



BLUNTS FARM
WOODLAND CREATION SCHEME
DRAFT 05.05.2020



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SITE LOCATION



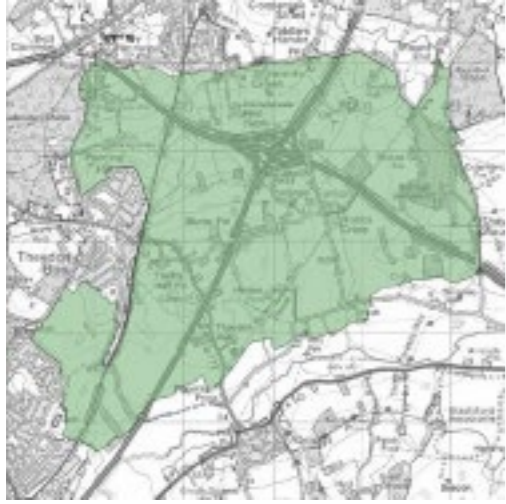
The site is located in Theydon Bois, SW of the M25/M11 motorway junction. It is an agricultural site, located within the Metropolitan Green Belt, NE of the Epping Forest.

AREA MEASUREMENTS



LANDSCAPE CONTEXT

The site lies within the Roding Valley Mid-Essex Landscape Character Area, just east of the Epping Forest and Ridges. On a more detailed scale of the Epping Forest Landscape Character assessment (by Chris Blandford Associates, see full reference below) it has been further associated with the Theidon Garnon landscape character area (G2) of the wooded Ridges and Valleys category (G).



Extent of G2 Landscape Character Area

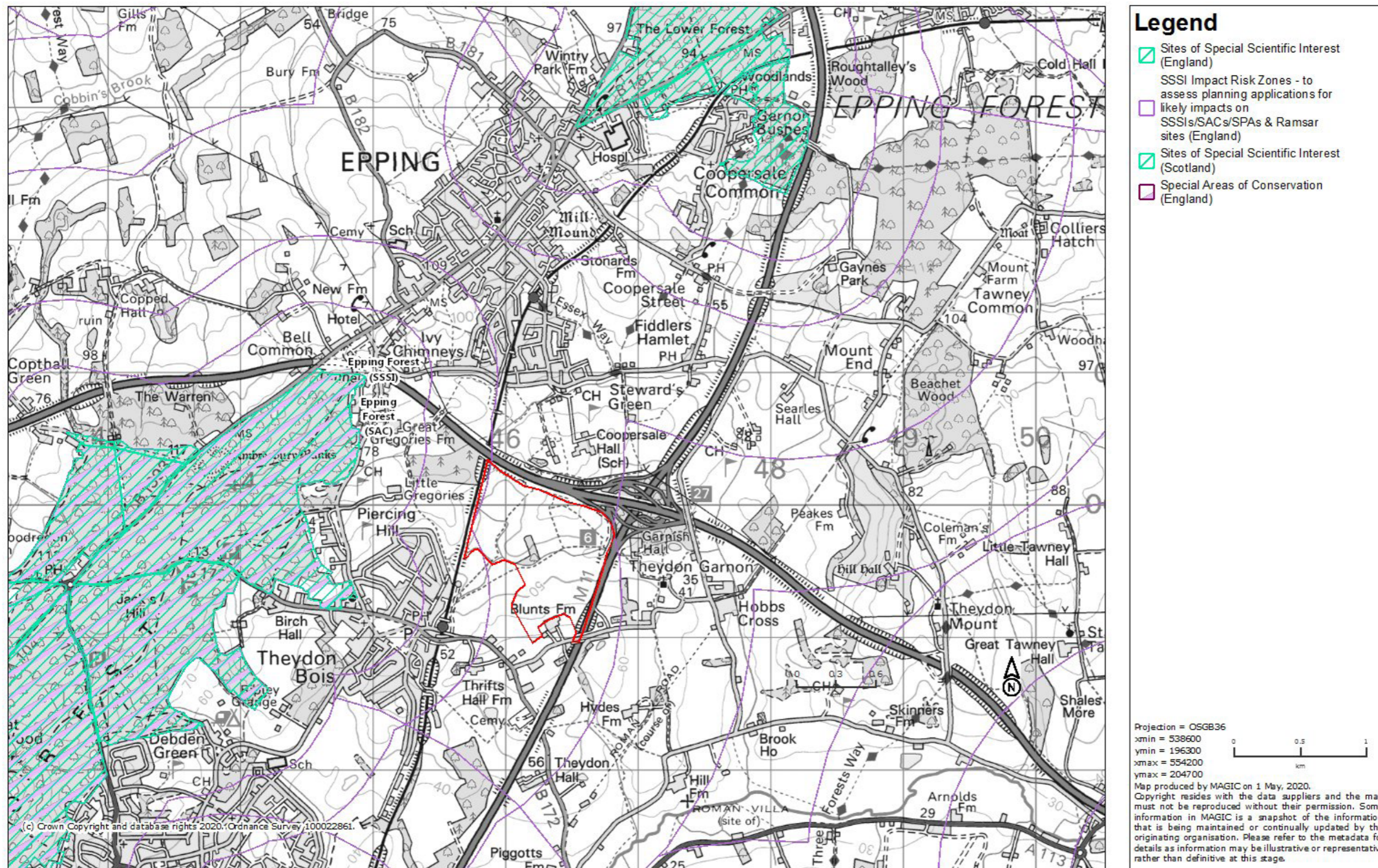
Key characteristics of the Theidon Garnon Landscape Character Area:

- The interchange between the M11 and M25 road corridors dominates landscape pattern within this area;
- Both road corridors introduce a source of noise and movement into the area and disturb overall sense of tranquillity;
- Strongly undulating topography in places as a result of the series of ridges and slopes;
- A patchwork of arable and pastoral farmland, often lined with mature hedgerows, containing hedgerow trees;
- Rows of pylons form dominant vertical elements within certain views;
- A network of minor roads cross the area;
- Settlement pattern comprises a series of small, linear, historic hamlets, such as Fiddler's Hamlet.

Suggested land management guidelines:

- Conserve and enhance the existing hedgerow pattern, and strengthen through planting using local provenance species;
- Conserve mature and veteran trees within fields and hedgerows (and associated headlands) as key landscape and ecological features;
- Conserve and promote the use of building materials which are in keeping with local vernacular/landscape character.
- Establish species rich field margins within arable fields as an important nature conservation habitat.

(Source: Epping Forest District Council Epping Forest Landscape Studies;, Landscape Character Assessment, Chris Blandford Associates)



The site is located within a close proximity of the Epping Forest SSSI and SAC (less than 1 km from the NE edge of the designation boundary) and as such is located within the impact zone of the SSSI. Two main habitats represented in the Epping Forest are acid grassland and semi-natural lowland broadleaved, mixed and yew woodland. In relation to the SAC listing, the habitat is further described as the H9120 Atlantic acidophilous beech forests with *Ilex* and sometimes also *Taxus* in the shrublayer (*Quercion robori-petraeae* or *Ilici-Fagenion*).

(Sources: <https://sac.jncc.gov.uk/habitat/H9120/>; <https://designatedsites.naturalengland.org.uk/>)

GEOLOGY AND SOILS (DESKTOP STUDY)

Geologically, the site is located within the London Clay Formation - Clay, Silt and Sand.

(Source: <http://mapapps.bgs.ac.uk/geologyofbritain/home.html>)

Based on the soilscape map (Cranfield Soil and Agrifood Institute), the site, as well as Epping Forest, are located within the Soilscape 18: Slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils.

(Source: <http://www.landis.org.uk/soilscales/index.cfm>)

Cranfield University 2020. The Soils Guide. Available: www.landis.org.uk. Cranfield University, UK. Last accessed 05/05/2020

According to the Countryside survey of topsoil in Great Britain, the pH value for parts of the site are about pH 6.07 (dated in 2007), which is slightly above the Epping Forest (pH 5.5).

(Source: <http://www.ukso.org/static-maps/countryside-survey-topsoil.html>)

PROPOSED WOODLAND MIX

The proposed woodland mix is based on the desktop research and needs to be reassessed following a site visit and an ecological survey.

The new woodland character and the species composition are determined by the site location and the soil type. The proximity of the major protected area of the Epping Forest with the semi-natural lowland broadleaved, mixed and yew woodland habitat, has been taken into account and reflected in the selection of the species for the Blunts farm site. The character of the proposed woodland should also relate to the landscape character of the area.

The woodland mix is based on a typical composition of a lowland beech-oak woodland. The species selection relates to the Forestry Commission recommendation for a semi-natural mixed lowland broadleaved woodland on slightly acidic to neutral soils (NVC woodland W14) and includes major native trees (Beech and English Oak), smaller trees (Silver birch, Rowan, Goat Willow and Wild Cherry) and smaller understorey trees (Holly, Yew, Hazel and Hawthorn).

Note, that although the design is based on good practice recommendations for new woodland planting, the aim the project on the Blunts Farm site is not habitat restoration, but a carbon sequestration scheme. In that respect the species selection may need to be expanded to meet the carbon sequestration targets as well as the climate change adaptation measures.

References:

Rodwell and Patterson (1994), Creating new native woodlands, FC Bulletin 112

FORESTRY COMMISSION (2017). The UK Forestry Standard.

PRELIMINARY TREE PLANTING MIX CALCULATIONS

Phase 1 (Area 49.8 ha)

Quantity	Name	Common name	Density/m2	% in the mix
Planting area in m2 450,000				
Dominant trees				
9,000	<i>Fagus sylvatica</i>	Beech	0.2	10%
4,500	<i>Quercus robur</i>	English Oak	0.2	5%
Sub-dominant trees				
5,625	<i>Acer campestre</i>	Field maple	0.25	5%
33,750	<i>Betula pendula</i>	Silver birch	0.5	15%
5,625	<i>Populus tremula</i>	Aspen	0.25	5%
11,250	<i>Prunus avium</i>	Bird cherry	0.25	10%
22,500	<i>Sorbus aucuparia</i>	Rowan	0.5	10%
11,250	<i>Salix caprea</i>	Goat willow	0.5	5%
Understorey trees				
22,500	<i>Corylus avellana</i>	Hazel	0.5	10%
45,000	<i>Crataegus monogyna</i>	Hawthorn	0.5	20%
6,750	<i>Ilex aquifolium</i>	Holly	0.5	3%
4,500	<i>Taxus baccata</i>	Yew	0.5	2%
				100%
182,250 TOTAL				

Phase 2 (Overall area 32.7 ha)

Quantity	Name	Common name	Density/m2	% in the mix
Planting area in m2 300,000				
Dominant trees				
6,000	<i>Fagus sylvatica</i>	Beech	0.2	10%
3,000	<i>Quercus robur</i>	English Oak	0.2	5%
Sub-dominant trees				
3,750	<i>Acer campestre</i>	Field maple	0.25	5%
22,500	<i>Betula pendula</i>	Silver birch	0.5	15%
3,750	<i>Populus tremula</i>	Aspen	0.25	5%
7,500	<i>Prunus avium</i>	Bird cherry	0.25	10%
15,000	<i>Sorbus aucuparia</i>	Rowan	0.5	10%
7,500	<i>Salix caprea</i>	Goat willow	0.5	5%
Understorey trees				
15,000	<i>Corylus avellana</i>	Hazel	0.5	10%
30,000	<i>Crataegus monogyna</i>	Hawthorn	0.5	20%
4,500	<i>Ilex aquifolium</i>	Holly	0.5	3%
3,000	<i>Taxus baccata</i>	Yew	0.5	2%
				100%
121,500 TOTAL				

PROPOSED TREE SPECIES (INITIAL SELECTION - TBC)



Fagus sylvatica



Quercus robur



Betula pendula



Sorbus aucuparia



Prunus avium



Corylus avellana



Crataegus monogyna



Ilex aquifolium

WOODLAND DEVELOPMENT VISUALISATION - "BEFORE" AND PHASE 1



Existing situation



Phase 1 planting visualisation (young woods)

PHASE 1 AND 2 OF WOODLAND PLANTING



Phase 2 planting visualisation



Visualisation of the mature woodland (Phase 1 and 2 together)