

M25 junction 28 improvement scheme TR010029

6.3 Environmental Statement Appendix 7.2: Desk study report

APFP Regulation 5(2)(a)
Planning Act 2008

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009



Infrastructure Planning

Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

M25 junction 28 scheme Development Consent Order 202[x]

6.3 ENVIRONMENTAL STATEMENT APPENDIX 7.2: DESK STUDY REPORT

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Appendix 7.2 Desk study report

7. Desk study report

7.1 Introduction

7.1.1 This appendix presents the findings of the desk based study in relation to the following biodiversity features:

- Statutory designated sites
- Non-statutory designated sites
- Priority habitats
- Priority plants
- Invasive non-native plants

7.1.2 The desk based study area (search distances) and data sources can be found in the Biodiversity chapter (Chapter 7) of the Environmental Statement (application document TR010029/APP/6.1).

7.2 Desk study data results

Statutory designated sites

7.2.1 One statutory site, The Manor LNR, is present within the study area, as detailed in Table 7.1.

7.2.2 The closest statutory designated site where there is a hydrological connection to the Scheme, via the Ingrebourne River, is Ingrebourne Marshes SSSI, 12 km downstream from the DCO boundary. The closest international site hydrologically connected to the Scheme is Thames Marshes and Estuary SPA and Ramsar site, via the River Ingrebourne and River Thames, approximately 35 km downstream.

7.2.3 There are no Special Areas of Conservation with bats listed as a reason for designation within 30 km of the Scheme.

Table 7.1: Statutory designated sites within the study area

Site name	Grid reference	Area (ha)	Distance from DCO boundary	Description
The Manor LNR	TQ555923	60	0.3 km north west	A historic landscape made up of acid and neutral grassland, along with ancient and secondary woodland. A wide and diverse range of habitats comprise ponds, hedgerows and lakes which support great crested newt and stag beetle.

Non-statutory designated sites

7.2.4 There are 42 non-statutory designated sites within the study area. These sites are detailed in Table 7.2. The northern extent of Ingrebourne Valley Site of

Metropolitan Importance for Nature Conservation (SMI) lies within the DCO boundary. The full citation of this SMI is provided in Annex 1.

Table 7.2: Non-statutory designated sites within the study area

Site name ¹	Description ²	Distance from the DCO boundary	Area	Grid reference
Ingrebourne Valley SMI	One of the most natural river corridors in London, with nationally important wetlands at the lower end and ancient alder woods further upstream. Approximately 36.8 ha of the SMI lies within the DCO Boundary.	Partly within the DCO boundary	263 ha	TQ538842
The Oaks Local Wildlife Site (LoWS)	The wood is dominated by pedunculate oak. This section is bounded by earth bunds and ditches, indicating an old, possibly ancient status for this section, although the remainder of the wood is recent in origin.	Directly adjacent to DCO boundary (west) north-east	14 ha	TQ566930
Jermains Wood Site of Borough Importance for Nature Conservation (SBI) Grade 2	An ancient wood ³ with a good range of plants and animals. Includes part of the M25 highway slope.	Directly adjacent to the DCO boundary west	7.3 ha	TQ570908
Tyler's Wood SBI	New SBI designated in 2016 Local Plan update. Description not available.	Directly adjacent to the DCO boundary west	15 ha	TQ5729050
Folkes Lane Woodland (Upminster) SBI	New SBI designated in 2016 Local Plan update. Description not available.	0.02 km west	48 ha	TQ576895
Foxburrow Wood LoWS	Site has suffered losses due to the expansion of the M25. It previously comprised hornbeam-oak-birch wood over a ground cover dominated by bracken. Now, large parts appear to lack a high canopy, comprising young growth with occasional oaks.	0.02 km southeast	6.9 ha	TQ575902
Foxburrow Wood, (Upminster) SBI Grade 2	Ancient woodland	0.02 km southwest	2.2 ha	TQ573902
Duck Wood SBI Grade 1	A large ancient wood, with a series of fine ponds, managed as a nature reserve by the London Wildlife Trust.	0.25 km west	10 ha	TQ555923

¹ Sites of Importance for Nature Conservation (SINCs) are locally designated sites in Greater London, broken into four categories: Sites of Metropolitan Importance (SMIs), Sites of Borough Importance Grade 1 (SBI Grade 1), Sites of Borough Importance Grade 2 (SBI Grade 2) and Sites of Local Importance (SLI). Additional sites identified in the Havering Local Plan (2016 – 2031) are identified as Proposed Sites of Borough Importance (pSBIs). In Essex, Local Wildlife Sites (LoWS) are locally designated sites.

² Taken from citations provided by local records centre.

³ This woodland is not identified as ancient on magic.defra.gov.uk. However, the citation for the LoWS states this is an area of probable ancient woodland.

Site name ¹	Description ²	Distance from the DCO boundary	Area	Grid reference
Jackson's Wood and Tyler's Shaw LoWS	Either side of the watercourse in Jackson's Wood hornbeam coppice dominates along with scattered ash and pedunculate oak standards	0.03 km southeast	4.4 ha	TQ574908
Lower Vicarage Wood LoWS	A large ancient wood dominated by overgrown hornbeam coppice with frequent standards of pedunculate oak. There is little understorey and ground flora, largely due to intense deer browsing.	0.05 km north	4.2 ha	TQ569929
Dagnam Park and Hatter's Wood SMI	An historic landscaped park with many high-quality wildlife habitats, including ancient woodland, a variety of grassland, and ponds.	0.16 km northwest	75 ha	TQ550930
Romford to Harold Wood Railsides SBI Grade 2	Havering's railsides form a network of valuable undisturbed habitats, acting as corridors for wildlife moving around the borough.	0.4 km west	28 ha	TQ531894
Tylers Common SBI Grade 1	A large common with a good range of wildlife habitats, with some uncommon plants.	0.4 km southwest	29 ha	TQ566905
Coombe Wood LoWS	The western part of the site is characterised by silver birch, scattered pedunculate oak and sweet chestnut. Rhododendron dominates the shrub layer whilst bluebells are abundant in the ground flora.	0.5 km southeast	7.9 ha	TQ579901
Shoulder of Mutton Site of Local Importance for Nature Conservation (SLI)	A small ancient woodland, popular for informal recreation.	0.6 km west	2.2 ha	TQ551919
Weald Country Park LoWS	The site comprises the majority of Weald Country Park, with the only exclusions being the heavily managed visitor areas to the south of the main lake and a number of woodland sections dominated by conifers. The park can be divided into three distinct section: the northern woods, eastern old parkland and western meadowland.	0.7 km north	139 ha	TQ570947
St Faith's/HoneyPot Lane Meadows LoWS	The site comprises extensive grassland, hedgerow and streamside habitat. The meadows are separated by a network of substantial hedgerows forming well connected corridors of scrubby habitat.	0.7 km northeast	16 ha	TQ586937
Warley Country Park LoWS	Much of the western part of this site is developing woodland and scrub	0.8 km southeast	25 ha	TQ584924

Site name ¹	Description ²	Distance from the DCO boundary	Area	Grid reference
	interspersed by grassy glades. To the east is an area of more densely shading plantation habitat with pedunculate oak and ash.			
Warley Place LoWS	The site comprises the Essex Wildlife Trust's Warley Place nature reserve and two adjacent meadows.	0.9 km east	10 ha	TQ583909
Bachelor's Walk Wood LoWS	Site comprises two sections of streamside woodland. The northern section has a canopy dominated by hornbeam coppice with pedunculate oak standards whilst alder is found by the stream.	0.9 km east	1.4 ha	TQ582916
La Plata Grove LoWS	A variety of tree species for the high canopy of this woodland. Those characteristics of this site include pedunculate oak, ash and common lime, whilst alder is found near the stream on the western side of the site.	0.9 km east	1.7 ha	TQ588933
Carter's Brook and Paine's Brook SBI Grade 2	Two streams lined with woodland and grassland, forming a valuable green corridor across the north of Havering.	0.9 km southwest	12 ha	TQ541929
Long Wood and Sage Wood SBI Grade 1	A sizeable area of ancient woodland, providing access to nature for many people in the north of Havering.	1 km west	4.3 ha	TQ544922
Tomkyns East Pastures SBI Grade 1	Grassland, woodland and scrub.	1.1 km south	6.6 ha	TQ571897
Holly Wood LoWS	Tall pedunculate oak, sycamore, beech and ash are the characteristic tree species of this site. A fenced and secluded pond area towards the northern end of the site provides greater habitat diversity to the site.	1.2 km southeast	4.6 ha	TQ590926
St. Charles Nature Reserve LoWS	The main canopy is dominated by ash and pedunculate oak. Beneath is a lower sub including hornbeam, whilst hazel, holly and hawthorn are species found in the shrub layer. Alder grows alongside a small channel running through the site along with coppices small-leaved lime.	1.2 km northeast	0.4 ha	TQ587942
Hall Lane Verge and Montrose Pastures SBI Grade 2	Secondary woodland and road verge	1.2 km southwest	3.5 ha	TQ561899
Upminster Lodge Farm Horse Field SBI Grade 1	Horse paddock.	1.2 km south	1.7 ha	TQ566891

Site name ¹	Description ²	Distance from the DCO boundary	Area	Grid reference
Hill View SBI Grade 2	Grassland and secondary woodland.	1.2 km south	1 ha	TQ573889
Bourningwood Fields SBI Grade 2	A colourful, flower-rich pasture surrounded by fine hedges.	1.3 km south west	7ha	TQ557906
Clement's Wood LoWS	The site comprises both ancient and secondary woodland. Hazel and sycamore coppice along with holly dominate the southern part of the site. The western margin has streamside alder whilst some parts of the wood are characterised by pedunculate oak and ash standards over a shrub layer that includes elder and hawthorn.	1.3 km east	8.5 ha	TQ586919
Forge House Paddocks and Fishing Lake SBI Grade 2	Flower-rich fields and a number of ponds combine to provide some varied wildlife habitats.	1.3 km northwest	7.7 ha	TQ543936
St Mary the Virgin Churchyard, Great Warley LoWS	A mix of species typical of neutral and acid grassland are to be found in the churchyard site.	1.4 km southeast	0.4 ha	TQ588899
Locksmith Wood LoWS	Most of the site comprises ancient woodland, although the central rectangular compartment is a recent plantation.	1.5 km north	5.1ha	TQ560951
High Wood LoWS	Ancient and secondary woodland.	1.5 km northeast	4.9 ha	TQ582949
Chequers Road Wood SBI Grade 2	Secondary woodland alongside a road.	1.5 km northwest	0.6 ha	TQ544939
Holden's Wood LoWS	A wide variety of tree and shrub species are found throughout this large, undulating woodland. Many ground flora species of interest are also present.	1.7 km east	20 ha	TQ591909
Weald Brook Wood LoWS	The site comprises a strip of possibly ancient streamside woodland with an artificial southern margin.	1.8 km north	1.7 ha	TQ547950
St Thomas' Churchyard, Noak Hill SBI Grade 2	A churchyard with neutral and acidic grassland with a diversity of wild flowers, mosses and fungi.	1.9 km northwest	0.5 ha	TQ541940
Gilstead Wood LoWS	A small stand of old hornbeam may attain ancient woodland status, but the majority of this wood is mature recent woodland.	1.9 km north	2.2ha	TQ557955
Little Warley Common/Warley	Former wood-pasture, now broadleaved woodland, with a flora	1.9 km east	11 ha	TQ594908

Site name ¹	Description ²	Distance from the DCO boundary	Area	Grid reference
Gap Woods LoWS	typical of broadleaved woods on sandy, acid soils.			
Parker's Shaw LoWS	Much of the central part of Parker's Shaw has been replanted with sweet chestnut standards. Whilst bramble forms some dense ground cover, bluebell and yellow archangel are also found within the ground flora.	2.0 km southeast	1.6 ha	TQ582895

Ancient Woodland and ancient and veteran trees

7.2.5 There are 17 parcels of ancient woodland within the study area, as detailed in Table 7.3.

7.2.6 There are no ancient or veteran trees within 50 m of the Scheme listed on the Ancient Tree Inventory⁴.

Table 7.3: Ancient woodland within the study area

Site name	Distance from the DCO boundary	Area	Grid reference
Lower Vicarage Wood	0.05 km north	5.8 ha	TQ569929
Foxburrow Wood/ Coombegreen Wood ⁵	0.02 km southeast	16.6 ha	TQ575902
Folkes Lane Woodland/Foxburrow wood	0.02 km southwest	2.2 ha	TQ573902
Vicarage Wood	0.23 km north west	4.2 ha	TQ570933
The Osiers	0.2 km northeast	4.2 ha	TQ554935
Duck Wood	0.25 km west	6.4 ha	TQ555923
Fir Wood	0.25 km northwest	3.4 ha	TQ555931
Jackson's Wood	0.03 km southeast	4.4 ha	TQ574908
Shoulder of Mutton Wood	0.6 km west	2.1 ha	TQ551920
Hatters Wood	0.9 km west	12 ha	TQ546929
Unknown name	1.3 km east	1.5 ha	TQ586918
Holdens Wood	1.4 km east	12.6 ha	TQ591908
Unknown name	1.5 km east	0.1 ha	TQ586921
Locksmith Wood	1.5 km north	4.9 ha	TQ560951
Clement's Wood	1.6 km east	1.6 ha	TQ588920

⁴ <https://ati.woodlandtrust.org.uk/> [accessed January 2020]

⁵ This woodland is called Foxburrow Wood on OS maps, but named Coombegreen Wood on the Ancient Woodland Inventory (MAGIC, 2019)

Site name	Distance from the DCO boundary	Area	Grid reference
Codham Hall Wood	1.7 km south	5.1 ha	TQ584888
Unknown name	1.7 km south	2.5 ha	TQ583886

Priority habitats

7.2.7 Priority habitats within the study area (excluding ancient woodland) are listed in Table 7.4.

Table 7.4: Priority habitats within the study area

Priority habitat ⁶	Distance of nearest parcel from DCO boundary	Number of parcels within 1 km of DCO boundary
Deciduous woodland	The Grove and Alder Wood, within the DCO boundary, are Priority habitats. There are multiple additional areas of habitat within 1 km of the DCO boundary.	348
Woodpasture and parkland	280 m east (in The Manor Local Nature Reserve)	8
Lowland meadows	280 m east (in The Manor Local Nature Reserve)	1
Traditional orchards	700 m south	8

Priority plants

7.2.8 Records of priority plants within the study area Table 7.5. The information provided by records centres does not always give precise location. None of these records were from within the DCO boundary.

Table 7.5: Records of priority plants within the study area

Species
Bluebell
Butcher's-broom
Corn mint
Corncockle
Devil's-bit scabious
Harebell
Heather
Hoary plantain
Lesser spearwort
Tormentil
Wood-sorrel

⁶ As shown on MAGIC: www.magic.gov.uk [accessed January 2020]

Non-native invasive plants

7.2.9 Non-native invasive plants within the study area are listed in Table 7.6. This includes plants listed on the London Invasive Species Initiative. None of these records were from within the DCO boundary.

Table 7.6: Non-native invasive plants habitats within the study area

Species	Schedule 9 ⁷	London invasive species initiative
Butterfly-bush		*
Canadian water-weed		*
Cotoneaster	*	*
Curly waterweed	*	
Evergreen oak		*
False-acacia		*
Few-flowered garlic		*
Giant hogweed	*	*
Goat's-rue		*
Green alkanet		*
Indian balsam (Himalyan balsam)	*	*
Japanese Knotweed	*	*
Least Duckweed		*
Parrot's-feather	*	*
Rhododendron	*	*
Snowberry		*
Three-cornered Garlic	*	
Turkey oak		*
Water fern	*	

⁷ Wildlife and Countryside Act 1981 (as amended)

Annex 1: Citation for Ingrebourne Valley Site of Metropolitan Importance for Nature Conservation⁸

Metropolitan Site Reference: M108

Site Name: Ingrebourne Valley

Grid ref: TQ 538 842

Area (ha): 262.56

Borough(s): Havering

Habitat(s): Ancient woodland, Bare ground, Hedge, Marsh/swamp, Pond/lake, Reed bed, Running water, Scrub, Secondary woodland, Semi-improved neutral grassland, Wet ditches, Wet grassland, Wet woodland/carr

Access: Free public access (part of site)

Ownership: London Borough of Havering and Private

Site Description:

The River Ingrebourne flows through one of the most natural riparian corridors in London. At its lower end is an extensive and nationally important suite of naturally-formed freshwater habitats, known as Ingrebourne Marshes. These include extensive reedbeds, lakes, wet grasslands and small areas of willow (*Salix* spp.) carr and support an exceptional wetland invertebrate and bird fauna. The reedbeds are notable for abundant reed sweet-grass (*Glyceria maxima*) as well as common reed (*Phragmites australis*), and many uncommon plants include small sweet-grass (*Glyceria declinata*), nodding bur-marigold (*Bidens cernua*) and water and golden docks (*Rumex hydrolapathum*, *R. maritimus*). The upper reaches are largely wooded, with important ancient alder (*Alnus glutinosa*) woodlands. Large areas of herb-rich grassland are also included, as are ox-bow ponds and small areas of species-rich fen.

A very diverse breeding avifauna includes redshank, lapwing, hobby, water rail, kingfisher, common snipe, reed bunting, cuckoo, long-eared owl, reed and sedge warblers, gadwall, teal and pochard, and irregular marsh and Cetti's warblers and bearded tit (London's only recent breeding records for the latter two). Large numbers of teal and tufted duck occur on Berwick Ponds in winter, while a long list of species visit on passage in spring and autumn. The diverse invertebrate fauna includes the nationally rare, scarce emerald damselfly (*Lestes dryas*), and many other nationally scarce species from various groups. Areas of bare ground support important populations of the 'Thames Terrace' assemblage of burrowing hymenoptera. A strong population of specially-protected water voles is present throughout. Berwick Ponds are also important to foraging bats, with at least four species regularly present. Part Site of Special Scientific Interest; part of the site was declared as a Local Nature Reserve in 2006.

Hornchurch Country Park is accessible from both sides of the river, and the river can then be followed on either side as far as Hornchurch Stadium. There are public car parks at the Country Park and in Hacton Lane. North of Upminster Road, public footpaths follow the river between Benets Road and River Drive and Wych Elm Road, but do not continue as far as the A127. North of the A127, there is access to the Ingrebourne at Mount Pleasant Farm and Pages Farm, as well as from Harold Wood Park. There are public car parks in Hall Lane and at Harold Wood Park. There is no formal access to the Ingrebourne Valley to the north of Shepherds Hill.

Site first notified:	19/09/1988	Boundary last changed:	30/11/2005
Citation last edited:	24/11/2006	Mayor Agreed:	25/11/2002
Defunct:	N		
Last Updated:	14/03/2007		

⁸ Text copied from citation provided by Greenspace Information for Greater London in September 2019.

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