of the Neighbourhood Area in relatively close proximity. There are:

- Wayland Wood SSSI, approximately 650 metres away
- Potter's Carr SSSI, approximately 1.4 kilometres away
- Scoulton Mere SSSI, approximately 1.8 kilometres away

Priority habitat mapping nevertheless shows that the parish contains a range of habitats and environmental features associated with its rural landscape, particularly around Carbrooke Fen.

Local Nature Recovery Strategy mapping

The Norfolk Local Nature Recovery Strategy includes a Local Habitat Map identifying:

- Areas of Particular Importance for Biodiversity (APIB)
- Areas that Could Become of Importance for Biodiversity (ACB)

The map shown in **Figure 8** shows a broad pattern of ACB land around Carbrooke, Watton, Broadmoor, Ovington and the surrounding rural landscape. The map includes land beyond the Neighbourhood Area in order to show the wider ecological context. More limited APIB areas are also identified within the wider area. The mapping suggests that habitats and environmental features around Carbrooke are linked to the surrounding countryside rather than existing as isolated areas.

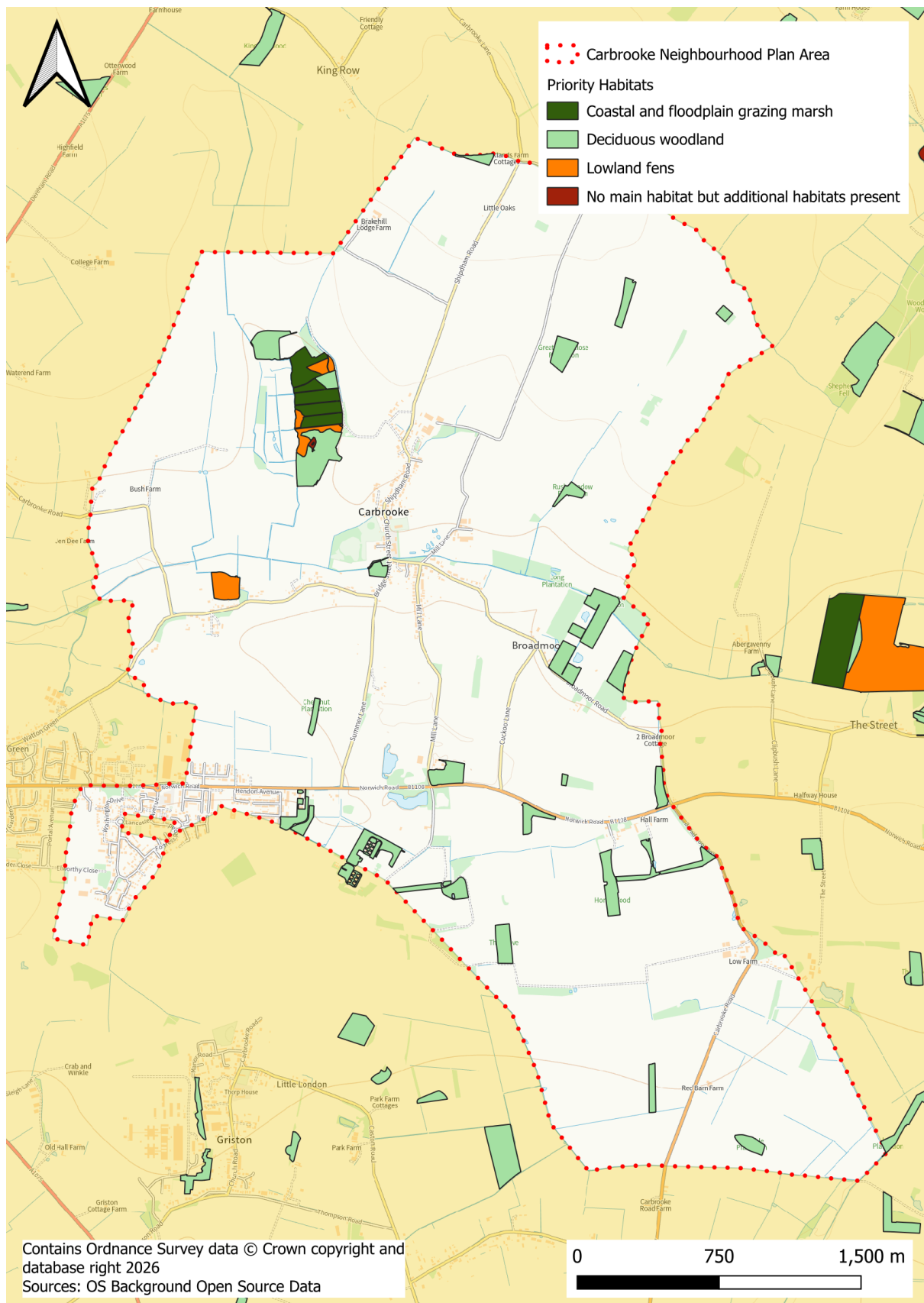
The LNRS explains that the mapping is strategic and indicative rather than site-specific. It is intended to identify broad habitat networks and opportunities for nature recovery rather than act as a detailed ecological survey or planning designation.

Priority Habitats

The map below shows that the most extensive concentration of mapped habitat within the parish is associated with Carbrooke Fen to the north-west of the village. Habitats mapped in this area include lowland fen, coastal and floodplain grazing marsh, and deciduous woodland.

Outside the fen area, priority habitats are generally smaller and more dispersed, consisting mainly of scattered deciduous woodland parcels and fragmented habitat areas within the wider agricultural landscape.

Figure 9: Priority Habitats in Carbrooke



Habitat Connectivity

The parish contains a number of landscape features which support habitat connectivity. These include hedgerows, field boundaries, drainage corridors, ponds, undeveloped agricultural land, roadside vegetation, and planted open spaces. These features are part of the wider landscape and may support movement of species and ecological connections between habitats.

The LNRS mapping suggests that habitat connectivity within the parish is linked not only to individual sites, but also to the wider network of agricultural land, drainage features and landscape corridors surrounding Carbrooke.

Summary

- Carbrooke contains a range of habitats associated with its rural and agricultural landscape.
- Habitat features within the parish include hedgerows, field margins, ponds, drainage features, grassland and planted open spaces.
- The LNRS Local Habitat Map identifies Areas of Particular Importance for Biodiversity and Areas that Could Become of Importance for Biodiversity within the wider area around Carbrooke.
- The parish forms part of a wider connected environmental network
- Existing green spaces and drainage features support biodiversity and habitat connectivity.

Points to consider

- Whether opportunities exist to strengthen habitat connectivity between existing green spaces and drainage corridors.

Flooding and water

Environment Agency flood mapping shows that most of the built-up parts of Carbrooke are outside Flood Zones 2 and 3. The areas at higher risk from rivers and the sea are mainly associated with watercourse corridors and lower-lying land.

The map below identifies Flood Zones 2 and 3 along a watercourse corridor running west to east through the parish, passing south of the older village core and continuing toward Broadmoor. A more extensive area of mapped flood risk is also shown around Carbrooke Fen to the north-west of the village.

Figure 10: Flooding risk from rivers and sea in Carbrooke (Environment Agency 2025)

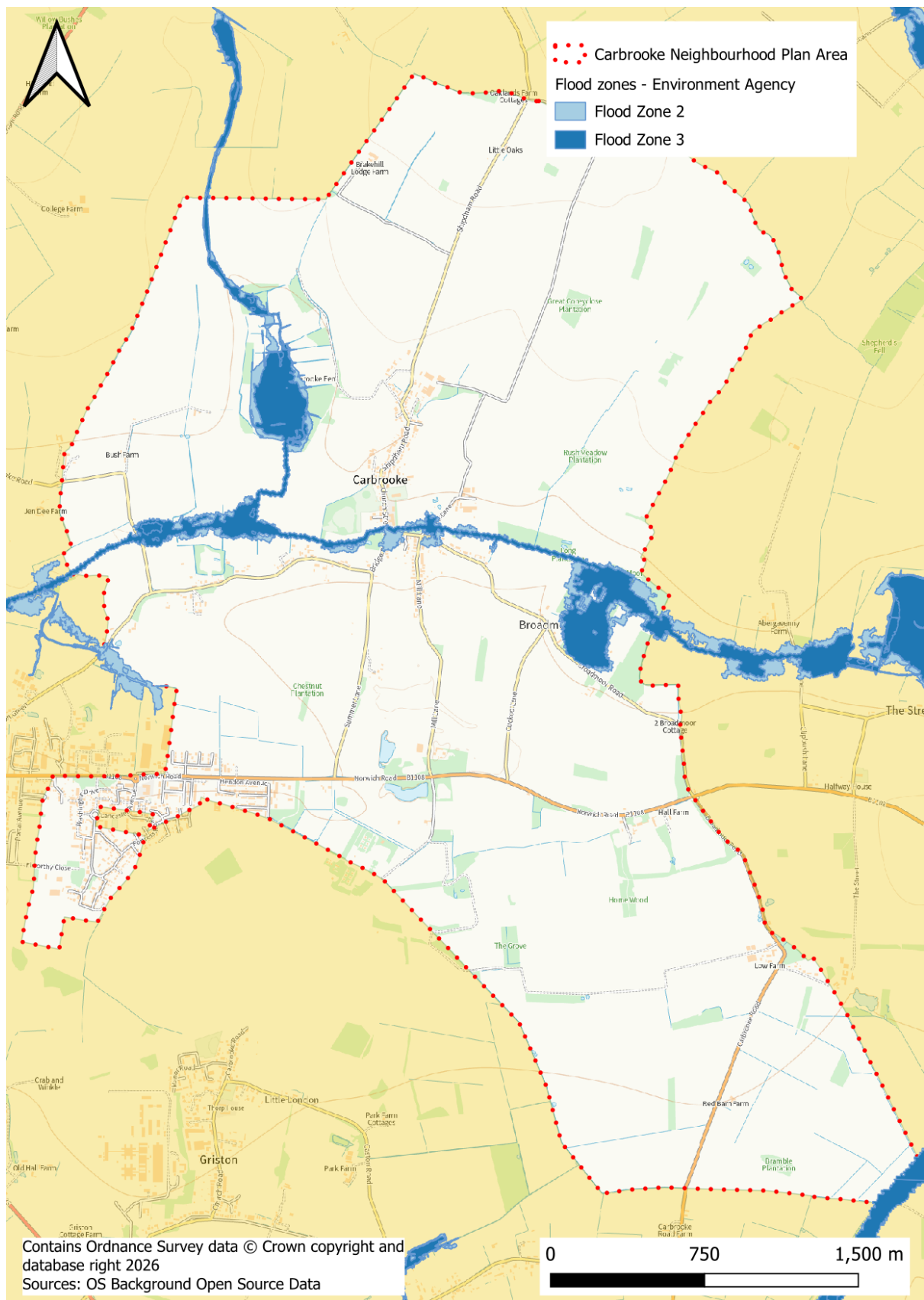
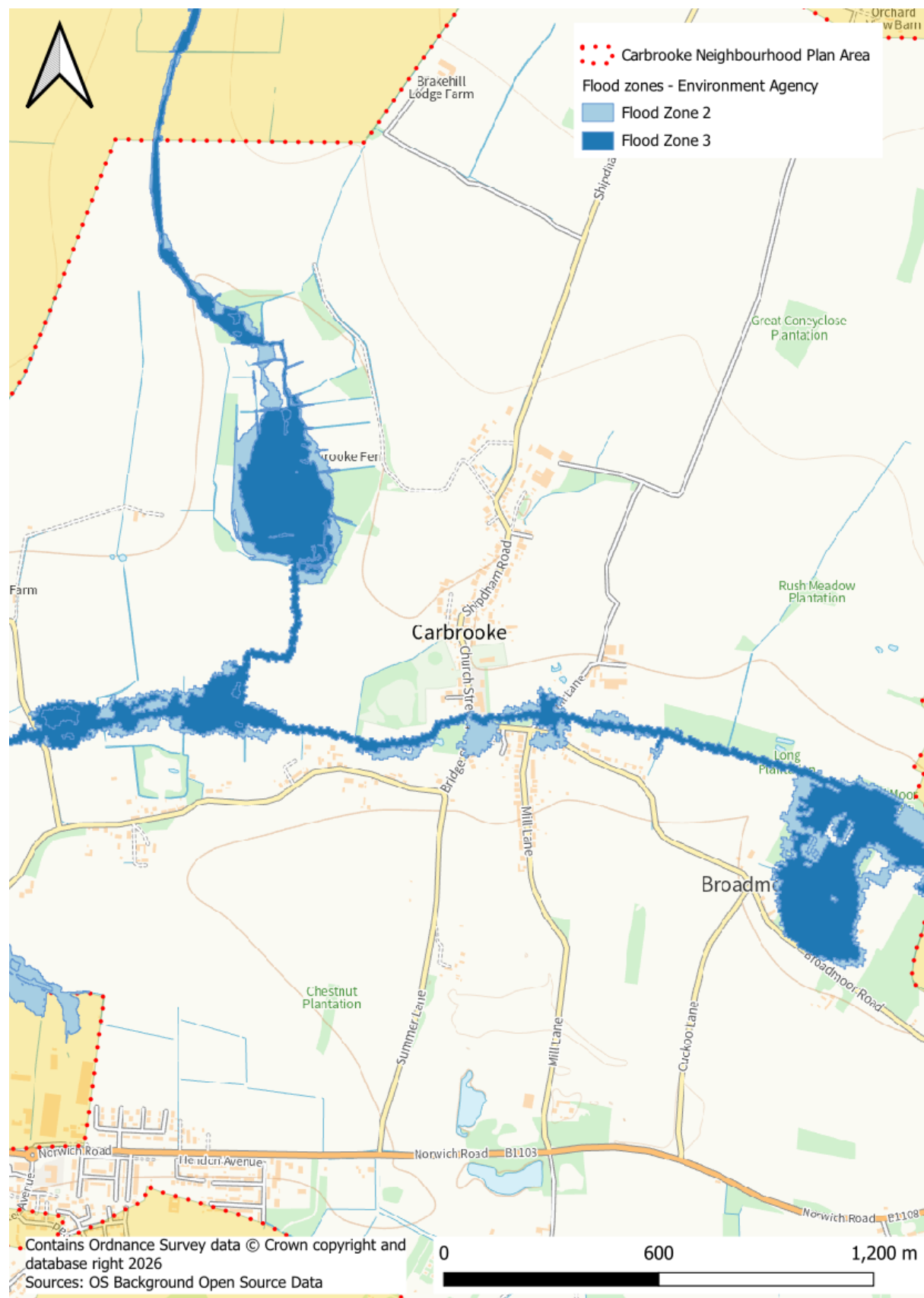


Figure 11: Flooding risk from rivers and sea in Carbrooke (Environment Agency 2025)



Surface water flooding

Surface water flooding can occur where rainfall cannot drain away quickly enough and instead flows across roads, fields and developed areas or collects in low points within the landscape.

This is particularly relevant in parts of Carbrooke where:

- development has expanded onto previously undeveloped land
- roads and lanes have limited drainage infrastructure
- agricultural runoff contributes to rapid water movement
- drainage ditches and roadside channels form part of the local drainage system

Surface water flood risk is more dispersed than river and sea flood risk. The Environment Agency surface water map shows areas of low, medium and high annual chance of surface water flooding across parts of the parish. The mapped areas are generally associated with drainage corridors, field boundaries, low points in the landscape, rural lanes and parts of the built-up area.

[illegible]

The surface water mapping shows flooding risk along parts of the watercourse corridor south of Carbrooke Village, around Carbrooke Fen, around Broadmoor and nearby drainage features, along some rural lanes and field drains, around parts of the newer development areas south of Norwich Road, and in scattered areas across agricultural land.

The parish contains a network of ordinary watercourses, field drains, roadside ditches, ponds and drainage features. These form part of the parish's blue infrastructure and support drainage, landscape character and habitat connectivity. Existing landscape evidence also identifies intermittent ditches and drainage features within the agricultural landscape around Carbrooke. This aligns with the mapped pattern of surface water and fluvial flood risk.

Norfolk County Council's Winter 2020–21 Flood Investigation Report records one incident of internal flooding at Norwich Road, Carbrooke on 23 December 2020. The investigation identifies several contributing factors, including surface water runoff from significant rainfall, overland flow paths, highway runoff, the affected property being lower than surrounding features, obstruction of a watercourse by debris or silt, high water levels, historic culverting and saturated ground conditions. The report recommends considering opportunities to route highway flood water away from affected properties, maintaining watercourses so they remain free from obstruction, and considering property-level resilience and small-scale sustainable drainage measures.

The emerging Local Plan identifies sustainable drainage infrastructure as a requirement associated with strategic growth near Carbrooke. The flood mapping indicates that surface water management, retention of existing drainage features and treatment of flow routes will be relevant considerations in the wider Carbrooke area. Climate change is likely to increase the importance of managing surface water effectively. More intense rainfall events may place greater pressure on existing drainage systems and increase the risk of localised flooding.

Summary

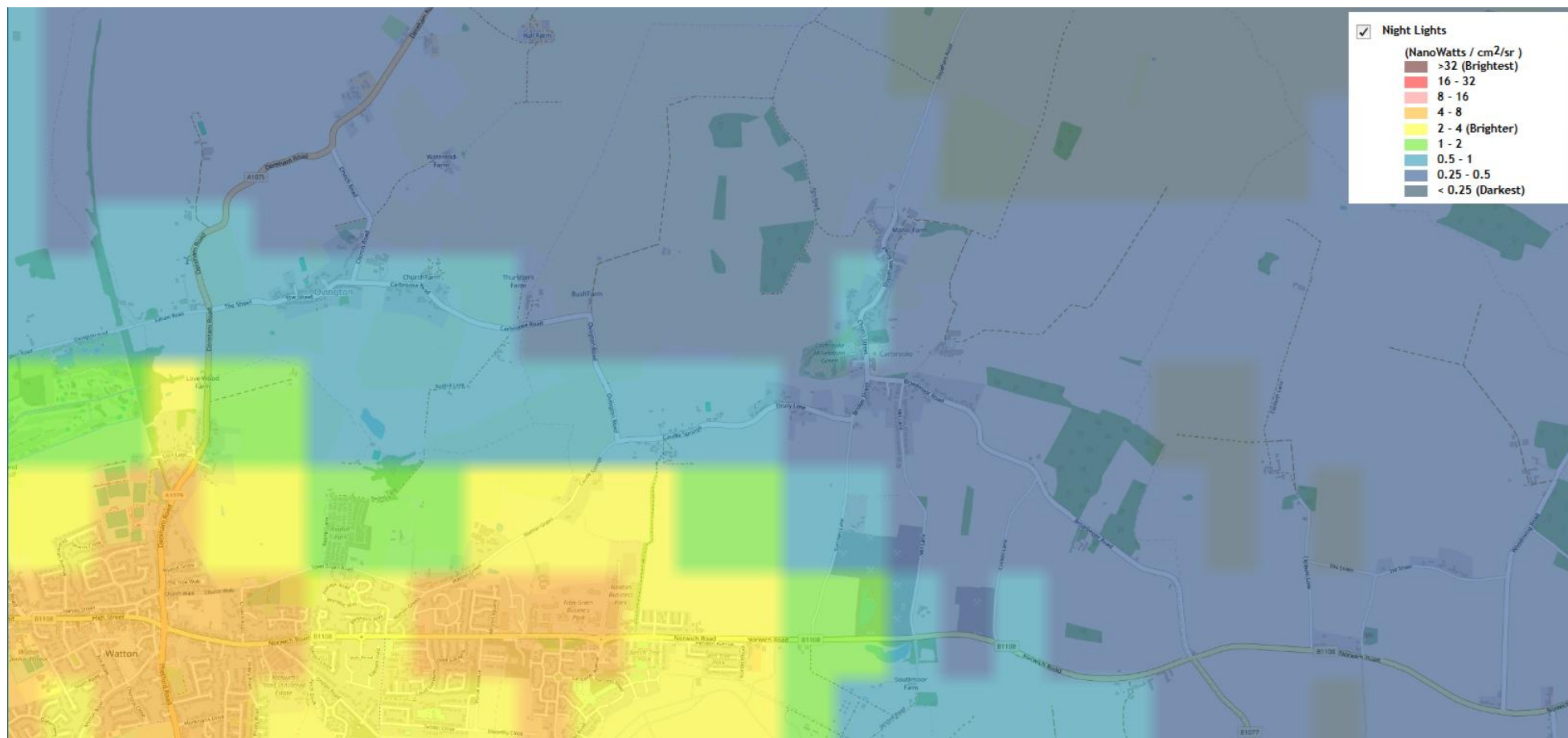
- Flood Zones 2 and 3 are mainly associated with watercourse corridors, lower-lying land and Carbrooke Fen.
- Surface water flood risk is more dispersed than fluvial flood risk.
- Surface water risk follows roads, field boundaries, drainage corridors, low points and parts of the built-up area.
- The parish contains a network of watercourses, ditches, ponds and drainage features which form part of its blue infrastructure.
- Norfolk County Council's Winter 2020–21 flood investigation records one incident of internal flooding at Norwich Road, Carbrooke

Dark skies

Rural character and dark skies

The CPRE dark skies mapping shown below provides an indication of relative night-time brightness and light pollution across the parish and surrounding areas.

Figure 13: CPRE Dark Skies Mapping for Carbrooke and surrounding area



The mapping shows a clear contrast between the brighter urban area of Watton and the darker surrounding rural landscape around Carbrooke. The brightest areas are concentrated around Watton and associated built development, while much of the agricultural land surrounding Carbrooke falls within darker mapped areas with lower levels of light pollution.

The mapping also shows a transition between the brighter urban edge of Watton and the darker rural landscape surrounding the older part of Carbrooke. Open agricultural land between the settlements contributes to this transition in night-time character. Carbrooke's settlement pattern also contributes to its rural character at night. The older part of the village is dispersed and linear in form, with development arranged along rural lanes including Church Street, Broadmoor Road, Mill Lane and Drury Lane. In many locations the settlement transitions directly into open countryside. Street lighting within the older village core is generally more limited and less urban in character than in larger settlements. In contrast, newer residential development south of Norwich Road contains a more suburban pattern of development and associated lighting infrastructure.

Resident responses to the community survey identified the parish's rural character and countryside setting as important local characteristics. Although dark skies were not identified as a dominant issue within the survey, responses frequently referred to maintaining a rural feel, avoiding urban sprawl and protecting the distinction between Carbrooke and Watton.

The Norfolk Local Nature Recovery Strategy also identifies reducing light pollution and supporting dark skies as measures capable of contributing to biodiversity and wider environmental quality.

Summary

- CPRE dark skies mapping shows a contrast between the brighter urban area of Watton and the darker rural landscape surrounding much of Carbrooke.
- Lower levels of light pollution are generally associated with agricultural land and open countryside around the parish.
- Open land between Carbrooke and Watton contributes to the transition between urban and rural night-time character.
- The older part of Carbrooke retains a dispersed rural settlement pattern with relatively limited lighting infrastructure.
- Newer development areas south of Norwich Road display a more suburban pattern of development and lighting.