

South Downs Forest Plan

2026-2036

Marden

Charlton & Drovers

Selhurst

Eartham

Houghton

South England Forest District

FE / South / FPR / South Downs / 2026



Forestry England
forests and woodlands
have been certified in
accordance with the UK
Woodland Assurance
Standard (UKWAS)



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1. Approvals

Date of commencement of plan: TBC

Approval period: 2026–2036

Summary of activity within approval period:

Forestry Activity	Habitat Type			
	Conifers (ha)	Broad-leaves (ha)	Open (ha)	Total (ha)
Clearfelling 2026-2036	83.60	12.94	1.32	82.02
Coppicing		3.43	N/A	
Restocking	0	60.32	N/A	
Regeneration Felling (LISS *)	Up to 11.5 of 46	Up to 92 of 368	N/A	Up to 103.5 of 414

(*) In addition to the proposed felling, up to 1,448 ha will be managed using Low Impact Silvicultural Systems. This will be done through the removal of single and small groups of trees, removing no more than 40% of the stems within any single management unit/compartment on a cycle of once every 10 years for broadleaves and once every 5 years for conifers. This operation will create space to allow crown and stem development, and allow in light to create suitable conditions for natural regeneration or underplanting.

FORESTRY ENGLAND Application for Forest Plan Approval

Forest District: South England Forest District

Forestry England Block Numbers: 66, 70, 71, 72

Woodland Names: Marden, Charlton & Drovers, Eartham & Selhurst, Houghton

Forestry England Plan Reference Number: FE / South / FPR / South Downs / 2026

Nearest Town or Village: Chichester

OS Grid reference: Marden – SU 818 127
Charlton & Drovers – SU 905 155 & SU 862 156
Selhurst – SU 923 123
Eartham – SU 945 114
Houghton – SU 995 114

Local Authority: Chichester District Council, Arun District Council

I apply for Forest Plan approval for the property described above and in the enclosed Forest Plan.

I undertake to obtain any permissions necessary for the implementation of the approved plan.

Signed:
Craig Harrison, Deputy Surveyor and Forest Management Director, South England Forest District

Date:

Approved:
Peter Coles, Area Director, Forest Services, South-East and London Area

Date:

2. FOREST PLANS

- Forest Plans define a long-term vision for a woodland (or group of woodlands), and usually look 50 to 100 years ahead. They set objectives and show how management will move towards achieving the long-term vision over the initial 10 to 30 years.
- This plan is a revision of the previous South Downs Forest Plan (approved in 2013). It was carried out in consultation with stakeholders and the public, and has incorporated developments in policy and local initiatives that have taken place since 2013.

Consultation and Approval Process

As part of the Forest Planning process we seek the views of stakeholders, including local communities and organisations involved with nature conservation, public recreation, and the timber industry. Through this consultation process we can ensure that an appropriate balance of objectives is achieved.

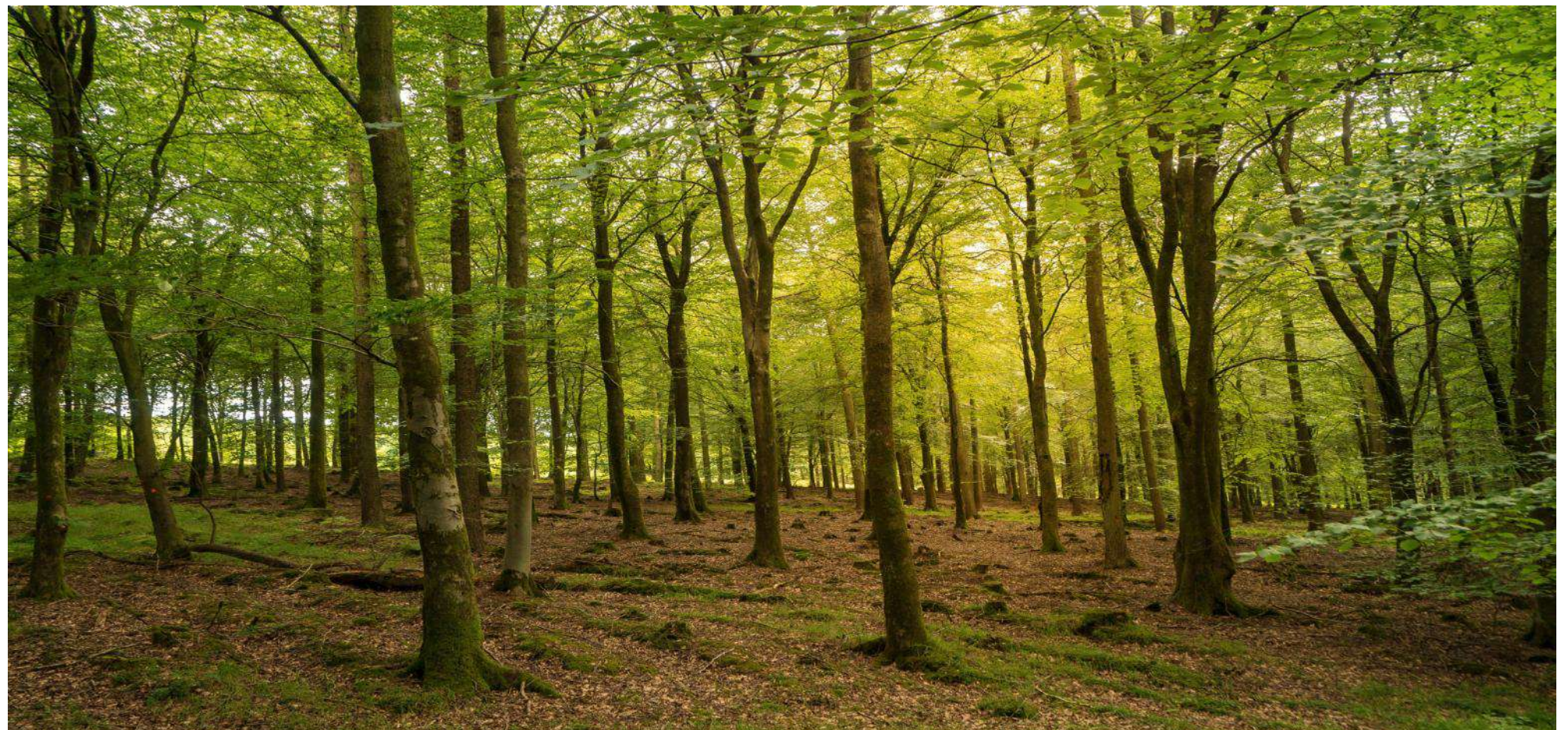
Approval of the Forest Plan is granted by Forest Services, which is the regulatory arm of the Forestry Commission. This regulatory approval is usually valid for 10 years and acts as a 10-year felling license.

The approved Forest Plan will be reviewed at year 5 to ensure proposals are still relevant, suitable and in line with current policy and guidance. This will also be an opportunity to evaluate the success of management over the 5-year period and carry out any amendments that may be required.

Context

Each section contains site specific details of location, tenure, landscape and historical context, current woodland structure, biodiversity and conservation, people, historic environment, soils, water, and timber production.

This information supports our decision making, both through the production of the Forest Plan and when planning forest operations to implement the proposals on the ground.



3. OBJECTIVES FOR THE SOUTH DOWNS WOODS

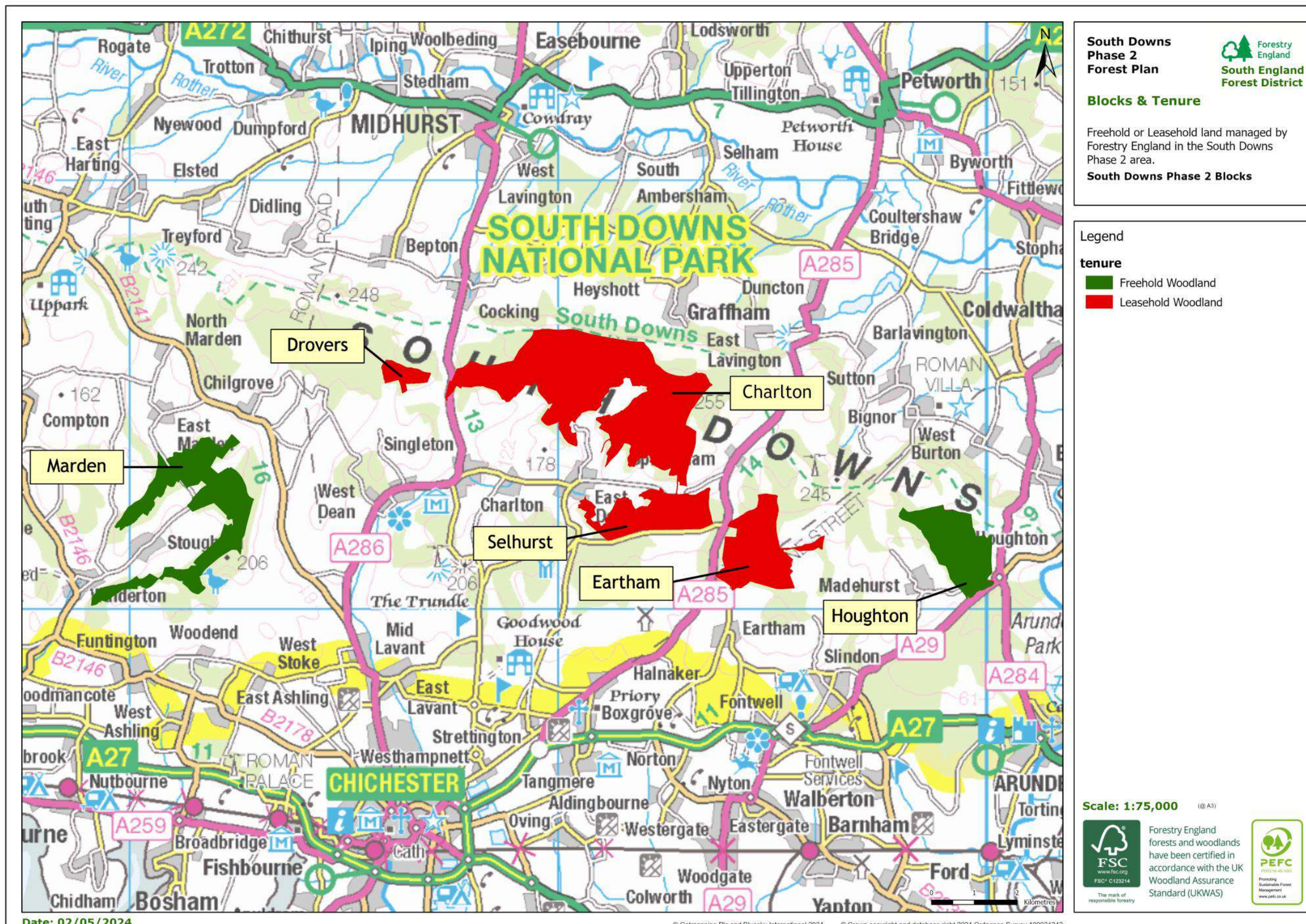
The woodlands of the South Downs will be managed in line with Forestry England's five-year strategic plan: Growing the Future. Our objectives will aim to deliver the following national targets:

- Build climate change resilience into our woods.
- Maintain, improve, and restore habitats and ecological function where possible and appropriate.
- Provide a valuable resource where people can interact with the natural environment.

SOUTH DOWNS OBJECTIVES:

- **Develop economic (timber supply) and ecological resilience against disease and climate change impacts by:**
 - Increasing the species and age diversity of the woodland through forest operations.
 - Where possible use a combination of natural regeneration, planting trees from local provenances, and also from suitable provenances matched with our likely future climate.
- **Promote species, habitat, and functional diversity by:**
 - Continuing to restore Planted Ancient Woodland Sites towards native and near native broadleaves.
 - Taking opportunities to manage open space and ride-edge habitats for the benefit of wildlife.
 - Moving towards the use of Low Impact Silvicultural Systems (LISS) in suitable stands.
 - Taking opportunities to promote soil enhancing species such as birch, hornbeam, small-leaved lime and alder.
 - Maintaining and improving, where possible, the favourable condition status of relevant Sites of Special Scientific Interest (SSSI) and Special Areas of Conservation (SAC)
- **In woods that are accessible to the public:**
 - Maintain the existing recreational capacity of the woodland.
 - Look for opportunities to develop recreational capacity and a high-quality visitor experience, while retaining woodland resilience.





4. Tenure

Forestry England is the freehold owner of Marden and Houghton. Charlton, Drovers, Selhurst and Eartham are managed under long-term leases. Shooting rights are reserved on certain leasehold areas. Long-term retention of trees surrounding the oil well operations will be managed under LISS (Low Impact Silvicultural Systems).

5. Landscape Context

The woodlands in this Forest Plan are on the South Downs, within the county of West Sussex, the second most wooded county in England with around 19% - 23% woodland cover. Most of the woodlands are part of a wider, almost contiguous wooded complex within the landscape, apart from Marden which is slightly more isolated.

National Character Area 125 describes the South Downs as “a broad elevated east-west chalk ridge with a predominantly steep north facing scarp slope and a gentle southerly dip slope, breaking into a series of hills in the west and terminating in distinctive chalk cliffs in the east”.

The woodlands lie in the area between the Arun Valley and A3M road, and are a significant part of the landscape. Marden and Charlton are visible from the surrounding villages and lanes and roads, while Selhurst looks across coastal plain towards Chichester. Eartham and Houghton are more hidden in the folds of the landscape.

The climate (as measured at Gatwick Airport) has annual precipitation of 572.7 mm and temperatures ranging from a mean 18°C for the warmest month to 5°C for the coldest month.

6. South Downs National Park

The woodlands in this Forest Plan are within the central area of the South Downs National Park. The South Downs National Park Authority Partnership Management Plan (in which Forestry England is listed as one of the Plan delivery partners) sets out a five-year strategy for the National Park, addressing the following areas:

- The Climate Emergency
- Economy
- Wellbeing
- Biodiversity
- New Housing and Infrastructure.

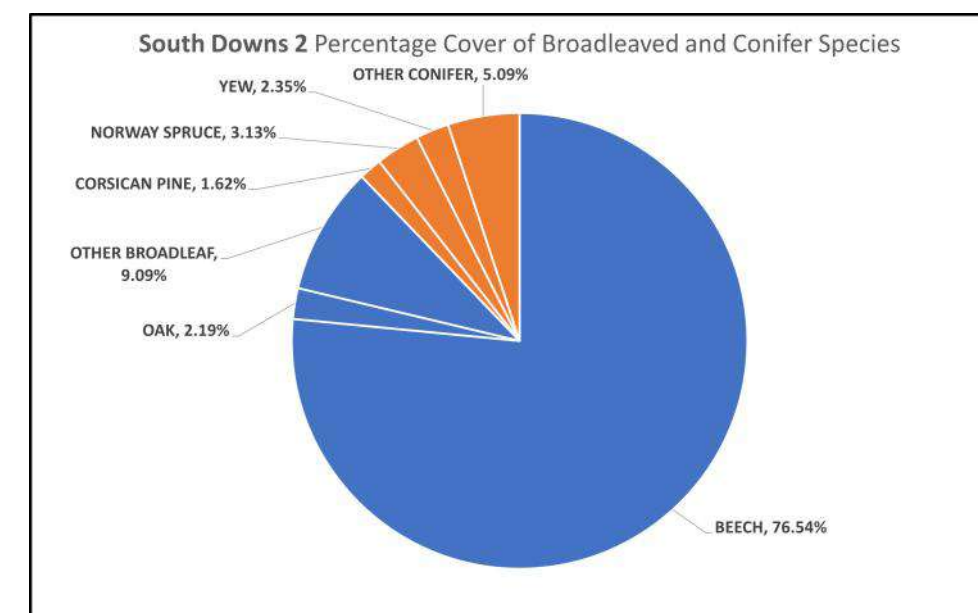
These main areas are broken down into a number of desired outcomes. Most of which align with Forestry England’s aspirations for our forests, including:

- Protecting landscape character
- Increasing resilience by improving soil and water
- Improve trees and woodland
- Managing priority habitats and species, and controlling invasive species
- Conserving heritage features
- Making the countryside diverse and accessible
- Improving health and wellbeing.

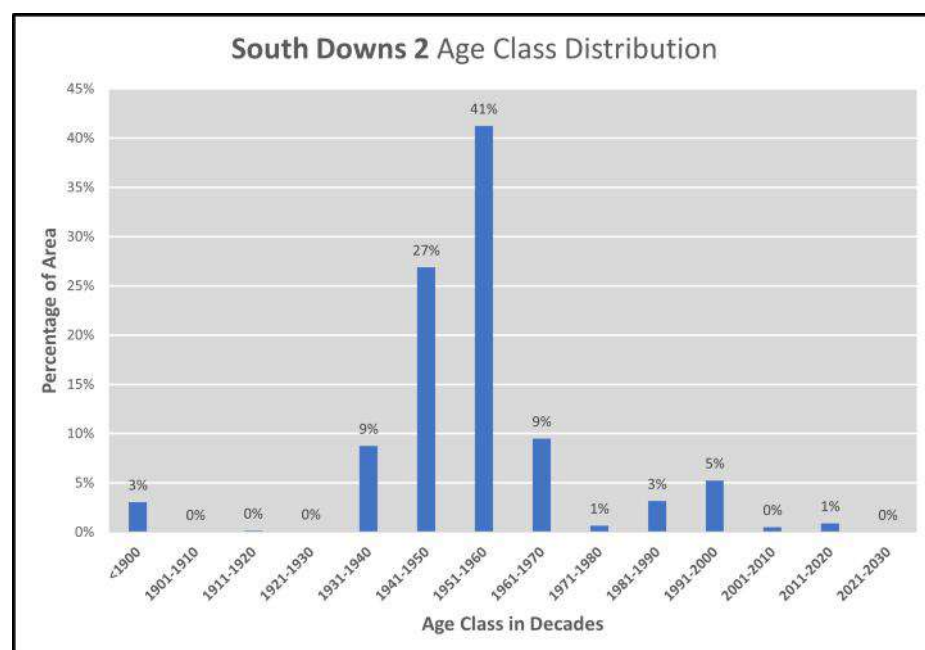
The objectives of this Forest Plan are in accord with the National Park Authority Partnership Management Plan objectives.

7. Current Woodland Structure

The woodlands of this Forest Plan are dominated by beech (*Fagus sylvatica*), which covers 77% of the total area. Other broadleaves account for 11% of the total area, of which 2% is oak (*Quercus robur*). The remaining 12% of the Forest Plan area is made up of conifers; mainly Norway spruce (*Picea abies*) and Corsican pine (*Pinus nigra ssp. Laricio*). Yew (*Taxus baccata*) is also present, and is an important feature in Marden where it forms areas of yew woodland that are part of Kingley Vale National Nature Reserve, SSSI and SAC. Conifers were often used in mixture as a nurse crop during the establishment of beech plantations. Many of these nurse trees have now been felled, and the remaining conifers are often intimately mixed within areas of beech. There are also areas of pure conifer plantation.



Although most of the woods are dominated by beech (with cover varying from 73% to 87% in the individual forests), Houghton forest is more varied. Here, beech cover is at 45%, and oak accounts for 12% of the area. Other broadleaves cover 29% of the area.



Around 68% of the Forest Plan area was planted between 1941 and 1960. A further 18% was planted in the decades either side of this main planting period (1931-1940 and 1961-1970).

7.1 Ancient Woodland Definitions

Ancient Woodland is defined as areas that have been under continuous woodland cover since at least 1600 CE. The definition includes areas that have been felled and regenerated. Ancient Woodland can be divided into:

- **Ancient Semi-Natural Woodland** (ASNW; generally containing a high percentage of native broadleaved tree species).
- **Planted Ancient Woodland Sites** (PAWS; areas that have been planted with monocultures of generally non-native tree species, but also including areas that have been planted with native species such as beech).

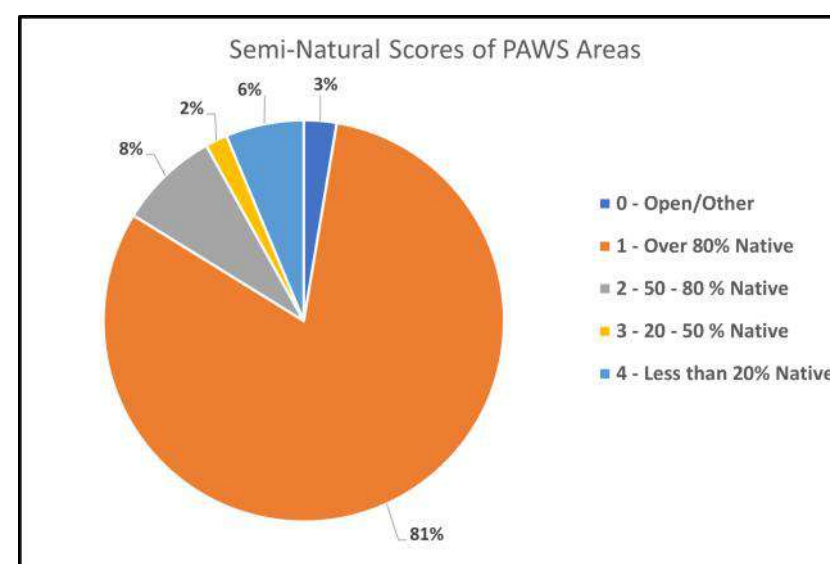
The table below shows the total area of each forest, and the area within them classified as either ASNW, PAWS, or other woodland.

Forest	Total Area	ASNW	PAWS	Other Woodland
Charlton & Drovers	988.40 ha	5.02 ha	837.26 ha	146.12
Eartham	260.14 ha	5.82 ha	242.19 ha	12.13 ha
Houghton	235.93 ha	63.52 ha	67.59 ha	104.82 ha
Marden	393.99 ha	4.90 ha	138.62 ha	250.47 ha
Selhurst	211.00 ha	31.30 ha	77.69 ha	102.01 ha

7.2 Semi-Natural Scores

Beginning in 2005, a semi-natural score has been calculated for each sub-compartment. This involves classifying the trees in each sub-compartment as native or non-native and summing the percentage of each. The classification used is:

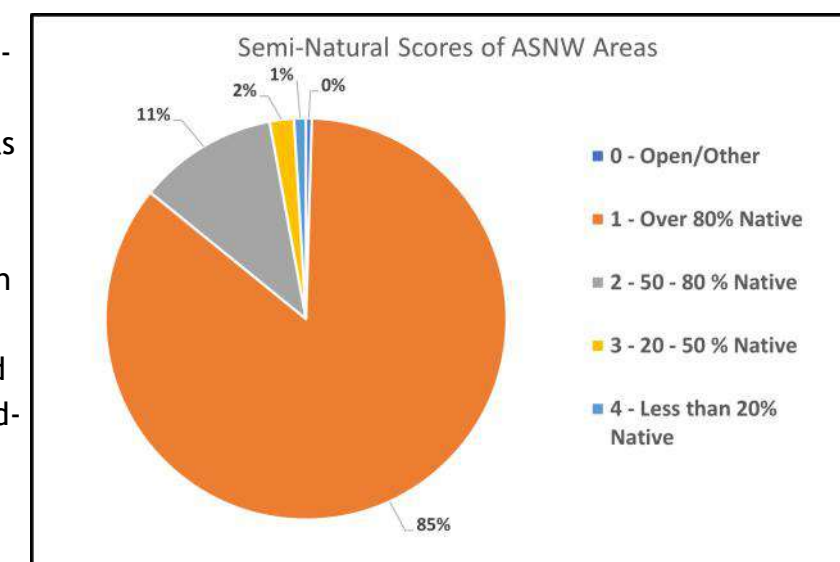
- **SN 0** = 0% (no trees are present)
- **SN 1** = 81%-100% (mostly or fully native tree species)
- **SN 2** = 51%-80%
- **SN 3** = 21%-50%
- **SN 4** = 1%-20% (predominantly non-native, usually conifer)



Semi-natural scores can be useful when assessing whether operations to diversify stands or restore PAWS to native woodland are proceeding in the desired direction. Forestry England will continue its work to enhance the biodiversity of its unrestored PAWS. By 2044, we will elevate the semi-natural score of these sites by at least one class, moving them towards a

more dominant native canopy and a richer, more natural woodland environment. The semi-natural scores in this document are only used for ASNW and PAWS areas. Although the woods of this Forest Plan are over 76.44% native, over 20% (407 ha) of the remaining area is made up of coniferous, mixed and non-native broadleaved woodland. It is in these areas where the above target will need to be met.

Although most of the beech areas of this Forest Plan are classified as PAWS, they are scored as SN1 because beech is a native species. The move towards low impact management, along with the need to regenerate and diversify large areas of even-aged beech woodland to native broadleaves will make PAWS restoration a challenge in these areas.



8. Silvicultural Systems

As with previous Forest Plans for these woods, we will continue to use Low Impact Silvicultural Systems (LISS) to manage the majority of the area. The ideal scenario with LISS is to use natural regeneration in felled areas, both to restock with site adapted species, and to reduce the cost of restocking. However, natural regeneration may be unsuitable in some areas where the regenerating species are predicted to be unsuitable for the site as the climate becomes warmer, or where we are restoring PAWS to native/near-native species. Planting will be necessary on these sites, ideally with planting stock from more southerly species provenances that will be suitable for a warming climate. Whether using planting or natural regeneration, we will use the minimum densities of young trees of 1100 per hectare for broadleaves and 1800 trees per hectare for conifers. It is likely that clear felling will still be necessary as a short-term response in areas affected by pests and diseases e.g., *Ips typographus* in areas of Norway spruce. Planting will be required on these sites, using tree species and provenances that are well matched to the local soils and, where possible, sourced from more southerly origins to ensure resilience and suitability for a warming climate. The Forestry Commission's "Guide to restocking your woodlands (*Ips typographus*)" has indicative suggestions for species.

- We will move towards diversifying species in extensive stands of even aged beech. Planning for diversification will be based on Forest Development Types (FDTs), a framework for forest stand management developed recently by Forest Research. We will use FDTs to guide our interventions as we work towards creating continuous cover stands with mixtures of species and greater variety of stand structures.

9. Biodiversity and Conservation

9.1 Protected Sites

Marden contains parts of Kingley Vale Site of Special Scientific Interest (SSSI), which is also a part of the Kingley Vale Special Area of Conservation (SAC). This SSSI and SAC consists of yew (*Taxus baccata*) woodland along with areas of chalk grassland and scrub. This designated habitat mix continues within the adjacent Kingley Vale National Nature Reserve. Unit 1 of Heyshott Down SSSI lies north of Charlton, and Unit 1 of Fairmile Bottom SSSI south of Houghton.

The nearby Singleton and Cocking Tunnels SSSI/SAC is an important hibernation site for a range of bat species. Given its proximity, these bats are likely to use our woodlands for foraging and commuting. Our management will reflect this by maintaining habitat connectivity, safeguarding potential roosting sites, and minimising disturbance during sensitive periods.

- We will continue to manage Kingley Vale SSSI as agreed with Natural England in the SSSI Management Plan with a mixture of grazing and mechanical vegetation management.

9.2 Biodiversity Opportunity Areas

Biodiversity Opportunity Areas (BOAs) show where improved management (or restoration and re-creation) of Priority Habitats will enhance landscape connectivity for the benefit of Priority Species. The Sussex Nature Partnership has developed several BOAs covering the county, three of which are adjacent to this Forest Plan:

- Arundel Park – Houghton
- Walderton to Welldown including Kingley Vale–Marden
- Western Escarpment–Charlton and Drovers

Each BOA document identifies the priority habitats within the area and lists the priority species that would benefit from their management and restoration. These benefits are achieved through actions such as:

- Woodland management, restoration, and diversification
- Enhancing woodland butterfly interest
- Strengthening ecological networks
- Improving and managing access

Each BOA also provides a list of species expected to respond positively to effective management and restoration of these habitats. Many of these actions are already embedded in our routine forest management, for example, ride and road-edge management to support lepidoptera and other invertebrates, but we will actively seek additional opportunities to promote and expand BOA habitats.

- We will seek opportunities to create linkages with adjacent designated and non-designated habitats, strengthening ecological connectivity and supporting species movement. This work will build on previous initiatives, such as the reintroduction of pearl-bordered fritillaries through the Pearls of the High Forest project in partnership with Butterfly Conservation. By enhancing these connections, we aim to improve habitat resilience and promote the recovery of priority species.

9.3 Habitat Management

Woodland biodiversity depends on Habitat structure, Open space and Deadwood. These will be promoted by appropriate management.

9.4 Forest Habitat Structure

One of the main factors affecting woodland biodiversity is vegetation structure. As an example, several bird species are known to be dependent on particular types of vegetation structure within stands. Some prefer high canopies with little understorey, and others need varied layers of ground and shrub vegetation in which to live, feed and reproduce. Most of the woodland in this Forest Plan will be managed using Low Impact Silvicultural Systems (LISS). As stands are regenerated, these systems should result in a wider range of vegetation structures. Most of these systems also depend on maintaining canopy cover, which helps ensure habitat continuity for a wide range of species.

In areas where open habitats are next to forest stands (such as ride edges), the most favourable habitat structure tends to grade from low grassy vegetation through a taller band of shrub vegetation, which then phases in to the taller canopy trees. This is usually referred to as two or three-zone ride management. Two-zone ride management typically consists of a central grass strip flanked by a single edge zone of taller vegetation, providing basic habitat diversity and sunlight penetration. In contrast, three-zone ride management adds an intermediate herbaceous zone between the grass strip and the shrub edge, creating a more gradual transition from open ground to woodland. These approaches significantly increases structural diversity, supports a wider range of species (including butterflies, birds, and invertebrates), and improve connectivity across the woodland. Scallop—curved indentations along ride edges—will further enhance microhabitats and increase the availability of warm, sheltered conditions for wildlife.

9.5 Open Space

Open space is another major contributor to woodland biodiversity. We will look for opportunities to enhance open space by managing roads, rides, and box junctions through selective tree removal, and by introducing three-zone ride management and creating scallops where appropriate. In addition, we will explore the creation of woodland glades and small meadows, which provide valuable habitats for pollinators and light-demanding species. Open areas can also be generated through group felling, creating temporary clearings that encourage natural regeneration and increase structural diversity within the woodland. Most ride enhancement will take place as part of harvesting operations, but we will seek funding for additional work if suitable project areas can be identified.

- We will seek opportunities to enhance open space by managing roads, rides, and box junctions through selective tree removal, and by introducing structured ride management systems—either two zone or three zone—along with creating scallops where appropriate.

9.6 Deadwood and Veteran Trees

Dead and decaying wood is an important part of several woodland food webs and plays a major role in ecosystem functioning.

- We will assess the current levels of standing and fallen deadwood, as well as veteran trees within forest stands. These assessments will either align with national surveys—such as the National Forest Inventory and the Ancient Tree Inventory - or use locally developed survey methods where appropriate. Where gaps are identified, we will actively create additional deadwood habitats to enhance ecological value and support biodiversity.

10. People

The woods of this Forest Plan provide opportunities for people from the surrounding area and further afield to explore the landscape and its wildlife, and to lead an active lifestyle. At present, the woods are mainly used for walking (including dog walking) and cycling.

Marden is dedicated as open access land under Section 16 of the Countryside and Rights of Way Act (2000). Houghton is not CROW designated, but access is permitted through the woods. Eartham is a leasehold wood, but access is permitted via the road and ride network.

We allow limited access in Selhurst. As well as Public Rights of Way (PRoWs), there is a permissive bridleway running east-west along the southern edge of the wood. Access to this bridleway is via the public car park, which also serves as a viewpoint across to the south coast, and from a horse unloading area located slightly further east. There is another small public carpark on the northern side of the wood, which links into the PRoW network. In Charlton, public access is limited to the PRoW network.

The South Downs Way National Trail runs east-west along the northern edge of Charlton Forest. This is joined by the New Lipchis Way and the West Sussex Literary Trail both of which run north-south through the forest. The Monarchs Way Long Distance Path passes through Marden, Selhurst, Eartham, Houghton forests. The section running through Eartham follows the route of Stane Street Roman road. Both the South Downs Way and the West Sussex Literary Trail are open to cyclists as well as walkers.

Horse riders can use the permitted bridleways throughout the South Downs forest blocks. Cyclists are permitted to use the same bridleways and green lanes, and they may also access the main forest roads within areas designated as open access.

11. Historic Environment

There are a large number of Scheduled Monuments (SMs) and unscheduled heritage features in the woods of this Forest Plan. These range from:

- Agricultural features and linear earthworks from the neolithic, Roman and medieval periods
- Burial mounds
- Artifacts such as flint axes (and other worked flint) and medieval pottery
- A Roman temple and road
- Chalk and gravel pits and a dew pond
- Charcoal burning platforms
- Second World War features including a Canadian overhead railway system for timber transport, a prisoner-of-war camp and an Auxiliary bunker.

Many of the unscheduled features were revealed by recent Lidar surveys of the South Downs, and more are being added to our maps annually.

SMs are managed under management plans agreed with Historic England, and unscheduled heritage features (and suspected features) are managed according to UK Forestry Standard guidelines. We also arrange desk-based assessments, and if necessary walkovers by archaeologists when planning forestry operations.

12. Geology and Soils

The soils under the woods of this Forest Plan have generally formed over chalk bedrock. In parts of Marden, there is also a layer of superficial deposits over the chalk. Soils over these superficial deposits are generally stoney or gleyed argillic brown earths, which are freely draining, slightly acid and loamy soils of low fertility. The soils beneath Charlton and Drovers, Eartham, Houghton and Selhurst are mainly rendzinas, with areas of stoney or gleyed typical brown earth. These soils are freely draining, loamy and lime rich, and of medium fertility.

13. Water

The woods in this Forest Plan sit on top of the South Downs chalk on freely draining soils and highly porous bedrock. None have any watercourses, and waterbodies are limited to a number of small fireponds.

14. Pests and Diseases

A number of existing and new pests and diseases are known or thought to be present in the South Downs blocks. These include:

- Ash dieback (*Hymenoscyphus fraxineus*), which has become a major problem in recent years, will continue to require the removal of dangerous trees. However, ash within forest stands will be retained to allow natural regeneration, enabling natural selection to act. Recent research has shown that younger generations of ash trees exhibit greater resistance to dieback compared to older trees, providing compelling evidence that natural selection is promoting resilience within the species. This approach supports the long-term recovery of ash populations while maintaining woodland biodiversity.
- Dothistroma needle blight (*Dothistroma septosporum*) mainly affects Corsican pine and is present throughout the area.
- Larger eight-toothed European spruce bark beetle (*Ips typographus*) is an ongoing risk for the spruce component located in the South Downs blocks. These are within the Plant Health (*Ips typographus*) Demarcated Area Notice, which places legal obligations and restrictions on the management and movement of infected timber and other material within this area.
- Proactive management of spruce on the public forest estate, especially within the demarcated area, is essential to protect the nation's timber resources. Removing spruce from this area helps reduce the risk of infestation by Eight-toothed spruce bark beetle (*Ips typographus*) which is blowing over from the continent.

Pest and disease outbreaks can mean woodlands are at high risk of unplanned change through premature felling and altered restocking plans. Our guidance and action plans regarding plant health are regularly evolving to adapt to plant health threats. We will continue to monitor for diseases as required and take any action required. Any changes to the Forest Plan will be notified or agreed with Forest Services in accordance with relevant guidance.

Browsing by deer on young trees is also a threat to woodland regeneration in southern England. Fallow (*Cervus dama*), Roe (*Capreolus capreolus*) and Muntjac (*Muntiacus reevesi*) are the most common deer species within the South Downs woods.

- Deer will be managed in accordance with the South England Forest District Deer Management Strategy and in the wider landscape through partnership work with local Deer Management Groups.

15. Glossary

Ancient Woodland

Areas of semi-natural native woodland that have had continuous woodland cover since at least 1600. They are particularly rich in biodiversity and this is often notable in their characteristic ground flora.

Ash Dieback (*Hymenoscyphus fraxineus*)

Ash dieback (also known as Chalara ash dieback) is a highly destructive fungus killing native ash trees across the UK. Young and coppiced trees will die quickly once infected, more mature ash may survive for a number of years once infected. Causes the timber to lose strength, become brittle and trees to start dropping limbs.

Aspect

The direction a slope faces. This can have a strong influence on the microclimate, ground vegetation, soils and hydrology.

Canopy

The mass of foliage and branches formed collectively by the crowns of trees. The shade it casts has a strong influence on the plants, trees and shrubs beneath it.

Clearfelling

Cutting down of an area of woodland (if it is within a larger area of woodland, it is typically a felling greater than 0.25 ha). A scatter or small clumps of trees may be left standing within the felled area.

Coppice

Coppicing is silvicultural system based on regeneration by regrowth from cut stumps (coppice stools). The same stool is used through several cycles of cutting and regrowth. Coppice can also refer to an area of woodland in which the trees or shrubs are periodically cut back to ground level to stimulate growth and provide wood products. 'Coppice with standards' refers to coppice with a scatter of trees grown on a long rotation to produce larger-sized timber and to regenerate new seedlings to replace worn out stools.

Coupes

Areas of forest that have been or will be managed together.

Dothistroma Needle Blight (DNB)

DNB is a fungal disease affecting mainly pine species. The fungus affects the needles of the infected tree, which are eventually shed. This can continue year on year and gradually weaken the tree, significantly reducing timber yields. It can also eventually lead to mortality.

Ecosystem Services

Ecosystem services are the goods and services that people depend on that arise from ecosystems. They are usually categorised into Provisioning (eg: timber, water, food production), Regulating (eg: regulation of climate and diseases), Cultural (eg: recreational opportunities, aesthetic value) and Supporting services that underpin these (eg: crop pollination).

Ecosystem

An ecosystem is an interconnected network formed of all the living things in a given area (plants, animals and organisms) and their interactions with each other and their non-living environments (eg: weather, earth, sun, soil & climate).

Forest Plan (FP)

A FP is primarily a landscape-scale felling and restocking plan. It provides a holistic, long-term approach to planning and forest design, detailing felling operations over a 10 year period for the purposes of licencing felling and outlining proposals over the next 50 years. FPs are reviewed every 5 years and redrawn and approved every 10 years.

Forest Stewardship Council® (FSC®)

An internationally recognised body made up of non-government organisations promoting sustainable forest management to the forest industry and consumers.

Forestry England

Forestry England is the executive agency of the Forestry Commission that is responsible for managing the Nation's Forests in England.

Group Selection

A method of managing irregular stands in which regeneration is achieved by felling trees in small groups. Group selection involves felling groups of trees (generally <0.25 ha per group)

Historic Environment

The physical remains of every period of human development starting from 450,000 years ago and including earthworks, buried remains, structures and buildings.

Ips typographus (larger eight-toothed European spruce bark beetle)

Although the beetle prefers stressed or weakened trees, under the right environmental conditions its numbers can increase enough to result in attacks on healthy trees. If left uncontrolled, the beetle could cause significant damage to the United Kingdom's spruce-based forestry and timber industries.

Landscape Character

England is renowned for its rich, diverse and beautiful landscapes which have their own distinct local characters. These have been shaped over many thousands of years by natural influences such as soil and landform and by generations of human activity.

Long Term Retention

Individual, stable stands and clumps of trees retained for environmental benefit significantly beyond their normal economic age or size.

Low Impact Silviculture Systems (LISS)

Silvicultural systems including group selection, shelterwood or under-planting, small coupe felling, coppice or coppice with standards, minimum intervention and single tree selection systems. LISS are generally compatible with windfirm conifer woodlands and most broadleaved woodlands.

Minimum intervention

Management with no systematic felling or planting of trees. Operations normally accepted are fencing, control of non-native plant species and vertebrate pests, maintenance of paths and rides and safety work.

National Character Area (NCA)

Broad divisions of landscape form the basic units of cohesive countryside character, on which strategies for both ecological and landscape issues can be based. There are 159 Character Areas, each of which is distinctive with a unique 'sense of place'.

National Nature Reserve (NNR)

NNRs were established to protect some of our most important habitats, species and geology, and to provide 'outdoor laboratories' for research. Most NNRs offer opportunities to the public to experience wildlife first hand and learn more about nature conservation.

Native

Native tree species colonised Britain without human assistance at the end of the last ice age, before the English Channel cut Britain off from mainland Europe.

15. Glossary (cont.)

Natural Regeneration

The growth of new trees from seed found in the soil or cast from adjacent trees. Regeneration only occurs where suitable seed sources and conditions are present.

Natural Reserve

Natural Reserves are areas which are predominantly wooded, usually mature and intended to reach biological maturity. They are permanently identified and in locations which are of particularly high wildlife interest or potential. They are managed by minimum intervention unless alternative interventions have higher conservation or biodiversity value.

Open Space

Areas within a forest without trees, such as glades, stream sides, grass or heathland, water bodies, rocky areas, roads and rides.

Operational Plans

Detailed site plans prepared in advance of all major forest operations providing guidance to Forestry England staff and contractors. They identify site constraints, opportunities and areas requiring special treatment or protection.

Plantation on Ancient Woodland Site (PAWS)

Ancient Woodland areas where semi-natural woodland has been cleared and replaced by plantation, often including non-native species. PAWS can include both broadleaved and conifer woods and often retain remnant ancient woodland features like species-rich ground flora or undisturbed soils. Also known as Ancient Replanted Woodland.

Pollarding

A form of pruning where the upper branches of a tree are removed, promoting a dense head of foliage and branches. Cutting is usually around 2.4 metres above ground - the height that wild animals or domesticated stock could reach. Traditionally, trees were pollarded for fodder or for wood. Fodder pollards are generally pruned every two to six years, wood pollards at longer intervals, usually of eight to 15 years, to produce upright poles for eg: fence rails and posts.

Production Forecast

The projected volume of biomass that the forest will produce each year. Calculations are based on species, age, net area and yield class.

Public Rights of Way (PROW)

Access routes open to the public through legal designation. These include footpaths, by-ways and bridleways.

Regeneration Felling

Where individual trees of varying sizes are selected and removed from a stand. The whole stand is worked and the aim is to maintain full stocking of all tree sizes and ages, from seedlings to mature trees, in any one area.

Respacing

Thinning of dense natural regeneration at a young age (generally when trees are 2-5m tall) to produce a more consistent crop, focus available resources on the remaining trees and promote good development.

Restocking

The establishment of trees where felling has taken place. Restocking may be achieved through natural regeneration, but it is more usually associated with replanting.

Ride

Forestry term for unsurfaced roads, paths and tracks within a woodland which provide access for management and other activities.

Scheduled Monument

A scheduled monument is a site that is legally protected because of its historical importance.

Semi-natural woodland

Those woodlands which are comprised mainly of locally native trees and shrubs, and have some structural characteristics of natural woodland.

Shelterwood

The shelterwood system involves the felling of a proportion of the mature trees within an area whilst leaving some trees as a seed source and shelter for natural regeneration. The seed trees are subsequently removed. Note that the term 'seed tree system' is often used to describe 'shelterwoods' with densities of <50 retained mature trees per hectare.

The spatial arrangement of the retained trees can be uniform, in groups, or in strips, so giving rise to the name of different shelterwood systems. The removal of the seed trees can involve several felling operations.

Silvicultural Systems

Silviculture is the process of tending, harvesting and regenerating a forest. Different patterns of felling and regeneration form distinct 'silvicultural systems'. Different systems may be suitable for different management objectives (eg: conservation in an ancient woodland vs timber production in a conifer plantation).

Site of Special Scientific Interest (SSSI)

A SSSI is a formal conservation designation. Usually, it describes an area that is of particular interest to science due to the rare species of fauna or flora it contains - or even important geological or physiographical features that may lie in its boundaries.

Special Area of Conservation (SAC)

SACs are protected areas in the UK designated under the Conservation of Habitats and Species Regulations 2017 (as amended) in England and Wales. These areas form an internationally important network of high-quality conservation sites that make a significant contribution to conserving Annex I and Annex II habitats and species.

Strategic Plan

Forestry England's guide to the management of woodland in Central England Forest District. It divides the district into zones for the purpose of management and ensures forestry activities reflect the local ecological, social and cultural individuality of each woodland.

Sub-compartments

Areas of forest that form a homogeneous crop in terms of age, species composition and condition. They may be split across several locations and their boundaries may change as the forest develops after felling and restocking.

The nation's forests

The woodlands managed by Forestry England. This includes both freehold and leasehold land, previously referred to as the Public Forest Estate.

Thinning

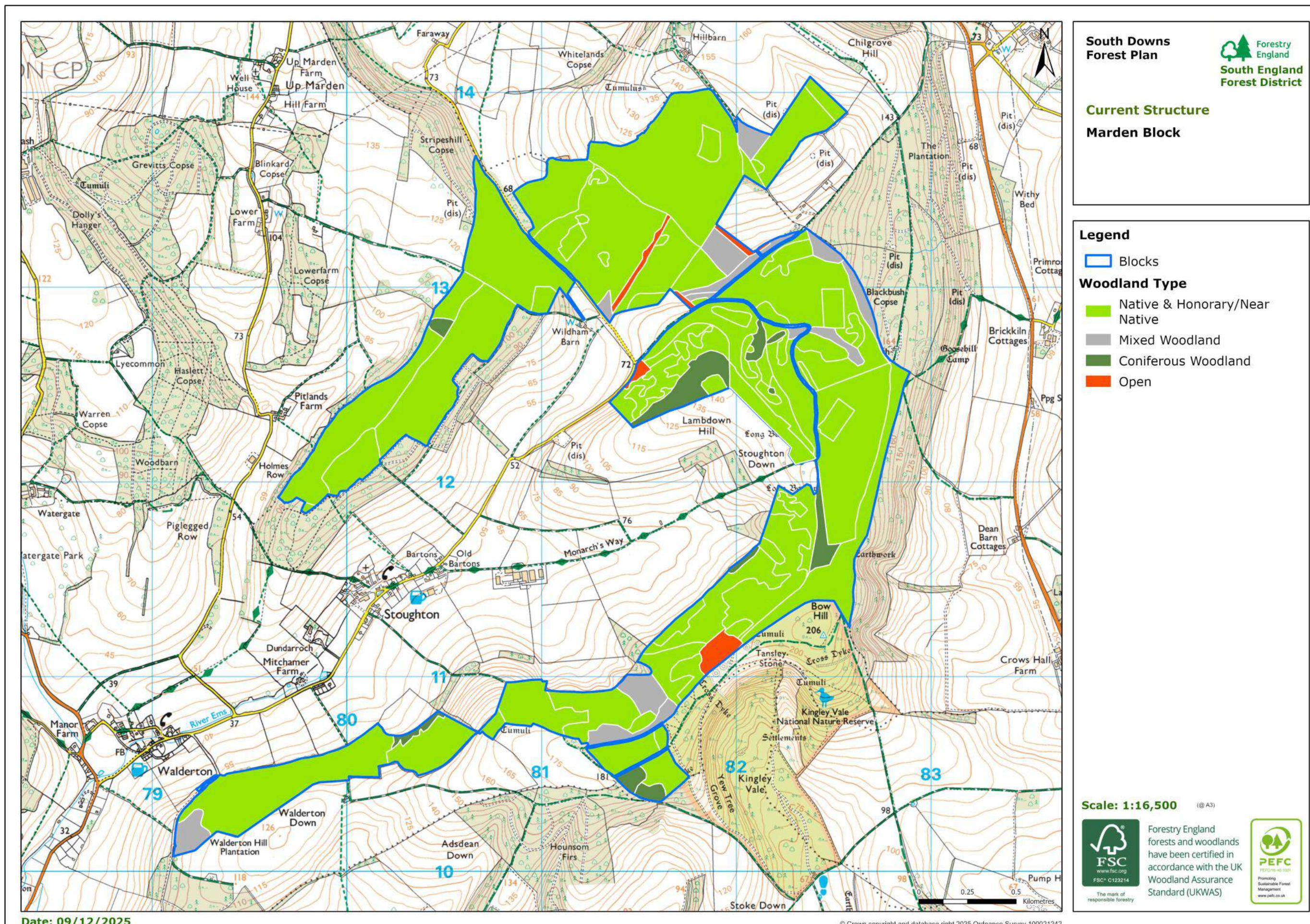
The removal of a proportion of trees in a forest after canopy closure, usually to promote growth and greater value in the remaining trees.

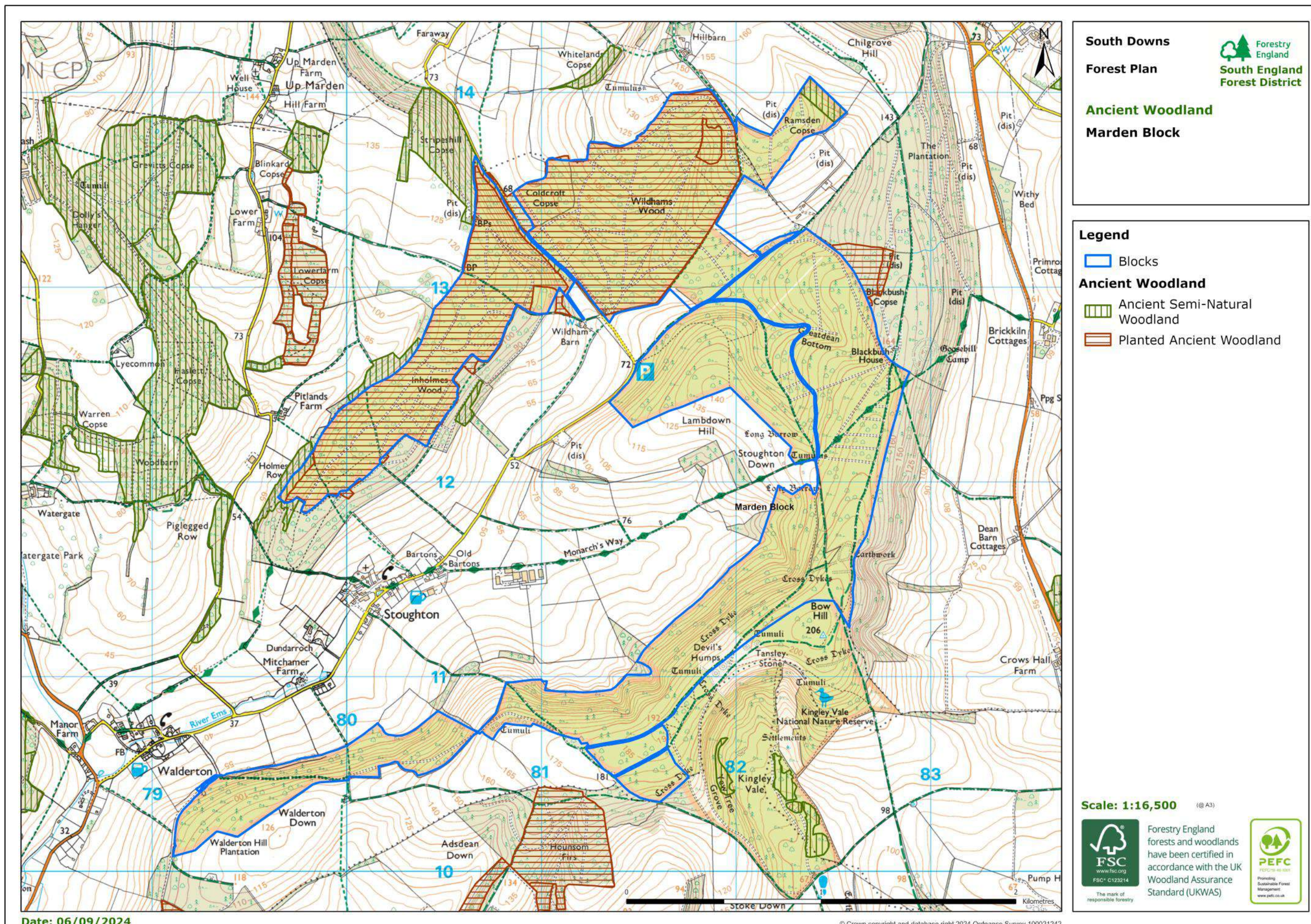
UK Forestry Standard (UKFS)

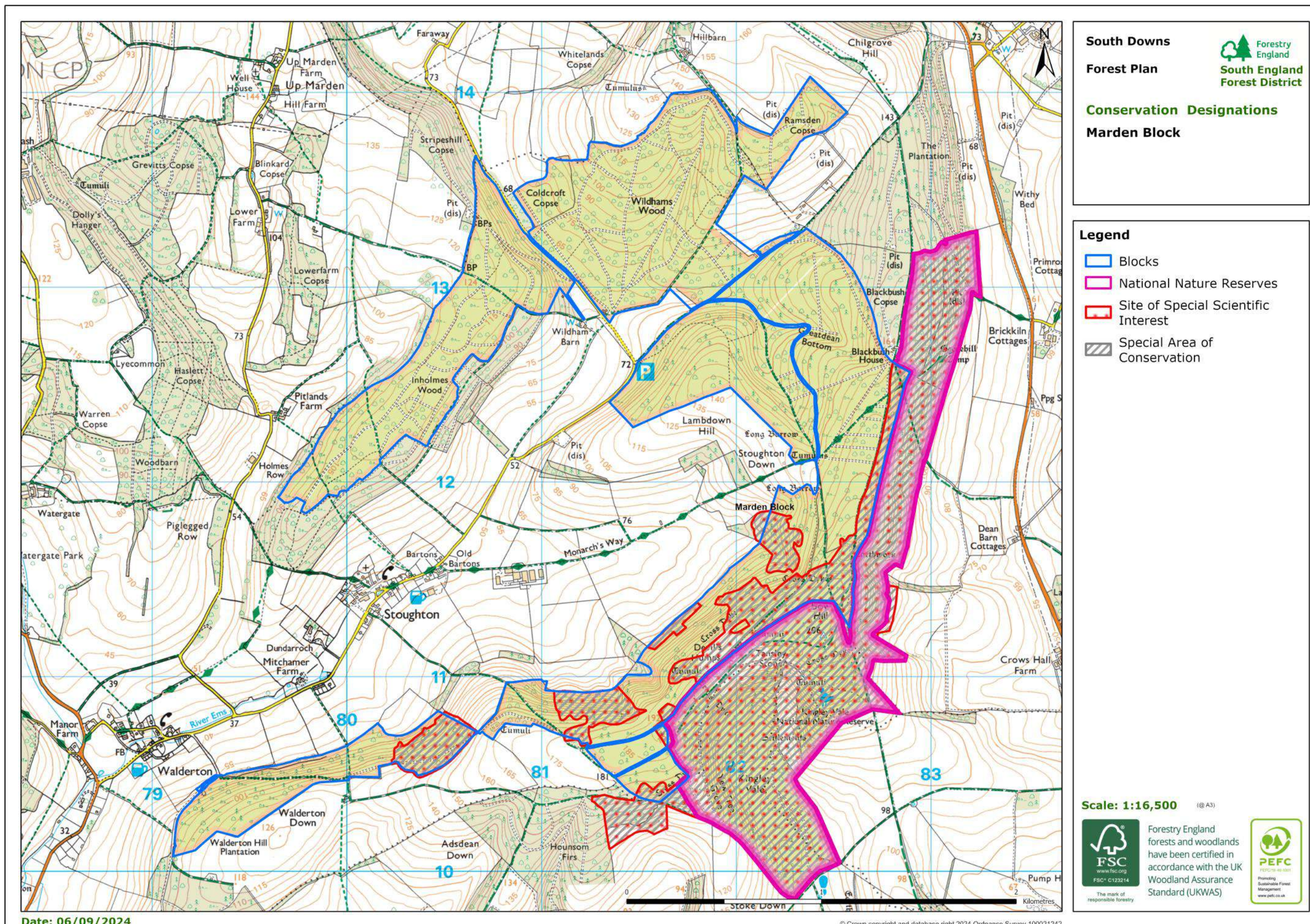
Outlines the Government's criteria and standards for the sustainable management of forests in the UK.

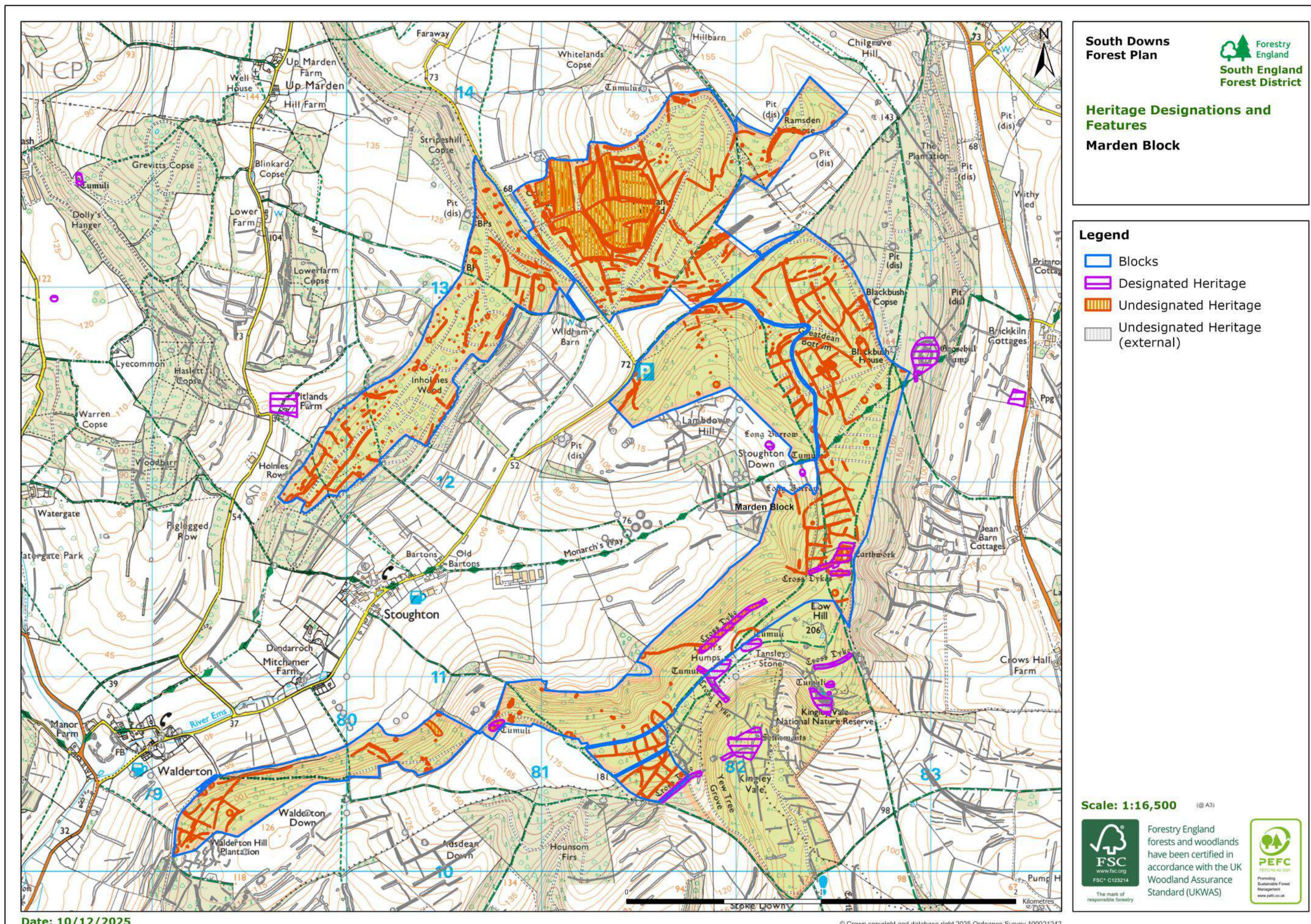
UK Woodland Assurance Standard (UKWAS)

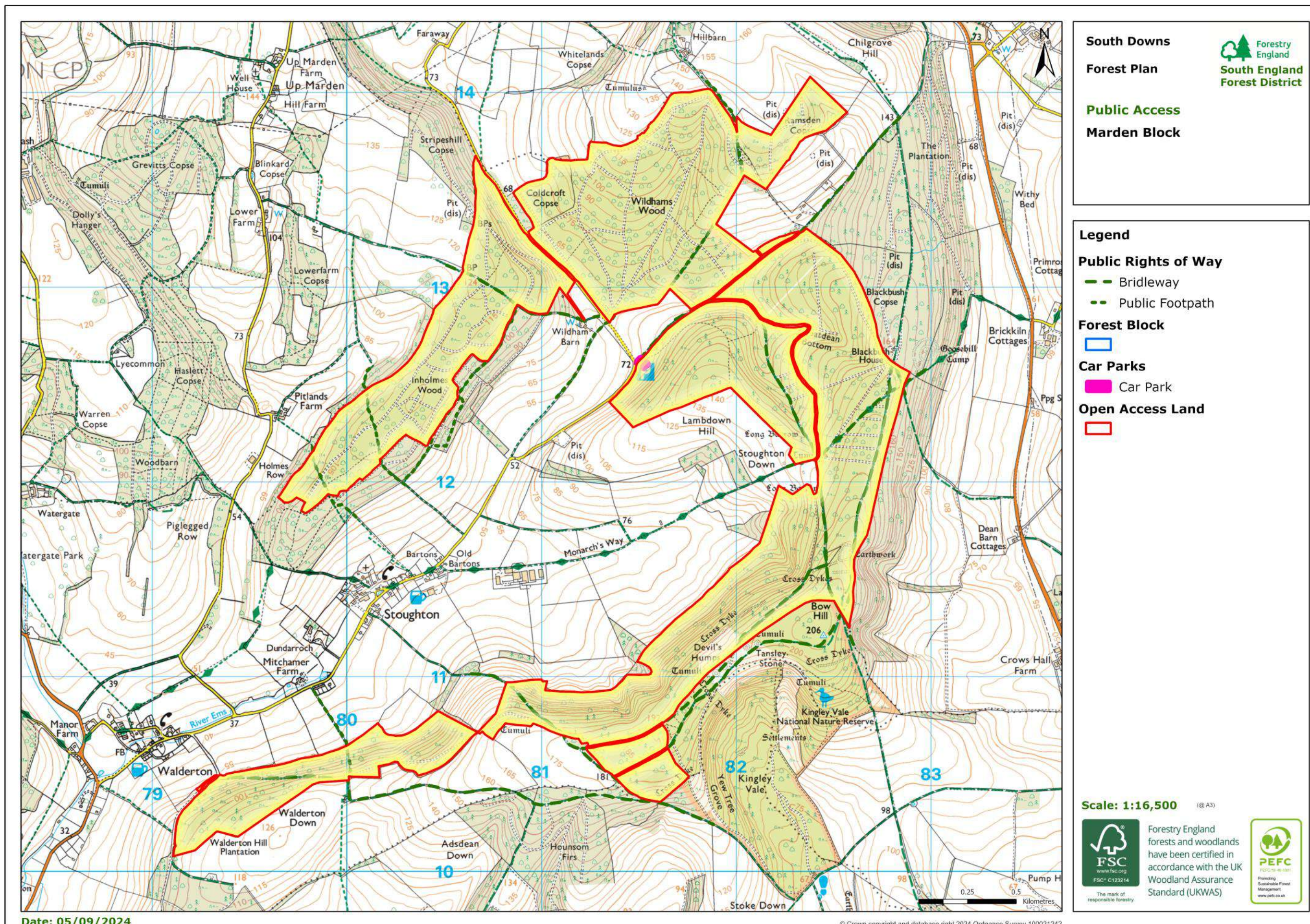
A voluntary scheme for the independent assessment of sustainable forest management in the UK. The Scheme has been developed by a partnership of forestry and environmental organisations in response to growing consumer demand for timber products from sustainably managed forests.

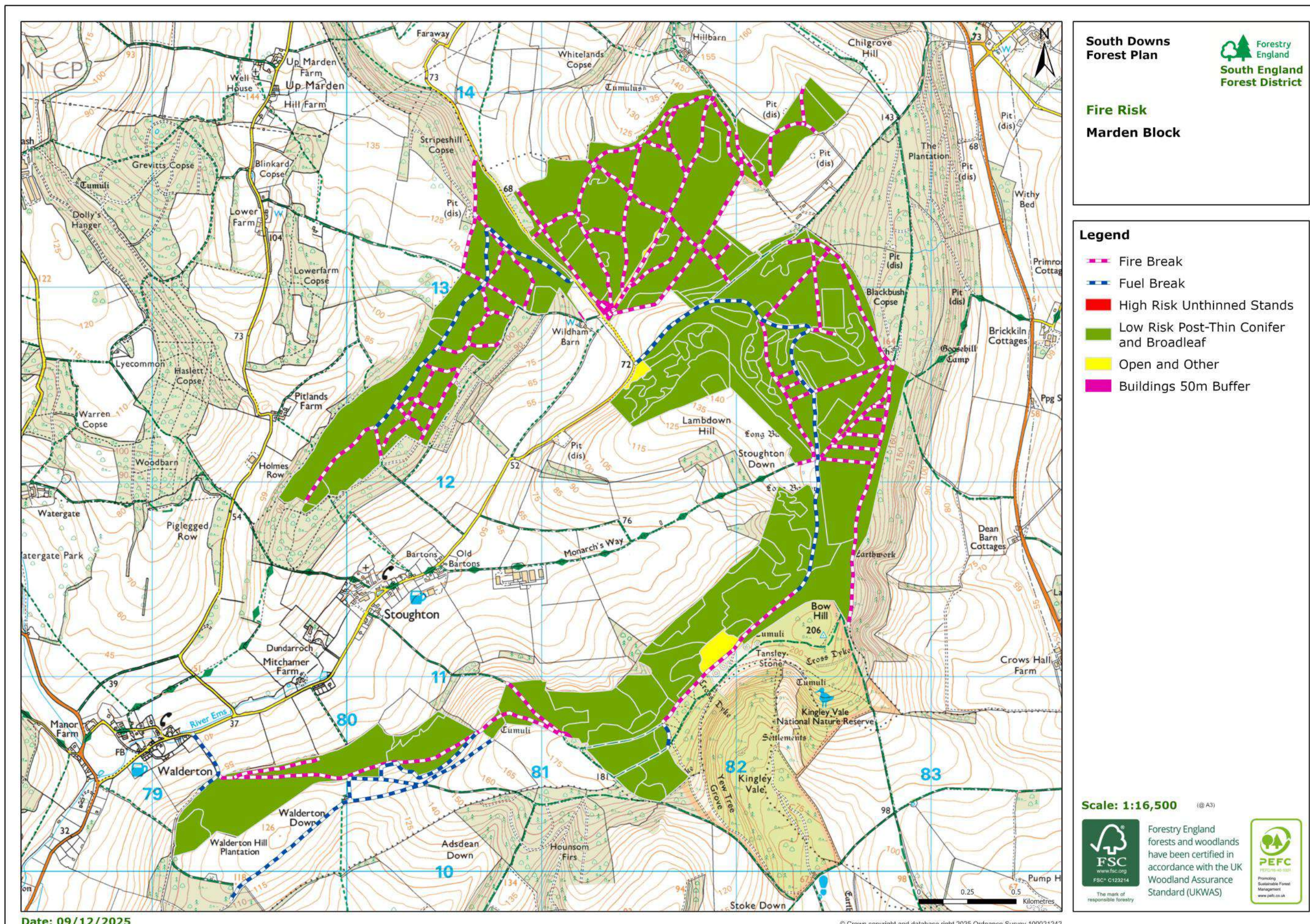


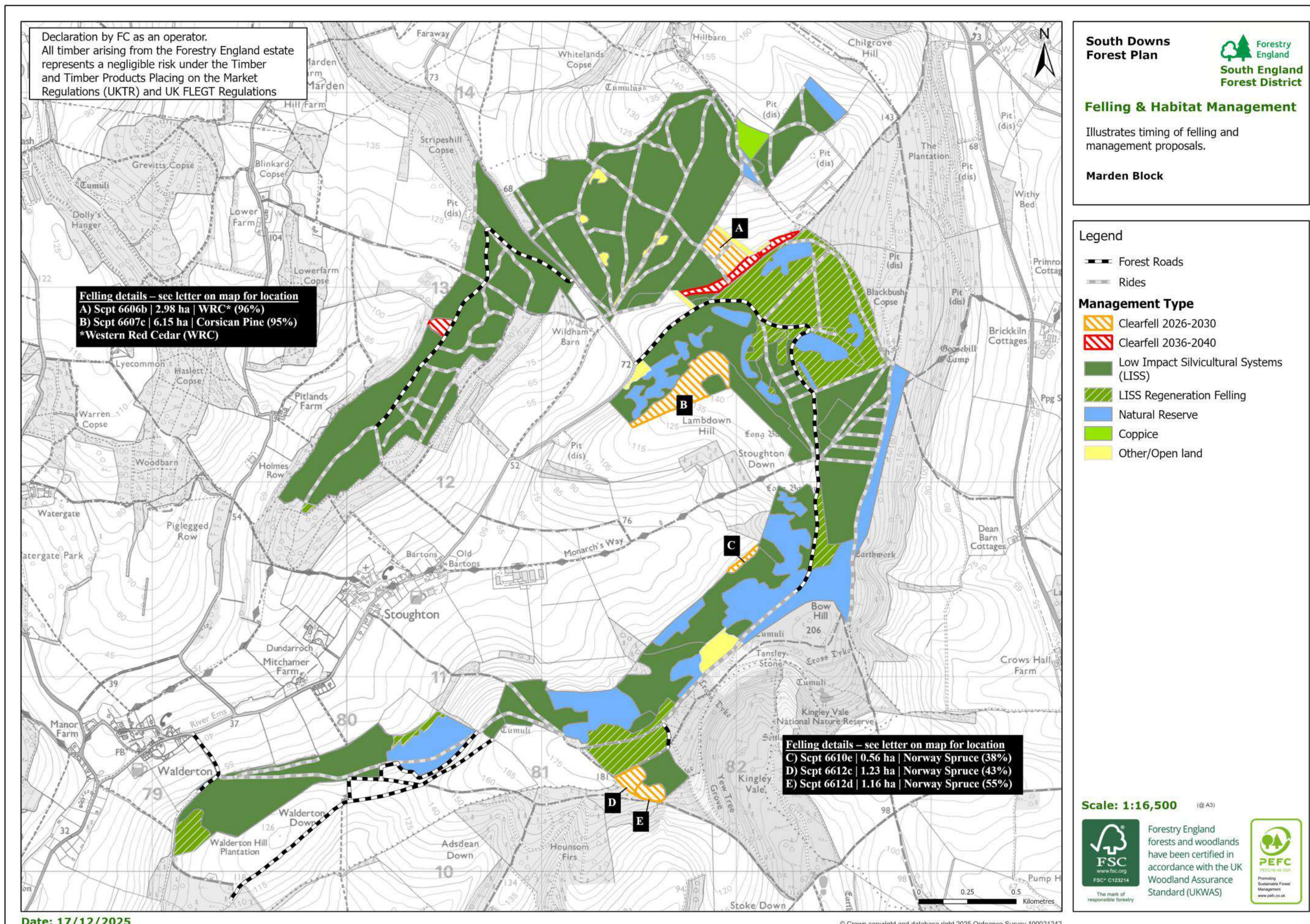


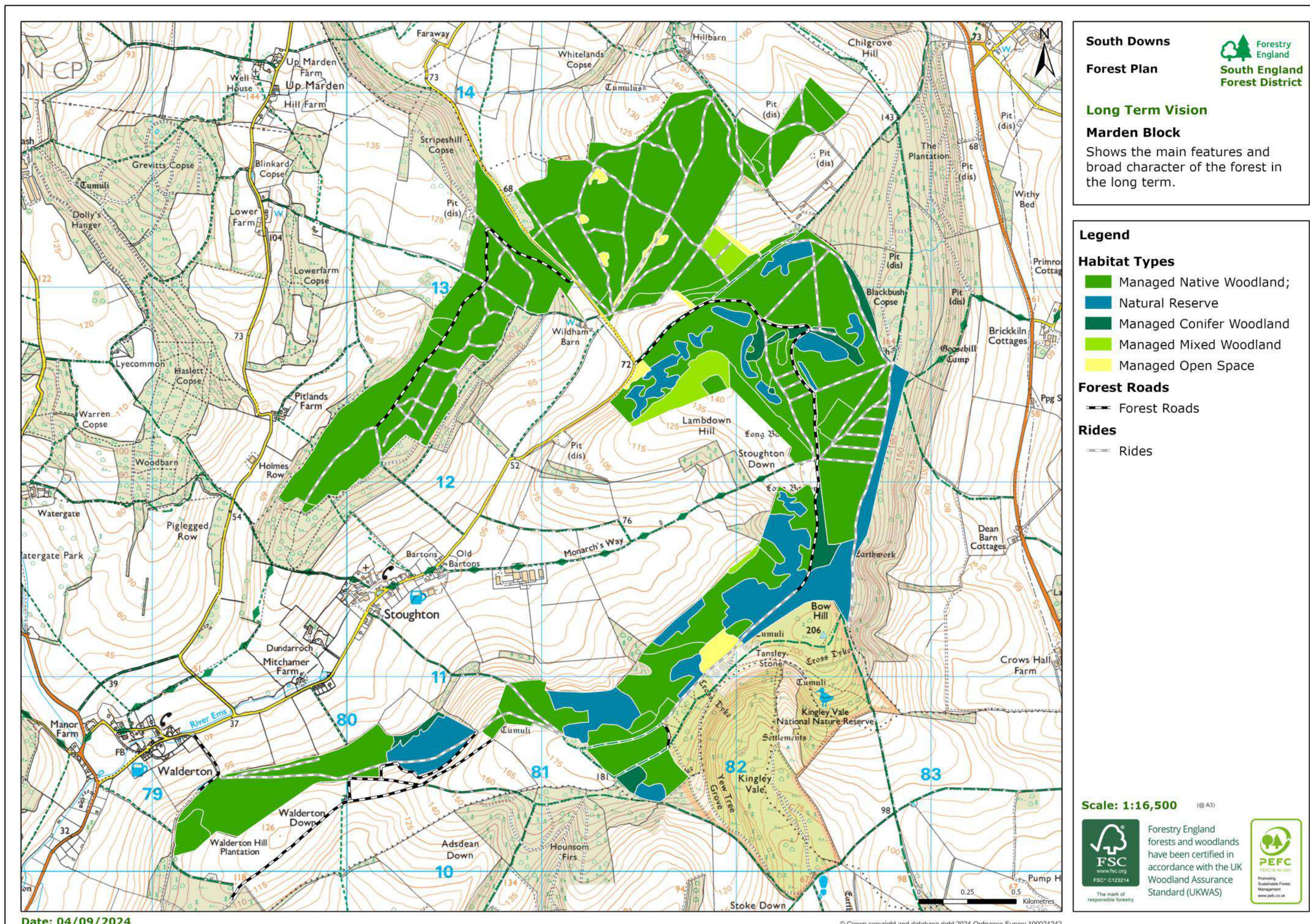


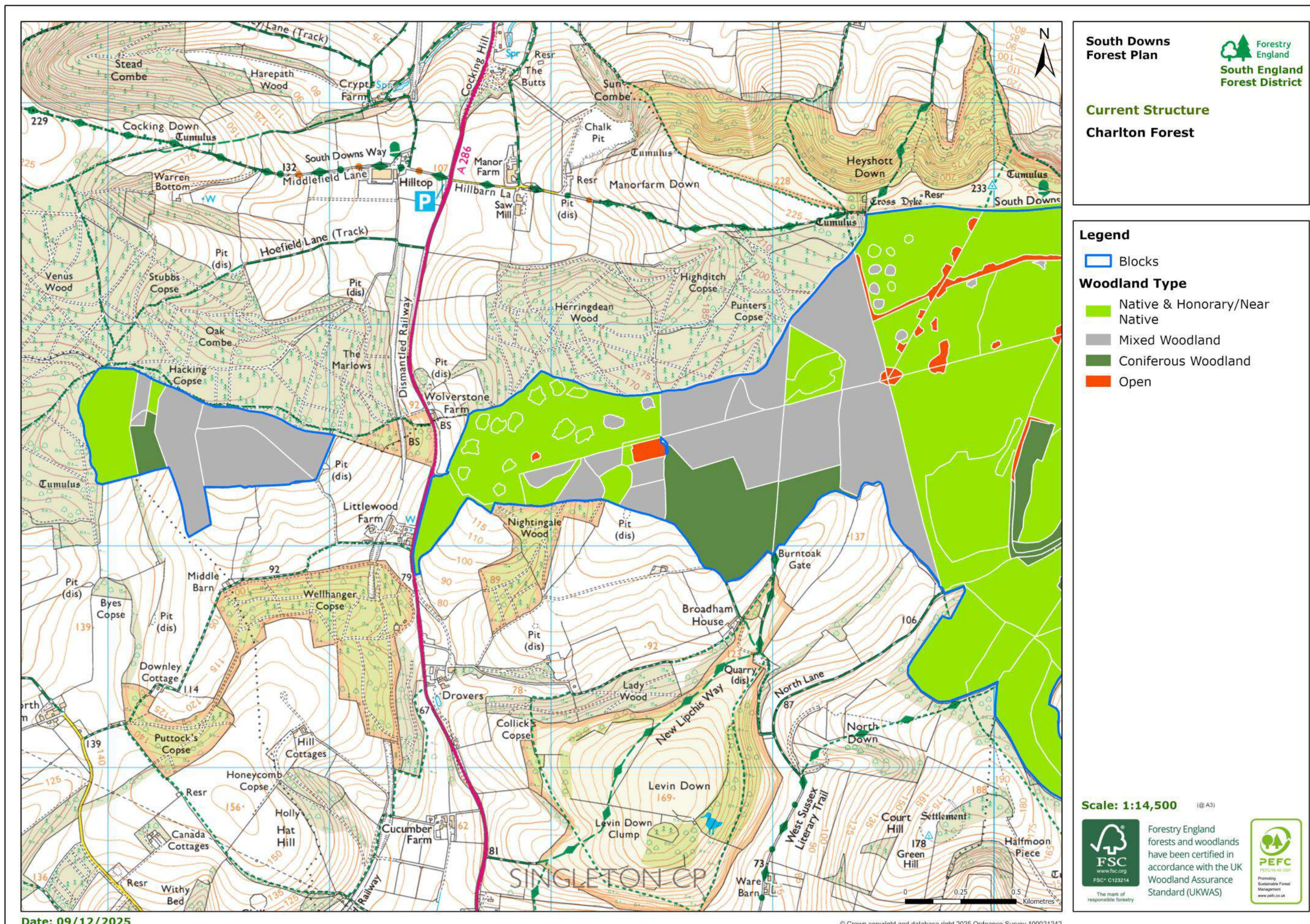


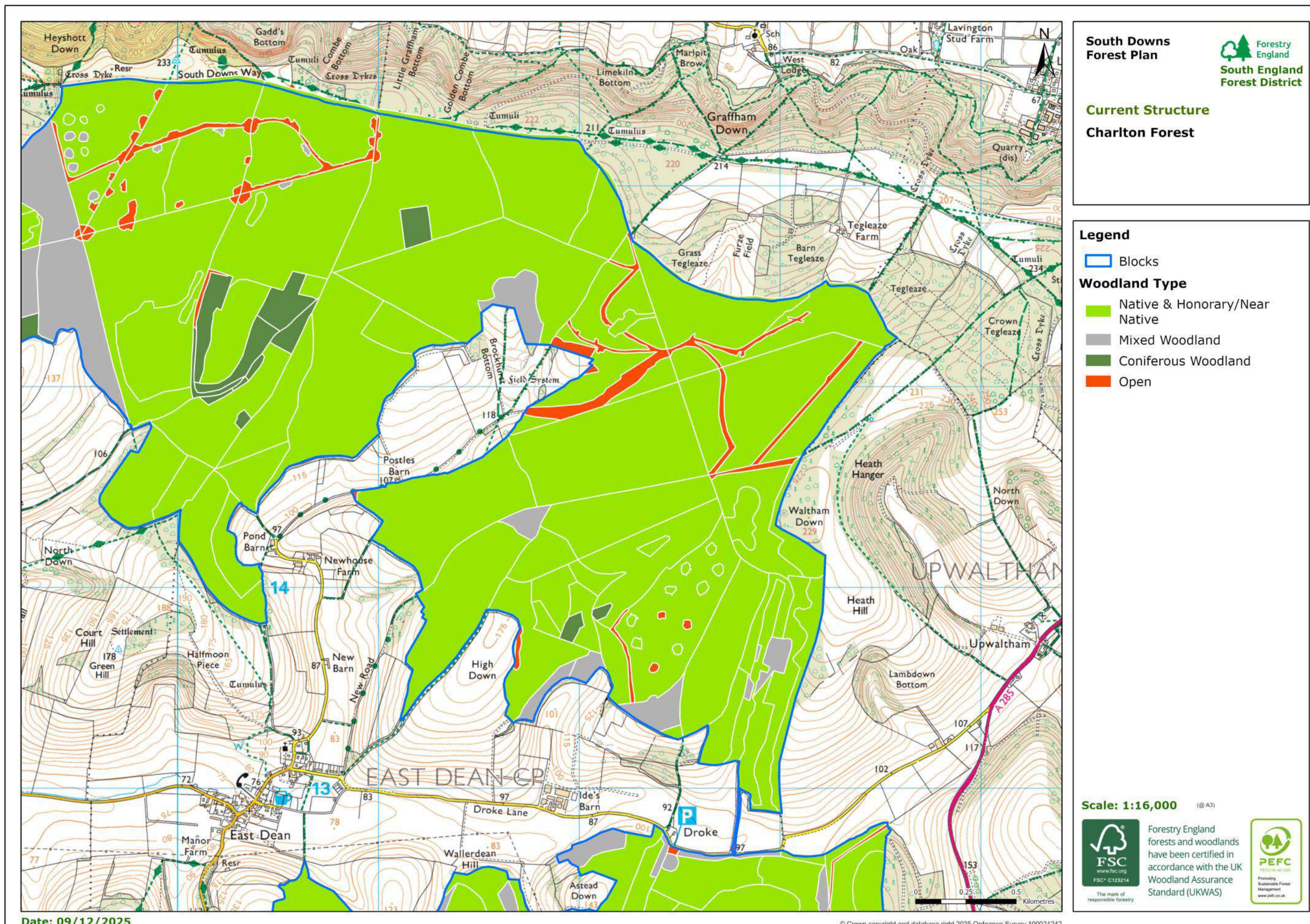


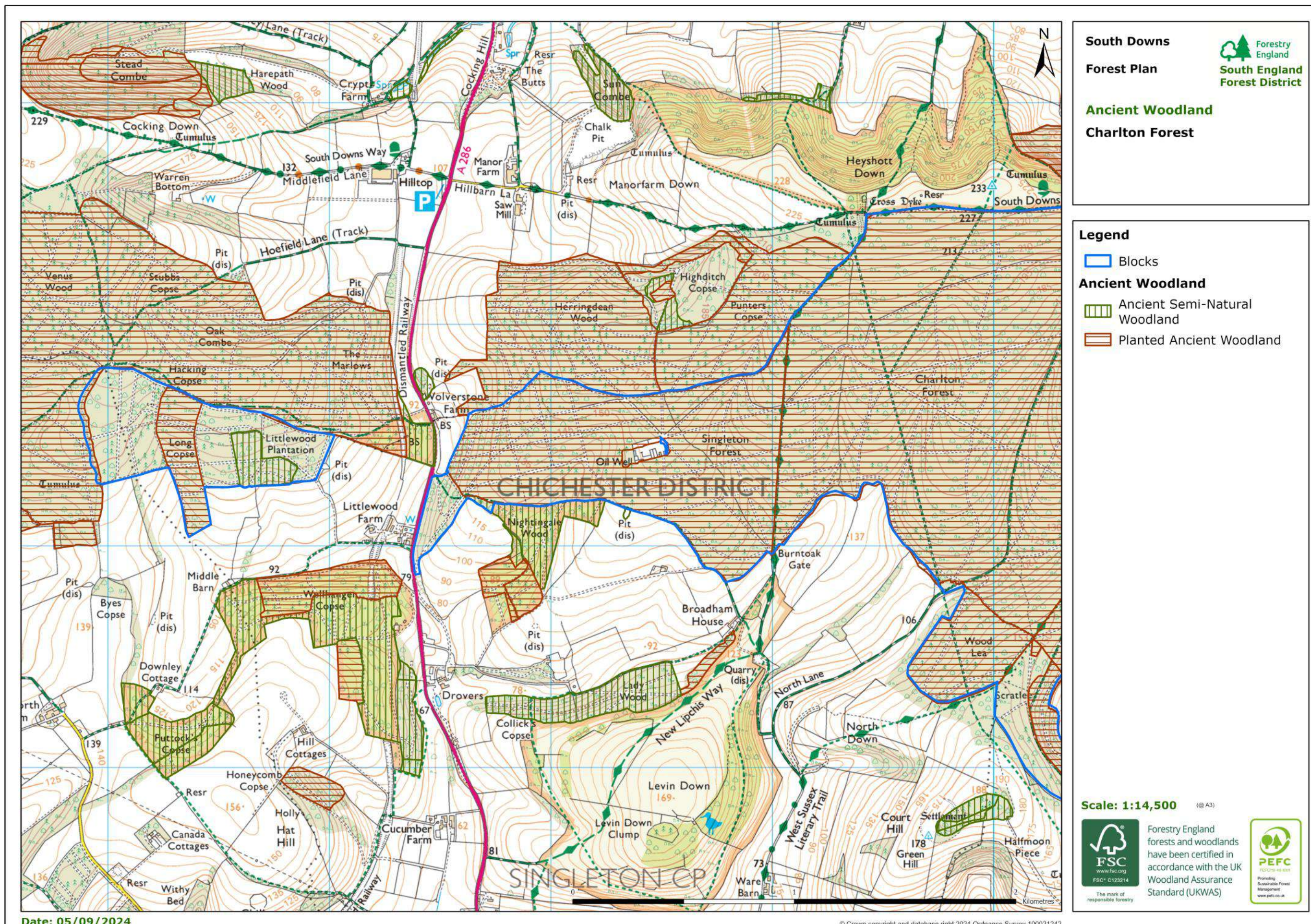


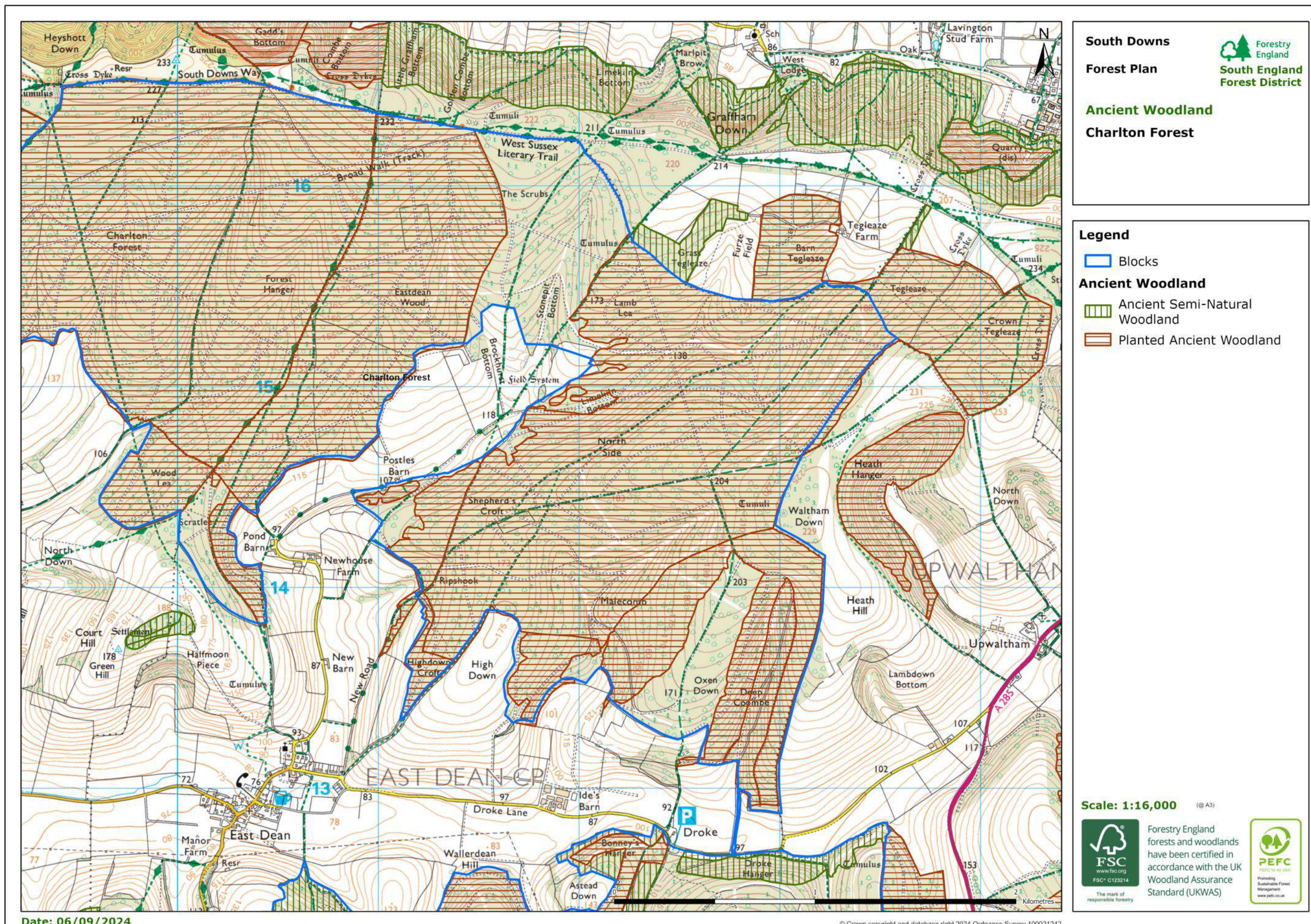


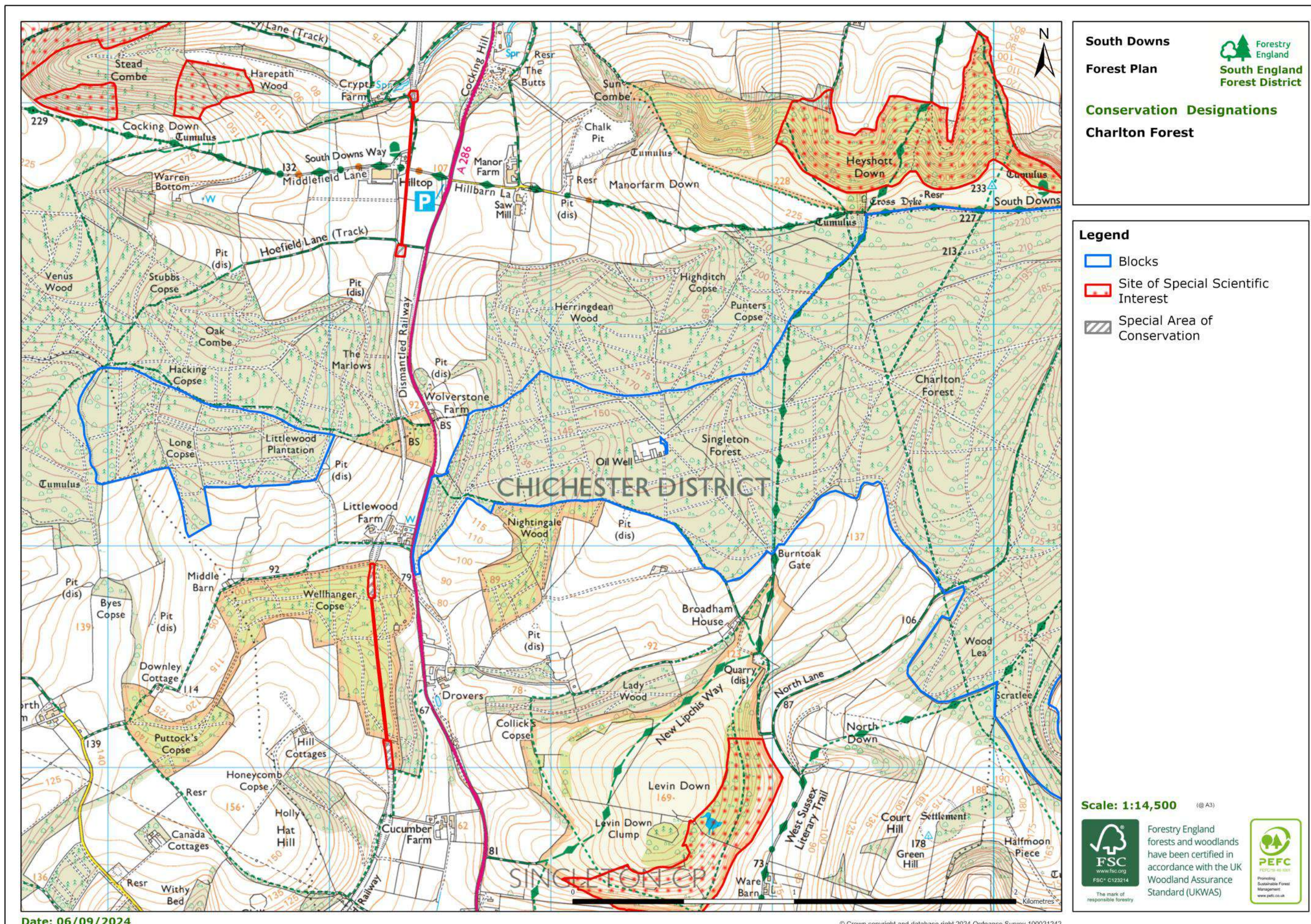






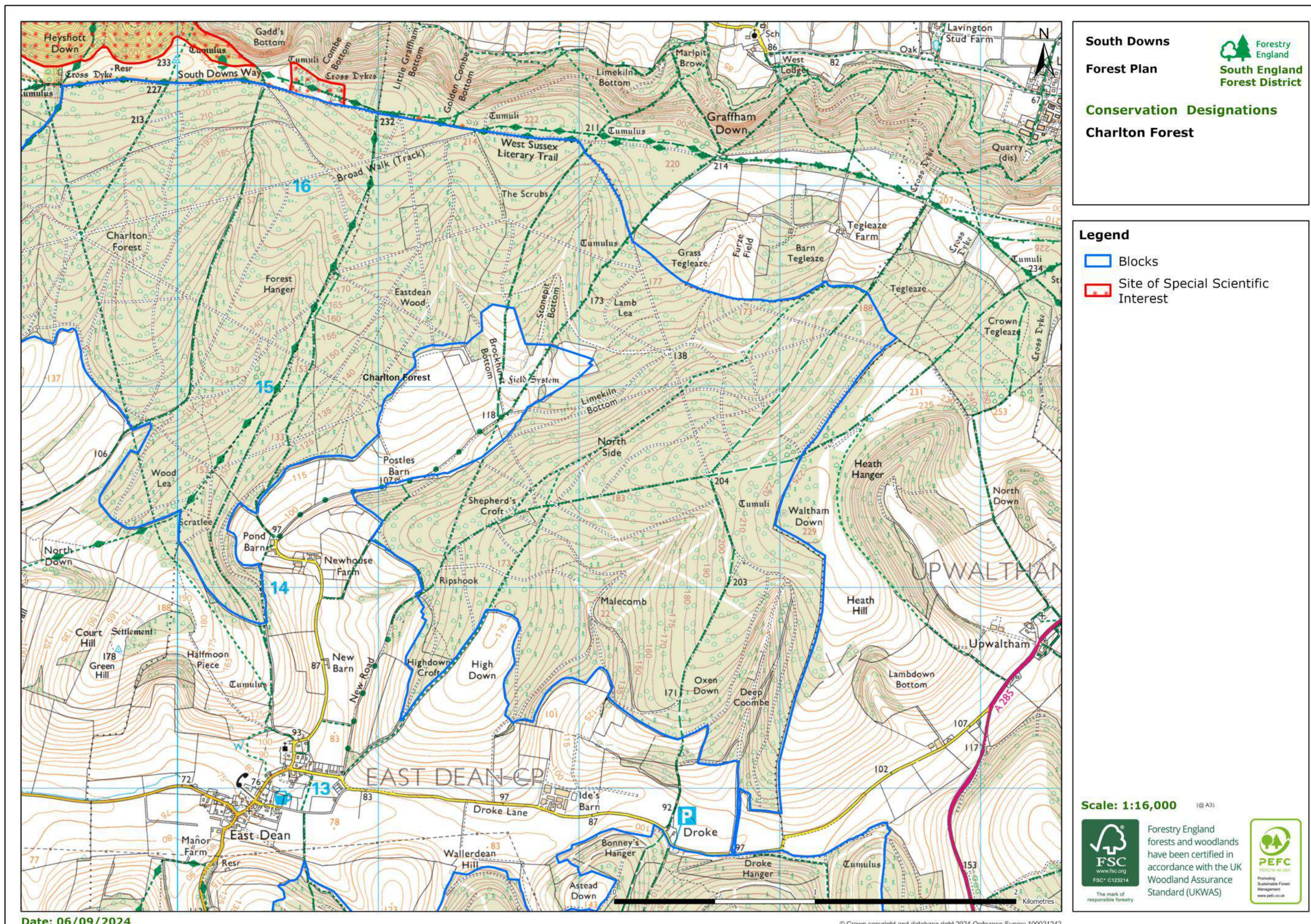


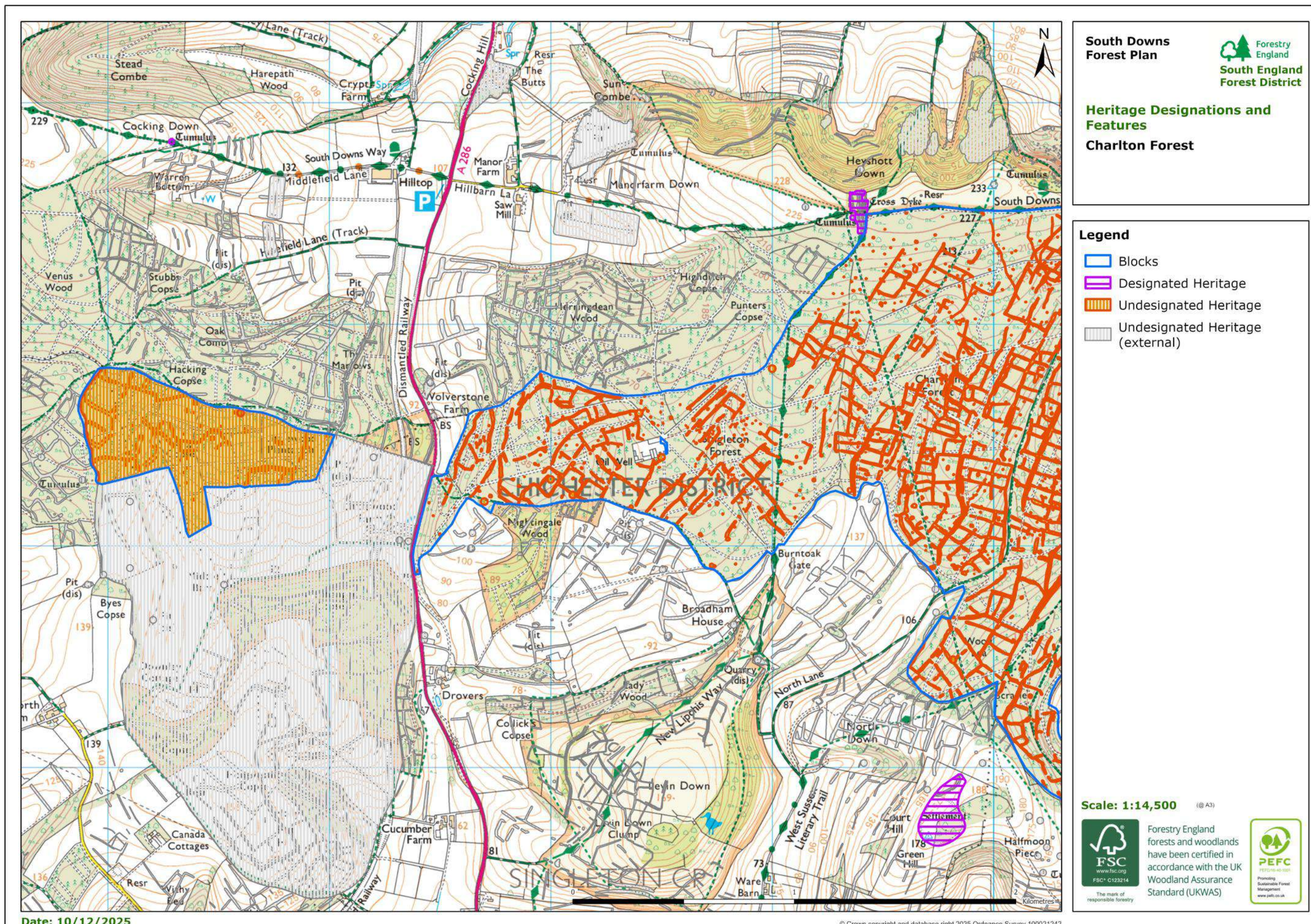


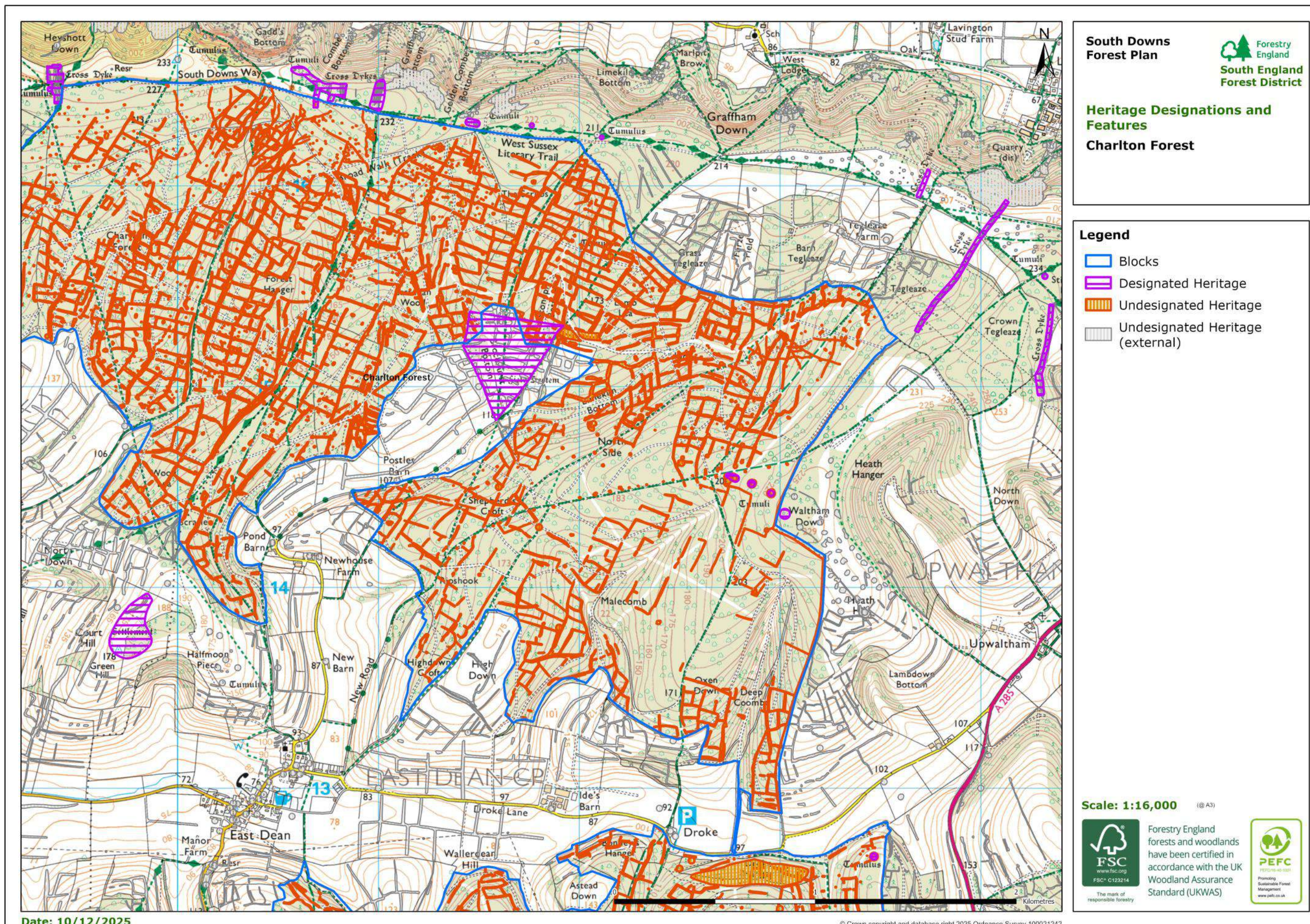


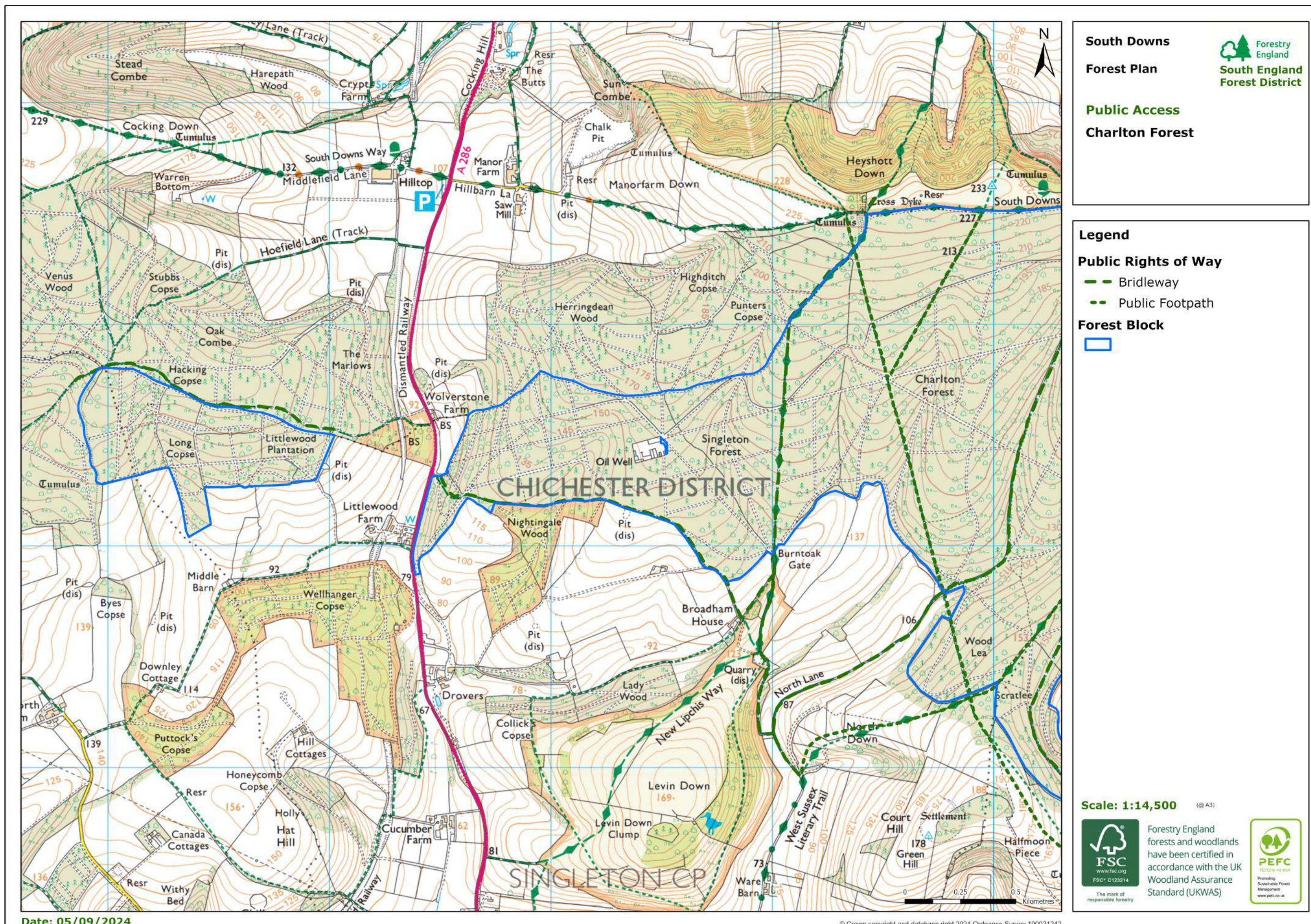
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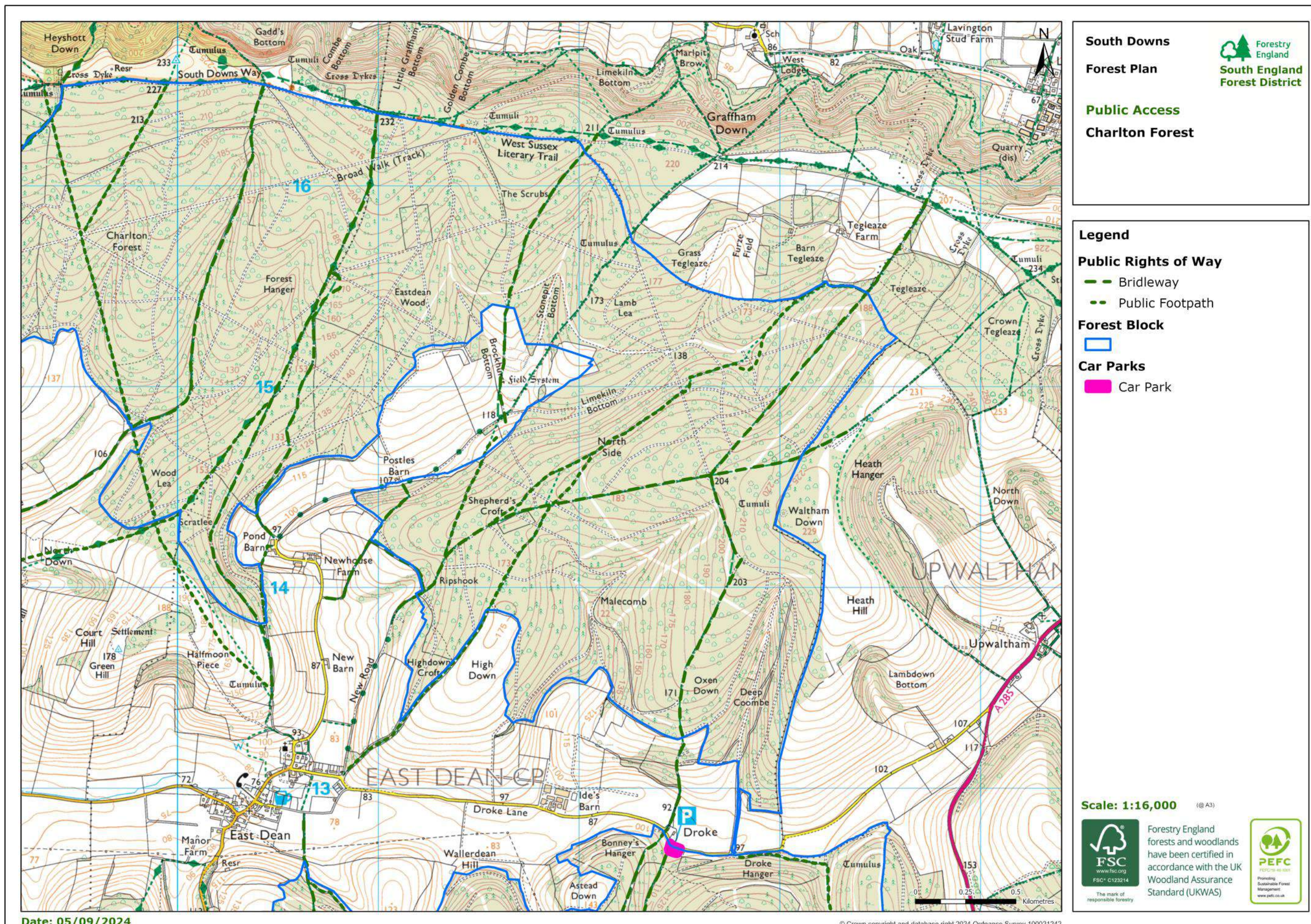
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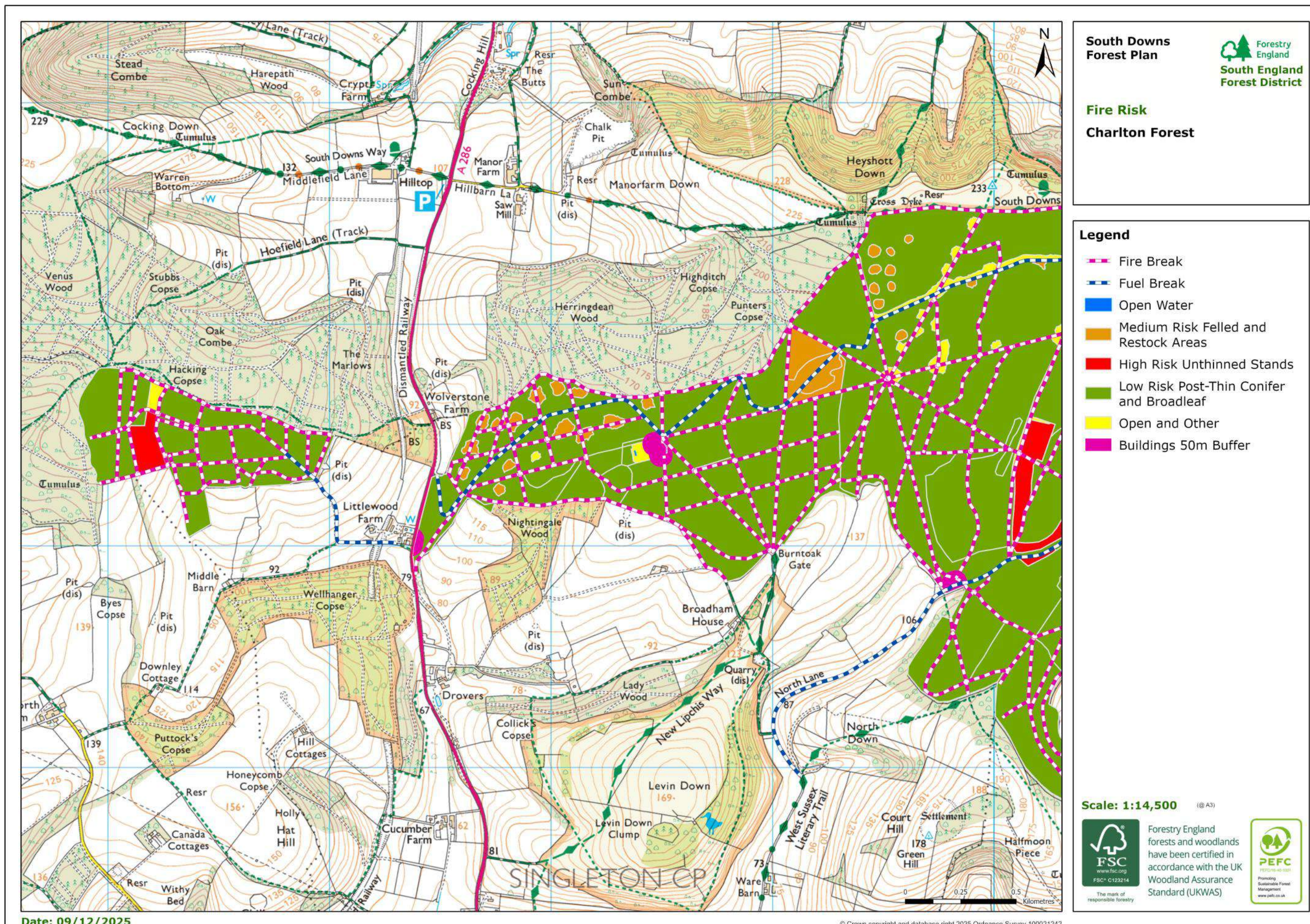


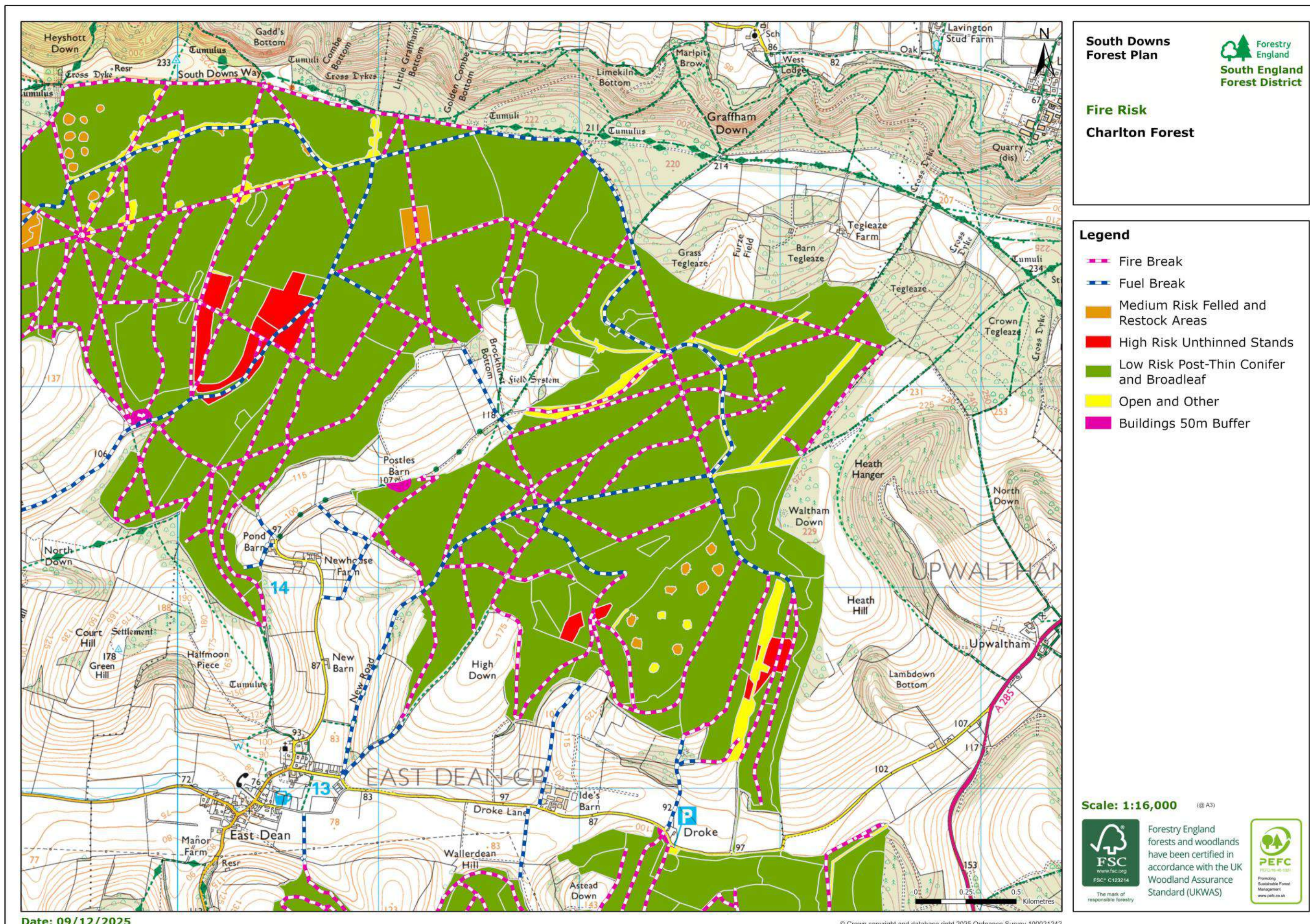


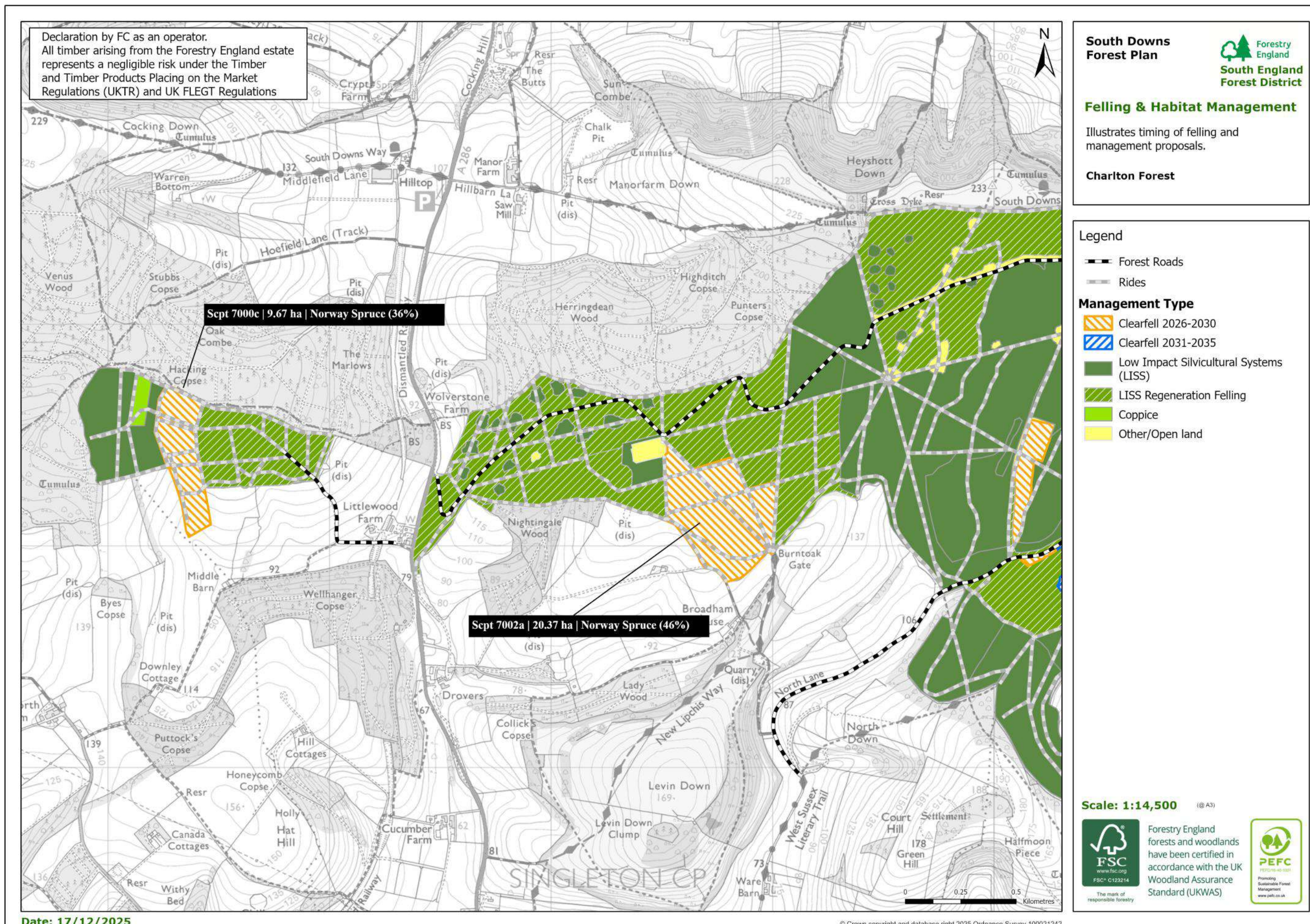


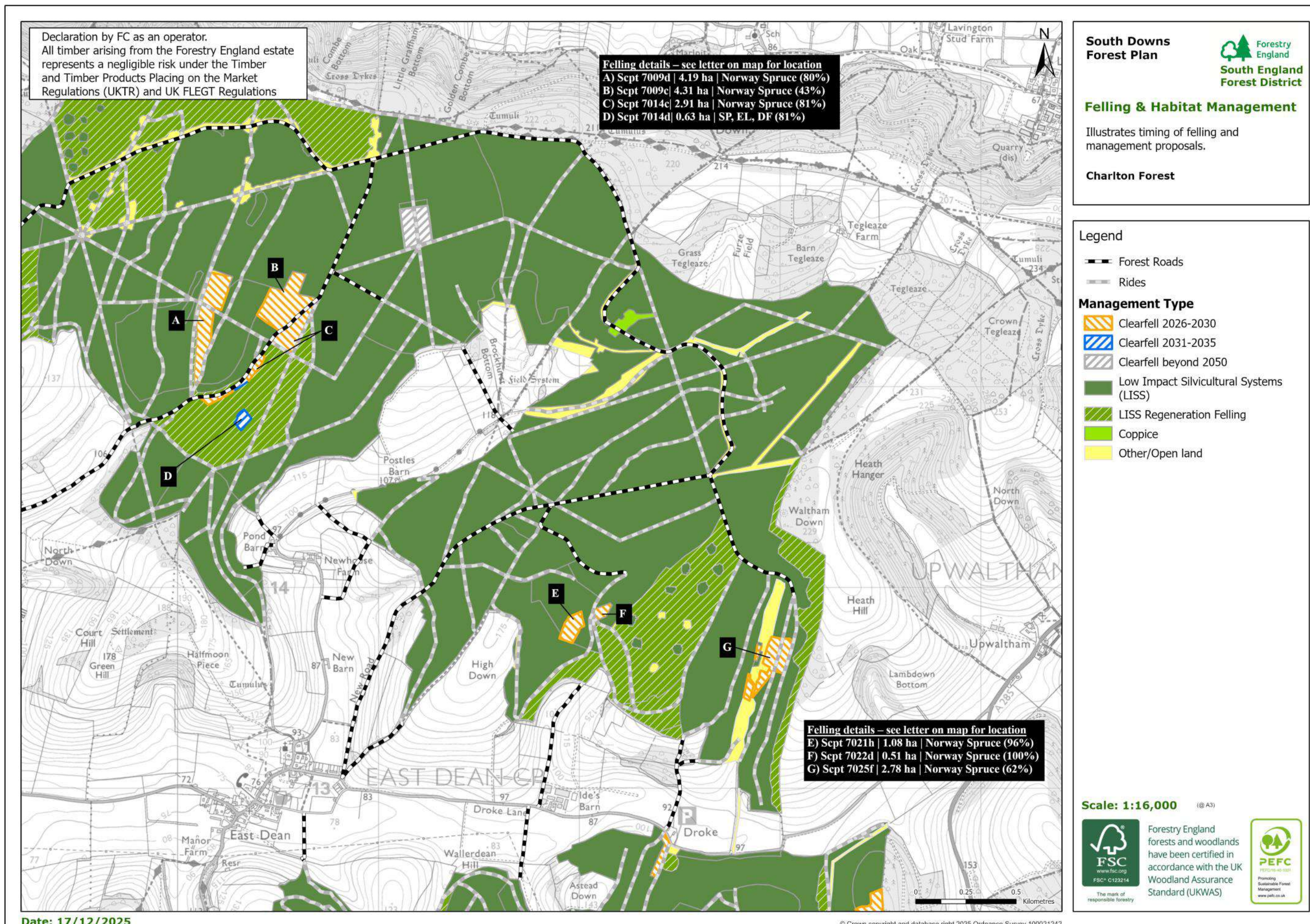


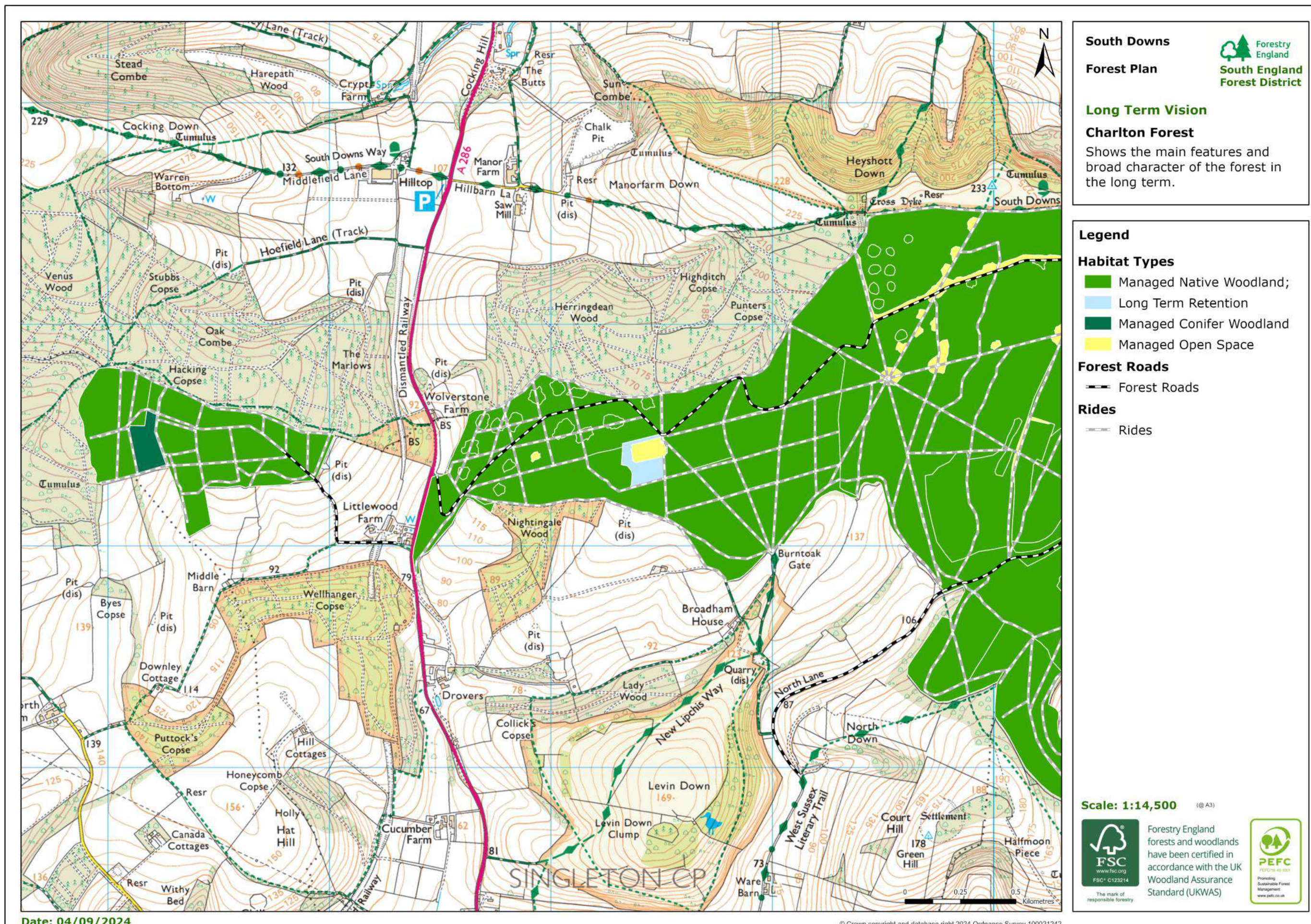


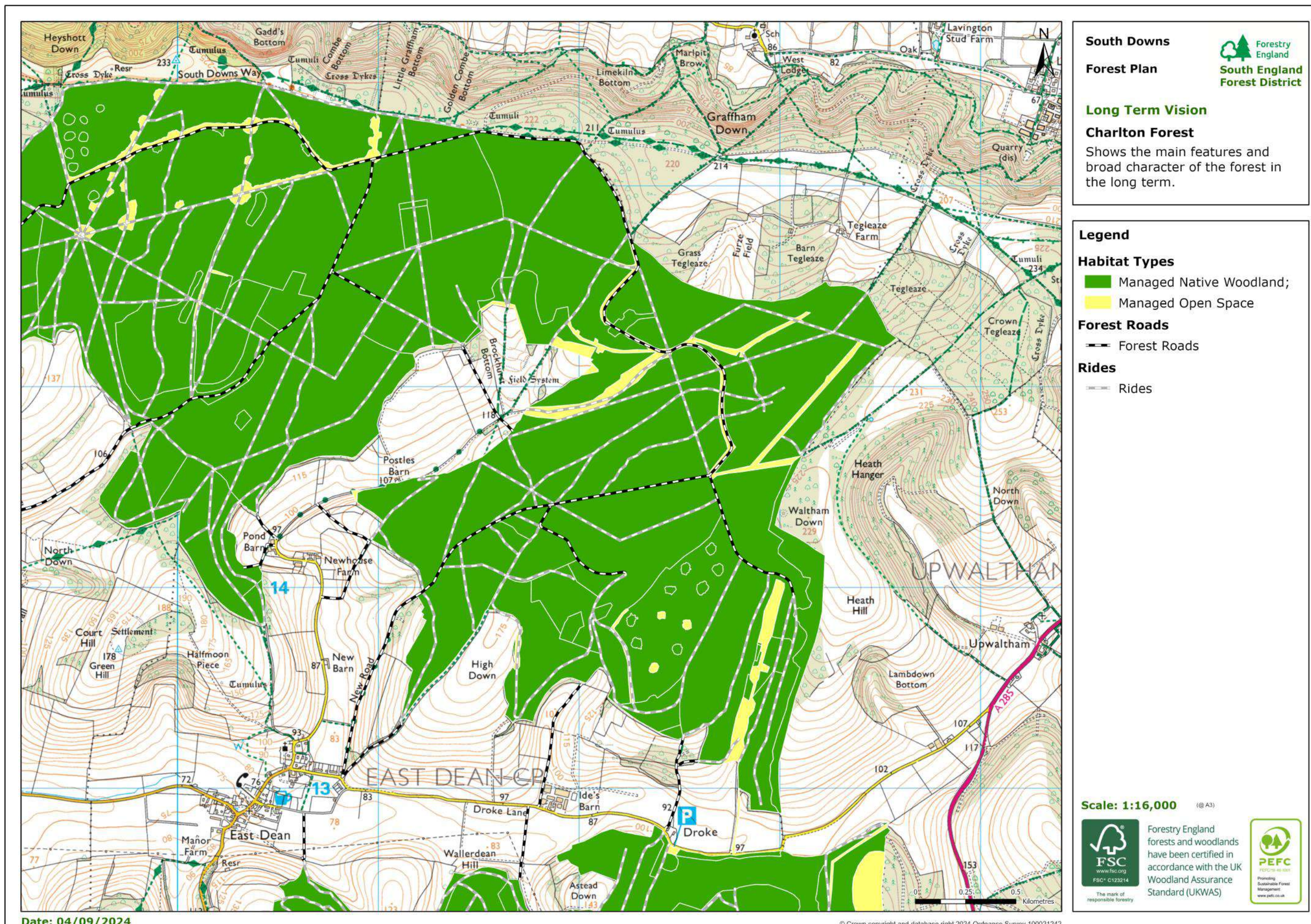


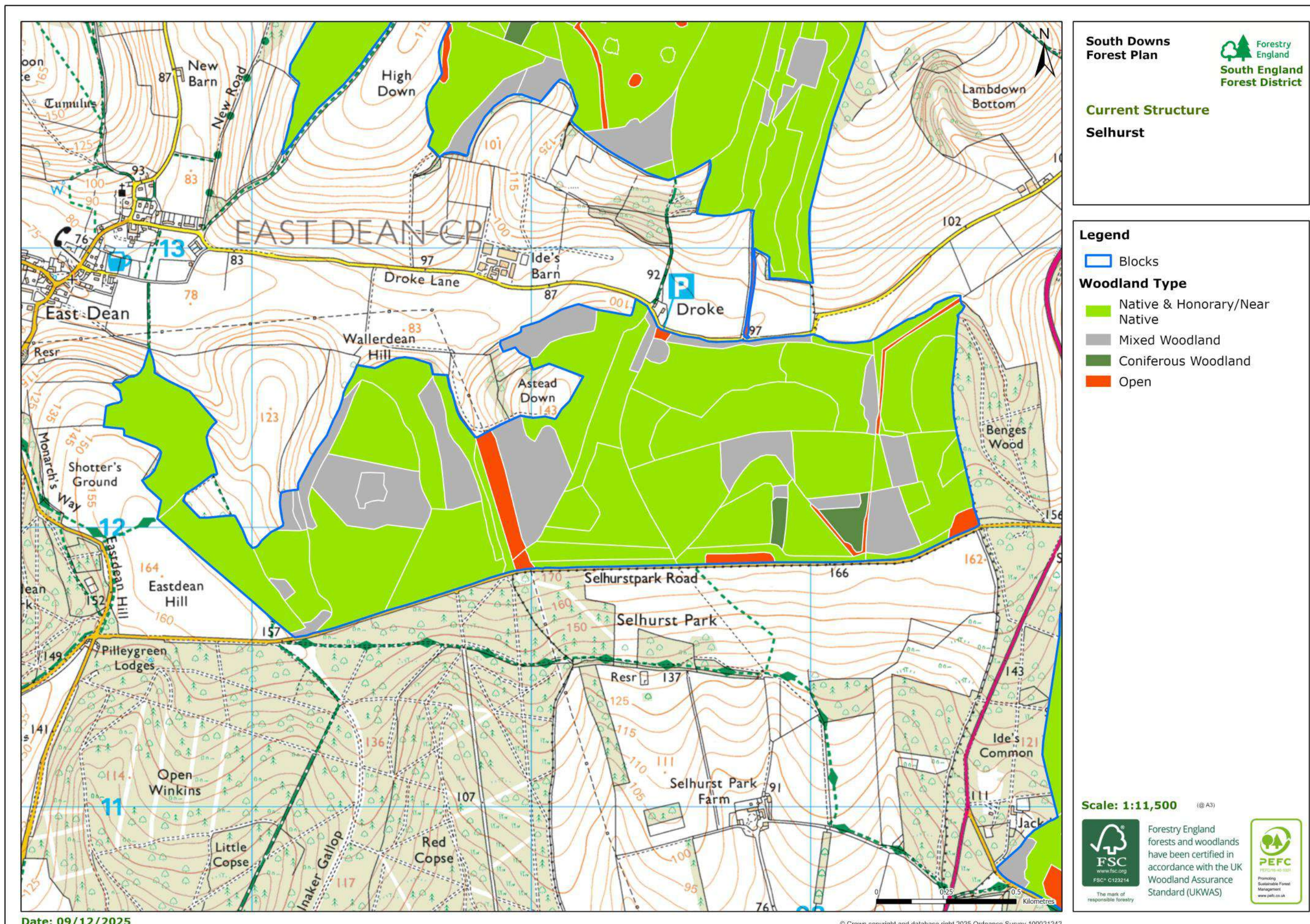


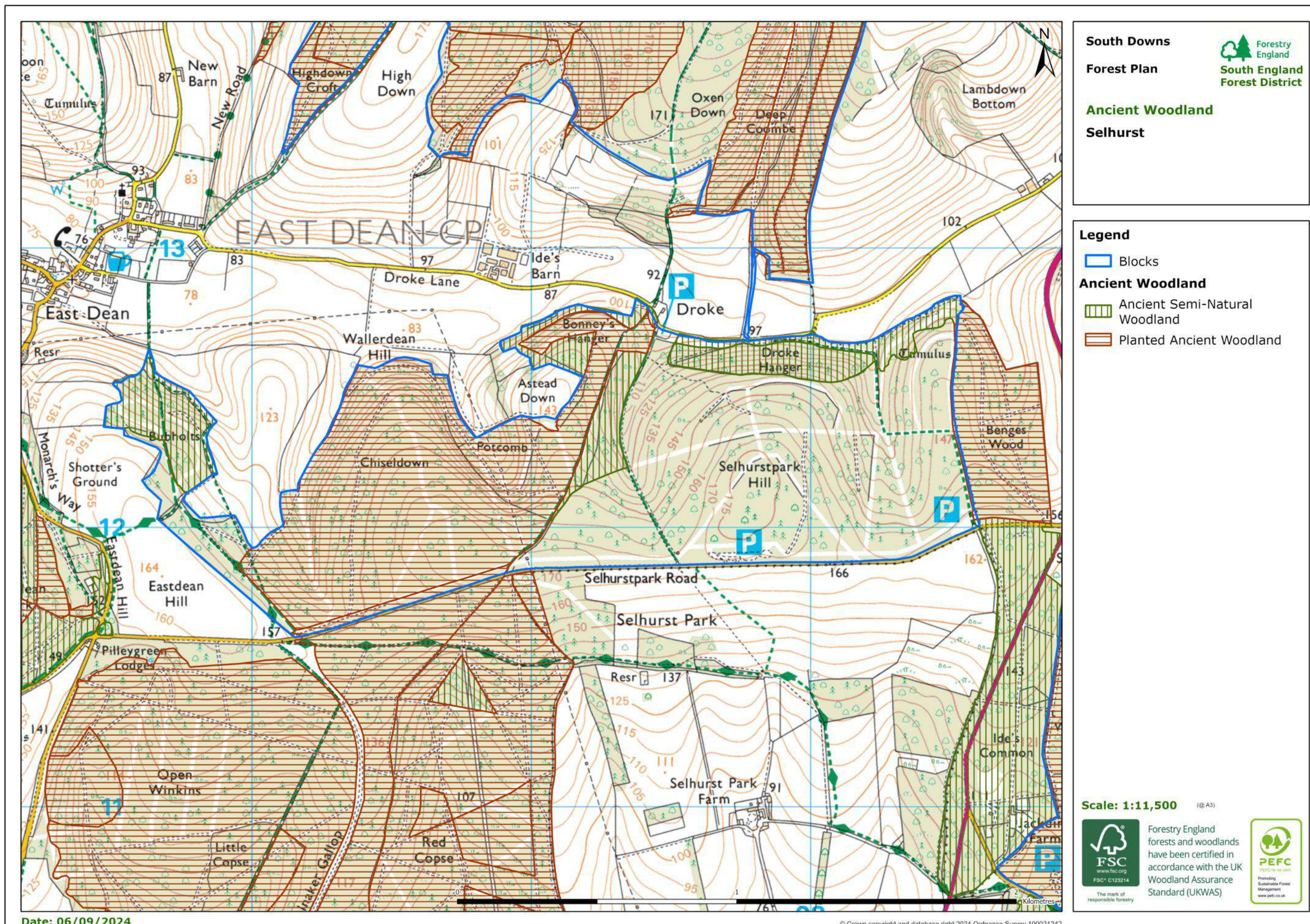


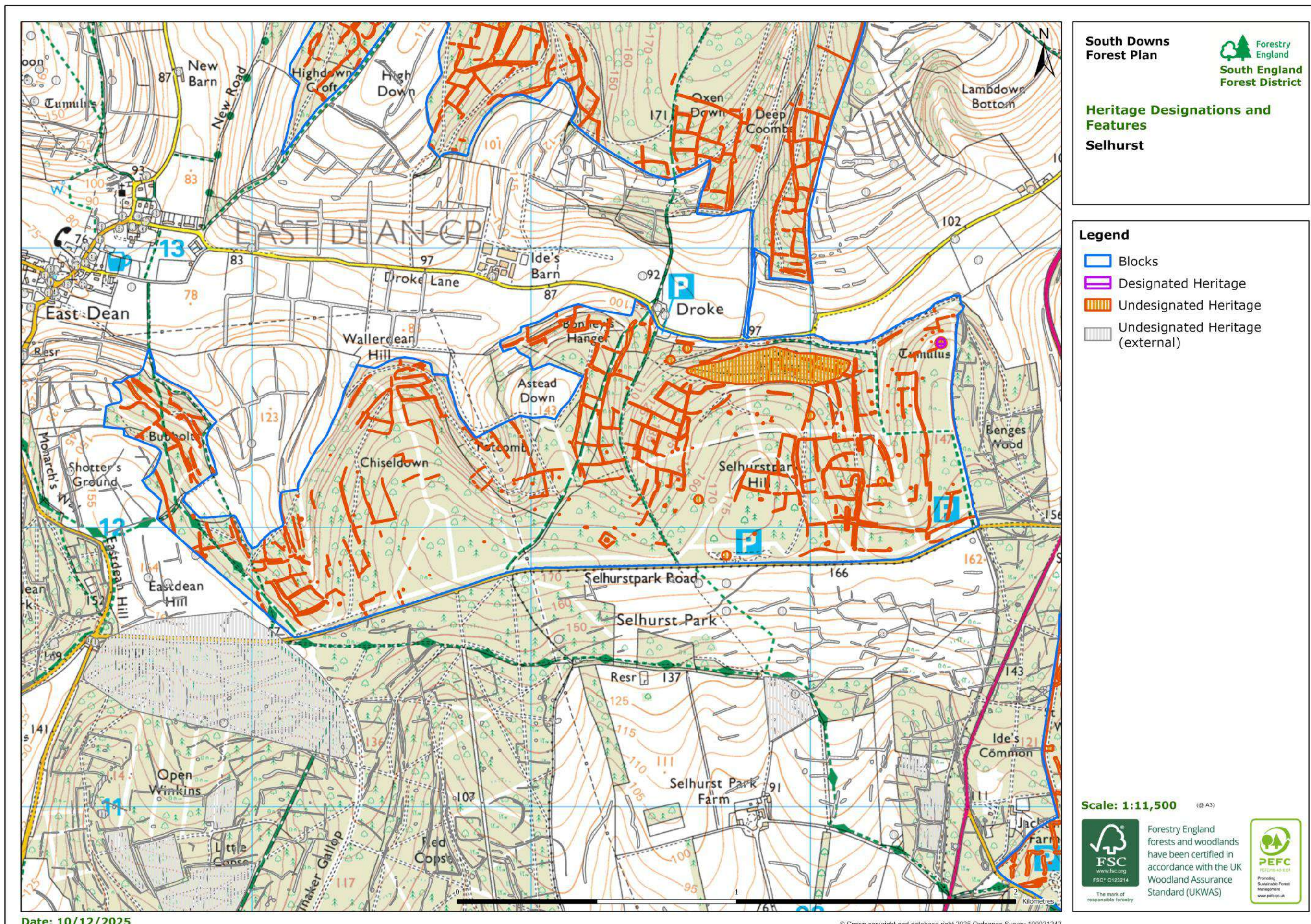


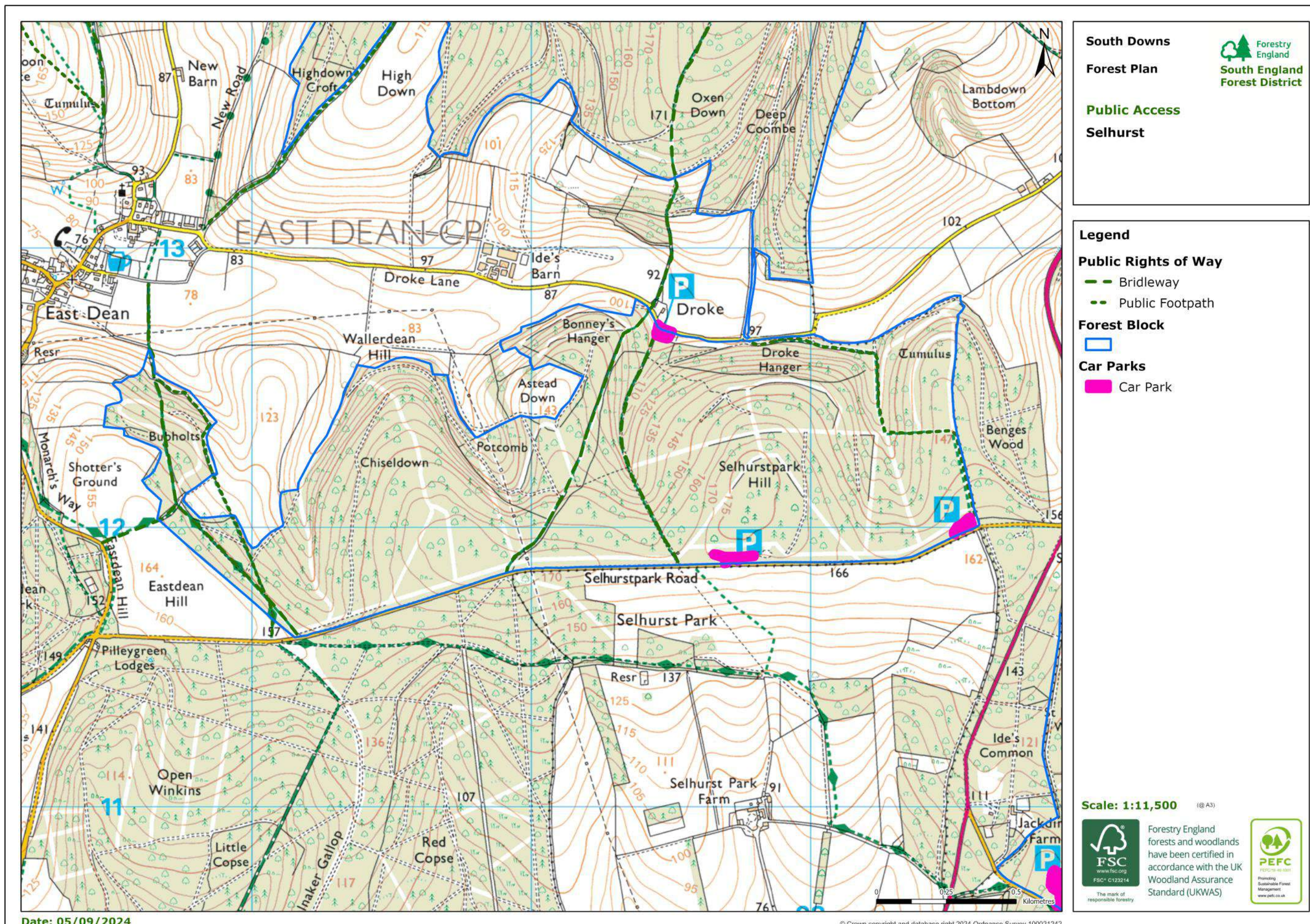


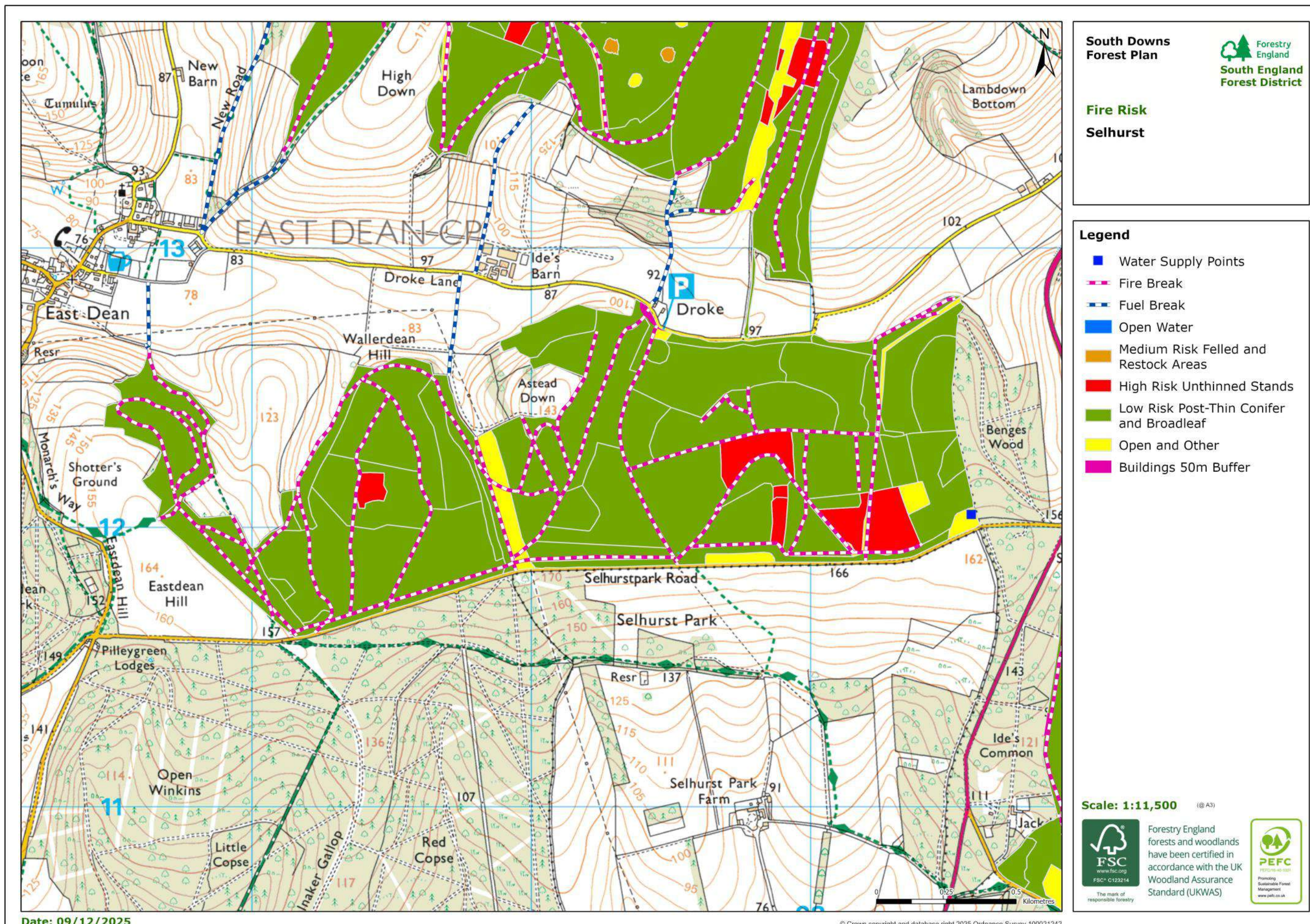


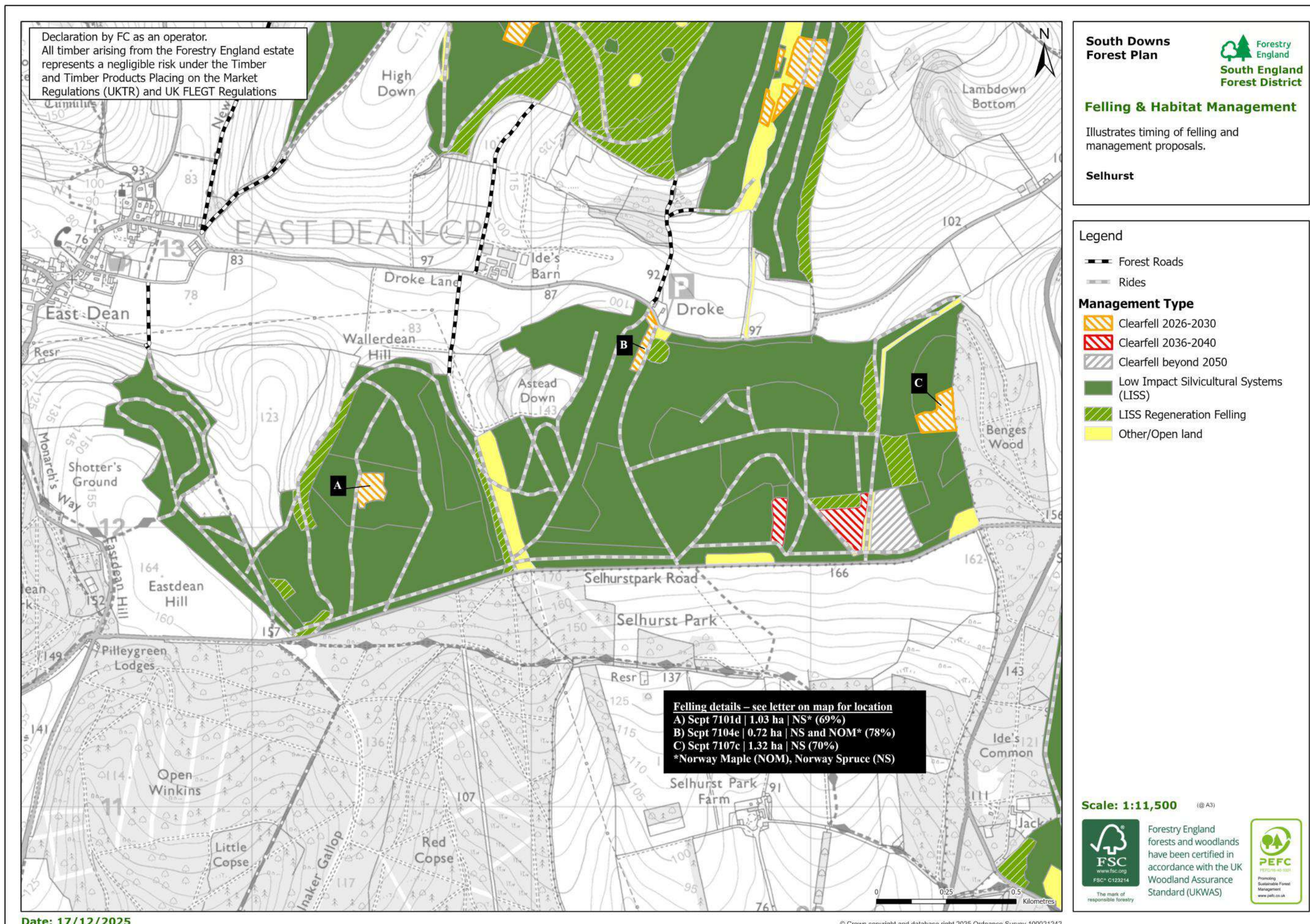


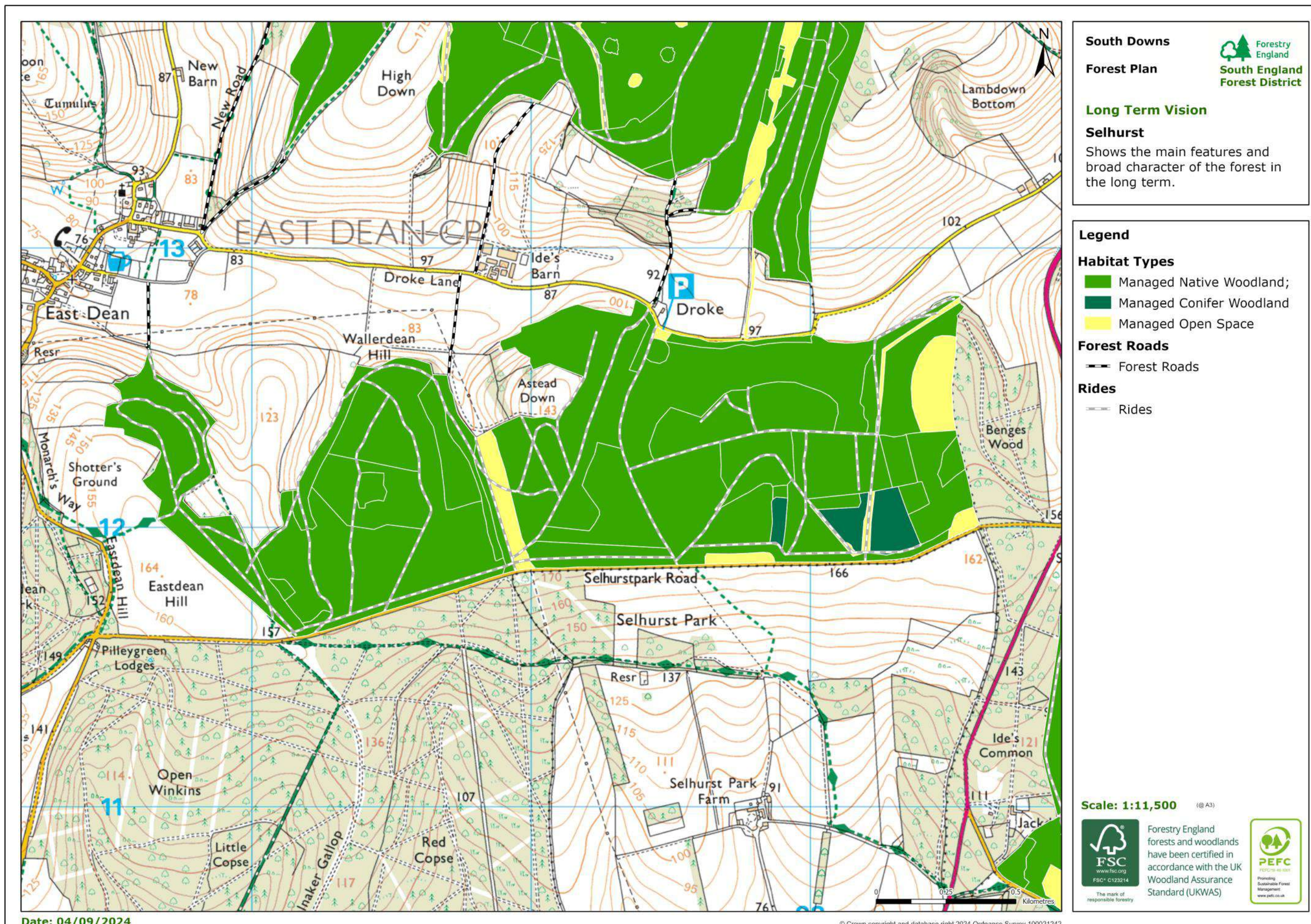


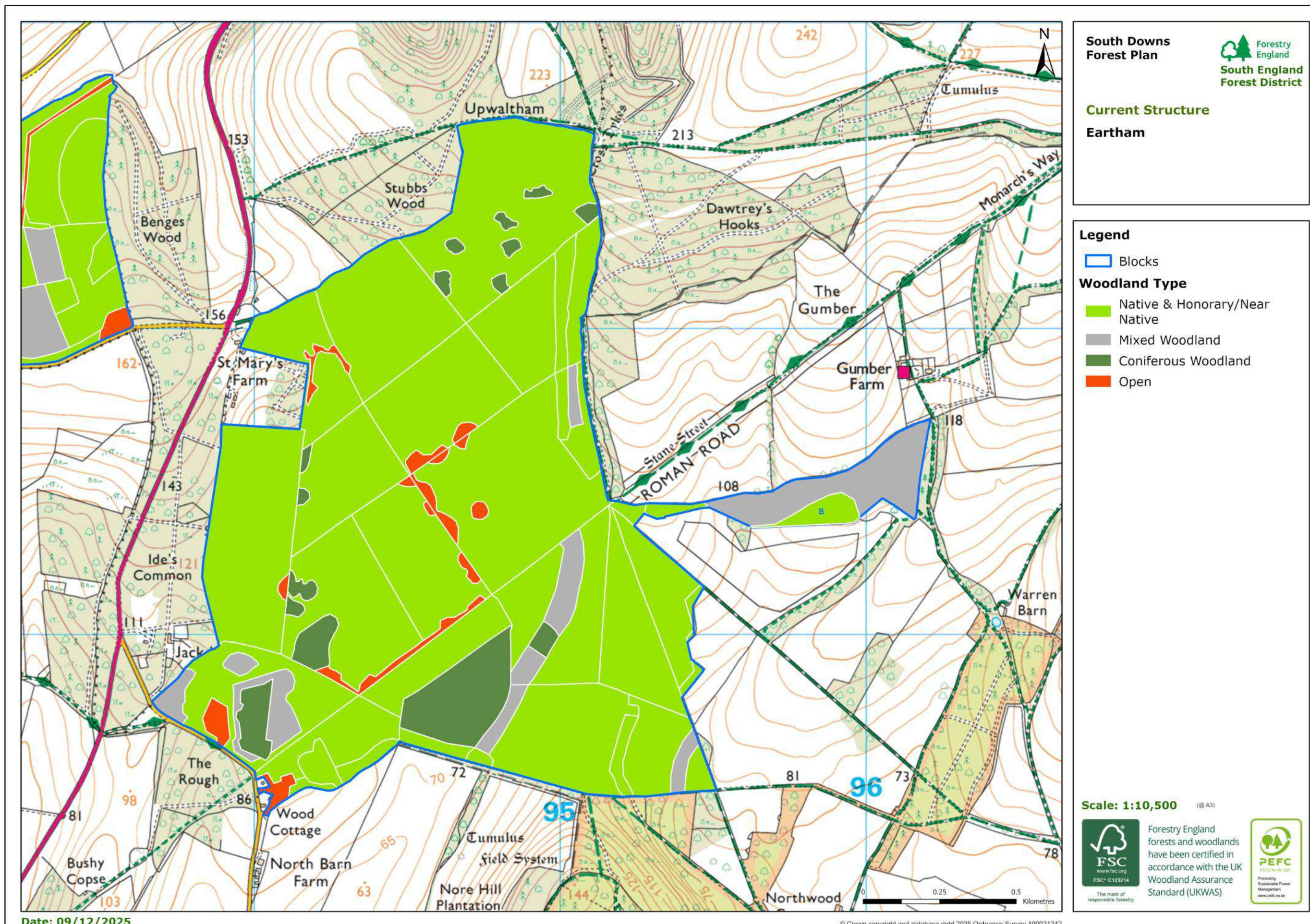


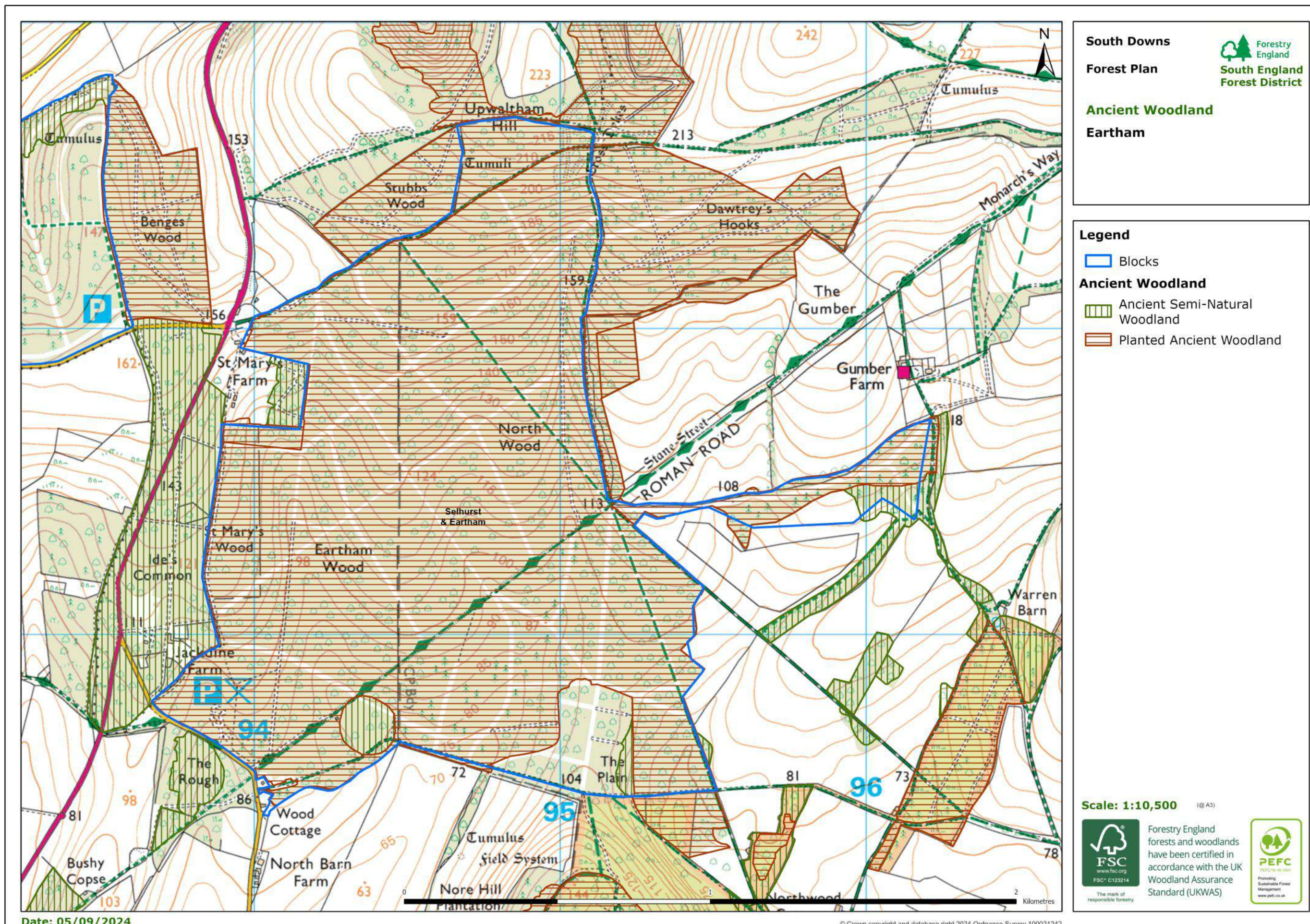


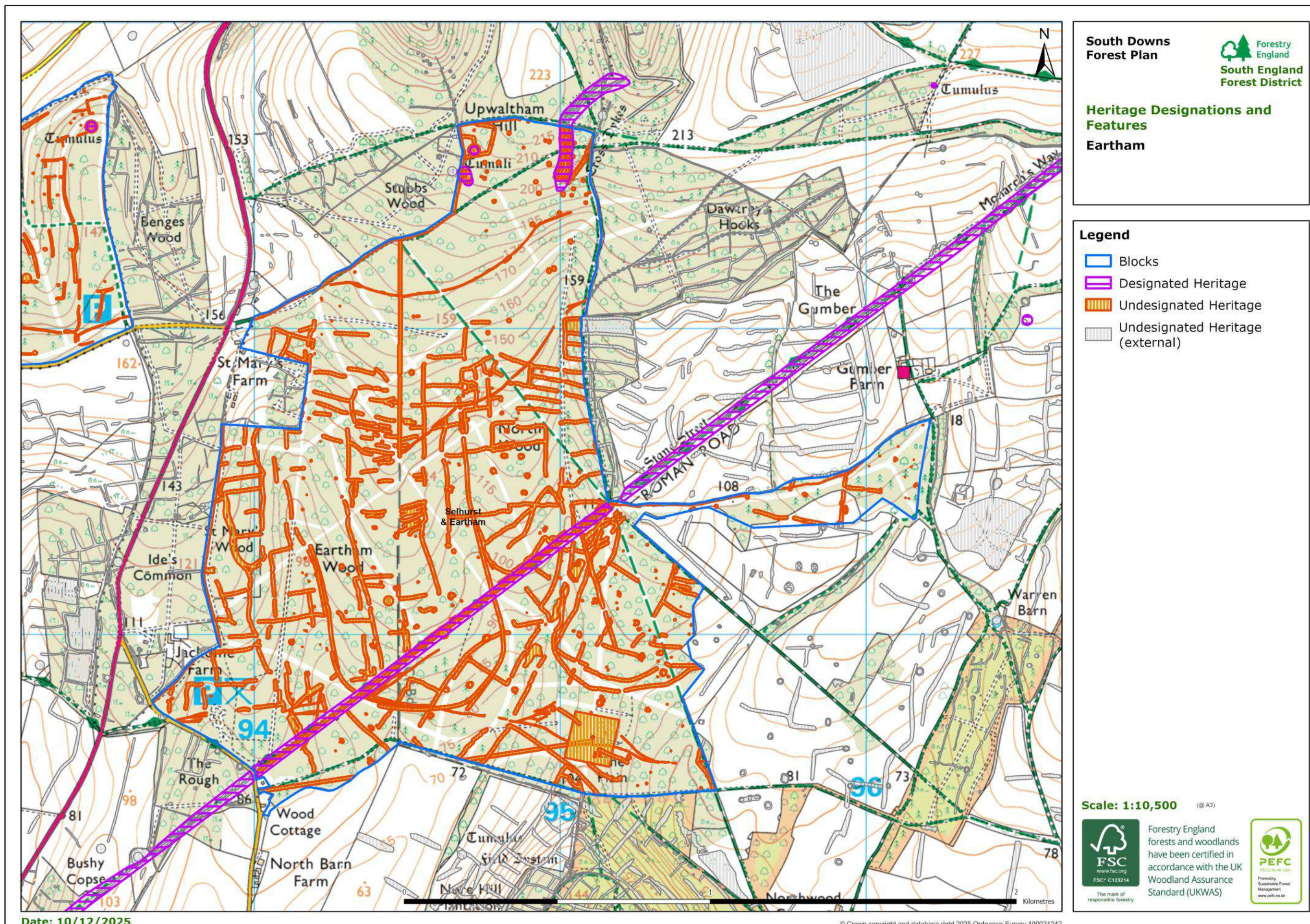


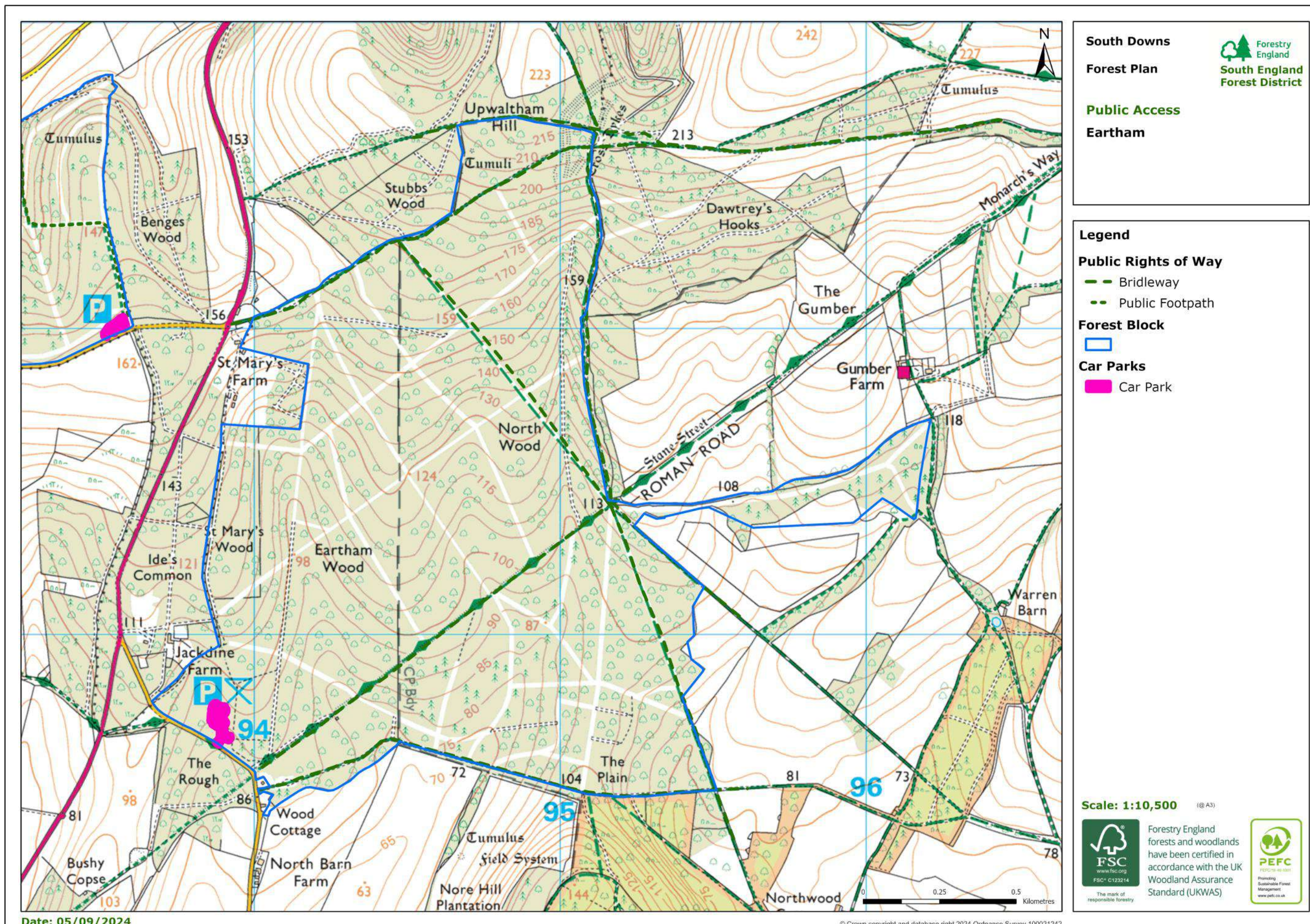


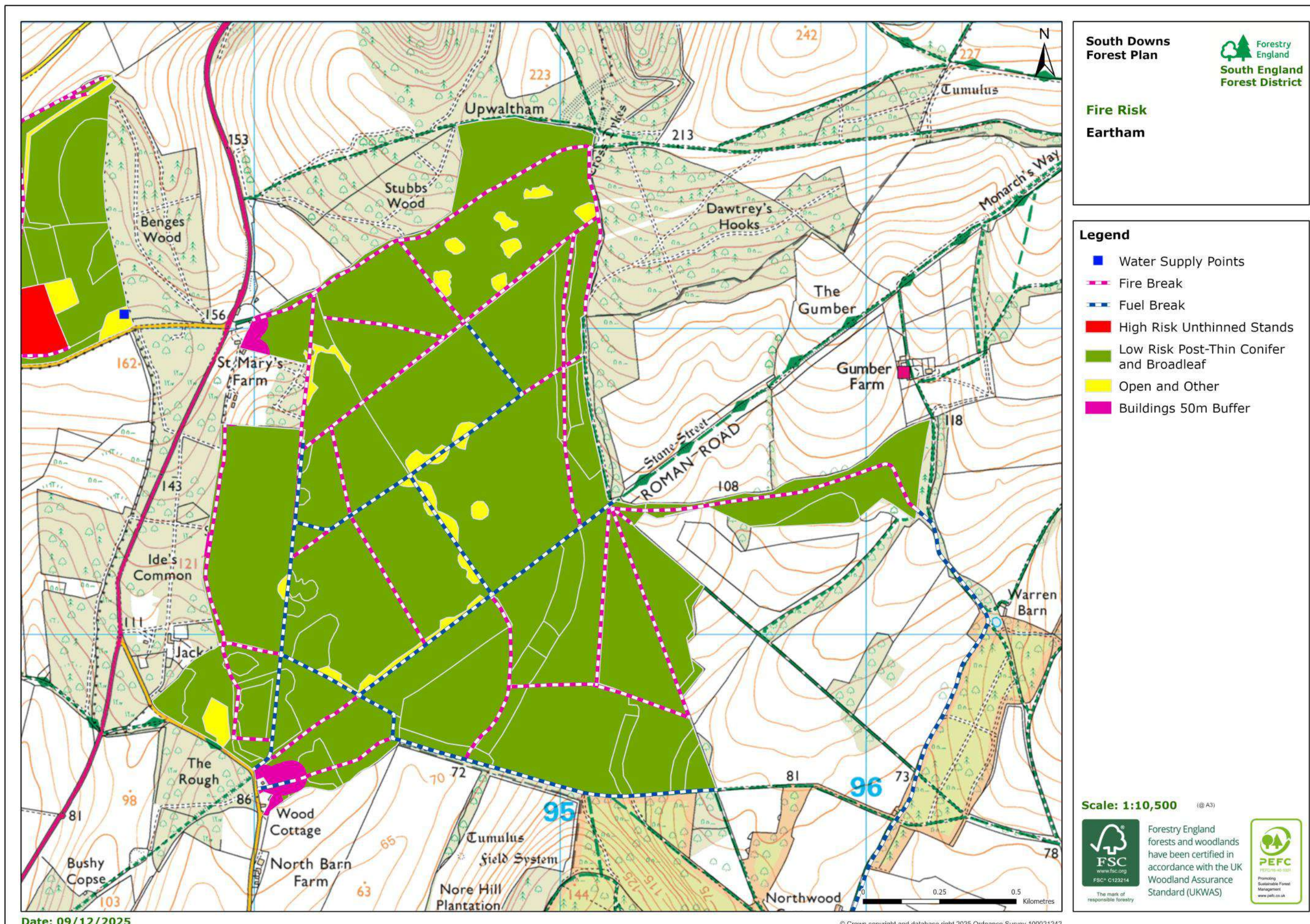


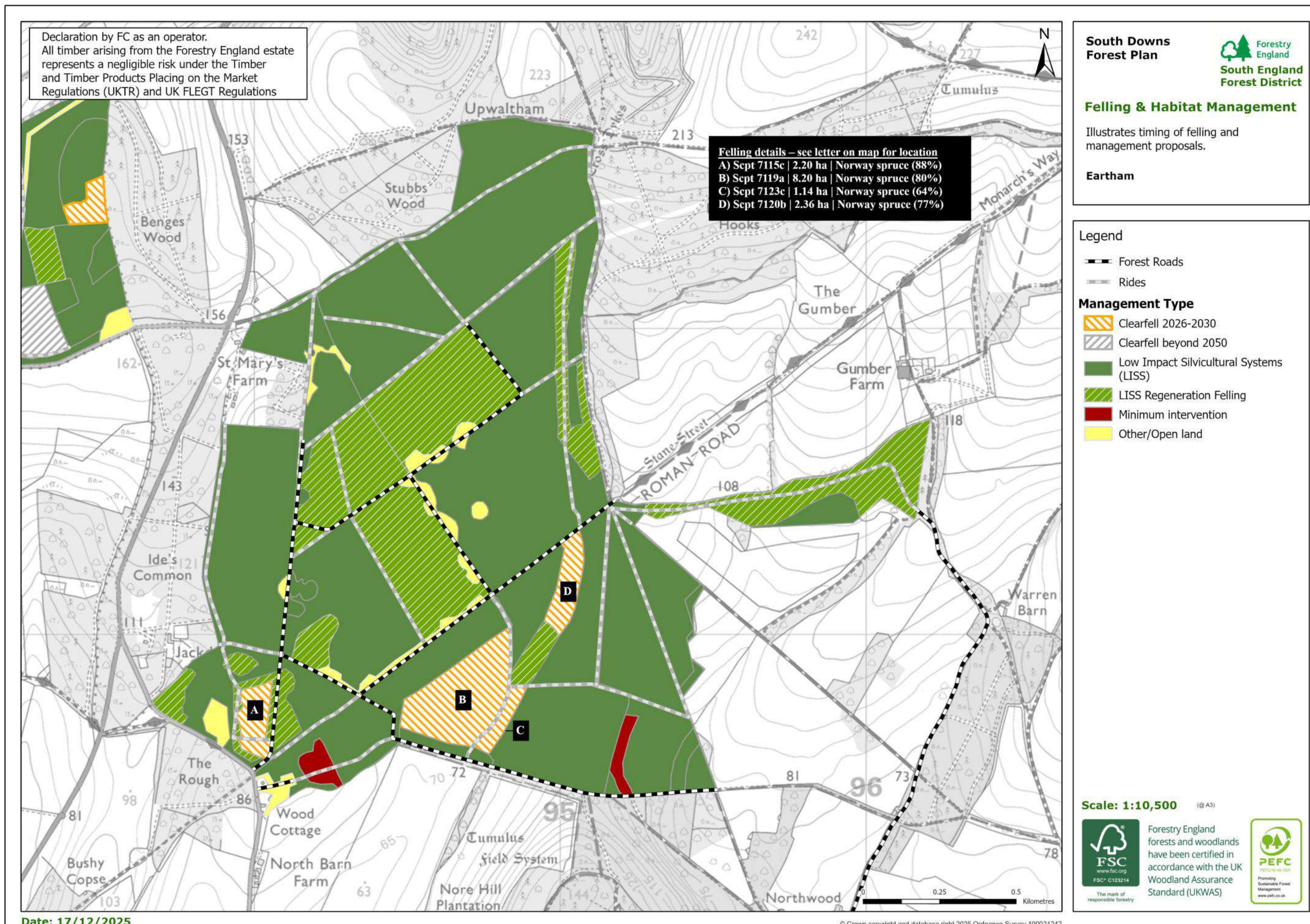


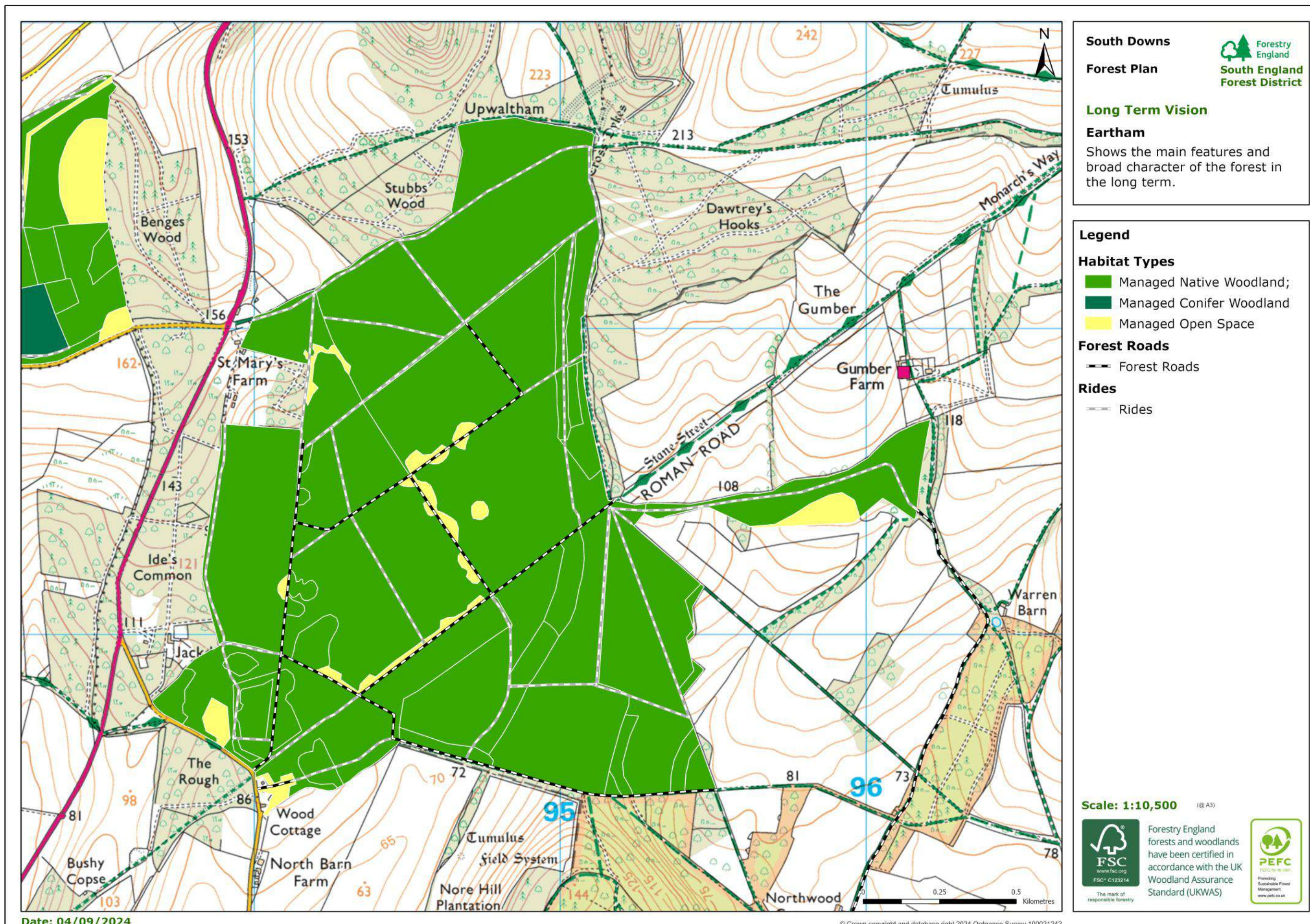


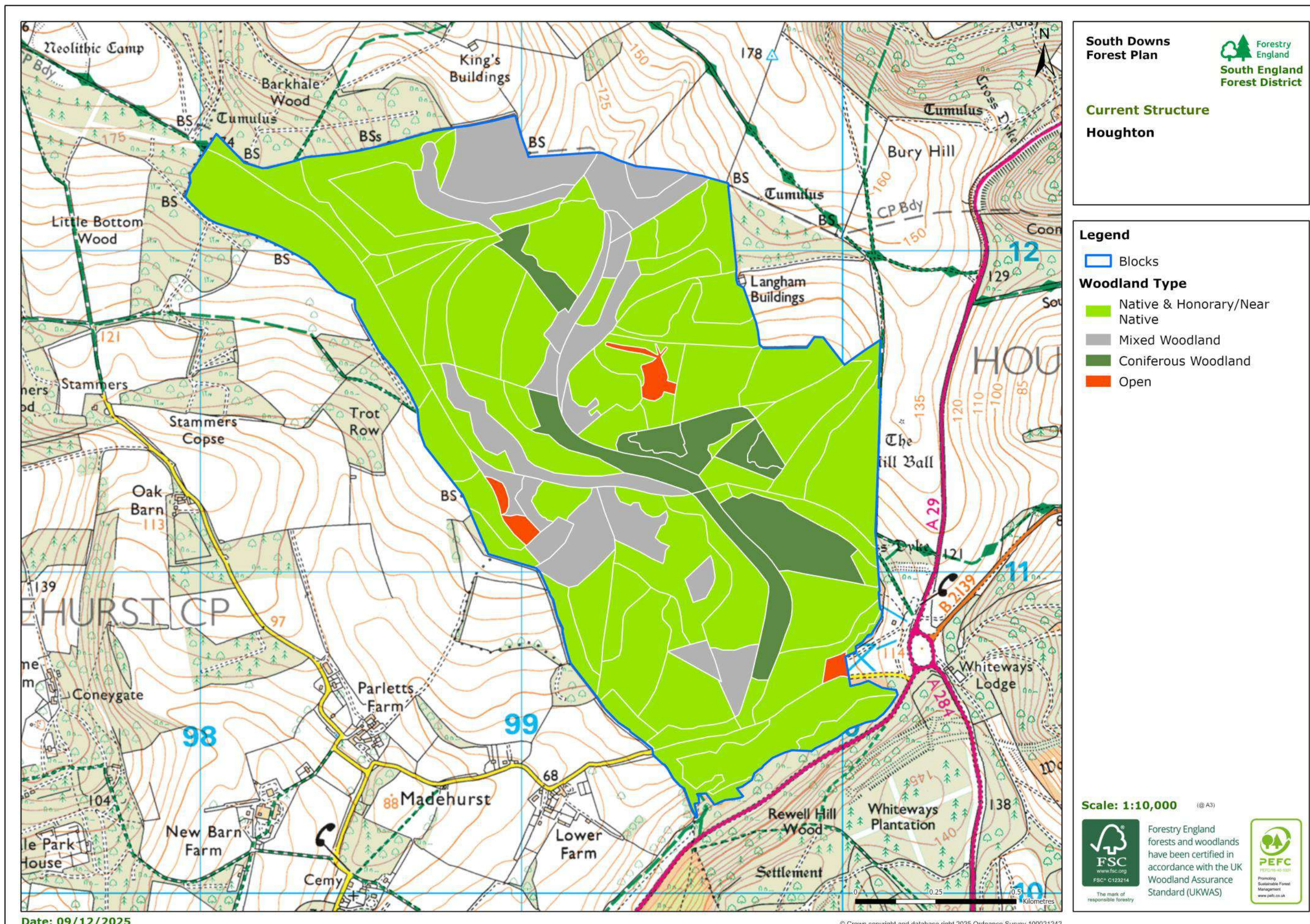


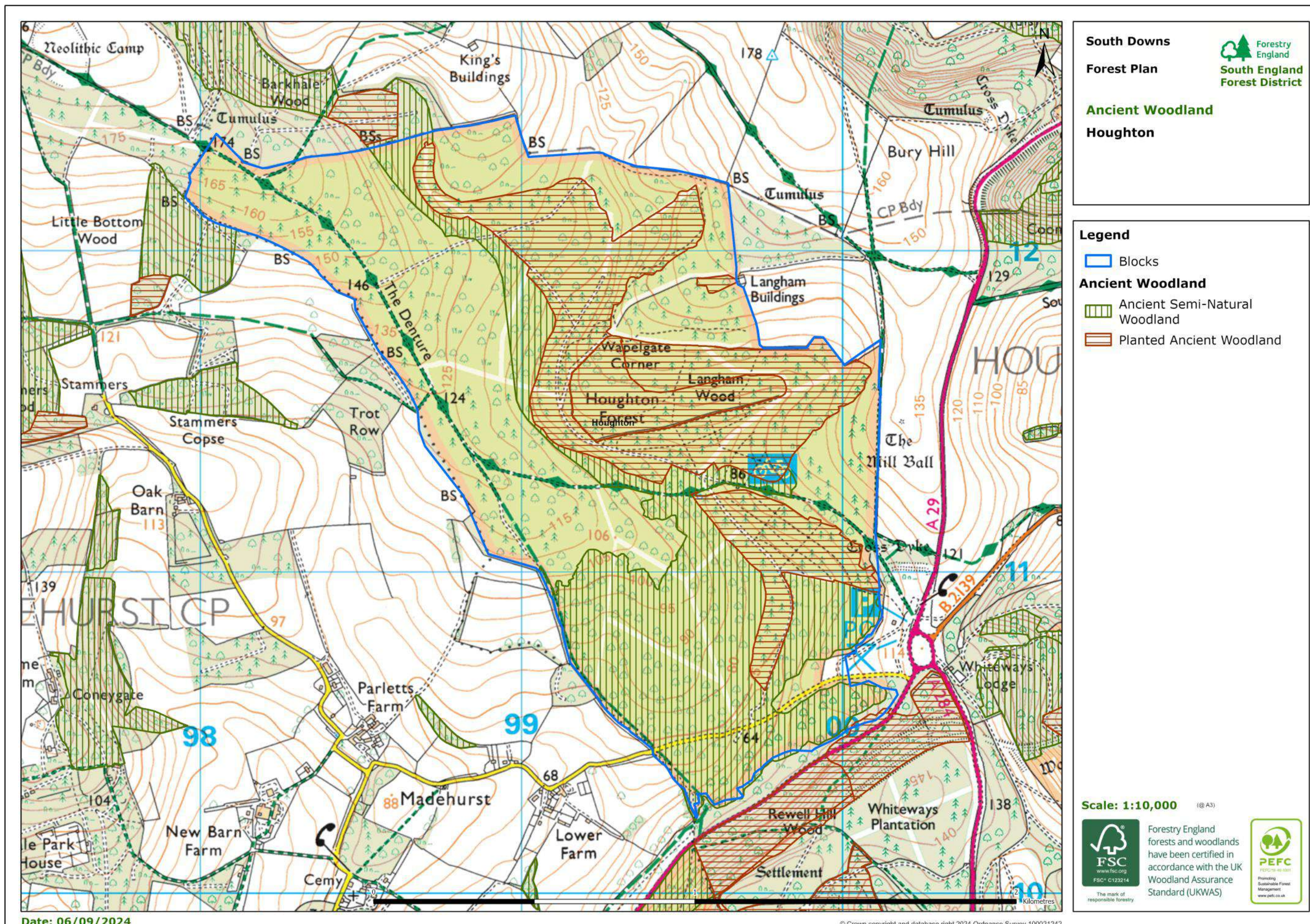


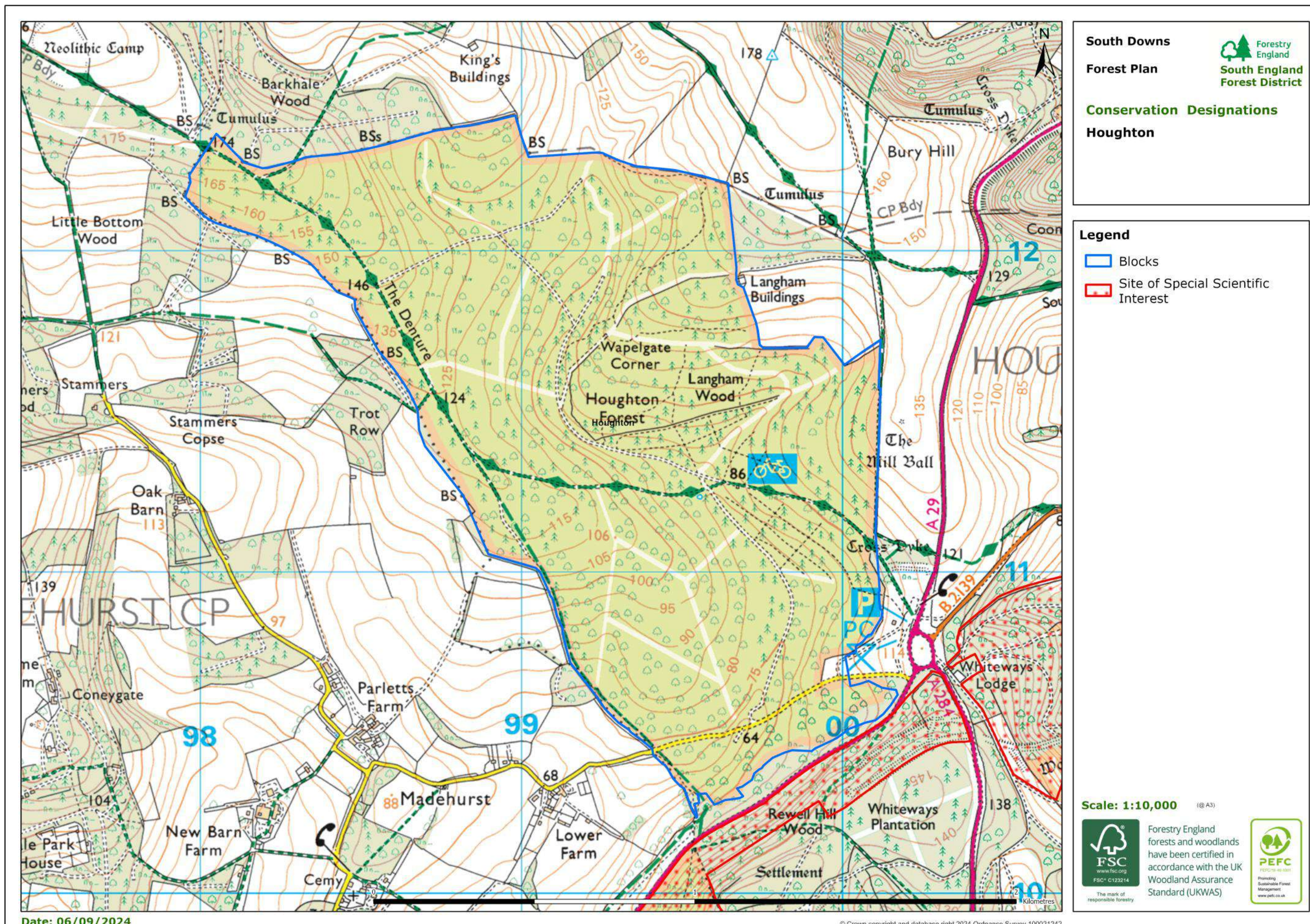


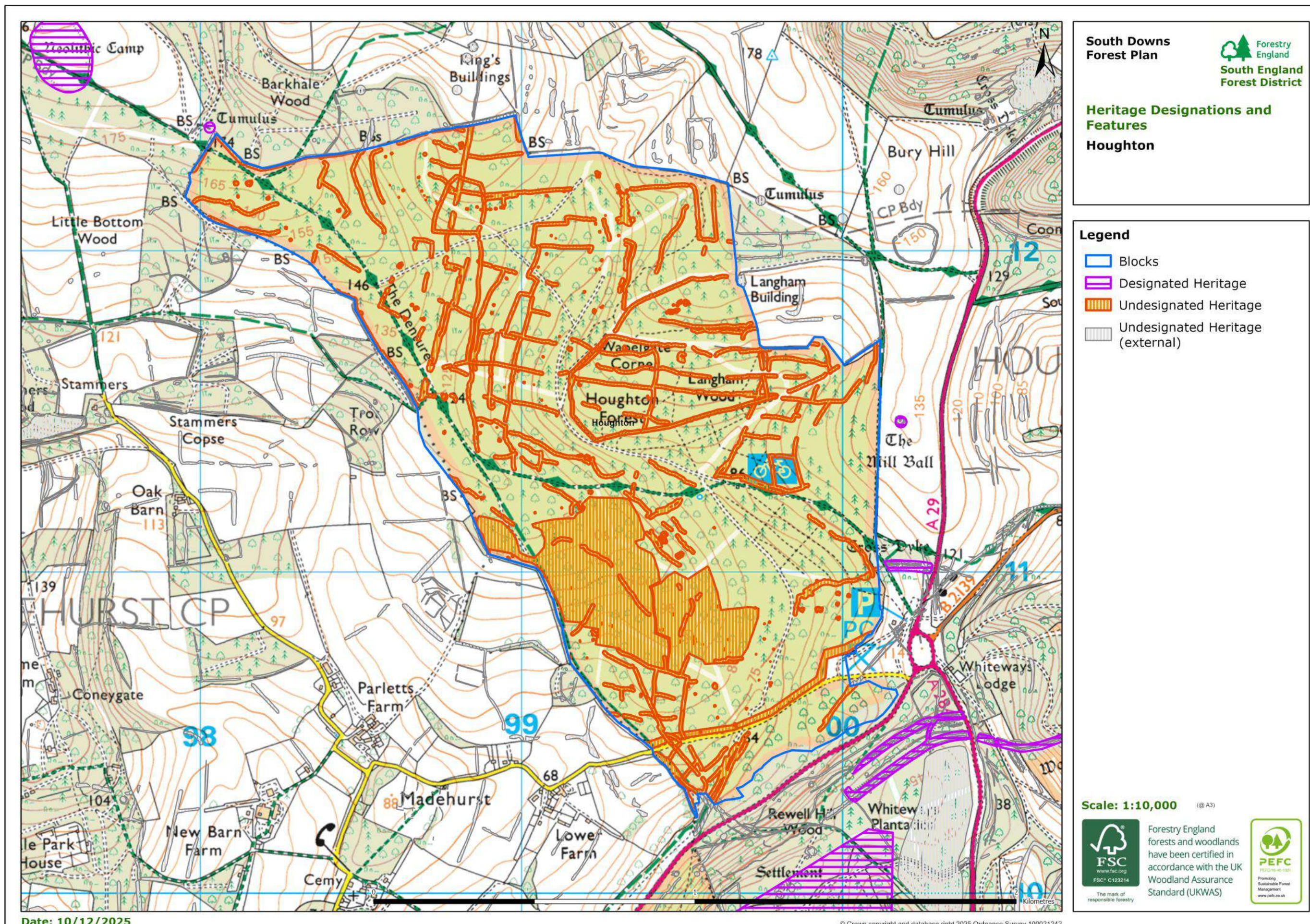


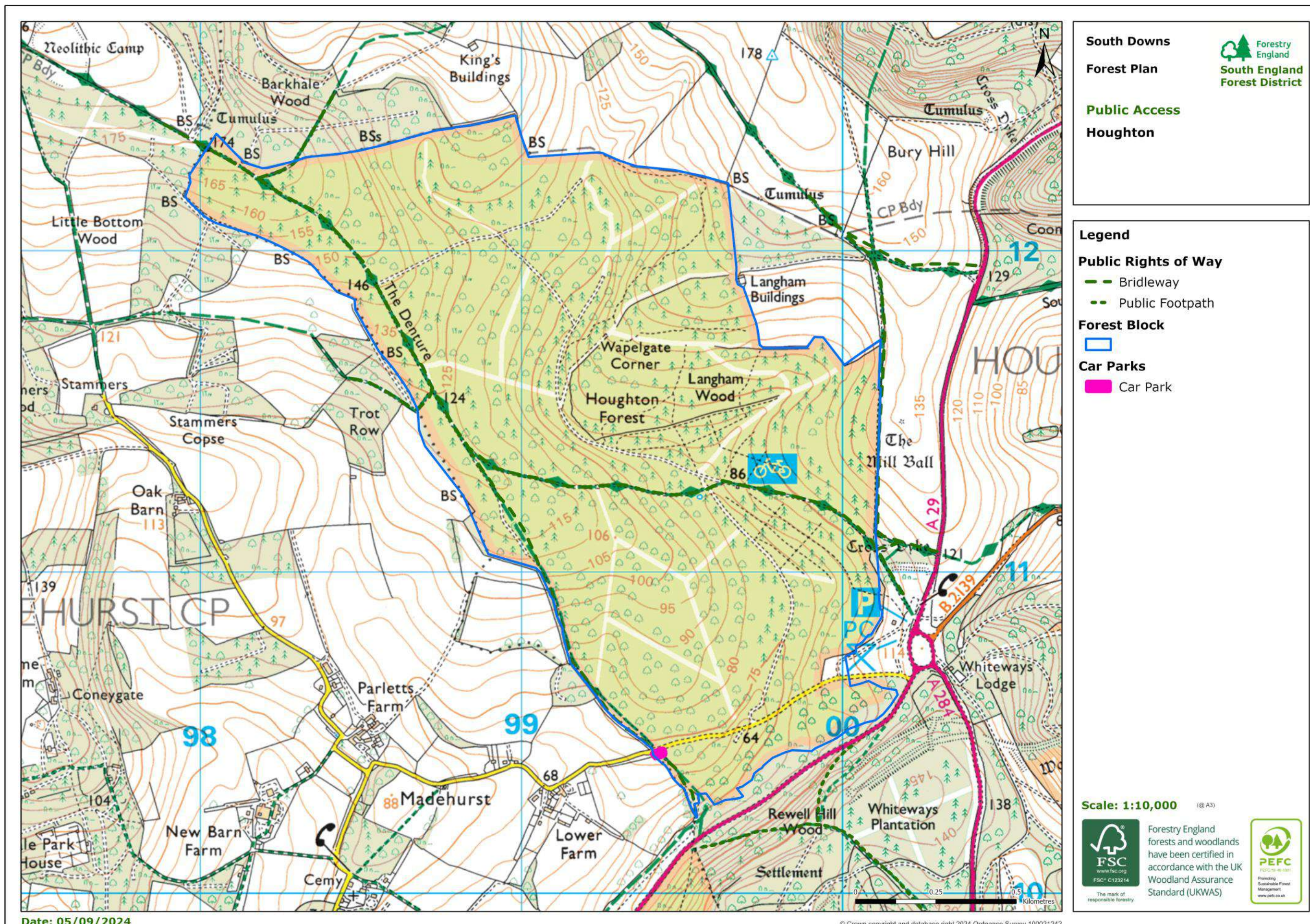


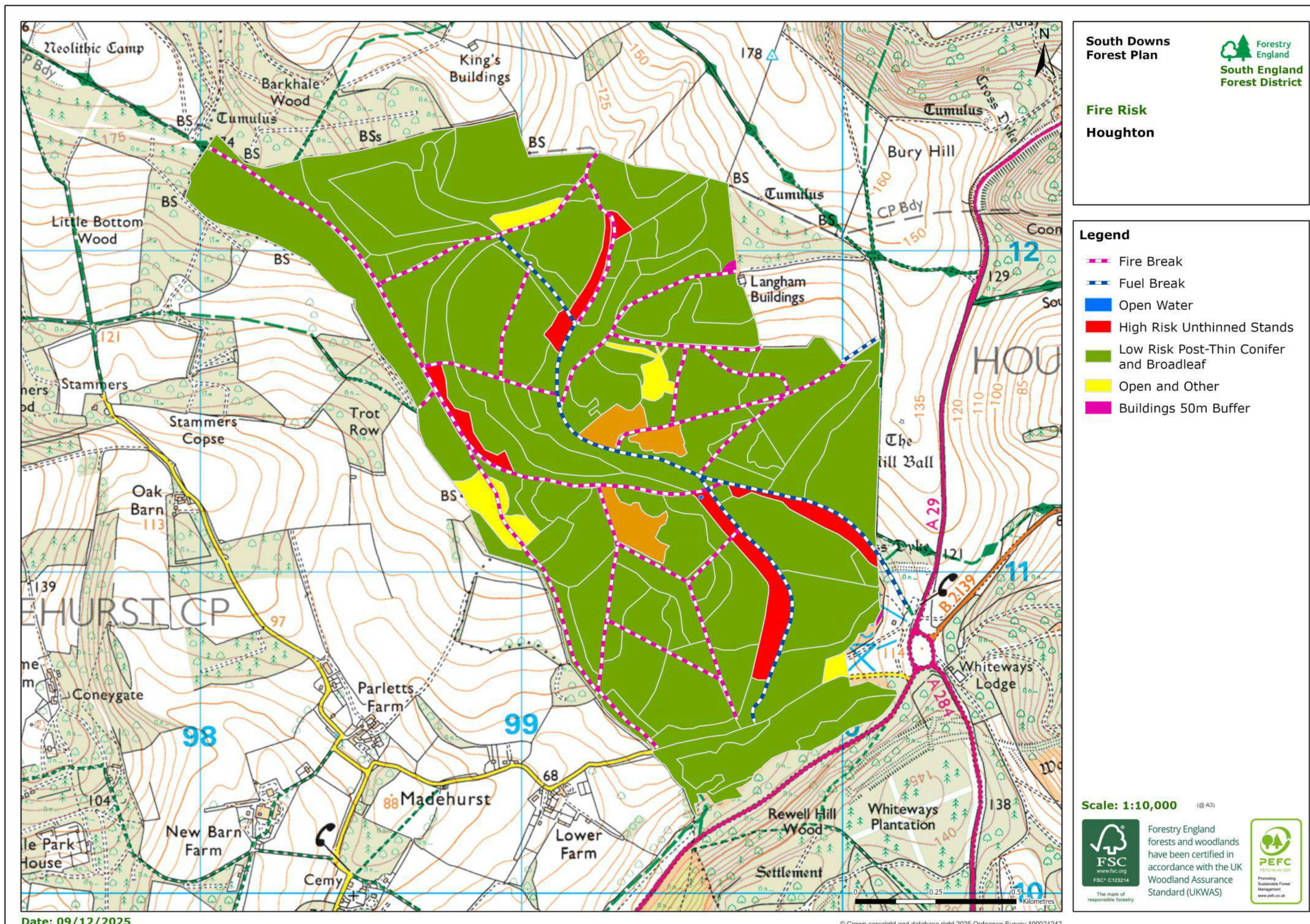


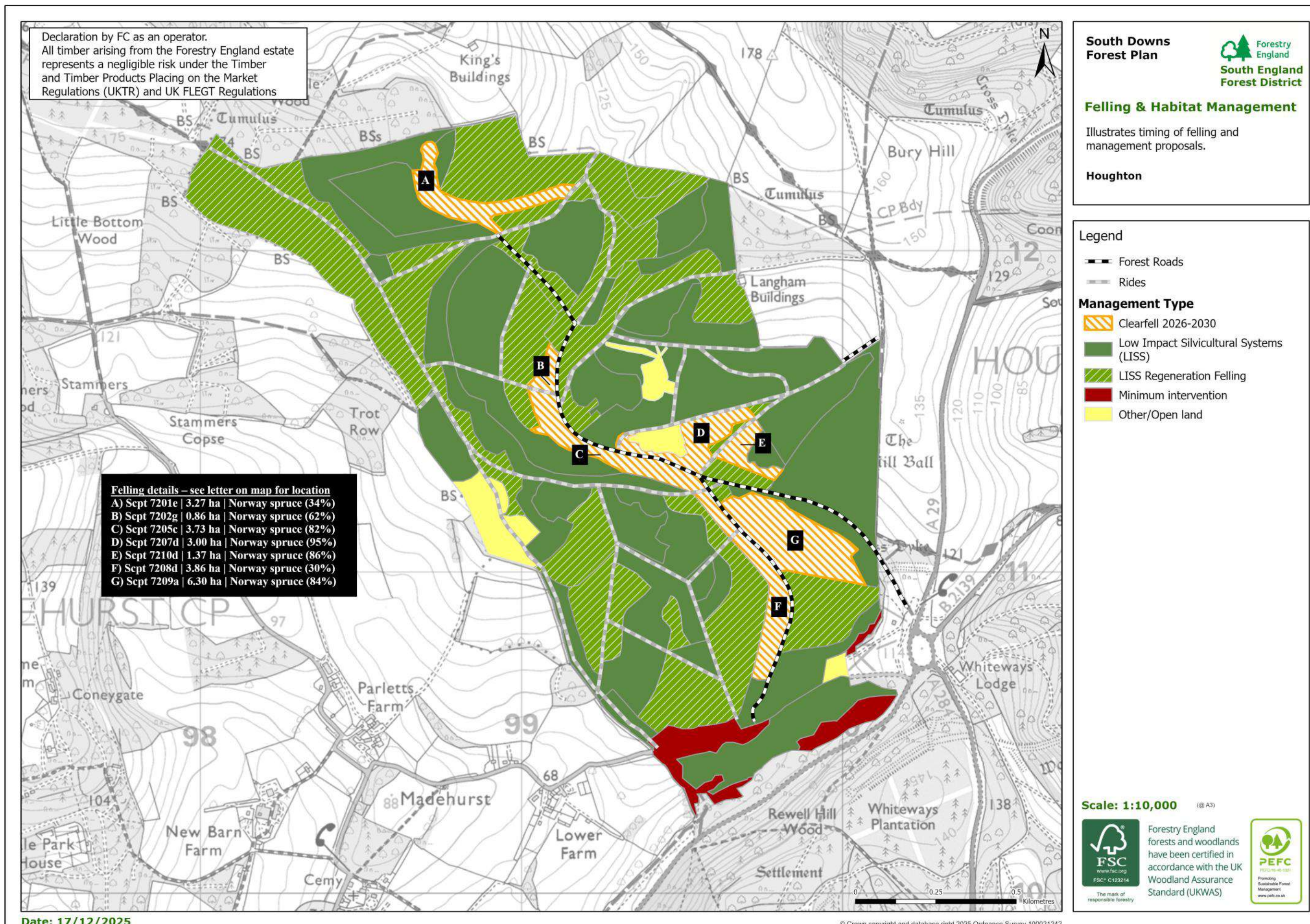


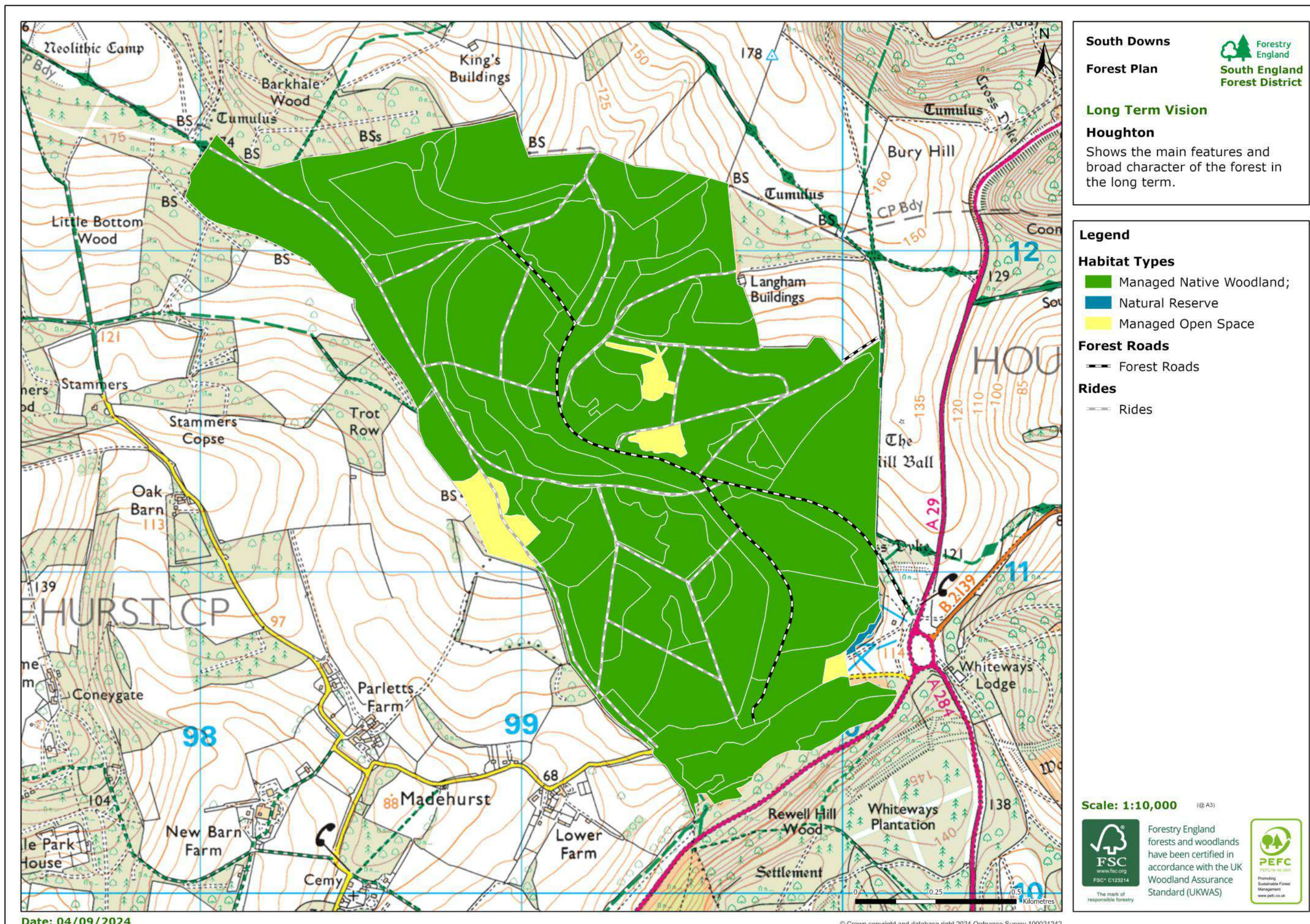












Appendix 1: UKWAS Compliance Table

	Forest Plan Area	Forest Plan Percentage	Forest District Area	Forest District Percentage
Total area	2,089 ha		47,565 ha	
Total Wooded area	2,007 ha	96%	28,280 ha	59%
Natural Reserves (Plantation)	0 ha	0%	286 ha	1%
Natural Reserves (Semi-Natural)	57 ha	3%	2,959 ha	6%
Long-term Retentions and Low Impact Silvicultural Systems	1,862 ha	89%	21,264 ha	45%
Area of conservation value including: • Ancient Semi-Natural Woodland • Planted Ancient Woodland Sites • Natural Reserves • Long-Term Retentions • Low Impact Silvicultural Systems • Sites of Special Scientific Interest	2,043 ha	98%	26,404 ha	56%

Appendix 2: Tolerance Table

	Adjustment to felling coupe boundaries	Swapping of felling coupes	Adjustment to felling operation	Clearance of standing trees associated with wind-blown areas	Timing of restocking - including natural regeneration	Species choice	Tree health
Formal approval by area team required	>25% of the coupe area	Where changes to the felling sequence is likely to result in a significant breach ¹ of the UKFS adjacency rules	Thinning to selective felling or clear felling LISS where > 60% of standing tree volume is to be removed	Clearance of >1 Ha or 10% of the area (whichever is less) in sensitive ² areas, >5 ha or 25% of the area (whichever is less) in non-sensitive areas	Where this is > 4 planting seasons from the date of felling	From mixed, predominantly broadleaves to evergreen conifer	Where no SPHN issued and felling required
Written approval only required from area team³	Between 10-25% of the coupe area	Where changes to the felling sequence is likely to result in a minor breach ⁴ of the UKFS adjacency rules	LISS where between 40% and 60% of standing tree volume is to be removed		Where this is at least 2 but no more than 4 planting seasons from the date of felling	Deciduous conifers to evergreen	Thinning > 50% but < 65%
Formal approval by area team <u>not</u> required⁵	< 10% of the coupe area	Where changes to the felling sequence does not result in a breach of the UKFS adjacency rules.	Clear felling to selective felling or thinning LISS where < 40% of standing tree volume is to be removed	Clearance of <1 Ha or 10% of the area (whichever is greater) in sensitive ² areas, <5 ha or 25% of the area (whichever is greater) in non-sensitive areas	Where this is < 2 planting seasons from the date of felling	Any other changes	Where SPHN is issued or thinning up to 50%

¹Greater than 20% of the coupe boundary

²Definition of sensitive areas is as per the EIA guidance

³Approval letter retained for compliance inspection purposes

⁴20% or less of the coupe boundary

⁵District team must retain all relevant documentation for compliance inspections

Appendix 3: Monitoring and measurement of success

Objective	Monitoring
Develop economic (timber supply) and ecological resilience against disease and climate change impacts by: - Increasing the species and age diversity of the woodland through forest operations. - Where possible use a combination of natural regeneration, planting trees from local provenances, and also from suitable provenances matched with our likely future climate.	- Summaries of felling, species and age distribution from our sub-compartment database at years 5 and 10. - Assessments of stocking density and natural regeneration using an appropriate method. - Consult Operational Site Assessments (OSAs) and Beat Team at years 5 and 10 to assess what opportunities have been taken to diversify species and age classes, use natural regeneration or plant trees of a more southerly provenance.
Promote species, habitat, and functional diversity by: - Continuing to restore Planted Ancient Woodland Sites towards native and near native broadleaves. - Taking opportunities to manage open space and ride-edge habitats for the benefit of wildlife. - Moving towards the use of Low Impact Silvicultural Systems (LISS) in suitable stands. - Taking opportunities to promote soil enhancing species such as birch, hornbeam, small-leaved lime and alder.	- Summaries of felling, species and age distribution at years 5 and 10 from our sub-compartment database. - Consult OSAs and Beat Team at years 5 and 10 to assess what opportunities have been taken to maintain SSSI status, carry out PAWS restoration, ride/open space management and wet woodland restoration. - Assess opportunities that have been taken to move towards the use of LISS and promote soil enhancing species.
In woods that are accessible to the public: - Maintain the existing recreational capacity of the woodland. - Look for opportunities to develop recreational capacity and a high-quality visitor experience, while retaining woodland resilience.	Consult OSAs and Beat Team at years 5 and 10 to assess what opportunities have been taken carry this out.

Appendix 3: Monitoring and measurement of success

Forestry England National Strategic goal	Forest Plan Objective	Monitoring
For Wildlife - The nation's forests provide the most valuable places for wildlife to thrive and expand in England. - The rich, diverse, and connected habitats in the nation's forests will continue to be improved and enhanced by our sustainable forest and land management. - We will harness the power of nature, establishing a network of wild areas in the nation's forests.	Promote species, habitat, and functional diversity by: - Continuing to restore Planted Ancient Woodland Sites towards native and honorary/near native broadleaves. - Taking opportunities to manage open space and ride-edge habitats for the benefit of wildlife. - Maintain and improve functioning forest soils that drive nutrient and water cycling by: - Moving towards the use of Low Impact Silvicultural Systems (LISS) in suitable stands. - Take opportunities to promote soil enhancing species such as birch, hornbeam, and small-leaved lime. - Look for habitat enhancement opportunities for key species groups such as lepidoptera or bats. - Look for methods to encourage the regeneration of designated and undesignated areas of yew (<i>Taxus baccata</i>) woodland near or adjacent to Kingley Vale National Nature Reserve, SSSI and SAC.	Review the Forest Plan by: - Reviewing Operational Site Assessments (OSAs) at years 5 and 10 to assess what opportunities have been taken to move towards PAWs restoration and carry out ride/open space management, promote soil enhancing species, carry out habitat enhancement, and manage Kingley Vale SSSI and other yew areas. - Looking at summaries of species and age distribution from SCDB exports at year 10
For People - The nation's forests are a living treasure for all, deeply connected to people's lives improving the health and well-being of the nation. We will: - Continue to provide first-class outdoor experiences in the nation's forests with excellent customer service. - Increase the diversity of visitors to the nation's forests.	In those woods that are accessible to the public (Eartham, Houghton and Marden): - Maintain the existing recreational capacity of the woodland. - Look for opportunities to develop recreational capacity and a high-quality visitor experience, while retaining woodland resilience. - Conserve features of natural and cultural heritage signifi-	Review OSAs and talk to the Beat Team to assess what opportunities have been taken carry this out.
For Climate: The nation's forests are resilient to climate change, increasing their value for communities by producing high-quality, sustainable timber and absorbing carbon emissions. We will: Continue to manage the nation's forests, following world-class, independently certified, sustainable forest and land management standards to ensure they thrive and provide vital sustainably produced timber.	Develop economic (timber supply) and environmental resilience against climate change and disease impacts by: - Increasing the species and age diversity of the woodland through forest management operations. - Where possible use a combination of natural regeneration, planting trees from local provenances, and also from suitable provenances matched with our likely future climate.	Review the Forest Plan by: - Reviewing OSAs at years 5 and 10 to assess what opportunities have been taken to diversify species and age classes, use natural regeneration or plant trees of a more southerly provenance. - Looking at assessments of natural regeneration using an appropriate method from OGB4 (or its PPG successor) at years 5 and 10. - Looking at summaries of species and age distribution from SCDB exports at year 10