

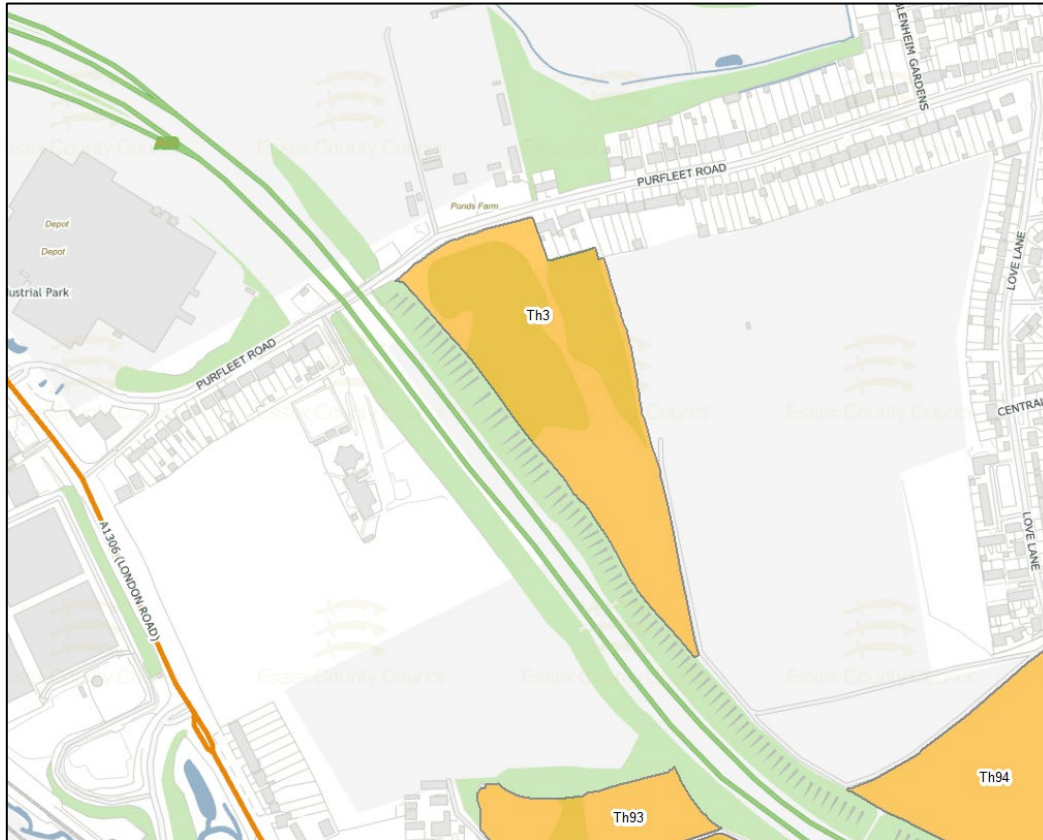
Site reference: Th3
Site name: Jill's Field, Aveley

Grid ref. (approx. centre of site): TQ556798
Site area: 5.0ha

LoWS Selection Criteria:

- HC2 – Lowland Mixed Deciduous Woodland on Non-Ancient Sites
- HC13 – Heathland and Acid Grassland

Boundary Map



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Site Description

This site comprises a mosaic of species-rich acid grassland, scrub and secondary woodland habitats, part of which is the Purfleet Road, Aveley SSSI, designated for its Thames Terrace interglacial deposits.

Open acid grassland in the southern half of the site consists of Common Bent (*Agrostis capillaris*), Smaller Cat's-tail (*Phleum bertolonii*) and Sheep's Sorrel (*Rumex acetosella*) with Common Knapweed (*Centaurea nigra*), Lady's Bedstraw (*Galium verum*), Buck's-horn Plantain (*Plantago coronopus*), Narrow-leaved Ragwort (*Senecio inaequidens*), Hoary Mustard (*Hirschfeldia incana*), Perforate St John's-wort (*Hypericum perforatum*) and "Small-fruited" Prickly Sedge (*Carex muricata* ssp. *pairae*). Early flowering species include the Essex Red List species Changing Forget-me-not (*Myosotis discolor*), Early Forget-me-not (*Myosotis ramosissima*), Spring Vetch (*Vicia lathyroides*), Clustered Clover (*Trifolium glomeratum*) and Subterranean Clover (*Trifolium subterraneum*), and the England Red List Near Threatened species Common Cudweed (*Filago germanica*) and Toothed Medick (*Medicago polymorpha*).

The scrub and woodland habitats consist of Pedunculate Oak (*Quercus robur*), Silver Birch (*Betula pendula*), Wild Cherry (*Prunus avium*), Hawthorn (*Crataegus monogyna*), Hazel (*Corylus avellana*), Goat Willow (*Salix caprea*), elm (*Ulmus* sp.) and Bramble (*Rubus fruticosus* agg.). The ground flora includes Wood Avens (*Geum urbanum*) and Lords-and-ladies (*Arum maculatum*).

Site Selection Rationale

HC2 – Although clearly secondary, the woodland habitat present has achieved a maturity of structure that qualifies it as Priority habitat.

HC13 – The grassland community is a good match for Lowland Dry Acid Grassland Priority habitat and a number of robust indicator species are present.

Priority Habitats

Lowland Dry Acid Grassland

Lowland Mixed Deciduous Woodland

Ownership and Access

The site is in private ownership with no official public access but can be viewed from the adjacent Purfleet Road.

Condition Statement

Moderate, stable

Management Issues

The site is subject to heavy public use, most significantly by motorbikes and other vehicles leading to a high proportion of bare, disturbed ground. While this is preserving the open aspect of the grassland, the regular disturbance is reducing the vegetated area. There is no active management of the scrub and woodland.

Review Schedule

Site selected: 2006

Site Reviewed: 2016 (Unpubl); 2022, separated from Th93 Fanns Farm and Th94 Love Lane Pasture.

Site reference: Th5

Site name: Purfleet Pit, Purfleet

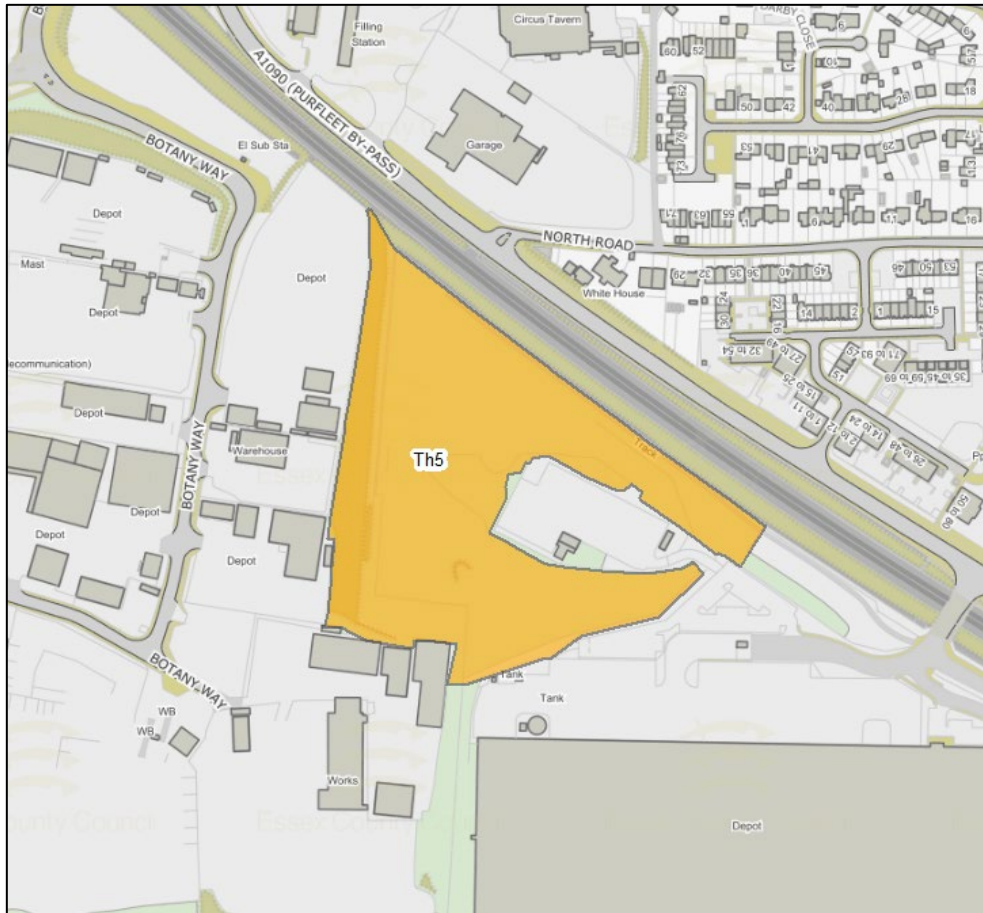
Grid ref. (approx. centre of site): TQ560784

Site area: 3.6ha

LoWS Selection Criteria:

- SC19 - Important Invertebrate Assemblages

Boundary Map



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Site Description

This site includes the Purfleet Chalk Pits geological SSSI and consists of rough grassland on a chalky substrate with developing scrub.

Habitats have been poorly recorded recently due to a lack of access, but ecological assessment has demonstrated that the site supports a diverse and significant assemblage of invertebrates, including Priority species, and species that are nationally rare and/or threatened. The aculeate fauna is of particular interest and includes the Priority species *Bombus humilis* and *Cerceris quinquefasciata*.

Site Selection Rationale

SC19 – available survey information demonstrates the diversity and importance of the invertebrate assemblage.

Priority Habitats

Open Mosaic Habitat on Previously Developed Land

Ownership and Access

The site is in private ownership with no public access.

Condition Statement

Poor, declining

Management Issues

The site has received no management for nature conservation outcomes over a number of years leading to the spread of scrub and a loss of open habitat. However, this is reversible. Business operations in the centre of the site have continued to encroach into the LoWS area.

Review Schedule

Site selected: 2006

Site Reviewed: 2016 (Unpubl.); 2022, operational areas removed.

Site reference: Th7

Site name: Watts Wood, Purfleet

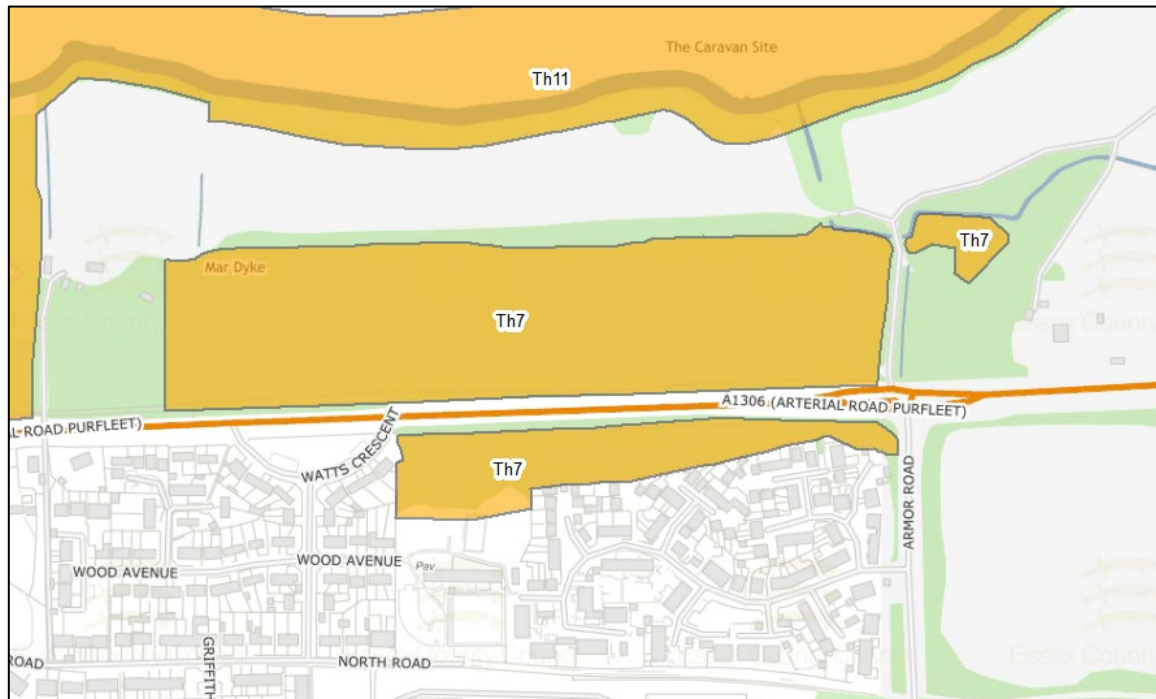
Grid ref. (approx. centre of site): TQ565788

Site area: 9.4ha

LoWS Selection Criteria:

- HC1 – Ancient Woodland Sites
- HC2 – Lowland Mixed Deciduous Woodland on Non-ancient Sites

Boundary Map



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Site Description

This woodland site, bisected by the A1306, is predominantly Ancient but includes small sections of more recent woodland at the eastern end and on the northern edge.

The larger, northern section has a canopy that consists of Pedunculate Oak (*Quercus robur*), Ash (*Fraxinus excelsior*), Wild Cherry (*Prunus avium*) and Hornbeam coppice (*Carpinus betulus*) with an understorey of Field Maple (*Acer campestre*), elm (*Ulmus* sp.), Hazel (*Corylus avellana*), Elder (*Sambucus nigra*) and Hawthorn (*Crataegus monogyna*).

The ground flora includes Bluebell (*Hyacinthoides non-scripta*), Wood Spurge (*Euphorbia amygdaloides*), Wood Avens (*Geum urbanum*), Wood Dock (*Rumex sanguineus*), Wood-sedge (*Carex sylvatica*), Ground Ivy (*Glechoma hederacea*), Honeysuckle (*Lonicera periclymenum*) and Lords-and-Ladies (*Arum maculatum*) with Bramble (*Rubus fruticosus* agg.), Common Ivy (*Hedera helix*) and Bracken (*Pteridium aquilinum*).

The southern section also includes Sweet Chestnut (*Castanea sativa*) and Turkey Oak (*Quercus cerris*) in the canopy and has a relatively poor ground flora including Bracken, Bramble, Common Ivy and only scattered Bluebell.

Site Selection Rationale

HC1 – The majority of the site is included in the Ancient Woodland Inventory, which is supported by the presence of robust indicator species.

HC2 – Map evidence shows that small parts of the site are not Ancient, but they nonetheless show a structure and composition that qualifies them as Priority habitat.

Priority Habitats

Lowland Mixed Deciduous Woodland

Ownership and Access

The site is in private ownership with no public access but can be viewed from Arterial Road and from a public right of way at its eastern end.

Condition Statement

Moderate, stable

Management Issues

The site is not managed for nature conservation outcomes, which will lead to deterioration over time.

Review Schedule

Site selected: 1992 (W3)

Site Reviewed: 2006, no change; 2016 (Unpubl.), minor boundary changes; 2022, camp site at western end removed.

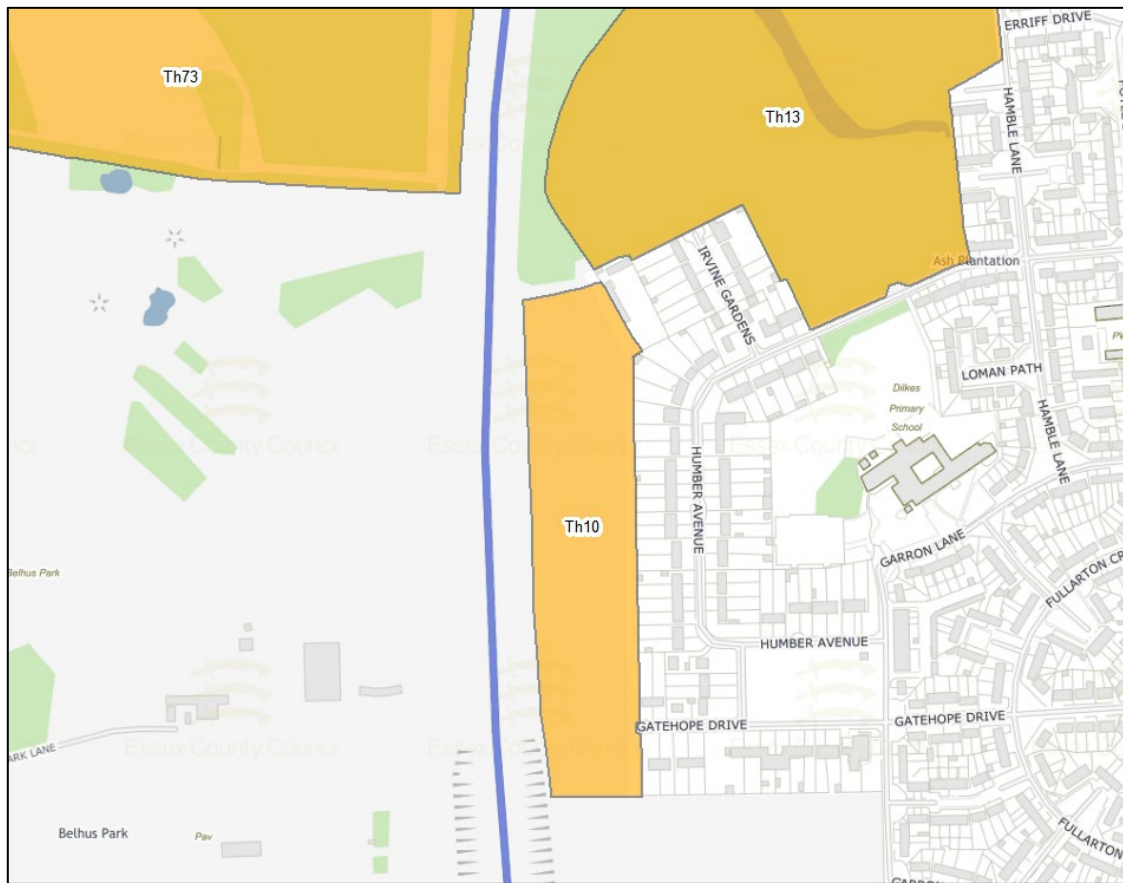
Site reference: Th10
Site name: Belhus Park East, South Ockendon

Grid ref. (approx. centre of site): TQ575812
Site area: 4.2ha

LoWS Selection Criteria:

- HC13 – Heathland and Acid Grassland

Boundary Map



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Site Description

This site is grassland habitat that was part of the historic Belhus Park, now isolated following the construction of the M25. It sits on a surface deposit of sands and gravels resulting in an acid grassland community, although its condition is variable and modified by its management history.

The sward consists of Common Bent (*Agrostis capillaris*), Red Fescue (*Festuca rubra*), Sweet Vernal-grass (*Anthoxanthum odoratum*), Smaller Cat's-tail (*Phleum bertolonii*), Meadow Foxtail (*Alopecurus pratensis*), Smooth Meadow-grass (*Poa pratensis*), Crested Dog's-tail (*Cynosurus cristatus*) and Yorkshire Fog (*Holcus lanatus*). Other species present include Sheep's Sorrel (*Rumex acetosella*), Lady's Bedstraw (*Galium verum*), Fairy Flax (*Linum catharticum*), Hoary Ragwort (*Jacobaea erucifolia*), Field Wood-rush (*Luzula campestris*), Bird's-foot (*Ornithopus perpusillus*), Knotted Clover (*Trifolium striatum*) and the Nationally Scarce Subterranean Clover (*Trifolium subterraneum*).

Site Selection Rationale

HC13 – Although not in ideal condition, the grassland is derived from acid grassland that has not been subject to agricultural improvement and could be restored with more appropriate management.

Priority Habitats

Lowland Dry Acid Grassland

Ownership and Access

The site is owned and managed by Thurrock Council as public open space and is part of Thames Chase Community Forest.

Condition Statement

Moderate, declining

Management Issues

Large parts of the grassland are frequently mown, which has a negative effect on species diversity and floristic abundance. Trees have recently been planted in some of the unmown areas, which will eventually lead to the loss of the important grassland habitat.

Review Schedule

Site selected: 2006

Site Reviewed: 2016 (Unpubl.), removal of grassland invaded by scrub; 2022, no change.

Site reference: Th11

Site name: Mar Dyke Valley, Purfleet to Stifford

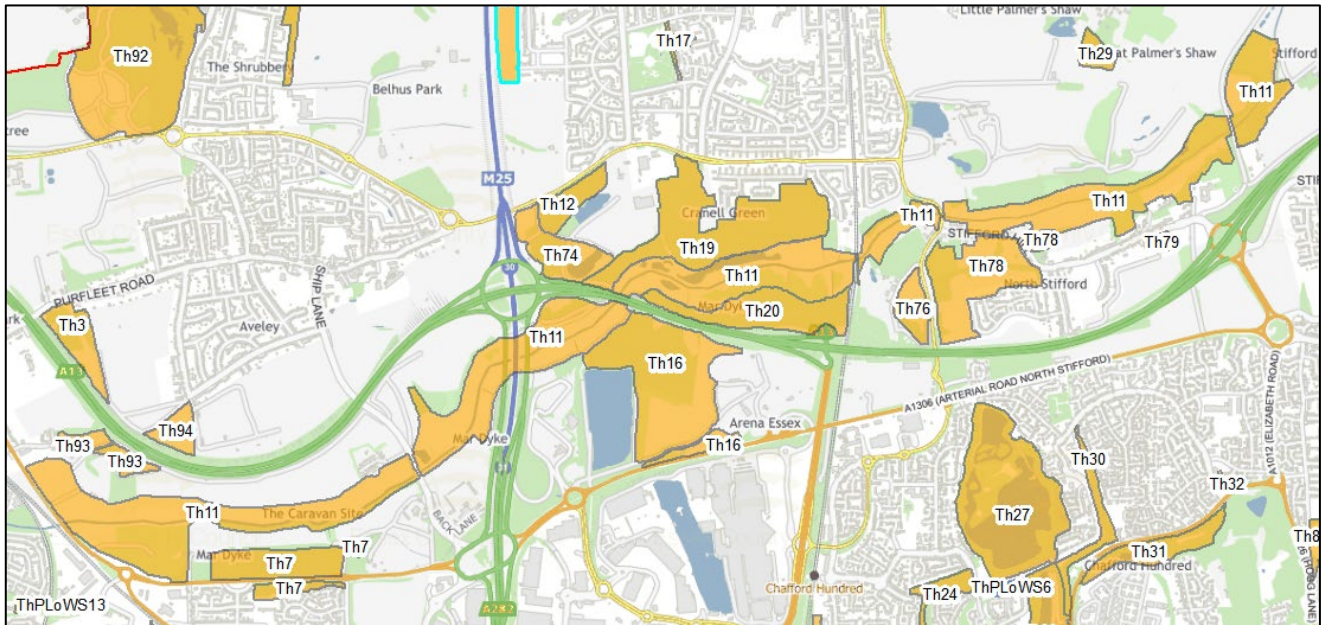
Grid ref. (approx. centre of site): TQ582798

Site area: 107.3ha

LoWS Selection Criteria:

- HC1 – Ancient Woodland Sites
- HC10 – River Floodplain
- HC14 – Lowland Fen Vegetation
- HC18 – Rivers
- HC29 – Habitat Extension Mosaics
- HC30 – Wildlife Corridors

Boundary Map



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Site Description

This site covers over 6km of the valley of the Mar Dyke and primarily consists of floodplain grassland and Lowland Fen with some associated woodland, scrub and valley slope grassland. It comprises the most significant ecological corridor in the administrative area and has connections to many other LoWS.

The floodplain grassland is generally dominated by coarse grass species such as False Oat-grass (*Arrhenatherum elatius*), Cock's-foot (*Dactylis glomerata*) and Yorkshire-fog (*Holcus lanatus*) with stands of tall ruderals and scrub, except where it is currently horse-grazed or wet. Typical scrub species include White Poplar (*Populus alba*), Sallow (*Salix cinerea*), Hawthorn (*Crataegus monogyna*) and Blackthorn (*Prunus spinosa*). There are also more mature White Willow (*Salix alba*) and Hybrid Black Poplar (*Populus x canadensis*), with occasional mature Pedunculate Oak (*Quercus robur*), singly or in groups. A small section of Pedunculate Oak and willow (*Salix sp.*) wet woodland is also present to the east of Ship Lane.

In the wet and horse-grazed areas, the grassland component features Creeping Bent (*Agrostis capillaris*) with some Marsh Foxtail (*Alopecurus geniculatus*) and other marshy grassland species such as Hairy Sedge (*Carex hirta*), Dittander (*Lepidium latifolium*), Water Mint (*Mentha aquatica*), Trifid Bur-marigold (*Bidens tripartita*), Amphibious Bistort (*Persicaria amphibia*), Purple Loosestrife (*Lythrum salicaria*), Great Willowherb (*Epilobium hirsutum*), Marsh Thistle (*Cirsium palustre*) and Hemlock (*Conium maculatum*). Wetter areas support stands of Common Reed (*Phragmites arundinacea*), Bulrush (*Typha latifolia*), Reed Canary-grass (*Phalaris arundinacea*), Yellow Iris (*Iris pseudacorus*) and Reed Sweet-grass (*Glyceria maxima*), some of which are extensive. Winter-wet areas that dry out in the summer leaving open, muddy scrapes support rushes (*Juncus spp.*), Celery-leaved Buttercup (*Ranunculus sceleratus*), goosefoots (*Atriplex spp.*) and docks (*Rumex spp.*), including the Essex Red List species Golden Dock (*Rumex maritimus*). Creeping Cinquefoil (*Potentilla reptans*) and Creeping Bent are abundant across the transition from these areas to grassland.

The river itself supports a diverse aquatic and marginal vegetation including Arrowhead (*Sagittaria sagittifolia*), Water-plantain (*Alisma plantago-aquatica*), Branched Bur-reed (*Sparganium erectum*), Fool's-water-cress (*Helosciadium nodiflorum*), Gipsywort (*Lycopus europaeus*) and Broad-leaved Pondweed (*Potamogeton obtusifolius*).

The site includes some peripheral habitats with complimentary habitats to those on the floodplain. These include a meadow within the Davy Down Riverside Park, which seems to have been recently diversified. It consists of Creeping Bent, Smaller Cat's-tail (*Phleum bertolonii*), Yorkshire-fog, Smooth Brome (*Bromus racemosus*), Devil's-bit Scabious (*Succisa pratensis*), Wild Basil (*Clinopodium vulgare*), Common Knapweed (*Centaurea nigra*), Wild Carrot (*Daucus carota*), Red Bartsia (*Odontites vernus*), Hawkweed Oxtongue (*Picris hieracioides*), Field Scabious (*Knautia arvensis*), Agrimony (*Agrimonia eupatoria*), Meadow Crane's-bill (*Geranium pratense*), Hoary Ragwort (*Jacobaea erucifolia*), Common Bird's-foot-trefoil (*Lotus corniculatus*) and Common Centaury (*Centaureum erythraea*). Also included are sections of the sandy southern valley slope at Stifford Clays supporting scrub and woodland habitats alongside exposures of sand. Although poorly recorded, these are likely to be of significance to invertebrate species utilising the diverse plant communities of the floodplain.

Adjacent to the M25/A13 junction is a small area of acid grassland on the northern valley slope together with a fragment of the Ancient Low Well Wood, isolated by the construction of the A13. The lightly Rabbit-grazed sward is formed by Red Fescue (*Festuca rubra*), Common Bent (*Agrostis capillaris*) and Yorkshire-fog with Wild Marjoram (*Origanum vulgare*), Common Stork's-bill (*Erodium cicutarium*), Perforate St John's-wort (*Hypericum perforatum*), Common Centaury and the England Red List Near Threatened species Hoary Cinquefoil (*Potentilla argentea*). The Essex Red List species Changing Forget-me-not (*Myosotis discolor*), Early Forget-me-not (*Myosotis ramosissima*) have been recorded flowering early in the season. Low Well Wood consists of Pedunculate Oak, Sycamore (*Acer pseudoplatanus*) and Sweet Chestnut (*Castanea sativa*) with an understorey of Hazel (*Corylus avellana*), elm (*Ulmus* sp.) and Elder (*Sambucus nigra*). The ground flora includes Bluebell (*Hyacinthoides non-scripta*), Bracken (*Pteridium aquilinum*), Bramble (*Rubus fruticosus* agg.) and Common Ivy (*Hedera helix*).

Site Selection Rationale

HC1 – Ancient Woodland Sites – the small section of Low Well Wood is included in the Ancient Woodland Inventory.

HC10 – The extent of semi-natural floodplain grassland within this site is significant at a county level and comprises the majority of that habitat type within Thurrock.

HC14 – Some of the stands of swamp vegetation within the floodplain are significant enough to be considered as Lowland Fen in their own right.

HC18 – The Mar Dyke within the site is semi-natural and supports a diverse aquatic and marginal vegetation.

HC29 – This criterion is used to define the boundaries of the site, taking in those floodplain areas and peripheral habitats that would not meet the selection thresholds individually.

HC30 – This site forms the most significant ecological corridor within Thurrock.

Priority Habitats

Lowland Fens

Lowland Mixed Deciduous Woodland

Ownership and Access

Much of the site is in private ownership with no public access but the Mardyke Way passes along the majority of the valley allowing the habitats to be viewed.

Condition Statement

Moderate, stable

Management Issues

The invasive non-native species Floating Pennywort (*Hydrocotyle ranunculoides*) is present in parts of the Mar Dyke itself. Most of the site is not managed for nature conservation outcomes, so that habitat condition is poor in some areas. Significant areas of grassland are dominated by coarse species.

Review Schedule

Site selected: 1992 (G2)

Site Reviewed: 2006, boundary revisions; 2016 (Unpubl.), significant extension to west; 2022, significant additions and deletions.

Site reference: Th12

Site name: Hangman's Wood, South Ockendon

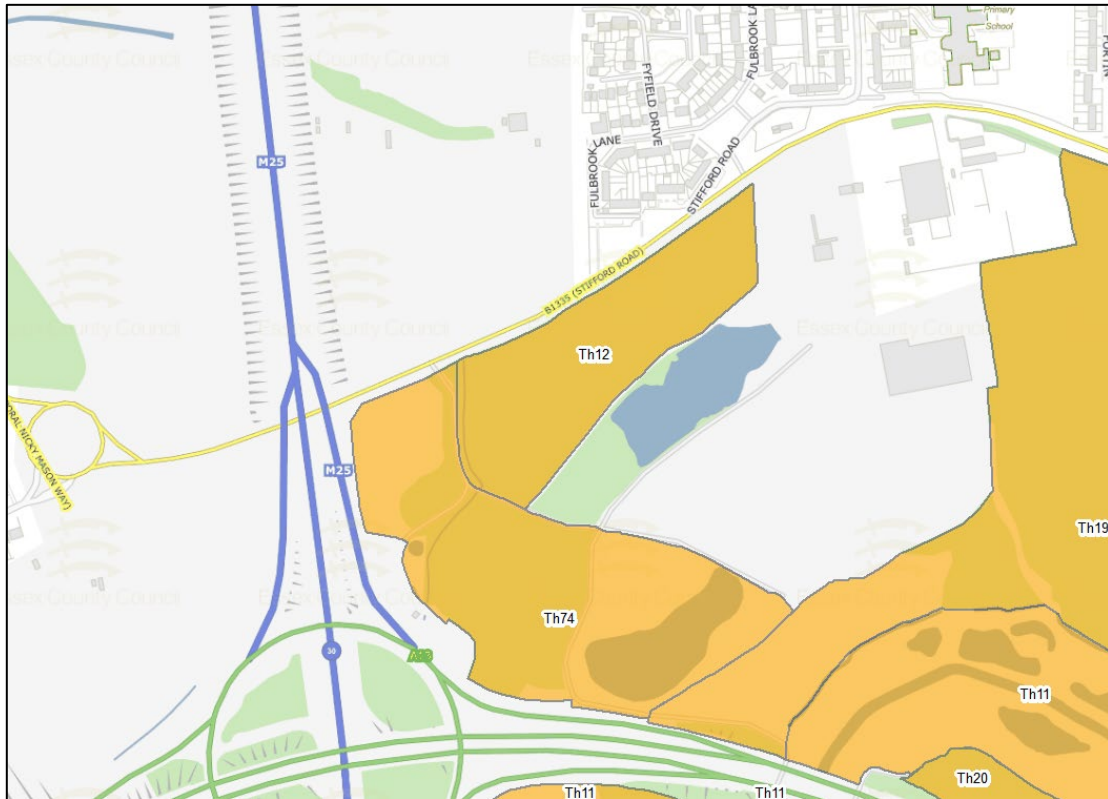
Grid ref. (approx. centre of site): TQ578804

Site area: 3.9ha

LoWS Selection Criteria:

- HC1 – Ancient Woodland Sites

Boundary Map



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Site Description

This small Ancient woodland forms part of a significant cluster of connected LoWS along the valley of the Mar Dyke, which include similar woodland sites.

The canopy consists of Pedunculate Oak (*Quercus robur*), Ash (*Fraxinus excelsior*) and Sweet Chestnut (*Castanea sativa*), with an understorey that includes Hawthorn (*Crataegus monogyna*), elm (*Ulmus* sp.), Elder (*Sambucus nigra*), Hazel (*Corylus avellana*) and Spindle (*Euonymus europaea*).

The ground flora is poorly recorded but appears to be limited. It includes Bluebell (*Hyacinthoides non-scripta*), Wood Anemone (*Anemone nemorosa*), Three-veined Sandwort (*Moehringia trinervia*) and Enchanter's Nightshade (*Circaea lutetiana*).

Site Selection Rationale

HC1 – The wood is included in the Ancient Woodland Inventory, which is supported by the presence of some robust indicator species.

Priority Habitats

Lowland Mixed Deciduous Woodland

Ownership and Access

The site is in private ownership with no public access but can be viewed from the adjacent Stifford Road.

Condition Statement

Poor, stable

Management Issues

The canopy includes a significant proportion of Sycamore (*Acer pseudoplatanus*), which casts a dense shade that inhibits ground flora. There is no evidence of any recent management for nature conservation outcomes.

Review Schedule

Site selected: 1992 (W

Site Reviewed: 2006, no change; 2016 (Unpubl.), no change; 2022, no change.

Site reference: Th13

Site name: Oak Wood and Ash Plantation, South Ockendon

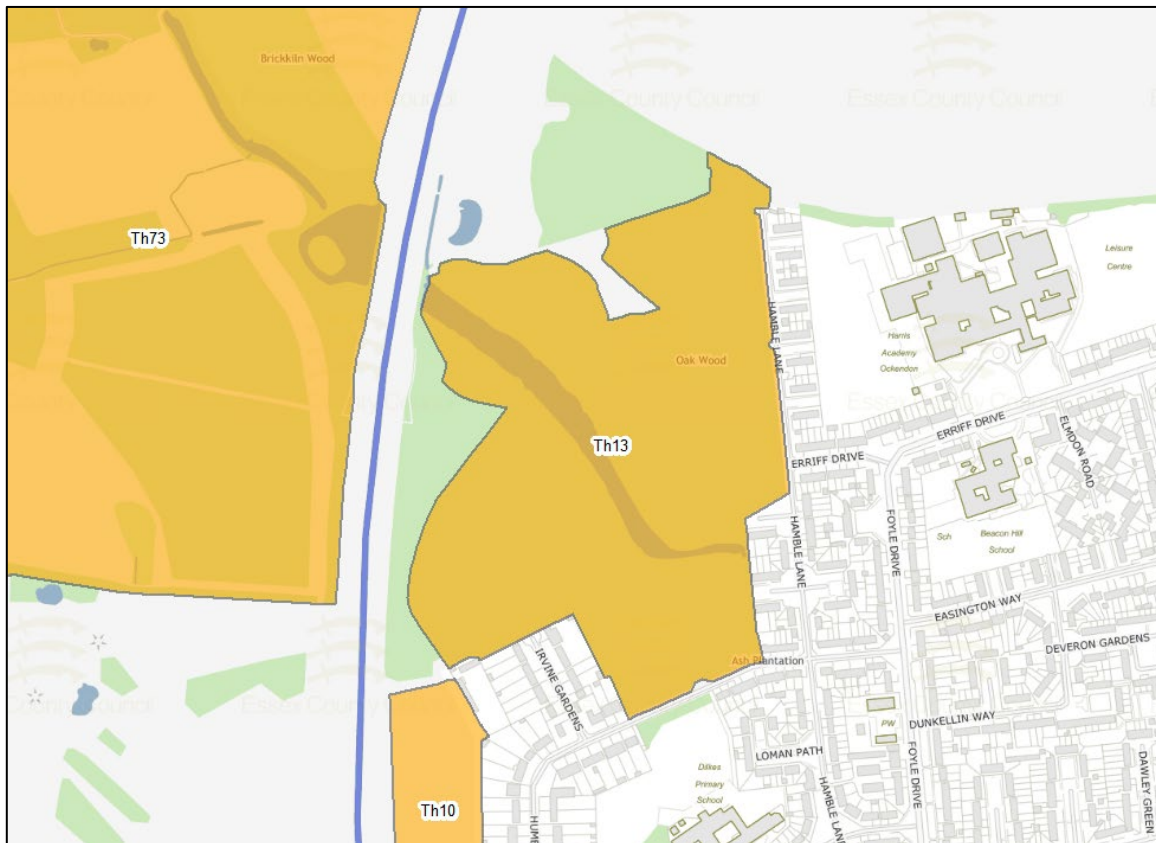
Grid ref. (approx. centre of site): TQ577817

Site area: 16.3ha

LoWS Selection Criteria:

- HC1 – Ancient Woodland Sites
- HC2 – Lowland Mixed Deciduous Woodland on Non-Ancient Sites

Boundary Map



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Site Description

This site consists of the Oak Wood, which is Ancient, together with some more recent, mature woodland known as Ash Plantation, both of which were formerly part of the historic 18th Century Belhus Park, most of which is now separated from it by the M25.

The canopy consists of Pedunculate Oak (*Quercus robur*) and Ash (*Fraxinus excelsior*), with Sycamore (*Acer pseudoplatanus*), Horse Chestnut (*Aesculus hippocastanum*), Common Lime (*Tilia x europaea*) and elm (*Ulmus* sp.). The understorey includes Hazel (*Corylus avellana*), Hawthorn (*Crataegus monogyna*) Hornbeam (*Carpinus betulus*), Wild Cherry (*Prunus avium*), Holly (*Ilex aquifolium*), and Elder (*Sambucus nigra*). Alder (*Alnus glutinosa*) and willow (*Salix* sp.) scrub is found adjacent to Long Pond, which runs through the middle of the site.

The ground flora is poorly recorded, but includes Bluebell (*Hyacinthoides non-scripta*), Wood Millet (*Milium effusum*), Wood-sedge (*Carex sylvatica*) and Remote Sedge (*Carex remota*).

Site Selection Rationale

HC1 – Oak Wood is documented as Ancient and included within the Ancient Woodland Inventory.

HC2 – The remainder of the site has a mature woodland structure that qualifies it as Priority habitat.

Priority Habitats

Lowland Mixed Deciduous Woodland

Ownership and Access

The site is owned and managed by Thurrock Council as public open space, as part of the Thames Chase Community Forest.

Condition Statement

Moderate, stable

Management Issues

The woodland, including the Ancient section, contains non-native species and receives recreational pressure from the surrounding housing developments, including cars parked along Hamble Lane.

Review Schedule

Site selected: 1992 (part, W6)

Site Reviewed: 2006, no change; 2016 (Unpubl.), no change.

Site reference: Th15

Site name: West Thurrock Reedbed

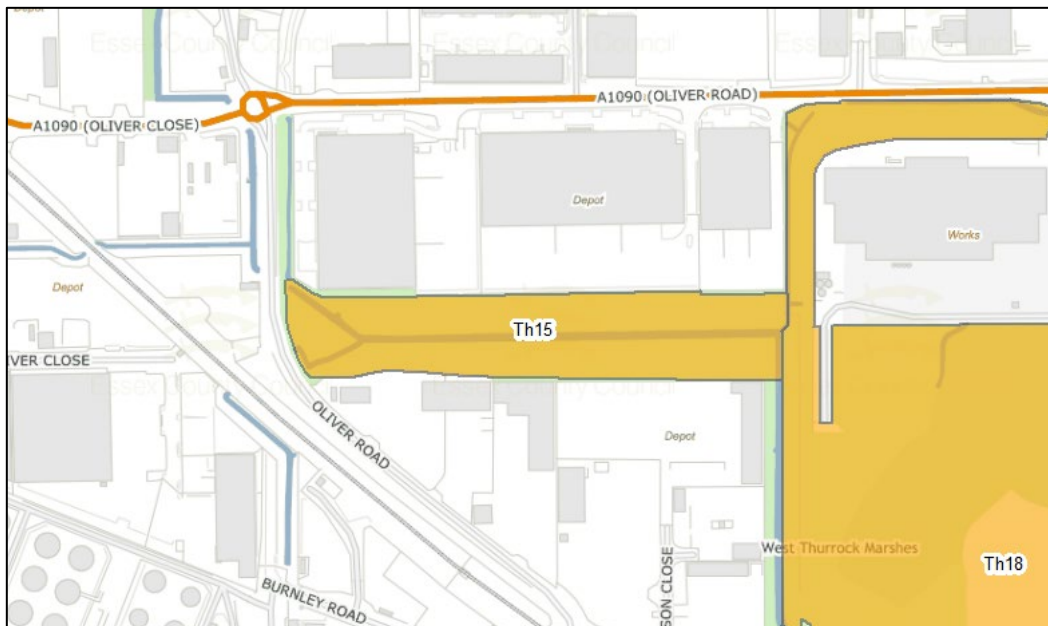
Grid ref. (approx. centre of site): TQ581771

Site area: 2.6ha

LoWS Selection Criteria:

- HC15 - Reedbeds

Boundary Map



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Site Description

This site consists of a pure stand of Common Reed (*Phalaris australis*) with only minimal marginal habitat. It represents one of the biggest reedbeds in Thurrock and connects to Th18 West Thurrock Lagoon and the West Thurrock Lagoons and Marshes SSSI.

Site Selection Rationale

HC15 – The site is a clear match to the Priority habitat.

Priority Habitats

Reedbeds

Ownership and Access

The site is in private ownership with no public access but can be viewed from Oliver Road.

Condition Statement

Moderate, stable

Management Issues

The reedbed does not receive any management for nature conservation outcomes and is likely to dry out over time due to the accumulation of plant litter.

Review Schedule

Site selected: 1992 (G3)

Site Reviewed: 1996, boundary revision; 2016 (Unpubl.), no change; 2022, minor boundary change.

Site reference: Th16

Site name: Arena Essex, West Thurrock

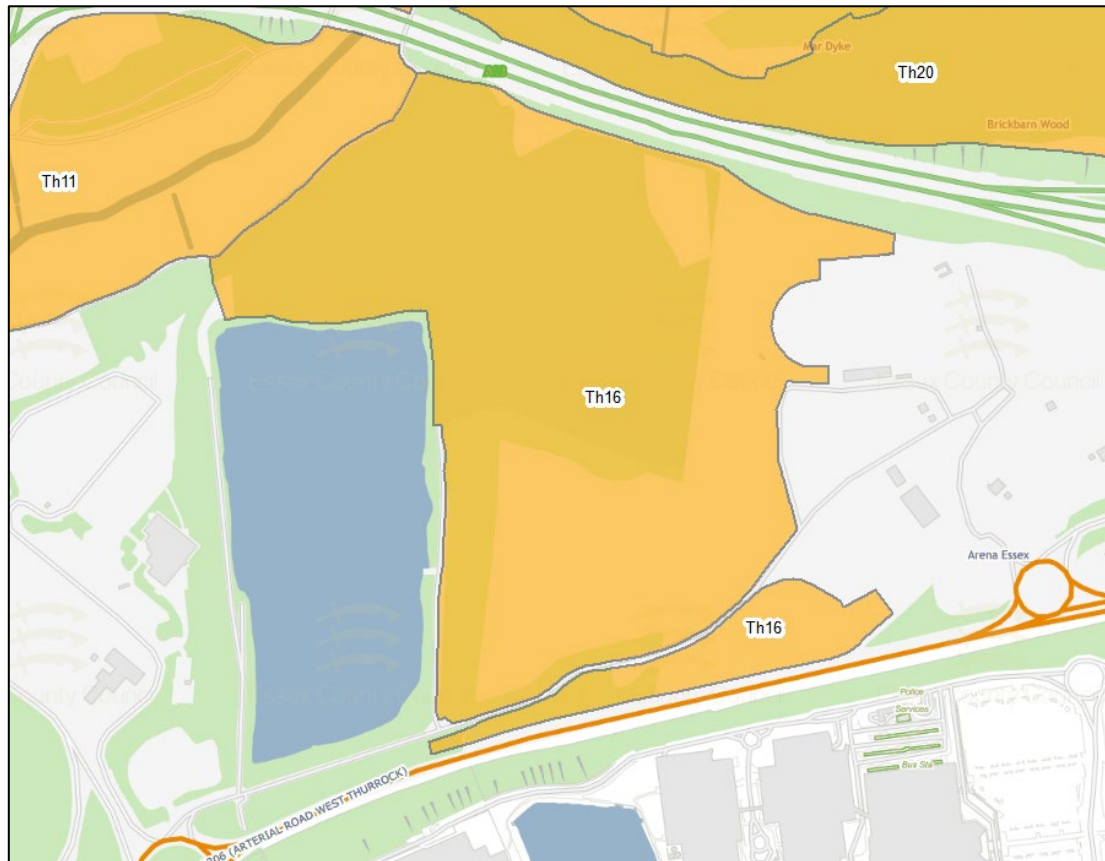
Grid ref. (approx. centre of site): TQ582796

Site area: 25.9ha

LoWS Selection Criteria:

- HC27 – Post-industrial Sites
- SC1 – Vascular Plants
- SC19 – Important Invertebrate Assemblages

Boundary Map



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Site Description

This site is a former industrial site that now supports a mosaic of calcareous grassland and open vegetation within scrub and young woodland. More mature trees mark the location of Oak Wood, which may have been Ancient, but has been extensively damaged by motorsport activity. The site includes a number of substrates and a complex topography, including a prominent south-facing bank and seasonally wet hollows.

The calcareous grassland is formed on base-rich clay soils and so cannot be considered to be Lowland Calcareous Grassland Priority habitat. It is predominantly herb rich as a result of the physical impact of recreational activity, with only a few areas achieving a mature grass dominated sward in the absence of regular disturbance. Species present include Marjoram (*Origanum vulgare*), Viper's Bugloss (*Echium vulgare*), Ploughman's Spikenard (*Inula conyzae*), Yellow-wort (*Blackstonia perfoliata*), Fairy Flax (*Linum catharticum*), Blue Fleabane (*Erigeron acris*), Wild Basil (*Clinopodium vulgare*), Rough Hawkbit (*Leontodon hispidus*), Bulbous Buttercup (*Ranunculus bulbosus*), Meadow Crane's-bill (*Geranium pratense*), Mouse-ear Hawkweed (*Pilosella officinarum*), Common Knapweed (*Centaurea nigra*), Common Bird's-foot-trefoil (*Lotus corniculatus*), Red Bartsia (*Odontites vernus*), Wild Strawberry (*Fragaria vesca*), Agrimony (*Agrimonia eupatoria*), Wild Carrot (*Daucus carota*), the Essex Red List species Carline Thistle (*Carlina vulgaris*) and Hound's-tongue (*Cynoglossum officinale*), and the England Red List Near Threatened species Common Cudweed (*Filago germanica*).

The site (and other parts of the motorsport complex to its east) supports a population of the England Red List Endangered Broad-leaved Cudweed (*Filago pyramidata*) at one of only a few known sites in the UK. The

majority of plants are on the western edge of the arena itself on the viewing bank, but smaller quantities are scattered across the open areas.

The woodland component has a canopy consisting of Pedunculate Oak (*Quercus robur*) with Silver Birch (*Betula pendula*), Sweet Chestnut (*Castanea sativa*), Sycamore (*Acer pseudoplatanus*) and occasional Ash (*Fraxinus excelsior*). Scrub species include Hawthorn (*Crataegus monogyna*), elm (*Ulmus* sp.), Field Maple (*Acer campestre*), Hazel (*Corylus avellana*), Dogwood (*Cornus sanguinea*), Wild Cherry (*Prunus avium*) and willows (*Salix* spp.). Some areas are more dominated by mixed willow scrub with the non-native Butterfly-bush (*Buddleja davidii*) and Sea Buckthorn (*Hippophae rhamnoides*).

Invertebrate surveys have identified the presence of a range of significant species including the Priority species *Bombus humilis*, *Cerceris quinquefasciata* and *Dorycera gramineum* with 18 Nationally Rare and 57 Nationally Scarce species. Important associations appear to be with short sward and bare ground habitats and with decaying wood and the assemblage is likely to be of at least regional importance.

Slow Worm, Common Lizard and Adder are all known to be present.

Site Selection Rationale

HC27 – The site overall supports all of the habitat features to be expected on Open Mosaic Habitats on Previously Developed Land Priority habitat and this is supported by its clear importance for invertebrates.

SC1 – The population of Broad-leaved Cudweed alone, by far the most significant in Essex, allows the use of this criteria, although populations of other key species are also present.

SC19 – Survey results have demonstrated the presence of a large number of notable invertebrate species.

Priority Habitats

Open Mosaic Habitat on Previously Developed Land

Ownership and Access

The site is in private ownership with no public access.

Condition Statement

Moderate, declining

Management Issues

The site is not managed for nature conservation outcomes and the open habitats of most value are being lost to the spread of scrub in some areas. Physical disturbance continues to result in loss of habitat. Non-native invasive species are having a negative impact on some habitats, with Sea Buckthorn and Butterfly-Bush scrub reducing the extent of open habitats, and Goat's-rue (*Galega officinalis*) at risk of dominating other areas. The site is subject to a planning application that will result in the loss of part of the LoWS.

Review Schedule

Site selected: 2006

Site Reviewed: 2016 (Unpubl.), minor boundary revisions; 2022 minor reduction.

Site reference: Th17
Site name: Little Dilkes Wood,

Grid ref. (approx. centre of site): TQ
Site area: ha

LoWS Selection Criteria:

- HC

Boundary Map



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Site Description

This woodland is a fragment of a once much larger Ancient Woodland and is now incorporated into Dilkes Park.

The canopy is made up of Pedunculate Oak (*Quercus robur*), Ash (*Fraxinus excelsior*), Sweet Chestnut (*Castanea sativa*), Hornbeam (*Carpinus betulus*) and Wild Service-tree (*Sorbus torminalis*) with an understorey of Sycamore (*Acer pseudoplatanus*), elm (*Ulmus* sp.), Blackthorn (*Prunus spinosa*), Hazel (*Corylus avellana*), Hawthorn (*Crataegus monogyna*) and Elder (*Sambucus nigra*).

The ground flora includes Bluebell (*Hyacinthoides non-scripta*), Bramble (*Rubus fruticosus* agg.), Common Nettle (*Urtica dioica*) and Common Ivy (*Hedera helix*) with Wood-sedge (*Carex sylvatica*), Three-nerved Sandwort (*Moehringia trinervia*), Enchanter's Nightshade (*Circaea lutetiana*) and Hedge Woundwort (*Stachys sylvatica*).

Site Selection Rationale

HC1 – Although too small to be included within the Ancient Woodland Inventory, map evidence and the presence of some robust indicator species suggest that the site is derived from Ancient Woodland.

Priority Habitats

Lowland Mixed Deciduous Woodland

Ownership and Access

The site is owned and managed by Thurrock Council as a public open space.

Condition Statement

Poor, stable

Management Issues

The woodland suffers from high recreational pressure, which includes fire damage and significant littering.

Review Schedule

Site selected: 1992 (W7)

Site Reviewed: 2006, no change; 2016, (Unpubl.), no change; 2022, remapped to better match old woodland boundaries.

Site reference: Th18

Site name: West Thurrock Brownfields

Grid ref. (approx. centre of site): TQ583768

Site area: 25.6ha

LoWS Selection Criteria:

- HC27 – Post-industrial Sites
- SC19 – Important Invertebrate Assemblages

Boundary Map



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Site Description

This site is in two sections, one of which is a pulverised fuel ash (PFA) lagoon that was previously part of the West Thurrock Lagoon and Marshes SSSI, and the other is grassland with scattered scrub that has established following development impacts around 1990.

The site as a whole supports an assemblage of invertebrates that is likely to be of national significance, including the jumping spider *Atulus distinguendus* and the cuckoo-wasp *Elampus foveatus*, each of which is only known from one other UK site.

The northern section was covered by PFA in the second half of the 20th Century, leaving a varied topography that, because of the chemical characteristics of the substrate, developed a complex mosaic of vegetation including species associated with chalk grassland and saltmarsh. These include Yellow-wort (*Blackstonia perfoliata*), Ploughman's Spikenard (*Inula conyzae*), Sea Aster (*Aster tripolium*), saltmarsh-grasses (*Puccinellia* spp.) and Lesser Sea Spurrey (*Spergularia marina*). Open areas of grassland are generally species-rich and are interspersed by scrub of varying density.

The southern section is dominated by grassland with scattered, but increasing, scrub and includes a section of seawall and folding. The grassland includes rough grassland dominated by coarse species and tall ruderals, alongside more open flower-rich swards. It forms an important extension to the adjacent SSSI and to the northern section, with habitats of benefit to the invertebrate populations present.

Site Selection Rationale

HC27 – Both sections of the site have been substantially changed from their original coastal grazing marsh habitat as the result of development and as a whole exhibit the range of key ecological features that qualify them as open mosaic Priority Habitat. The habitats present provide an extension to the SSSI, with features of value to invertebrates, even in their current condition. The site could readily be restored to better condition.

SC19 – Survey work has demonstrated the presence of large numbers of nationally and locally rare and scarce invertebrate species forming an assemblage likely to be of national significance.

Priority Habitats

Open Mosaic Habitat on Previously Developed Land

Ownership and Access

Together with the SSSI, the northern part of the site is managed by Essex Wildlife Trust but with no public access. The site can be viewed from Oliver Road and the adjacent seawall.

Condition Statement

Moderate, improving

Management Issues

Succession to scrub is the main ecological process that affects the condition of both sections, although active management of the northern section for nature conservation outcomes is allowing the habitat there to improve after a period of neglect. The southern section is threatened with development, which would lead to a reduction of ecological resource availability to the invertebrates and other species utilising the SSSI and LoWS.

Review Schedule

Site selected: 1992 (M1, including current SSSI)

Site Reviewed: 2006, SSSI area removed; 2016 (Unpubl.), developed area removed, additional brownfield added; 2022, further developed area removed.

Site reference: Th19

Site name: Brannett's Wood Complex, South Ockendon

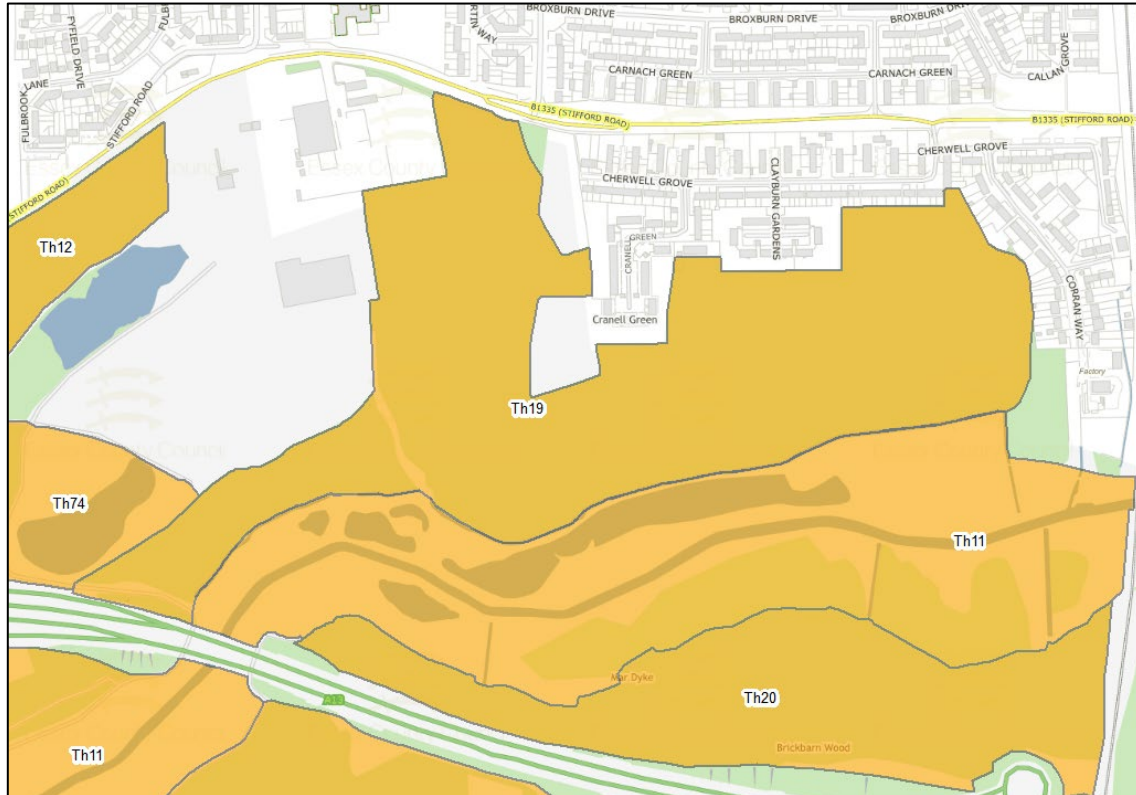
Grid ref. (approx. centre of site): TQ584803

Site area: 23.3ha

LoWS Selection Criteria:

- HC1 – Ancient Woodland Sites
- HC2 – Lowland Mixed Deciduous Woodland on Non-Ancient Sites

Boundary Map



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Site Description

This site is made up of the surviving parts of three Ancient Woods on the northern valley slope of the Mar Dyke: Brannett's Wood, Millards Garden and Low Well Wood. The site includes some small areas of more recent woodland. Various blocks on the northern edge of the wood were lost to development in the post-war period.

Brannett's Wood and Millard Garden share a canopy of Pedunculate Oak (*Quercus robur*), Ash (*Fraxinus excelsior*) and Sweet Chestnut (*Castanea sativa*) with Sycamore (*Acer pseudoplatanus*) and Wild Cherry (*Prunus avium*). The understorey includes Hazel (*Corylus avellana*), Hawthorn (*Crataegus monogyna*), elm (*Ulmus* sp.), Holly (*Ilex aquifolium*) and Elder (*Sambucus nigra*) with more Sycamore. The ground flora includes Wood Anemone (*Anemone nemorosa*), Bluebell (*Hyacinthoides non-scripta*), Pignut (*Conopodium majus*), Wood Melick (*Melica uniflora*), Wood-sedge (*Carex sylvatica*), Goldilocks Buttercup (*Ranunculus auricomus*), Remote Sedge (*Carex remota*), Wood Meadow-grass (*Poa nemoralis*), Hairy-brome (*Bromopsis ramosus*), Tufted Hair-grass (*Deschampsia cespitosa*), False Brome (*Brachypodium sylvaticum*), Pendulous Sedge (*Carex pendula*), Creeping Soft-grass (*Holcus mollis*), Enchanter's-nightshade (*Circaea lutetiana*), Male-fern (*Dryopteris filix-mas*) and some Bracken (*Pteridium aquilinum*). Millard's Garden, which straddles a stream valley, has a denser structure than Brannett's Wood but with fewer large canopy trees.

Low Well Wood consists of Ash, Sycamore, Sweet Chestnut, and Silver Birch (*Betula pendula*) with occasional large Pedunculate Oak and an understorey that includes Hazel, Hawthorn and elm. Its ground flora is less developed than that in the woods to the east, but includes Bluebell, Wood Spurge (*Euphorbia amygdaloides*), Primrose (*Primula vulgaris*), Wood Meadow-grass, and Wood-sedge.

Site Selection Rationale

HC1 – All three woods are included in the Ancient Woodland Inventory, which is supported by the presence of robust indicator species and by map evidence, which dates back to the 14th Century, when Millard’s Garden and Brannett’s Wood were known as Maynwares Garden and Brendewode, respectively.

HC2 – The connection between Low Well Wood and Millard’s Garden is known to be more recent, as are small sections elsewhere around the site’s boundaries.

Priority Habitats

Lowland Mixed Deciduous Woodland

Ownership and Access

The site is owned and managed by Thurrock Council as part of the Thames Chase Community Woodland, and area crossed by a network of paths.

Condition Statement

Moderate, stable

Management Issues

There is little evidence of regular management for nature conservation outcomes and the abundance of Sycamore in the understorey is likely over time to increase shading to the detriment of the ground flora. Non-native poplars (*Populus* sp.) and the invasive non-native Cherry Laurel (*Prunus laurocerasus*) are present.

Review Schedule

Site selected: 1992 (W8 and part of W9)

Site Reviewed: 2006, sites merged and boundaries revised; 2016, merged with Th14, acid grassland added, boundaries revised; 2022, area south of the A13 added to Th11, minor boundary revisions.

Site reference: Th20

Site name: Brickbarn Wood Complex, South Ockendon

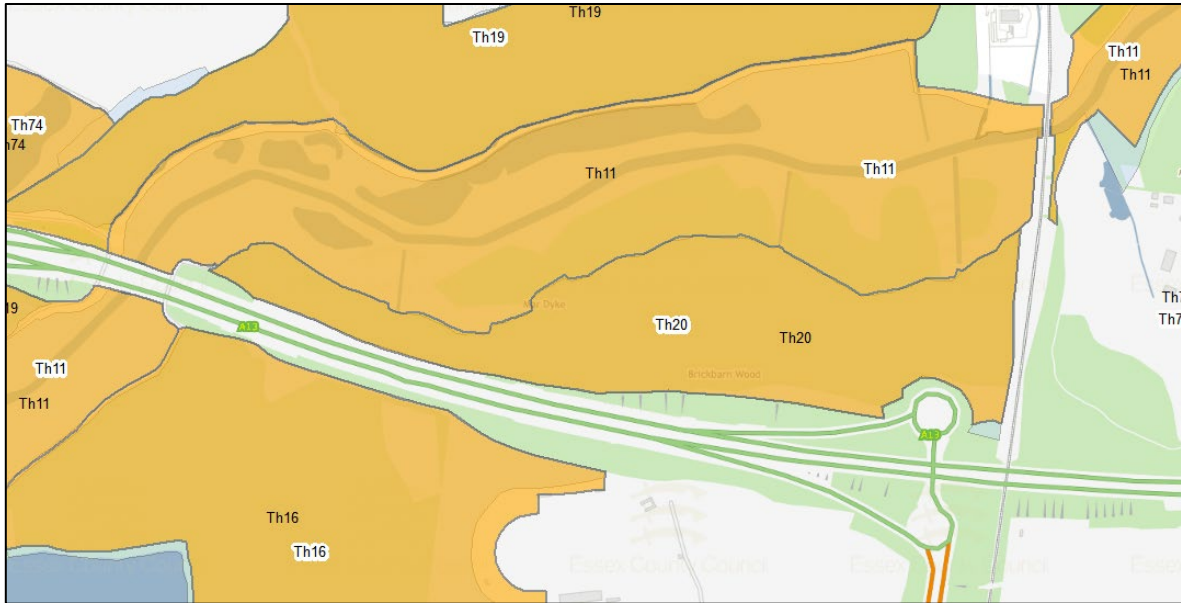
Grid ref. (approx. centre of site): TQ587799

Site area: 10.7ha

LoWS Selection Criteria:

- HC1 – Ancient Woodland Sites
- HC2 – Lowland Mixed Deciduous Woodland on Non-Ancient Sites
- HC13 – Heathland and Acid Grassland
- SC1 – Vascular Plants

Boundary Map



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Site Description

This site on the southern valley slope of the Mar Dyke consists of the surviving fragments of three woodlands: Broom Hill, Brickbarn Wood and Combe Wood, connected by more recent woodland habitat and with associated old acid grassland. Some of this older woodland is likely to be Ancient. All three woods were fragmented by the construction of the A13.

Brickbarn and Combe Woods have a canopy that primarily consists of Pedunculate Oak (*Quercus robur*), Ash (*Fraxinus excelsior*), Hornbeam (*Carpinus betulus*), Wild Cherry (*Prunus avium*) and Sycamore (*Acer pseudoplatanus*) with an understorey of Hazel (*Corylus avellana*), Hawthorn (*Crataegus monogyna*), Field Maple (*Acer campestre*), Elder (*Sambucus nigra*) and some Buckthorn (*Rhamnus cathartica*). The more recent woodland, between Brickbarn Wood and Broom Hill and between Brickbarn and Coombe Woods, consists of Ash and tall Hawthorn with Elder.

The understorey includes Bluebell (*Hyacinthoides non-scripta*), Wood Avens (*Geum urbanum*), False Brome (*Brachypodium sylvaticum*), Remote Sedge (*Carex remota*), Ground Ivy (*Glechoma hederacea*), Red Campion (*Silene dioica*) and Bracken (*Pteridium aquilinum*).

Broom Hill has Pedunculate Oak with Hawthorn, Hazel, Bracken and Bramble (*Rubus fruticosus* agg.). Around Broom Hill are small areas of acidic grassland supporting Red Fescue (*Festuca rubra*), Sweet Vernal Grass (*Anthoxanthum odoratum*), Smaller Cat's-tail (*Phleum bertolonii*), Lesser Stitchwort (*Stellaria graminea*), Agrimony (*Agrimonia eupatoria*), Wild Carrot (*Daucus carota*), Perforate St John's-wort (*Hypericum perforatum*) and Hawkweed Oxtongue (*Picris hieracioides*).

The acid grassland on the southern part of the eastern end of the site is diverse and supports a population of the England Red List Endangered Broad-leaved Cudweed (*Filago pyramidata*) at one of only a few known sites in the UK. Other characteristic species here include Common Bent (*Agrostis capillaris*), Red Fescue, Smaller Cat's-tail, Sheep's Sorrel (*Rumex acetosella*), Common Centaury (*Centaureum erythraea*), Viper's Bugloss (*Echium vulgare*), *Cladonia* lichens, Common Stork's-bill (*Erodium cicutarium*), Field Wood-rush (*Luzula campestris*), parsley-piert (*Aphanes* sp.) and Bird's-foot (*Ornithopus perpusillus*).

Site Selection Rationale

HC1 – The Ancient Woodland Inventory shows part of Brickbarn Wood as Ancient, although map evidence suggests that the indicated boundary is not accurate. It is considered likely that at least part of the site is Ancient.

HC2 – Some areas of woodland are known to be more recent as a result of map evidence, although they have a structure and composition that qualifies them as Priority habitat woodland.

HC13 – The grassland communities present match the appropriate descriptions to be considered Priority habitat acid grassland.

SC1 - The population of Broad-leaved Cudweed allows the use of this criteria, although populations of other key species are also present.

Priority Habitats

Lowland Dry Acid Grassland

Lowland Mixed Deciduous Woodland

Ownership and Access

The site is in private ownership with no public access.

Condition Statement

Moderate, declining

Management Issues

There is no active management for nature conservation outcomes and, while the woodland habitats are fairly resilient, the grassland habitats are vulnerable to the spread of scrub and dominance by coarse species.

Review Schedule

Site selected: 1992 (W10, Brickbarn Wood only)

Site Reviewed: 2006, significant additions; 2016 (Unpubl.) no change; 2022, minor boundary revisions.

Site reference: Th22

Site name: Grenville Road Grasslands

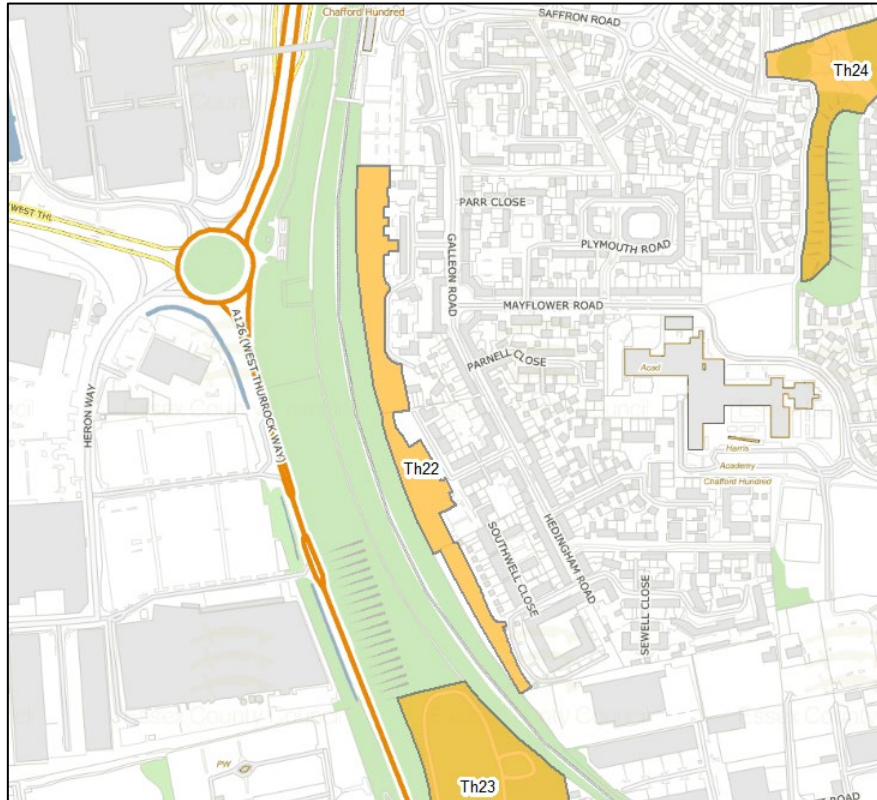
Grid ref. (approx. centre of site): TQ589783

Site area: 1.5ha

LoWS Selection Criteria:

- HC12 – Lowland Calcareous Grassland
- SC19 – Important Invertebrate Assemblages

Boundary Map



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Site Description

This site comprises grassland habitat between the cutting of the railway line, to the south of the Chafford Hundred Station, and housing developments from the early 2000s on Grenville Road, Rawlyn Close and Southwell Close. The grasslands are used as open space by local residents, but have developed on free-draining, calcareous soils, leading to the development of species-rich chalk grassland communities.

The grass sward is made up of Common Bent (*Agrostis capillaris*), Red Fescue (*Festuca rubra*) and Yellow Oat-grass (*Trisetum flavescens*), with some patches of Perennial Rye-grass (*Lolium perenne*) in places. Herbaceous species present that are indicative of chalk grassland are Ploughman's Spikenard (*Inula conyzae*), Carlina Thistle (*Carlina vulgaris*) – both on the Essex Red List –, Yellow-wort (*Blackstonia perfoliata*) and Salad Burnet (*Poterium sanguisorba*).

Other notable grassland species include Fairy Flax (*Linum catharticum*), Blue Fleabane (*Erigeron acris*), Strawberry Clover (*Trifolium fragiferum*), Bladder Champion (*Silene vulgaris*), Wild Carrot (*Daucus carota*), Common Bird's-foot-trefoil (*Lotus corniculatus*), Musk Mallow (*Malva moschata*), Red Bartsia (*Odontites vernus*), Thyme-leaved Sandwort (*Arenaria serpyllifolia*), Hop Trefoil (*Trifolium campestre*), Mouse-ear Hawkweed (*Pilosella officinarum*), Lady's Bedstraw (*Galium verum*), Agrimony (*Agrimonia eupatoria*), Common Knapweed (*Centaurea nigra*), Field Scabious (*Knautia arvensis*), Hare's-foot Clover (*Trifolium arvense*), Hairy Tare (*Ervilia hirsuta*), Perforate St John's-wort (*Hypericum perforatum*) and Red Clover (*Trifolium pratense*). An unidentified hawkweed (*Hieracium* sp.) is also likely to be of interest. Some of these species are present even where the grass is frequently mown for amenity purposes.

The Essex Red List species Kidney Vetch (*Anthyllis vulneraria*) and Common Milkwort (*Polygala vulgaris*) have been recorded previously, as have Sheep's Fescue (*Festuca ovina*) and Pyramidal Orchid (*Anacamptis pyramidalis*).

Past surveys have demonstrated the presence of a significant invertebrate assemblage, including Priority bumblebee species, the Essex Red List Mottled Grasshopper (*Myrmeleotettix maculatus*), and a range of other local and national Red List species. The floristic diversity and abundance of the grassland, including mown areas, will be of value to the assemblage.

Site Selection Rationale

HC12 – the grassland present is derived from the bare chalk substrate left behind following chalk extraction and a number of good indicator species have been recorded.

SC19 – The site’s recorded history of nationally and locally rare invertebrate species is enough to suggest an assemblage of significance at a County level, if not more.

Priority Habitats

Lowland Calcareous Grassland

Ownership and Access

The site is in private ownership, but the majority is open space associated with the adjoining housing.

Condition Statement

Moderate, stable

Management Issues

A fringe of scrub along the western boundary of the site threatens to outshade some of the grassland, although its edge provides some of the best conditions for scarce plant species.

Review Schedule

Site selected: 2006

Site Reviewed: 2016 (Unpubl.); 2022, additional habitat to south.

Site reference: Th23

Site name: Anchor Field, West Thurrock

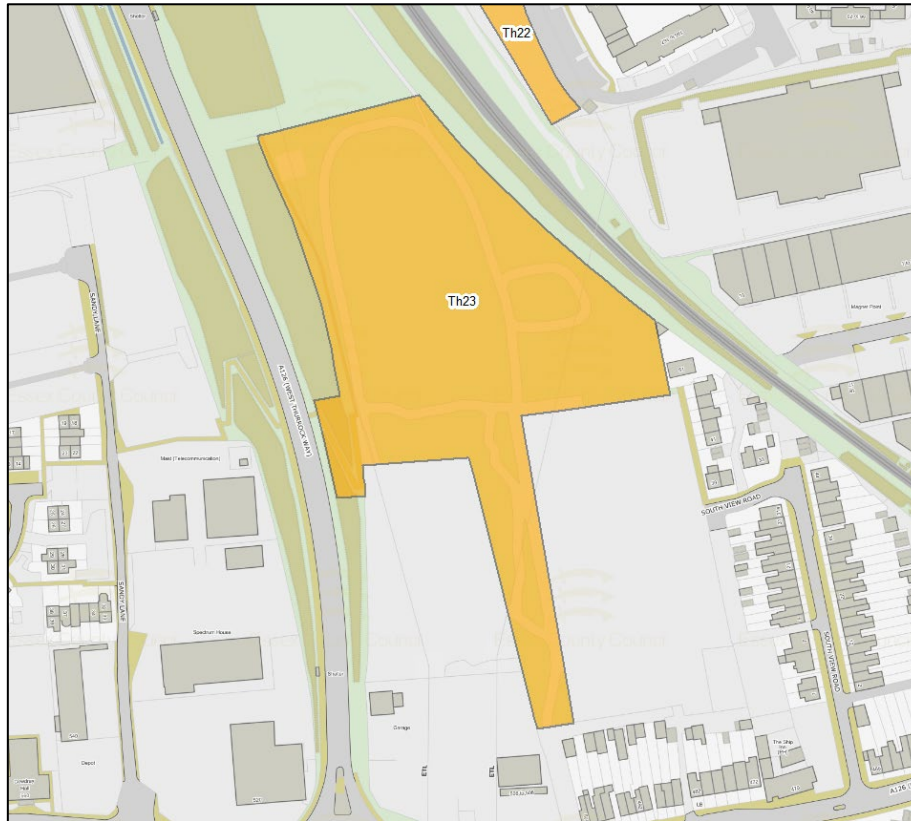
Grid ref. (approx. centre of site): TQ590779

Site area: 2.1ha

LoWS Selection Criteria:

- HC11 – Other Neutral Grasslands
- SC16 – Hotspots for Reptile Diversity
- SC19 – Important Invertebrate Assemblages

Boundary Map



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Site Description

This site forms part of one of the few remaining River Thames valley slope grasslands that has been unaffected by quarrying or development and it supports a calcareous neutral grassland community. It has been shown to be of national significance for its invertebrate assemblage and supports three reptile species.

The site supports Rabbit-grazed grassland with scattered scrub and has a sward that is made up of Common Bent (*Agrostis capillaris*), Red Fescue (*Festuca rubra*), meadow-grass (*Poa* sp.) and Yorkshire-fog (*Holcus lanatus*). The chalk grassland indicators Ploughman's Spikenard (*Inula conyzae*) (Essex Red List) and Yellow-wort (*Blackstonia perfoliata*) are present alongside Viper's-bugloss (*Echium vulgare*), Agrimony (*Agrimonia eupatoria*), Red Bartsia (*Odontites vernus*), Weld (*Reseda luteola*), Common Centaury (*Centaureum erythraea*), Hawkweed Oxtongue (*Picris hieracioides*), Perforate St John's-wort (*Hypericum perforatum*), Wild Carrot (*Daucus carota*), Teasel (*Dipsacus fullonum*), Hoary Cress (*Lepidium draba*), Hoary Mustard (*Hirschfeldia incana*) and Common Evening-primrose (*Oenothera biennis*).

The recorded invertebrate fauna includes a large number of nationally and locally rare and scarce species, some of which are Priority Species, with the resulting assemblage assessed as being of national significance. Adder, Common Lizard and Slow Worm are all present, combining to indicate the importance of the site to local reptile populations.

Site Selection Rationale

HC11 – The grassland habitat is substantially unimproved and features some key indicator species, but it does not conform to any of the Priority Habitat types.

SC16 – The presence of three reptile species triggers the use of this criteria.

SC19 – Recent survey work has demonstrated the continued presence of a significant assemblage of invertebrates.

Priority Habitats

None

Ownership and Access

The site is in private ownership but is crossed by a public right of way.

Condition Statement

Moderate, declining

Management Issues

As there is currently no regular management of the grassland, it is becoming dominated by coarse grass species such as False Oat-grass (*Arrhenatherum elatius*) and invaded by scrub, including Bramble (*Rubus fruticosus*), Dewberry (*Rubus caesius*), Hawthorn (*Crataegus monogyna*) and Dogwood (*Cornus sanguinea*). This is reducing floristic diversity and abundance.

Review Schedule

Site selected: 2006

Site Reviewed: 2016 (unpubl.), boundary changes; 2022, developed area and dense scrub habitat removed.

Site reference: Th24

Site name: Mill Wood and Cliff, Chafford Hundred

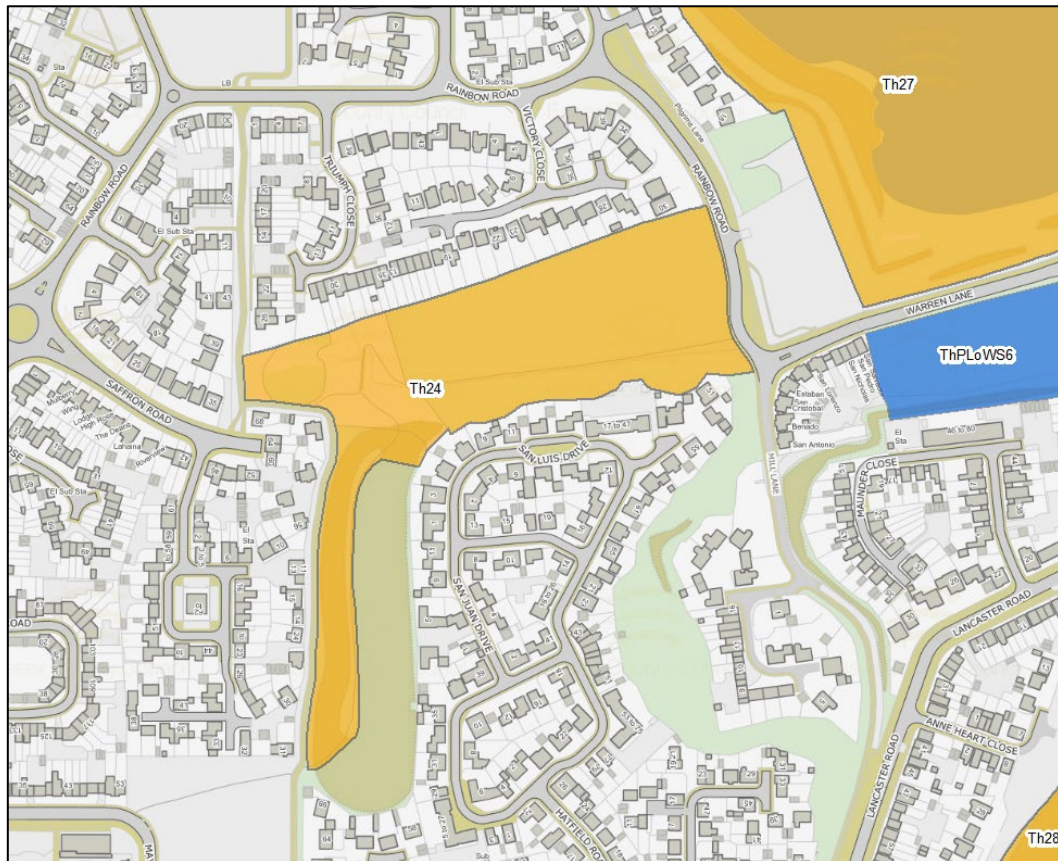
Grid ref. (approx. centre of site): TQ594787

Site area: 2.6ha

LoWS Selection Criteria:

- HC1 – Ancient Woodland Sites
- HC11 – Other Neutral Grasslands
- SC19 – Important Invertebrate Assemblages

Boundary Map



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Site Description

This site includes the remaining fragment of Mill Wood, which is likely to be of Ancient origin, the rest of which was lost to quarrying at the start of the 20th Century. It also includes a section of the chalk quarry cliff face and a bund left over from quarrying operations, which was landscaped when the surrounding housing development was built.

Mill Wood has a canopy of Pedunculate Oak (*Quercus robur*) with a diverse understorey that includes Ash (*Fraxinus excelsior*), Wild Cherry (*Prunus avium*), Field Maple (*Acer campestre*), Hazel (*Corylus avellana*), Wayfaring-tree (*Viburnum lantana*), Hawthorn (*Crataegus monogyna*) and elm (*Ulmus* sp.). Its ground flora includes Wood Spurge (*Euphorbia amygdaloides*), Bluebell (*Hyacinthoides non-scripta*), Three-nerved Sandwort (*Moehringia trinervia*) Stinking Iris (*Iris foetidissima*), Wood Sage (*Teucrium scorodonia*), Wavy Hair-grass (*Deschampsia flexuosa*), False Brome (*Brachypodium sylvaticum*), Red Campion (*Silene dioica*) Wood Avens (*Geum urbanum*) and Bracken (*Pteridium aquilinum*). Pignut (*Conopodium majus*) has also been recorded.

Open grassland on and by the cliff face and along the west side of the bund supports a diverse community, which includes the chalk grassland indicators Kidney Vetch (*Anthyllis vulneraria*) – Essex Red Data List – and Marjoram (*Origanum vulgare*) together with Common Broomrape (*Orobanche minor*), Blue Fleabane (*Erigeron acris*), Mouse-ear Hawkweed (*Pilosella officinarum*), Meadow Vetchling (*Lathyrus pratensis*), Hare's-foot Clover (*Trifolium arvense*), Red Bartsia (*Odontites vernus*), Common Bird's-foot-trefoil (*Lotus corniculatus*), Hope Trefoil (*Trifolium campestre*), Wild Carrot (*Daucus carota*), Perforate St John's-wort (*Hypericum perforatum*), Hawkweed Oxtongue (*Picris hieracioides*), Common Centaury (*Centaureum*

erythraea) and Oxeye Daisy (*Leucanthemum vulgare*). The grass component includes Common Bent (*Agrostis capillaris*), Red Fescue (*Festuca rubra*), Smaller Cat's-tail (*Phleum bertolonii*) and meadow-grass (*Poa* sp.).

Survey work has demonstrated the presence of a significant assemblage of nationally and locally rare and scarce invertebrate species. This site is all that remains of Mill Wood Pit, a nationally important site for invertebrates that was lost to housing development at the end of the 20th Century.

Site Selection Rationale

HC1 – The indicator species present support map evidence that suggests that the woodland is Ancient, although it was excluded from the Ancient Woodland Inventory as it was below the minimum size threshold of two hectares.

HC11 – The grassland community is not a clear match for Priority Habitat types, although it supports chalk grassland indicators and is of moderate species diversity.

SC19 – Recent survey work has generated records of nationally and locally rare species, such that the assemblage present is considered to be of at least county significance.

Priority Habitats

Lowland Mixed Deciduous Woodland

Ownership and Access

The site is owned and managed by Essex Wildlife Trust as part of its Chafford Gorges Nature Park, with open public access.

Condition Statement

Moderate, stable

Management Issues

The site is heavily used by local residents, with some negative consequences with regard to litter and dog fouling. The spread of scrub and coarse grasses is a threat to the extent of open grassland.

Review Schedule

Site selected: 2006

Site Reviewed: 2016 (Unpubl.), minor boundary revision. 2022, removal of planted trees on east face of bund.

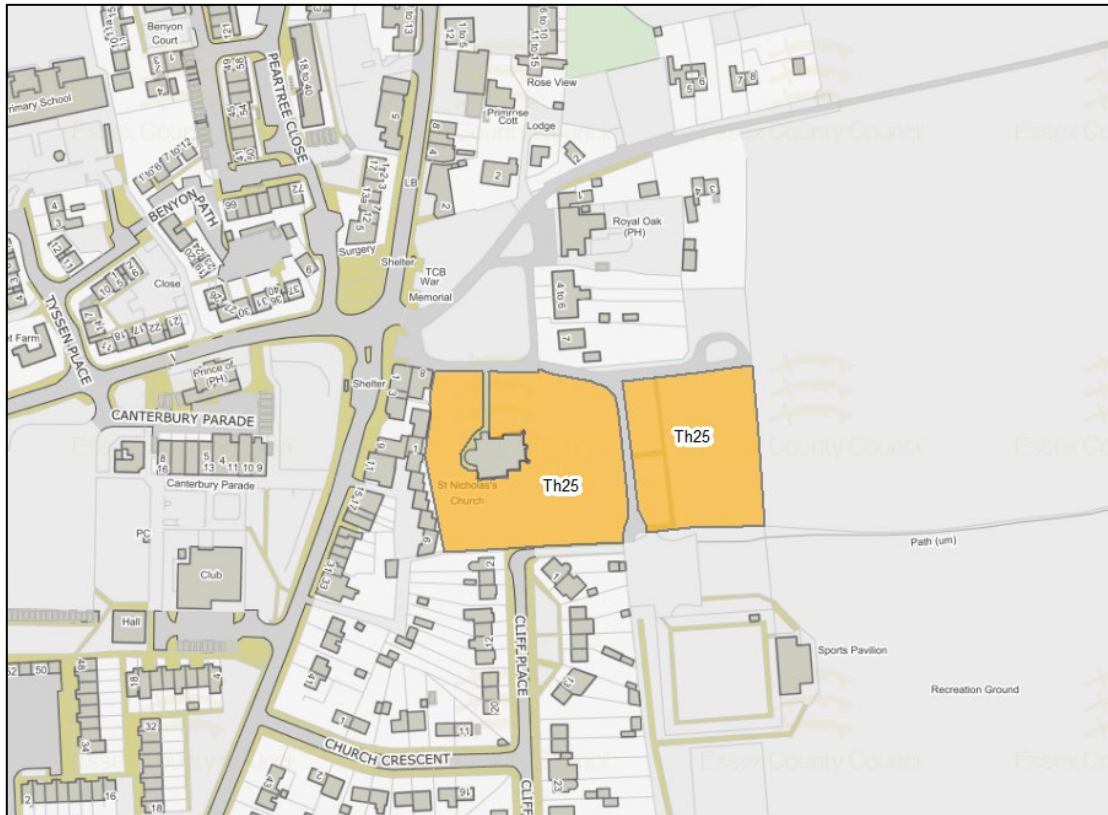
Site reference: Th25
Site name: South Ockendon Church

Grid ref. (approx. centre of site): TQ595829
Site area: 0.9ha

LoWS Selection Criteria:

- HC13 – Heathland and Acid Grassland

Boundary Map



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Site Description

This churchyard site, sited on a plateau of sands and gravels, supports an essentially unimproved acid grassland community that includes some species of particular significance.

The sward includes Common Bent (*Agrostis capillaris*), Red Fescue (*Festuca rubra*), Yellow Oat-grass (*Trisetum flavescens*) with Sheep's Sorrel (*Rumex acetosella*), Lady's Bedstraw (*Galium verum*), Germander Speedwell (*Veronica chamaedrys*), Ribwort Plantain (*Plantago lanceolata*), Yarrow (*Achillea millefolium*), Common Bird's-foot Trefoil (*Lotus corniculatus*), Self-heal (*Prunella vulgaris*), Field Wood-rush (*Luzula campestris*) and Meadow Buttercup (*Ranunculus acris*). Other species understood to be present include Knotted Clover (*Trifolium striatum*), Keel-fruited Corn-salad (*Valerianella carinata*) and the Nationally Scarce Subterranean Clover (*Trifolium subterraneum*).

Site Selection Rationale

HC13 – The basis of the community present is clearly derived from acid grassland, and it is unlikely to have ever been systematically improved agriculturally.

Priority Habitats

Lowland Dry Acid Grassland

Ownership and Access

The site is open for public access.

Condition Statement

Moderate, declining

Management Issues

The site is not managed for nature conservation, and it is mown too frequently and fully to allow the full development of the grassland community, but it could recover with more sympathetic management.

Review Schedule

Site selected: 2006

Site Reviewed: 2016 (Unpubl.), no change; 2022, remapped to remove church and surfaced path.

Site reference: Th27

Site name: Warren Gorge, Chafford Hundred

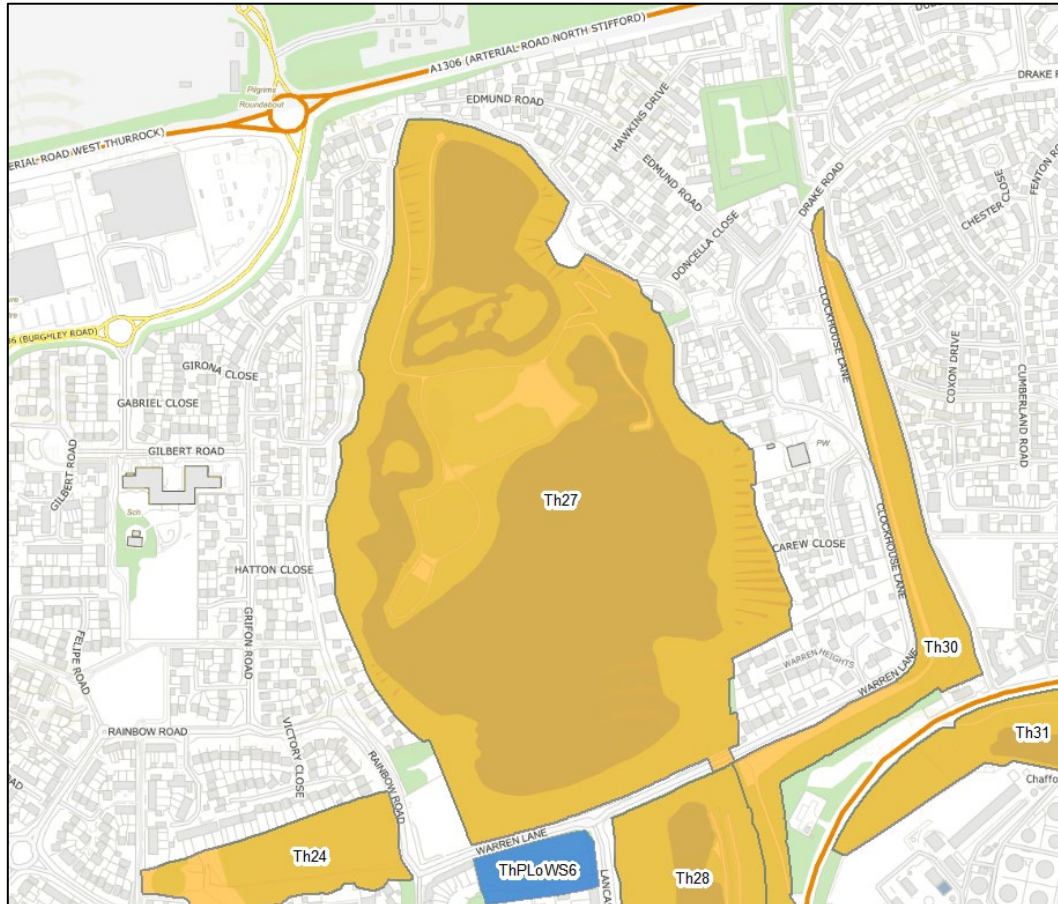
Grid ref. (approx. centre of site): TQ597791

Site area: 26.0ha

LoWS Selection Criteria:

- HC2 – Lowland Mixed Deciduous Woodland on Non-Ancient Sites
- HC12 – Lowland Calcareous Grassland
- HC28 – Small Component Mosaics
- HC31 – Accessible Natural Greenspace
- SC10 – Bat Hibernation Sites

Boundary Map



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Site Description

This site is an old chalk quarry that is now managed for public access and nature conservation, supporting a mosaic of wetland, grassland and woodland habitats. It is part of a complex of sites within the Chafford Hundred development that support similar and complimentary habitats, including the Grays Thurrock Chalk Pit SSSI.

The grassland habitats on the base and benches of the pit vary in character, with some chalk grassland communities and some that are more typical of neutral conditions. The species present include chalk grassland indicators such as Ploughman's Spikenard (*Inula conyzae*), Wild Liquorice (*Astragalus glycyphyllos*), Pyramidal Orchid (*Anacamptis pyramidalis*) and Marjoram (*Origanum vulgare*), which are all on the Essex Red Data List. Prominent grass species include Creeping Bent (*Agrostis stolonifera*), Common Bent (*Agrostis capillaris*), Smaller Cat's-tail (*Phleum bertolonii*), meadow-grass (*Poa* sp.) and Yorkshire-fog (*Holcus lanatus*) and other components of the community include Yellow Rattle (*Rhinanthus minor*), Wild Basil (*Clinopodium vulgare*), Common Knapweed (*Centaurea nigra*), Agrimony (*Agrimonia eupatoria*), Red Bartsia (*Odontites vernus*), Wild Carrot (*Daucus carota*), Fleabane (*Pulicaria dysenterica*), Perforate St John's-wort (*Hypericum perforatum*), Hawkweed Oxtongue (*Picris hieracioides*), Common Bird's-foot-trefoil (*Lotus corniculatus*), Meadow Vetchling (*Lathyrus pratensis*), Hop Trefoil (*Trifolium campestre*) and Common Centaury (*Centaureum erythraea*).

The maturing woodland is a mixture of planted and self-sown trees and includes Pedunculate Oak (*Quercus robur*), Ash (*Fraxinus excelsior*) and Silver Birch (*Betula pendula*) with Wild Cherry (*Prunus avium*), Aspen (*Populus tremula*), Dogwood (*Cornus sanguinea*), Hazel (*Corylus avellana*), Rowan (*Sorbus aucuparia*), Hawthorn (*Crataegus monogyna*), Holm Oak (*Quercus ilex*) and willows (*Salix* spp.). Associated ground flora is limited, but includes False Brome (*Brachypodium sylvaticum*), Wood Avens (*Geum urbanum*), Upright Hedge Parsley (*Torilis nodosa*) and Wild Clematis (*Clematis vitalba*).

Emergent and marginal vegetation around the lakes includes Mare's-tail (*Hippuris vulgaris*), Pink Water-speedwell (*Veronica catenata*), Water-plantain (*Alisma plantago-aquatica*), Gipsywort (*Lycopus europaeus*), Yellow Iris (*Iris pseudacorus*), Purple-loosestrife (*Lythrum salicaria*), Great Willowherb (*Epilobium hirsutum*), Water Mint (*Mentha aquatica*) and Common Reed (*Phragmites australis*). Extensive areas within and around the lakes are dominated by Alder (*Alnus glutinosa*) and willows (*Salix* spp.).

A series of three tunnels linking Warren Gorge to Lion Gorge, to the south, is used by roosting bats, most importantly during hibernation, when Daubenton's Bat, Natterer's Bat and pipistrelles are present. The largest tunnel is also used a summer, non-breeding roost by Daubenton's Bat.

Although the site supports a diverse fauna, the thresholds for the use of other species criteria are not met in the data available. It is likely that the site supports a good invertebrate assemblage and populations of reptiles and amphibians.

Site Selection Rationale

HC2 – Some of the more established woodland habitat has the structure and composition necessary to be considered as Priority Habitat.

HC12 – Although the chalk outcrop is the result of quarrying, the grassland community does meet the definition of this Priority Habitat.

HC28 – This criterion is used to include the woodland habitats that are not sufficiently mature to be considered as Priority Habitat, the lakes, other grasslands and scrub habitats, which in themselves could not meet any individual criterion.

HC31 – The extent of the site, as a key part of the Chafford Gorges Nature Park, is defined with this criterion.

SC10 – Monitoring data over a number of years is available to support the use of this criterion.

Priority Habitats

Lowland Mixed Deciduous Woodland

Lowland Calcareous Grassland

Ownership and Access

The site is owned and managed by Essex Wildlife Trust as part of its Chafford Gorges Nature Park, with open public access.

Condition Statement

Moderate, stable

Management Issues

Succession to scrub and woodland is an ongoing pressure, with a notable reduction in open grassland and open water edge habitats over the last 30 years. The site's importance as open space for the local community is associated with impacts on some of the habitats present.

Review Schedule

Site selected: 1992 (M2)

Site Reviewed: 2006, boundary revision; 2016 (Unpubl.), minor boundary revision; 2022, no change.

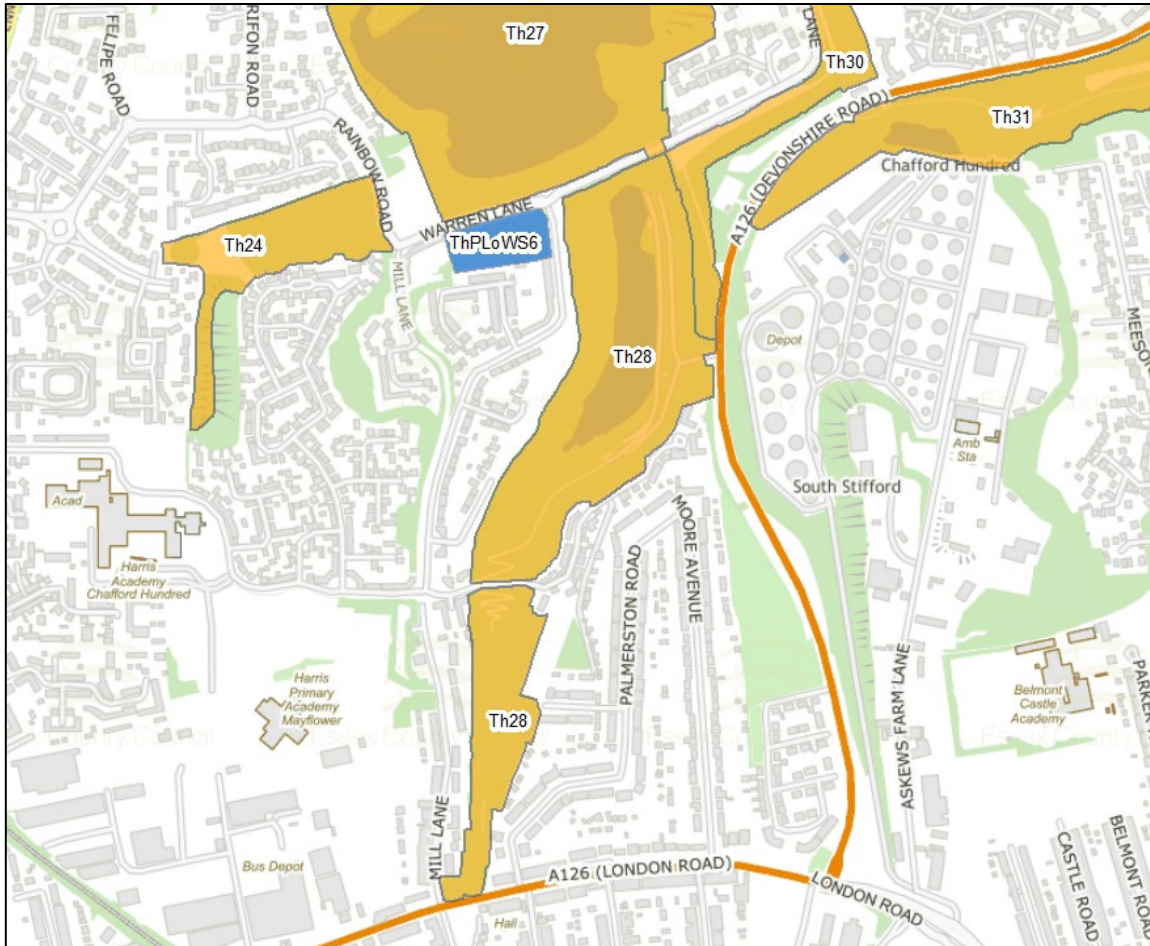
Site reference: Th28
Site name: Lion Gorge, Chafford Hundred

Grid ref. (approx. centre of site): TQ598784
Site area: 10.7ha

LoWS Selection Criteria:

- HC2 – Lowland Mixed Deciduous Woodland on Non-ancient Sites
- HC12 – Lowland Calcareous Grassland
- HC28 – Small Component Mosaics
- HC31 – Accessible Natural Greenspace

Boundary Map



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Site Description

This site comprises an old chalk quarry to the north and, to the south, the cutting of a tramway that took the chalk to the cement factory on the banks of the River Thames. The quarry base now holds a lake and its cliffs include a series of horizontal benches between vertical chalk faces, but the majority of the site supports woodland and scrub. The tramway cutting has been designated as the Lion Pit geological SSSI.

The developing secondary woodland includes Pedunculate Oak (*Quercus robur*), Ash (*Fraxinus excelsior*), Sycamore (*Acer pseudoplatanus*) and Silver Birch (*Betula pendula*) with Wild Cherry (*Prunus avium*), willow (*Salix* sp.), Dogwood (*Cornus sanguinea*), Hawthorn (*Crataegus monogyna*), Hazel (*Corylus avellana*), elm (*Ulmus* sp.) and Wayfaring-tree (*Viburnum lantana*). Ground flora is limited, featuring Common Ivy (*Hedera helix*), False Brome (*Brachypodium sylvaticum*), Wood Avens (*Geum urbanum*) and occasional Broad-leaved Helleborine (*Epipactis helleborine*).

Remaining open grassland habitats support a moderately diverse community that includes Bladder Campion (*Silene vulgaris*), Wild Carrot (*Daucus carota*), Common Bird's-foot-trefoil (*Lotus corniculatus*), Common Knapweed (*Centaurea nigra*), Agrimony (*Agrimonia eupatoria*), Red Bartsia (*Odontites vernus*), Viper's-bugloss (*Echium vulgare*), Hawkweed Oxtongue (*Picris hieracioides*), the Essex Red List species Marjoram (*Origanum vulgare*), Meadow Crane's-bill (*Geranium pratense*) and the Nationally Scarce Lesser Calamint (*Clinopodium calamintha*).

Although difficult to record, the benches on the quarry sides support more definable chalk grassland with indicator species such Yellow-wort (*Blackstonia perfoliata*) and the Essex Red List Carline Thistle (*Carlina vulgaris*) and Marjoram (*Origanum vulgare*).

The lake has limited emergent and marginal vegetation due to shading, but there are patches of Common Reed (*Phragmites australis*), Great Willowherb (*Epilobium hirsutum*), Purple-loosestrife (*Lythrum salicaria*) and Pendulous Sedge (*Carex pendula*).

Site Selection Rationale

HC2 – The more established woodland habitat has the structure and composition necessary to be considered as Priority Habitat.

HC12 – Although the chalk outcrop is the result of quarrying, the grassland community that has established does meet the definition of this Priority Habitat.

HC28 – This criterion is used to include the woodland habitats that are not sufficiently mature to be considered as Priority Habitat, the lake, other grasslands and scrub habitats, which in themselves could not meet any individual criterion.

HC31 – The extent of the site, as a key part of the Chafford Gorges Nature Park, is defined with this criterion.

Priority Habitats

Lowland Mixed Deciduous Woodland

Ownership and Access

The site is owned and managed by Essex Wildlife Trust as part of its Chafford Gorges Nature Park, with open public access.

Condition Statement

Moderate, stable

Management Issues

The open habitats are being lost as scrub and woodland develops, and this is especially damaging on the quarry benches, which are very difficult to manage. The site is well-used by the public with consequent impacts from littering and physical disturbance.

Review Schedule

Site selected: 1992 (M3)

Site Reviewed: 2006, boundary revision; 2016 (Unpubl.) Boundary revision; 2022, no change

Site reference: Th29

Site name: Great Palmer's Shaw, North Stifford

Grid ref. (approx. centre of site): TQ601811

Site area: 1.9ha

LoWS Selection Criteria:

- HC1 – Ancient Woodland Sites

Boundary Map



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Site Description

This small Ancient Woodland is the last remaining section of Palmers Wood, most of which had been lost by the mid-19th Century. The older canopy consists of Pedunculate Oak (*Quercus robur*) and Ash (*Fraxinus excelsior*), but it has been planted with Beech (*Fagus sylvatica*), Scot's Pine (*Pinus sylvestris*) and Larch (*Larix decidua*).

The understorey consists of Hazel (*Corylus avellana*), Hawthorn (*Crataegus monogyna*), elm (*Ulmus* sp.) and Elder (*Sambucus nigra*). The ground flora is impoverished, but includes Bluebell (*Hyacinthoides non-scripta*), Wood Avens (*Geum urbanum*), Ground-ivy (*Glechoma hederacea*), Bramble (*Rubus fruticosus* agg.) and Hedge Garlic (*Alliaria petiolata*).

Site Selection Rationale

HC1 – The site is included in the Ancient Woodland Inventory, which is supported by map evidence.

Priority Habitats

Lowland Mixed Deciduous Woodland

Ownership and Access

The site is in private ownership with no public access but can be viewed from a public right of way on the southern edge.

Condition Statement

Poor, stable

Management Issues

The non-native tree species create a dense shade, which limits the diversity of the ground flora, while the prevalence of Common Nettle (*Urtica dioica*) suggests nutrient enrichment.

Review Schedule**Site selected:** 1992 (W12)**Site Reviewed:** 2006, no change; 2016 (unpubl.), Little Palmer's Shaw removed due to its destruction; 2022, no change.

Site reference: Th30

Site name: Wouldham Cliffs, Chafford Hundred

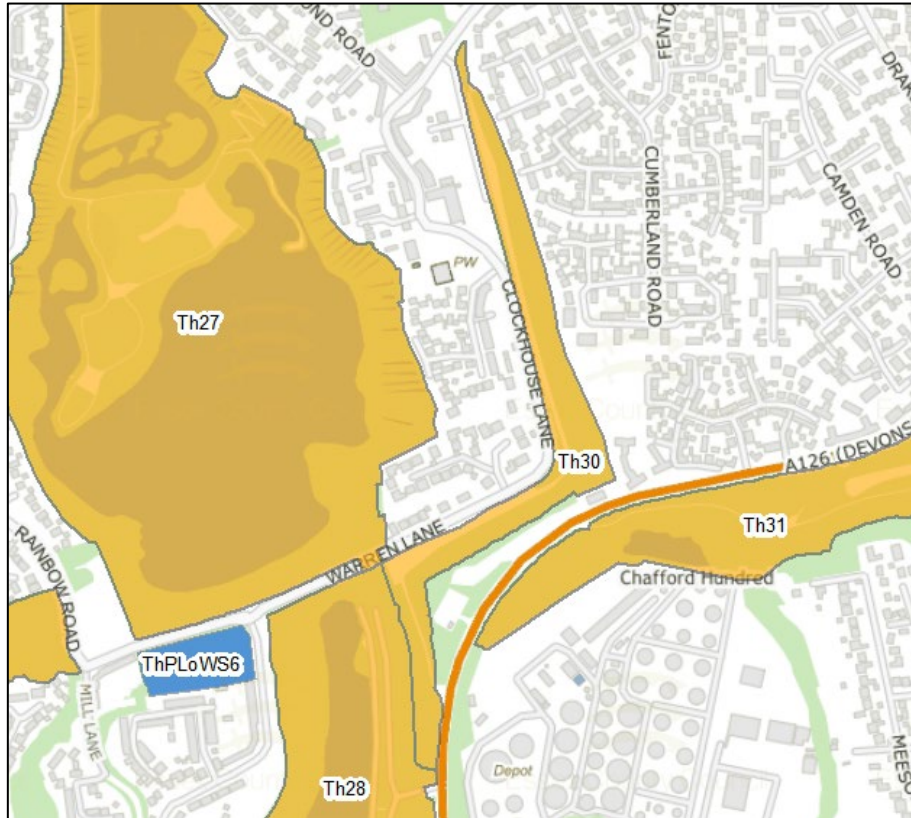
Grid ref. (approx. centre of site): TQ601790

Site area: 3.6ha

LoWS Selection Criteria:

- HC12 – Lowland Calcareous Grassland
- SC19 – Important Invertebrate Assemblage

Boundary Map



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Site Description

This site consists of two sections of cliff in the Chafford Hundred chalk pit complex formed in the second half of the 20th Century, and the narrow strips of grassland and scrub along its top and bottom. They now form part of the Essex Wildlife Trust Warren Gorges Nature Park. The chalk cliffs are topped with deposits of Thanet Sand, creating a mosaic of acidic and calcareous, free-draining soils.

The grassland is primarily composed of Common Bent (*Agrostis capillaris*), Red Fescue (*Festuca rubra*), meadow-grass (*Poa* sp.) and Smaller Cats-tail (*Phleum bertolonii*) with Marjoram (*Origanum vulgare*) (Essex Red Data List), Yellow-wort (*Blackstonia perfoliata*), Pyramidal Orchid (*Anacamptis pyramidalis*), Common Broomrape (*Orobanche minor*), Common Knapweed (*Centaurea nigra*), Agrimony (*Agrimonia eupatoria*), Common Bird's-foot-trefoil (*Lotus corniculatus*), Red Bartsia (*Odontites vernus*), Wild Carrot (*Daucus carota*), Perforate St John's-wort (*Hypericum perforatum*), Hop Trefoil (*Trifolium campestre*), Red Clover (*Trifolium pratense*), Common Centaury (*Centaureum erythraea*) and Hawkweed Oxtongue (*Picris hieracioides*).

Available survey evidence suggest that the habitats support a diverse invertebrate assemblage, likely to include species of national significance.

Site Selection Rationale

HC12 – Although not a classic example of chalk grassland, the site's position on chalk bedrock and the presence of key indicator species suggest that it should be considered to be Priority habitat.

SC19 – Survey work suggests the presence of an invertebrate assemblage of at least county significance.

Priority Habitats

Lowland Calcareous Grassland

Ownership and Access

The site is in private ownership with no public access but can be viewed from the nearby Whitehouse Road.

Condition Statement

Moderate, stable

Management Issues

The coarser grasses False Oat-grass (*Arrhenatherum elatius*) and Cock's-foot (*Dactylis glomerata*) are locally dominant as a result of a lack of management pressure, which is also allowing the invasion of scrub species.

Review Schedule

Site selected: 2006

Site Reviewed: 2016 (Unpubl.), extended to include cliff face; 2022, no change.

Site reference: Th31

Site name: Grays Pit Extensions, Chafford Hundred

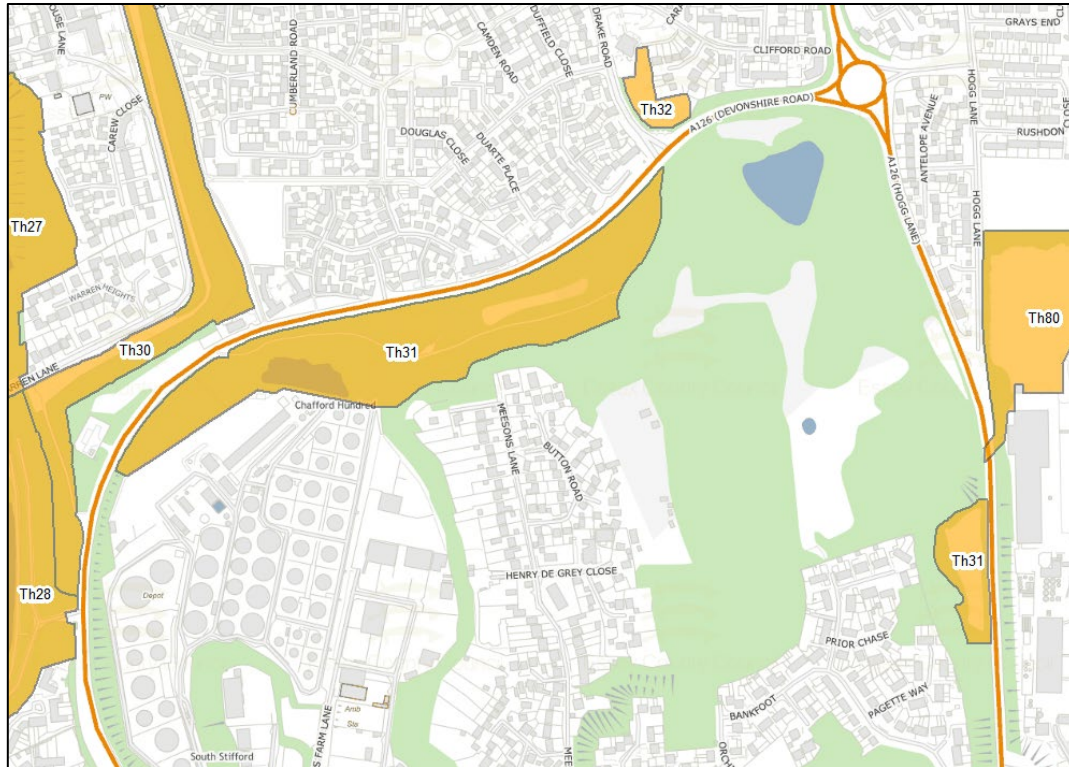
Grid ref. (approx. centre of site): TQ604789

Site area: 6.2ha

LoWS Selection Criteria:

- HC12 – Lowland Calcareous Grassland
- HC11 – Other neutral grasslands
- HC 27 – Post-industrial Sites
- SC1 – Vascular Plants

Boundary Map



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Site Description

The larger part of this site is a mosaic of open, chalk grassland, scrub and young woodland forming a link between the Grays Thurrock Chalk Pit SSSI immediately to the east and the Th27 Warren Gorge, Th28 Lion Gorge and Th30 Wouldham Cliffs LoWS to the west. Most of this area has been subjected to quarrying and it includes an area of open water. It also includes a small area of calcareous neutral grassland to the southeast of the SSSI, adjacent to Hoggs Lane.

Pedunculate Oak (*Quercus robur*) and Ash (*Fraxinus excelsior*) are the most frequent trees with variously aged Silver Birch (*Betula pendula*) and scrub consisting of Hawthorn (*Crataegus monogyna*), willows (*Salix* spp.), *Prunus* spp., Dogwood (*Cornus sanguinea*) and rose (*Rosa* agg.).

Areas of open grassland support Common Bent (*Agrostis capillaris*), Yorkshire-fog (*Holcus lanatus*), Red Fescue (*Festuca rubra*), Smaller Cat's-tail (*Phleum bertolonii*) with Common Knapweed (*Centaurea nigra*), Agrimony (*Agrimonia eupatoria*), Common Bird's-foot-trefoil (*Lotus corniculatus*), Tufted Vetch (*Vicia cracca*), Red Clover (*Trifolium pratense*), Meadow Vetchling (*Lathyrus pratensis*), Hop Trefoil (*Trifolium campestre*), Perforate St John's-wort (*Hypericum perforatum*), Hawkweed Oxtongue (*Picris hieracioides*), Wild Carrot (*Daucus carota*), Red Bartsia (*Odontites vernus*) and Hoary Mustard (*Hirschfeldia incana*). The Essex Red List species Marjoram (*Origanum vulgare*), Ploughman's Spikenard (*Inula conyzae*) and Yellow Rattle (*Rhinanthus minor*) are also present.

At the eastern end, where the chalk substrate is more exposed and the sward is more open, there is Wild Basil (*Clinopodium vulgare*), Glaucous Sedge (*Carex flacca*), Wild Strawberry (*Fragaria vesca*), Fairy Flax (*Linum catharticum*), Hairy St. John's-wort (*Hypericum hirsutum*), Mouse-ear Hawkweed (*Pilosella officinalis*), Common Spotted Orchid (*Dactylorhiza fuchsii*), Yellow-wort (*Blackstonia perfoliata*) and the

Essex Red List species Kidney Vetch (*Anthyllis vulneraria*), Carlina Thistle (*Carlina vulgaris*) and Irregular-toothed Hawkweed (*Hieracium lepidulum*). The Nationally Scarce species Man Orchid (*Aceras anthropophorum*) and Round-leaved Wintergreen (*Pyrola rotundifolium*) are also present here, often amongst the birch and willow scrub.

The smaller, eastern meadow is outside of the Nature Park boundary and at original, pre-quarrying ground level, meaning a less chalky substrate that nonetheless shows a calcareous influence. It is characterised by Common Bent, Yellow Oat-grass (*Trisetum flavescens*), Red Fescue and Yorkshire-fog with Marjoram, Common Knapweed, Agrimony, Wild Carrot, Cowslip (*Primula veris*), Meadow Vetchling, Red Bartsia, Oxeye Daisy (*Leucanthemum vulgare*), Hawkweed Oxtongue and the Essex Red List species Yellow Rattle.

Site Selection Rationale

HC12 – Although the exposure of chalk in the western section is not natural, the resulting vegetation is appropriate to Priority habitat, as evidenced by the presence of indicator species.

HC11 – The eastern meadow shows some calcareous influence, but does not match any Priority habitat description, despite being essentially unimproved.

HC27 – The site is part of the old chalk quarry and shows the range of features needed to qualify it as Open Mosaic Priority habitat.

SC1 – Significant populations of two Nationally Scarce species and six Essex Red List species justify the use of this criterion.

Priority Habitats

Lowland Calcareous Grassland

Open Mosaic Habitats on Previously Developed Land

Ownership and Access

The site is owned and managed by Essex Wildlife Trust as part of its Chafford Gorges Nature Park and has open access.

Condition Statement

Good, stable

Management Issues

The western part of the site supports a range of non-native species, including potentially invasive ones, such as *Cotoneaster*, Goat's-rue (*Galega officinalis*) and White Poplar (*Populus alba*). The coarse grasses Cock's-foot (*Dactylis glomerata*) and False Oat-grass (*Arrhenatherum elatius*) are dominant in places and the spread of scrub constantly threatens the extent of open habitat. The eastern meadow appears to be lacking management, meaning that coarse grasses such as Tall Fescue (*Schedonorus arundinacea*) and False Oat-grass are taking over, together with invading scrub. It should be noted that a degree of scrub cover is important to some of the key plant species.

Review Schedule

Site selected: 1992 (part of M4)

Site Reviewed: 2006, SSSI removed; 2016 (Unpubl.), no change; 2022, no change.

Site reference: Th32
Site name: Sandmartin Cliff, Chafford Hundred

Grid ref. (approx. centre of site): TQ607792
Site area: 0.35ha

LoWS Selection Criteria:

- HC12 – Lowland Calcareous Grassland
- HC27 – Post-industrial Sites
- SC19 – Important Invertebrate Assemblages

Boundary Map



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Site Description

This small site is a cliff of Thanet Sand with a small area of chalk grassland at its base. The top of the cliff marks the original ground level prior to the extraction of sand and chalk across much of the surrounding area and coincides with the peak of the original Thames valley slope.

The grassland consists of Common Bent (*Agrostis capillaris*), Red Fescue (*Festuca rubra*), meadow-grass (*Poa* sp.), Quaking-grass (*Briza media*), Smaller Cat's-tail (*Phleum bertolonii*) and Yellow Oat-grass (*Trisetum flavescens*) with Common Knapweed (*Centaurea nigra*), Tufted Vetch (*Vicia cracca*), Wild Carrot (*Daucus carota*), Perforate St John's-wort (*Hypericum perforatum*), Hawkweed Oxtongue (*Picris hieracioides*), and the Essex Red List species Yellow Rattle (*Rhinanthus minor*), Marjoram (*Origanum vulgare*), Kidney Vetch (*Anthyllis vulneraria*) and Small Scabious (*Scabiosa columbaria*).

Previous survey work has shown that the features of the site support a significant invertebrate assemblage including nationally and locally rare species, such as the Brown-banded Carder bee (*Bombus humilis*), a Priority species. The cliff has suitable conditions for nesting and basking, with the grassland providing an accessible foraging resource.

Site Selection Rationale

HC12 – Although the exposure of chalk is not natural, the resulting vegetation is appropriate to Priority Habitat, as evidenced by the presence of indicator species.

HC27 – The site is part of the old chalk quarry and shows the range of features needed to qualify it as Open Mosaic Priority Habitat.

SC19 – Survey information is available to demonstrate the significance of the site for invertebrates.

Priority Habitats

Lowland Calcareous Grassland

Open Mosaic Habitats on Previously Developed Land

Ownership and Access

The site is owned and managed by Essex Wildlife Trust as part of its Chafford Gorges Nature Park, and has no public access, but it can be viewed from the adjacent pavement.

Condition Statement

Good, stable

Management Issues

The spread of scrub is a constant threat to the extent of open vegetation and access to the exposed substrates of the cliff.

Review Schedule

Site selected: 1992 (as part of M4)

Site Reviewed: 2006, boundary changed; 2016 (unpubl.), no change; 2022, no change.

Site reference: Th34

Site name: Blackshots Nature Area

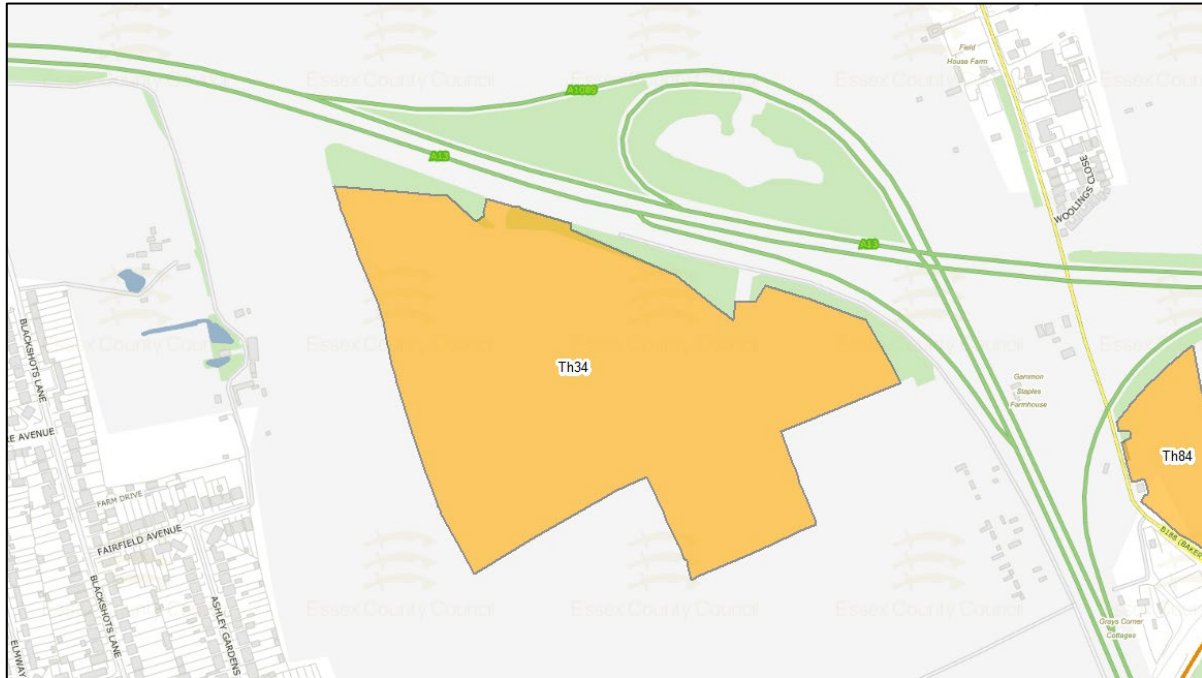
Grid ref. (approx. centre of site): TQ629806

Site area: 19.1ha

LoWS Selection Criteria:

- HC11 – Other Neutral Grassland
- HC28 – Small-component Mosaics

Boundary Map



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Site Description

This large former gravel pit now supports a significant extent of free-draining grassland with scattered scrub, and on its sloping banks, young woodland. It is heavily used by the local community, including by motorbikes.

The grassland is varied in structure and consists of Common Bent (*Agrostis capillaris*), Red Fescue (*Festuca rubra*), Sweet Vernal Grass (*Anthoxanthum odoratum*), Yorkshire-fog (*Holcus lanatus*), Meadow Foxtail (*Alopecurus pratensis*), meadow-grass (*Poa* sp.), Tall Fescue (*Schedonorus arundinacea*) and Cock's-foot (*Dactylis glomerata*). Also present are Common Knapweed (*Centaurea nigra*), Agrimony (*Agrimonia eupatoria*), Field Scabious (*Knautia arvensis*), Perforate St John's-wort (*Hypericum perforatum*), Wild Carrot (*Daucus carota*), Common Vetch (*Vicia sativa*), Hawkweed Oxtongue (*Picris hieracioides*) and Common Cat's-ear (*Hypochaeris radicata*). Areas of more open vegetation support Buck's-horn Plantain (*Plantago coronopus*), Common Centaury (*Centaureum erythraea*) and the Near Threatened Common Cudweed (*Filago vulgaris*).

The scrub species include Hawthorn (*Crataegus monogyna*), Apple (*Malus domestica*) and Dogwood (*Cornus sanguinea*), and woodland supports Pedunculate Oak (*Quercus robur*), Silver Birch (*Betula pendula*), Ash (*Fraxinus excelsior*), Wild Cherry (*Prunus avium*) and non-native species such as pines (*Pinus* sp.) and Norway Maple (*Platanus platanoides*).

Previous records suggest that a valuable invertebrate assemblage is present, with records of a number of locally scarce species and the Priority Species fly *Dorycera gramineum*.

Site Selection Rationale

HC11 – the grassland community present is not a good match for any of the Priority habitats but is moderately acidic and supports good species diversity.

HC27 – This criterion is used to define the extent of the site, taking in the scrub and young secondary woodland habitats together with all grassland types.

Priority Habitats

None

Ownership and Access

The site is in private ownership but can be viewed from a public footpath that crosses its eastern half.

Condition Statement

Moderate, stable

Management Issues

The spread of scrub at the expense of open grassland could lead to a decline in the condition of the site, although human influence in the form of fires and physical disturbance from motor vehicles can have a moderating influence on this.

Review Schedule

Site selected: 2006

Site Reviewed: 2016 (Unpubl.), no change; 2022, no change.

Site reference: Th35

Site name: Little Thurrock Reedbeds,

Grid ref. (approx. centre of site): TQ631778

Site area: 2.1ha

LoWS Selection Criteria:

- HC15 – Reedbeds
- HC28 – Small-component Mosaics

Boundary Map



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Site Description

The origin of these two reedbed blocks, separated by the A126, is unknown, but may be associated with the construction of the road. 19th Century maps show the area as a grazing marsh field, already bisected by the road to Tilbury.

The majority of the habitat consists of single-species stands of Common Reed (*Phragmites australis*), the western section includes some associated lowland fen type habitat to the east and west of the reedbed. This includes Bulrush (*Typha latifolia*), Great Willowherb (*Epilobium hirsutum*), Reed Sweet-grass (*Glyceria maxima*) and Amphibious Bistort (*Polygonum amphibium*) alongside Common Reed. A certain amount of scattered and dense scrub is included at the margins of the reedbed.

Site Selection Rationale

HC15 – the reedbed stands meet the necessary description to be considered as Priority habitat.

HC28 – the fen habitat is not of sufficient scale or quality to be considered Priority Habitat, but along with the scrub, it forms a valuable mosaic of habitats, and so this criterion has been used to define the site's boundaries.

Priority Habitats

Reedbeds

Ownership and Access

The site is in private ownership with no public access but can be viewed from the adjacent footpaths and roads.

Condition Statement

Moderate, stable

Management Issues

There is no active management of the reedbeds for nature conservation, so they will be subject to successional pressures over time, drying out and being overtaken by scrub.

Review Schedule

Site selected: 2006

Site Reviewed: 2016 (Unpubl.), no change; 2022, expanded to include additional fen habitat.

Site reference: Th36

Site name: Terrels Heath, Little Thurrock

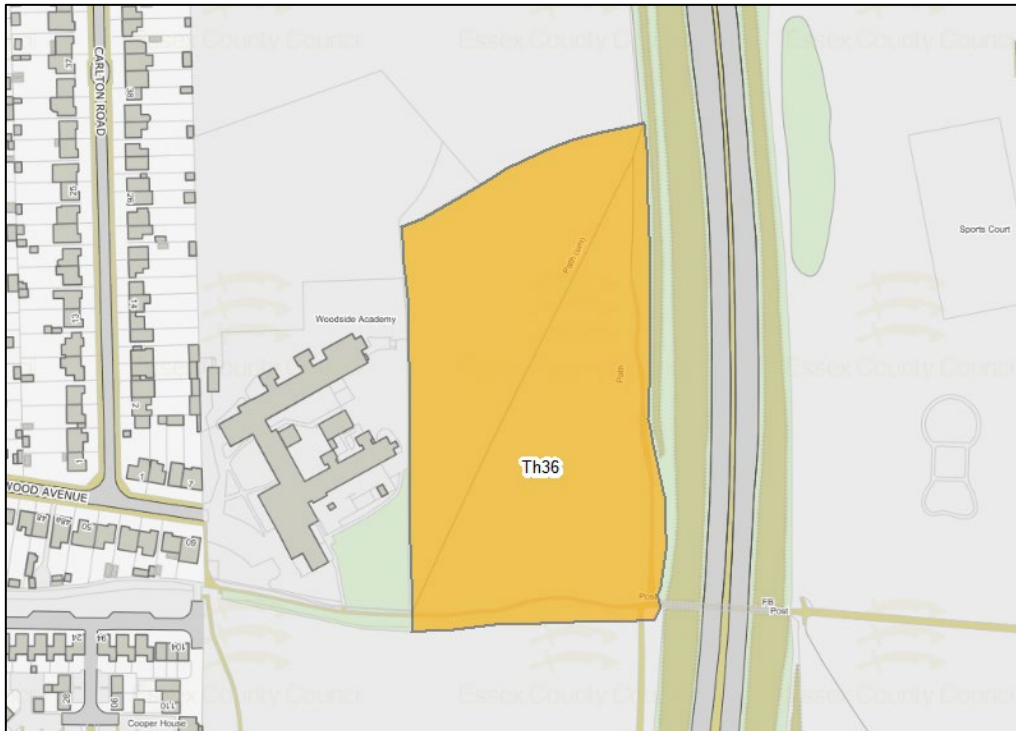
Grid ref. (approx. centre of site): TQ638792

Site area: 2.8ha

LoWS Selection Criteria:

- HC2 – Lowland Mixed Deciduous Woodland on Non-Ancient Sites

Boundary Map



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Site Description

This site is the remaining part of Terrels Heath, which extended further to the east until the mid-20th Century at least. Although most of it is included in the Ancient Woodland Inventory, there has to be some doubt over the validity of this status. Many of the trees within the woodland have large lower branches that indicate that they grew in the open, which combined with the name suggests a wood pasture or heathland with trees origin.

The woodland has a canopy of Pedunculate Oak (*Quercus robur*) with some Wild Cherry (*Prunus avium*) and an understorey that includes Hazel (*Corylus avellana*), Hawthorn (*Crataegus monogyna*), Field Maple (*Acer campestre*), elm (*Ulmus* sp.), Elder (*Sambucus nigra*) and Gorse (*Ulex europaeus*).

The ground flora features Bramble (*Rubus fruticosus* agg.) and Bracken (*Pteridium aquilinum*) with Bluebell (*Hyacinthoides non-scripta*), Lords and Ladies (*Arum maculatum*), Wood Sage (*Teucrium scorodonia*), Wood Avens (*Geum urbanum*), Greater Stitchwort (*Stellaria holostea*), Cow Parsley (*Anthriscus sylvestris*) and Creeping Soft-grass (*Holcus mollis*).

At the southern end, the canopy is more open, resulting in a mosaic of acid grassland amongst scattered mature Pedunculate Oaks. The sward includes Common Bent (*Agrostis capillaris*), Red Fescue (*Festuca rubra*), Sweet Vernal Grass (*Anthoxanthum odoratum*), Smaller Cat's-tail (*Phleum bertolonii*), meadow-grass (*Poa* sp.) and Cock's-foot (*Dactylis glomerata*) with Oxeye Daisy (*Leucanthemum vulgare*), Yarrow (*Achillea millefolium*) and Pignut (*Conopodium majus*).

Site Selection Rationale

HC2 – Although partially included in the Ancient Woodland Inventory, there is little to suggest that this status is warranted, but the habitat present does meet the description of Priority habitat woodland

Priority Habitats

Lowland Mixed Deciduous Woodland

Ownership and Access

The site is owned by Thurrock Council and managed as a public open space.

Condition Statement

Moderate, stable

Management Issues

The site is heavily used, which may affect the diversity and abundance of its ground flora and lead to localised enrichment from dog fouling. There is no evidence of management for nature conservation outcomes.

Review Schedule

Site selected: 1992 (W15)

Site Reviewed: 2006, no change; 2016 (Unpubl.), no change; 2022, no change.

Site reference: Th37

Site name: Tilbury Marshes, Tilbury

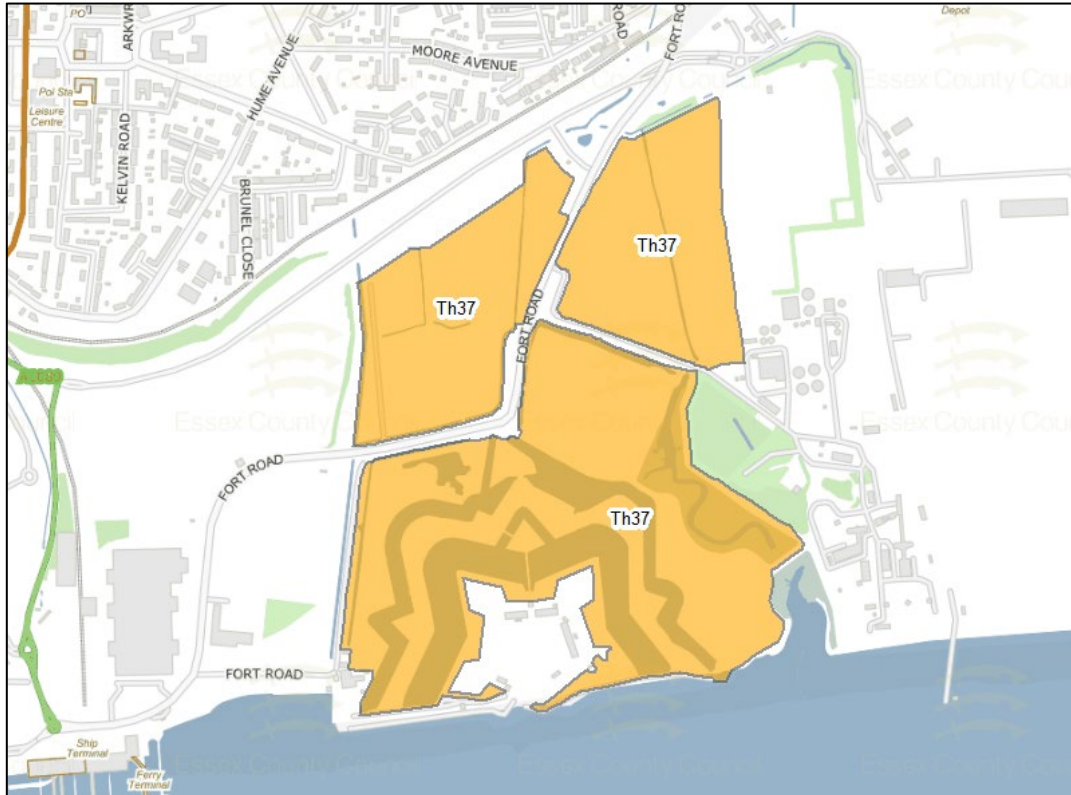
Grid ref. (approx. centre of site): TQ651756

Site area: 43.1ha

LoWS Selection Criteria:

- HC11 – Other Neutral Grassland
- HC21 – Coastal Grazing Marsh

Boundary Map



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Site Description

This site takes in the remaining sections of a once extensive grazing marsh system, including brackish ditches, together with the defensive moats and grassland associated with the historic fort, which is a scheduled monument.

The grazing marsh grassland includes Meadow Barley (*Hordeum secalinum*), Crested Dog's-tail (*Cynosurus cristatus*), Creeping Bent (*Agrostis stolonifera*) and Red Fescue (*Festuca rubra*) with Hairy Buttercup (*Ranunculus sardous*), Lady's Bedstraw (*Galium verum*), Knotted Hedge-parsley (*Torilis nodosa*), Narrow-leaved Bird's-foot Trefoil (*Lotus tenuis*), Lesser Sea-spurrey (*Spergularia marina*), Sea Wormwood (*Artemisia maritima*) and Wild Carrot (*Daucus carota*). The Nationally Scarce species Sea Clover (*Trifolium squamosum*), Divided Sedge (*Carex divisa*) and Slender Hare's-ear (*Bupleurum tenuissimum*) are also present.

The moat edges support saltmarsh flora including Saltmarsh Rush (*Juncus gerardii*), Sea Aster (*Aster tripolium*), Annual Seablite (*Suaeda maritima*), Sea Rush (*Juncus maritimus*), Greater Sea-spurrey (*Spergularia media*), glassworts (*Salicornia* spp.) and the Nationally Scarce Stiff Saltmarsh-grass (*Puccinellia rupestris*) and Sea Barley (*Hordeum marinum*). Grazing marsh ditches support Sea Club-rush (*Bolboschoenus maritimus*) and Fennel Pondweed (*Potamogeton pectinatus*).

The dry grassland on the outer edge of the fort includes Red Fescue (*Festuca rubra*), Wild Clary (*Salvia verbenaca*), Knotted Hedge-parsley, Common Knapweed (*Centaurea nigra*), Hawkweed Oxtongue (*Picris hieracioides*) and Perennial Wall-rocket (*Diplotaxis tenuifolia*).

The site also supports bird species of significance throughout the year, including breeding Shelduck.

Site Selection Rationale

HC11 – The grassland on the fort is not of a type that corresponds to a Priority habitat, although it supports some unusual plant species that make it worthy of selection.

HC21 – This is one of the few remaining sections of grazing marsh in Thurrock that retains an original topography and some of the characteristic species of the habitat.

Priority Habitats

Coastal and Floodplain Grazing Marsh

Ownership and Access

The site is in private ownership with no public access but can be viewed from public rights of way on and around it.

Condition Statement

Moderate, stable

Management Issues

The site is not managed with nature conservation outcomes in mind and sections can be over-grazed by horses. The non-native Bittenweed (*Cotula coronopifolia*) forms extensive stands on some parts of the moats and has the potential to outcompete native species.

Review Schedule

Site selected: 1992 (part of M5)

Site Reviewed: 2006, boundaries revised to remove developed sections; 2016 (Unpubl.), no change; 2022, north-eastern field added.

Site reference: Th38

Site name: Broom Hill, Chadwell St Mary

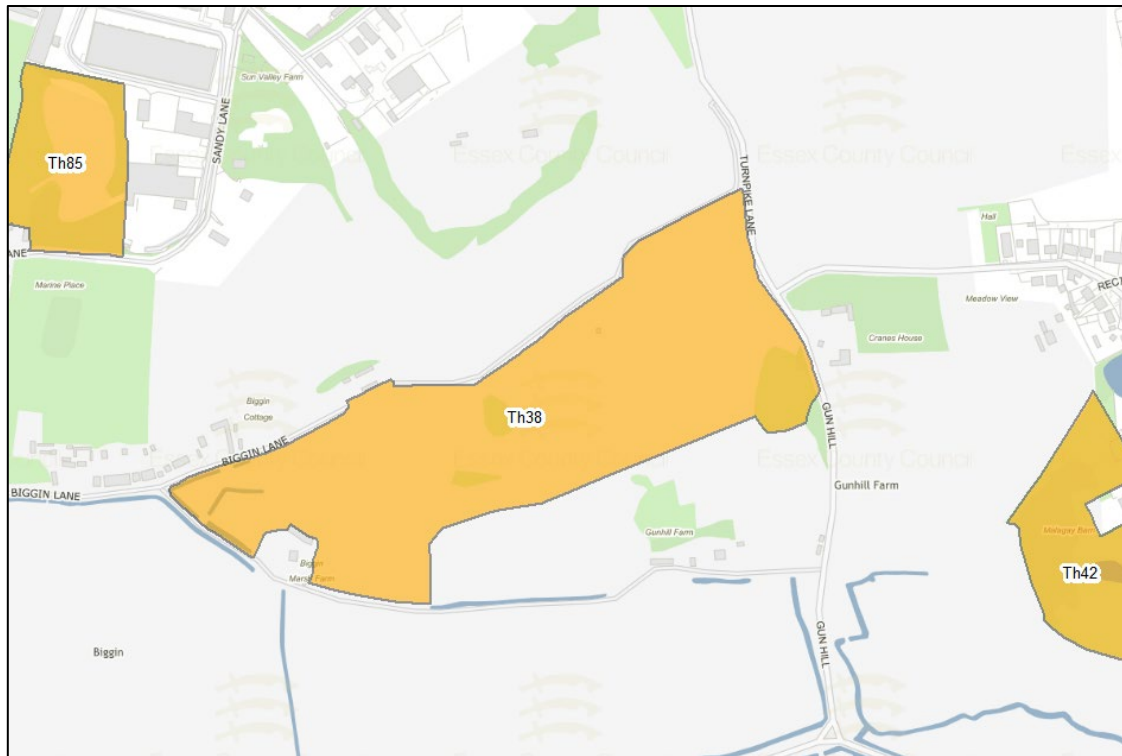
Grid ref. (approx. centre of site): TQ654778

Site area: 11.5ha

LoWS Selection Criteria:

- HC13 Heathland and Acid Grassland
- HC27 Post-industrial Sites
- SC1 – Vascular Plants
- SC19 – Important Invertebrate Assemblages

Boundary Map



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Site Description

This horse-grazed grassland site sits at the top of the ridge that marks an elevated former course of the River Thames and includes an area of shallow sand and gravel workings. It is probably the most important of Thurrock's remaining Thames Terrace grasslands, which are a vital component of the overall Thames Estuary biodiversity hotspot.

The grassland consists of Common Bent (*Agrostis capillaris*), Crested Dog's-tail (*Cynosurus cristatus*), Smaller Cat's-tail (*Phleum bertolonii*), Meadow Foxtail (*Alopecurus pratensis*), Smooth Meadow-grass (*Poa pratensis*), Soft-brome (*Bromus hordeaceus*) and Yorkshire-fog (*Holcus lanatus*) with Sheep's Sorrel (*Rumex acetosella*), Common Knapweed (*Centaurea nigra*), Bulbous Buttercup (*Ranunculus bulbosus*), Common Stork's-bill (*Erodium cicutarium*), Welled Thistle (*Carduus crispus*), Weld (*Reseda lutea*), Buck's-horn Plantain (*Plantago coronopus*), Parsley Piert (*Aphanes arvensis*), Black Horehound (*Ballota nigra*), Wood Sage (*Teucrium scorodonia*), Blinks (*Montia fontana*) and the Near Threatened Common Cudweed (*Filago germanica*). Curiously for an open hillside, Bluebell (*Hyacinthoides non-scripta*) is present on the northern slope.

The site also supports key populations of the Nationally Scarce species Autumn Squill (*Scilla autumnalis*), at one of only two sites in the county, Hoary Cinquefoil (*Potentilla argentea*) and Clustered Clover (*Trifolium glomeratum*), and the Essex Red List species Meadow Saxifrage (*Saxifraga granulata*), Changing Forget-me-not (*Myosotis discolor*) and Subterranean Clover (*Trifolium subterraneum*).

The site has a recorded invertebrate assemblage of national significance with large numbers of nationally rare and scarce species, including at least three Priority species.

Site Selection Rationale

HC13 – The dominant community across the site is characteristically an acid grassland one, which meets the Priority habitat definition.

HC27 – The eastern part of the site is a former extraction site.

SC1 – This criterion is applied primarily for the population of Autumn Squill, but with the other nationally and locally rare species in support.

SC19 – Existing species records show that the site supports a highly significant invertebrate assemblage.

Priority Habitats

Lowland Dry Acid Grassland

Open Mosaic Habitat on Previously Developed Land

Ownership and Access

The site is in private ownership with no public access but is crossed by a public right of way from Biggin Lane to Gun Hill.

Condition Statement

Moderate, stable

Management Issues

The site is not managed for nature conservation outcomes and so its condition varies according to the land use at the time. It can often be very heavily horse-grazed, which preserves its open character, but may inhibit some species.

Review Schedule

Site selected: 1992 (G5)

Site Reviewed: 2006, unchanged; 2016 (Unpubl.), minor boundary revision; 2022, no change

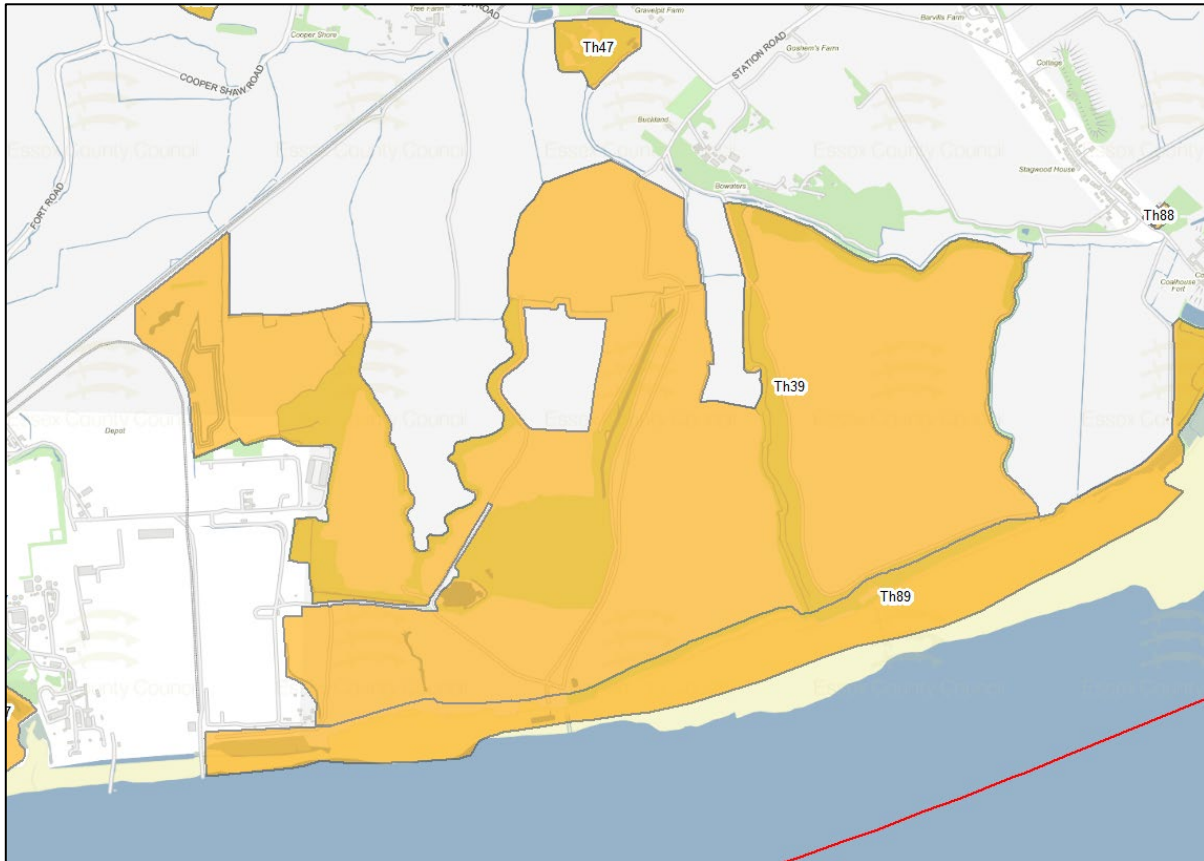
Site reference: Th39
Site name: West Tilbury Marshes Complex

Grid ref. (approx. centre of site): TQ672762
Site area: 241.3ha

LoWS Selection Criteria:

- HC21 – Coastal Grazing Marsh
- HC27 – Post-industrial Sites
- SC19 – Important Invertebrate Assemblage

Boundary Map



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Site Description

This site consists of several blocks of land of differing character, reflecting the landscape and management history of the area, including Walton Common, land associated with the disposal of pulverised fuel ash (PFA) from the former Tilbury Power Station, Goshems Farm former landfill site, and another former landfill site known as Horse Field.

The north western block includes Walton Common, a remnant of the coastal grazing marsh that covered the whole of the coastal belt between Grays and Stanford-le-Hope up to the middle of the 19th Century, when the construction of the railway line to Tilbury Ferry, followed by the establishment of Tilbury Docks in the 1880s started the industrialisation of this part of the Thames corridor. To the southeast is some rough grassland and scrub associated with the power station site and to the west is an area created as mitigation for impacts to biodiversity.

Adjacent to Walton Common is an area that consists of pulverised fuel ash (PFA), a by-product created during the operation of the coal-fired power station that was formerly located to the west. PFA provides base-rich conditions with a structure comparable to natural sands, and so can create habitat that resembles sand dunes, as well as supporting saltmarsh species. This area includes features created as ecological compensation for development impacts.

To the east is the Goshems Farm landfill site part of which has been re-worked to improve its capping and is still primarily bare ground, slowly vegetating. The more established habitat consists of rough grassland and

patchy scrub with some remaining open mosaic habitats, including a lagoon that is partially fringed with Common Reed (*Phragmites australis*) and Sea Club-rush (*Bolboschoenus maritimus*).

The eastern block is the re-capped former landfill site known as Horse Field, which supports an open, grassy vegetation with scattered scrub.

Although there is a lack of recent survey information for some of the land within the LoWS, the wider area and the individual habitats present are known to support a invertebrate assemblage of national importance. Key species include Hornet Robberfly (*Asilus crabroniformis*), Shril Carder Bee (*Bombus sylvarum*), *Cerceris quinquefasciata* and the cuckoo wasp *Hedychrum rutilans*, which was previously considered to be extinct in the UK. There is also known to be a population of Adder present.

Site Selection Rationale

HC21 – Walton Common is one of the last remaining sections of coastal grazing marsh to the east of Tilbury, protected by its Common Land status.

HC27 – Many of the habitats within the site have been subject to industrial process, mostly associated with waste management, and the site shows all of the features required of open mosaic Priority Habitat

SC19 – a number of surveys over many years have demonstrated the presence of a nationally important assemblage of invertebrates

Priority Habitats

Coastal and Floodplain Grazing Marsh

Open Mosaic Habitats on Previously Developed Land

Ownership and Access

The site is in private ownership with no public access but parts can be viewed from the England Coast Path to the south.

Condition Statement

Moderate, stable

Management Issues

The wider area has been repeatedly subject to development pressures and this site is restricted to those in a more stable condition, although their future security is uncertain with major infrastructure projects planned in close proximity.

Review Schedule

Site selected: 2006 (parts of Th39, Th40 and Th49)

Site Reviewed: 2016 (Unpubl.), parts of Th39, Th40 and Th41 amalgamated; 2022, Extended significantly

Site reference: Th41

Site name: Mucking Heath Complex, Orsett

Grid ref. (approx. centre of site): TQ659805

Site area: 53.5ha

LoWS Selection Criteria:

- HC13 – Heathland and Acid Grassland
- HC27 – Post-industrial Sites
- HC28 – Small-component Mosaics
- SC1 – Vascular Plants
- SC16 – Hotspots for Reptile Diversity
- SC19 – Important Invertebrate Assemblages

Boundary Map



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Site Description

This site consists of a formal gravel pit known as Orsett Camp Quarry and the Orsett Golf Course, part of which supports the fragmented remains of Mucking Heath on which it was constructed in the early 20th Century. The whole site sits on a plateau of sand and gravel that give rise to acidic, free-draining conditions that support important plant and invertebrate assemblages.

Orsett Camp Quarry has remained undisturbed since quarrying finished and is now dominated by scrub interspersed with open, short-swarded grassland grazed by Rabbits. Species present include Smaller Cat's-tail (*Phleum bertolonii*), Agrimony (*Agrimonia eupatoria*), Lady's Bedstraw (*Galium verum*), Mouse-ear Hawkweed (*Pilosella officinarum*), Buck's Horn Plantain (*Plantago coronopus*), Hoary Ragwort (*Jacobaea erucifolia*), Chicory (*Cichorium intybus*), Common Centaury (*Centaureum erythraea*), and Red Bartsia (*Odontites verna*). Knotted Clover (*Trifolium striatum*), Pyramidal Orchid (*Anacamptis pyramidalis*), Upright Chickweed (*Moenchia erecta*), the Nationally Scarce Clustered Clover (*Trifolium glomeratum*) and Subterranean Clover (*Trifolium subterraneum*) and the nationally Near Threatened Field Mouse-ear (*Cerastium arvense*) have also been recorded.

The grassland habitat within the golf course includes Common Bent (*Agrostis capillaris*), Red Fescue (*Festuca rubra*) and Sweet Vernal-grass (*Anthoxanthum odoratum*) with Heath Bedstraw (*Galium saxatile*), Lady's Bedstraw (*Galium verum*), Knotted Clover and Field Wood-rush (*Luzula campestris*). Other species recorded on site include the Nationally Vulnerable Green-winged Orchid (*Anacamptis morio*), the Nationally Scarce Autumn Squill (*Scilla autumnalis*) and the Near Threatened Hoary Cinquefoil (*Potentilla argentea*) and Field Scabious (*Knautia arvensis*).

The site is known to support populations of Adder, Common Lizard and Slow Worm, although no recent survey information is available, and past invertebrate surveys have recorded a notably high number of Priority, and locally and nationally scarce and rare species, including Hornet Robberfly (*Asilus crabroniformis*).

Site Selection Rationale

HC13 – Part of the site has a documented history of being heathland, while the sand and gravel surface geology of the area means that other grassland habitat is also acidic in character, especially so in the former aggregates pit.

HC27 – The extraction history of the northern section of the site, and the features present qualify as open mosaic Priority Habitat

HC28 – This criterion is used to define the boundary of the site, taking in those peripheral habitats that add structure and diversity to the site without meeting any other individual habitat criterion.

SC1 – The significance of the population of Autumn Squill is enough to justify the use of this criterion, but this is supported by the presence of other Nationally Scarce and Near Threatened species.

SC16 – Three species of reptile are known to be present, which triggers the application of this criterion.

SC19 – Survey information demonstrates the presence of an important assemblage including locally and nationally scarce and rare species.

Priority Habitats

Lowland Dry Acid Grassland

Open Mosaic Habitat on Previously Developed Land

Ownership and Access

Both parts of the site are in private ownership with no formal public access, apart from a public right of way that runs along the lane between the two parts of the site, turning south to cross the eastern part of the golf course.

Condition Statement

Moderate, stable

Management Issues

No part of the site is managed for nature conservation outcomes and so the site's continued existence and condition are subject to other land management decisions. Succession of open habitats to scrub and woodland is a concern.

Review Schedule

Site selected: 1992 (Mucking Heath, G6)

Site Reviewed: 2006, no change; 2016 (Unpubl.), combined with Th44; 2022, remapped to remove greens and fairways.

Site reference: Th42

Site name: West Tilbury Hall,

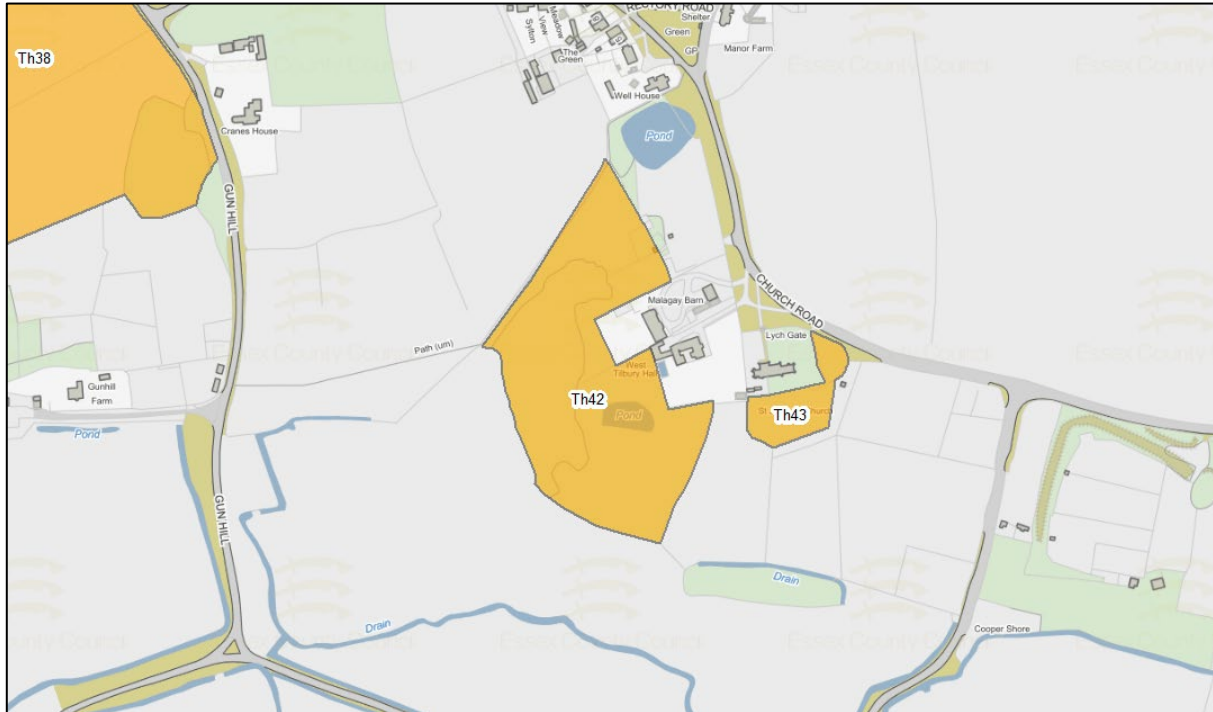
Grid ref. (approx. centre of site): TQ660777

Site area: 2.5ha

LoWS Selection Criteria:

- HC13 – Heathland and Acid Grassland
- HC27 – Small-component Mosaics

Boundary Map



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Site Description

This site lies on the slope of a Thames Terrace gravel plateau and is connected to the nearby Th38 Broom Hill LoWS and consists of a mosaic of grassland and scrub set within an old landscape around the hall and church.

The grassland habitat is poorly recorded but includes Common Bent (*Agrostis capillaris*) and Sheep's Sorrel (*Rumex acetosella*) with Lady's Bedstraw (*Galium verum*), Lesser Stitchwort (*Stellaria graminea*). Other species known to be present include the Essex Red List species Meadow Saxifrage (*Saxifraga granulata*), the nationally Near Threatened Wild Clary (*Salvia verbenaca*) and the Nationally Scarce Lesser Calamint (*Clinopodium calamintha*).

Site Selection Rationale

HC13 – The grassland habitat within the site is clearly acidic and of a type that qualifies as Priority habitat.
HC27 – This criterion is used to define the site's boundaries, taking in the scrub and rough grassland that do not meet the main habitat criterion, but that add structural diversity and offer the potential for restoration.

Priority Habitats

Lowland Dry Acid Grassland

Ownership and Access

The site is in private ownership with no public access but can be viewed from the nearby a public right of way beyond the northern boundary.

Condition Statement

Moderate, declining

Management Issues

There is no evidence of any recent management, which has led to the spread of scrub and an increase in its density. The free-draining character of the site will help to preserve open habitats on the steeper slopes.

Review Schedule

Site selected: 1992 (G7)

Site Reviewed: 2006, increased; 2016 (Unpubl.), no change; 2022, no change.

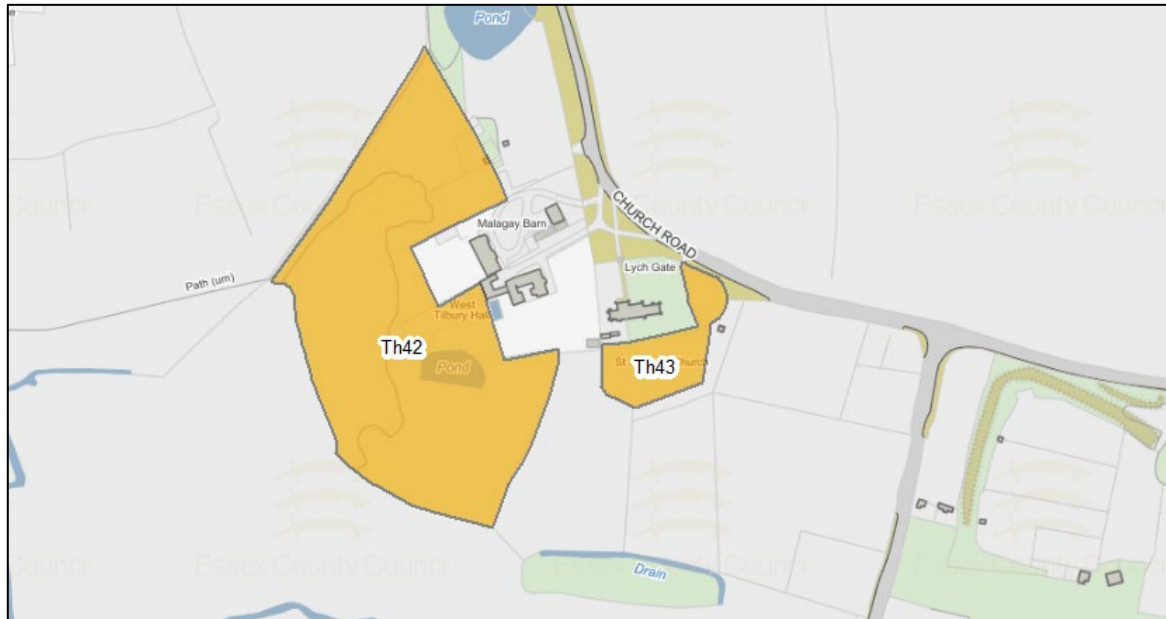
Site reference: Th43
Site name: West Tilbury Church

Grid ref. (approx. centre of site): TQ661776
Site area: 0.3ha

LoWS Selection Criteria:

- HC11 – Other Neutral Grassland

Boundary Map



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Site Description

This site consists of the part of the churchyard that has not been incorporated into the garden of the church, which is now a private residence.

The grassland is clearly old and unimproved agriculturally and although generally unremarkable, it supports the Essex Red List species Meadow Saxifrage (*Saxifraga granulata*), the nationally Near Threatened Wild Clary (*Salvia verbenaca*) and the Nationally Scarce Lesser Calamint (*Clinopodium calamintha*).

Site Selection Rationale

HC11 – the grassland community does not match any of the types that would qualify it as Priority habitat, but it has escaped agricultural improvement and its value is demonstrated by the plant species it supports.

Priority Habitats

None

Ownership and Access

Most of the churchyard is in private ownership with no public access but the LoWS section is still open to visitors.

Condition Statement

Moderate, stable

Management Issues

The grassland is not managed for nature conservation outcomes and so is subject to variations in cutting regime.

Review Schedule

Site selected: 1992 (G8)

Site Reviewed: 2006, no change; 2016 (Unpubl.), no change; 2022, private garden removed.

Site reference: Th45

Site name: Rainbow Wood and Ashen Shaw, Linford

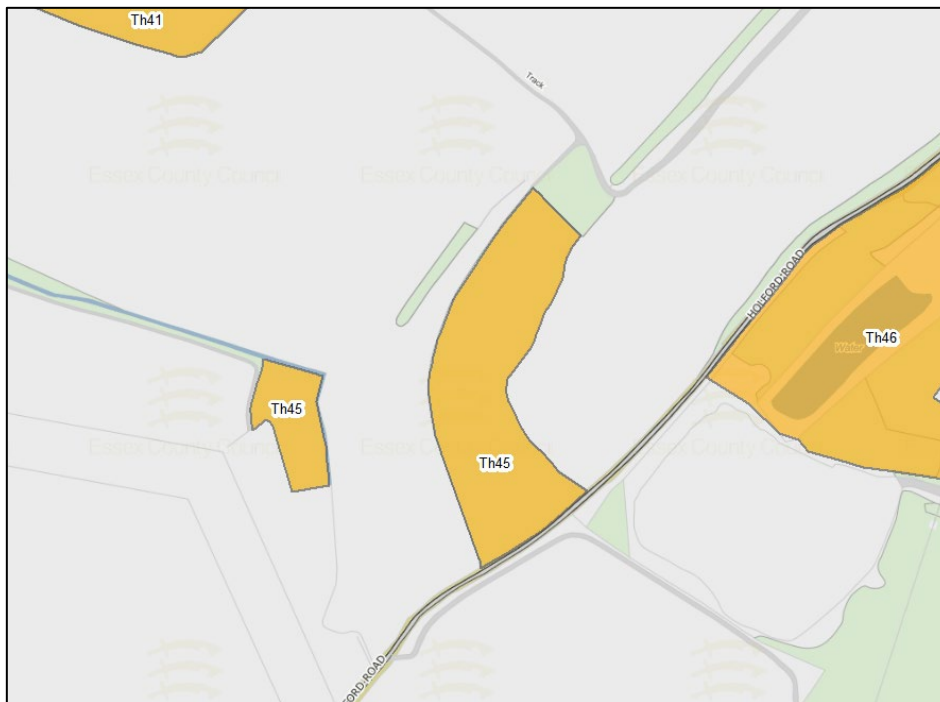
Grid ref. (approx. centre of site): TQ662798

Site area: 2.4ha

LoWS Selection Criteria:

- HC2 – Lowland Mixed Deciduous Woodland on Non-Ancient Sites

Boundary Map



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Site Description

These two small woodlands lie within a cluster of LoWS in the old parish of Mucking, which comprise heathland, acid grassland and post-industrial habitats and other small fragments of old woodland. The two woods are too small to have been considered in the preparation of the Ancient Woodland Inventory but were established at their current extent in the mid-19th Century and support species that may indicate Ancient status.

Rainbow Wood is a dry, valley slope woodland with a canopy of Pedunculate Oak (*Quercus robur*), Wild Cherry (*Prunus avium*) and some Ash (*Fraxinus excelsior*). Both Hornbeam (*Carpinus betulus*) and Sweet Chestnut (*Castanea sativa*) coppice stools are present, and the understorey includes Hazel (*Corylus avellana*), Hawthorn (*Crataegus monogyna*), Elder (*Sambucus nigra*) and Field Maple (*Acer campestre*). Its ground flora is dominated by Bluebell (*Hyacinthoides non-scripta*) and Bracken (*Pteridium aquilinum*), and the Ancient Woodland indicator Pignut (*Conopodium majus*) is also present. The wood supports a population of Glow-worm (*Lampyrus noctiluca*).

Ashen Shaw is a very small woodland fragment with a canopy consisting of Pedunculate Oak, Ash, Wild Cherry and Field Maple, with some Hornbeam and Sycamore (*Acer pseudoplatanus*). The understorey includes Hawthorn and Elder and Bluebell is dominant in the ground flora.

Site Selection Rationale

HC2 – Although there is some indication that these woods may be Ancient, there is no conclusive evidence available, but they clearly meet the description of Priority woodland habitat.

Priority Habitats

Lowland Mixed Deciduous Woodland

Ownership and Access

The site is in private ownership with no public access but can be viewed from the public right of way to the southeast.

Condition Statement

Moderate, stable

Management Issues

Neither woodland appears to be managed for nature conservation outcomes, which may lead to a deterioration in quality over time.

Review Schedule

Site selected: 2006

Site Reviewed: 2016 (Unpubl.), Ashen Shaw added; 2022, no change

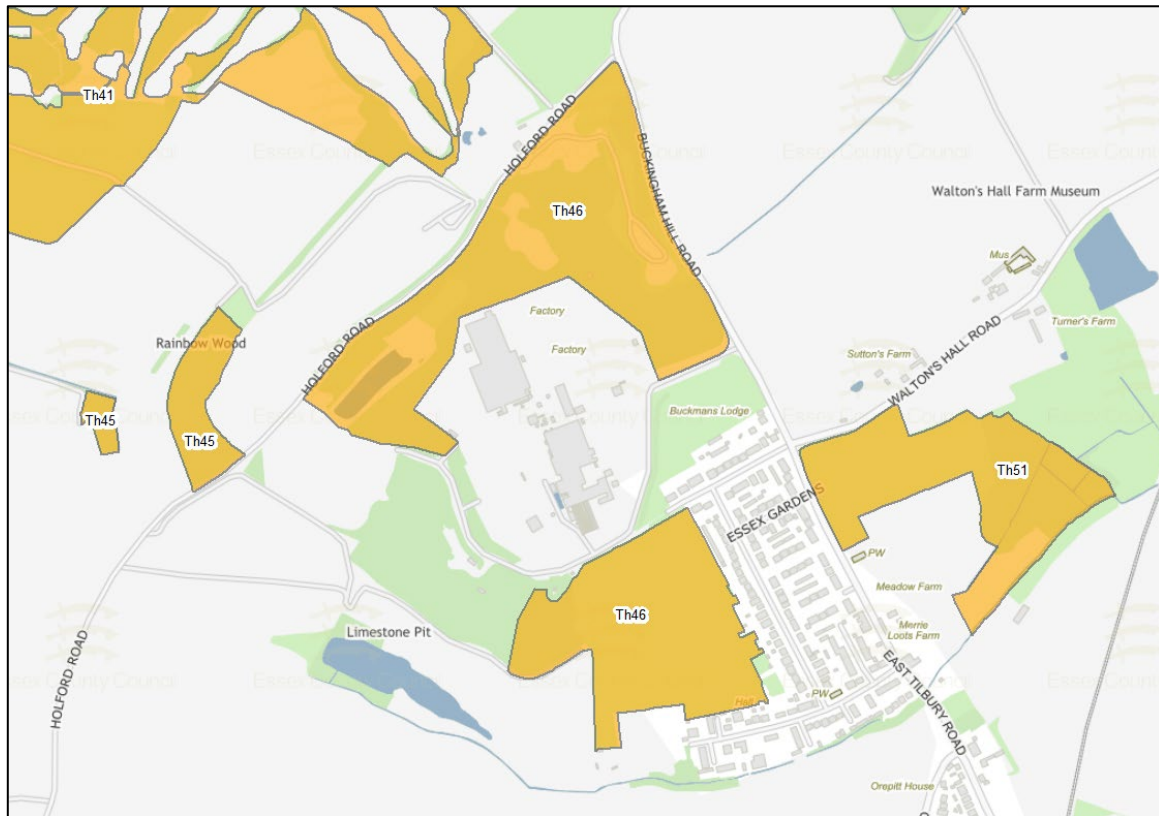
Site reference: Th46
Site name: Linford Pit, Linford

Grid ref. (approx. centre of site): TQ668798
Site area: 23.6ha

LoWS Selection Criteria:

- HC27 – Post-industrial Sites
- HC28 – Small-component Mosaics
- SC19 – Important Invertebrate Assemblages

Boundary Map



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Site Description

This varied site is in two sections, the northern part consisting of a worked-out pit and the southern part set out as plotland at the turn of the 20th Century, but never developed. The majority of the gravel pit has now been developed for industrial purposes and parts of the northern section are in operational use.

The northern section consists of a mosaic of scrub and woodland comprising Pedunculate Oak (*Quercus robur*), Sweet Chestnut (*Castanea sativa*) and Aspen (*Populus tremula*) with birch (*Betula* sp.), willow (*Salix* sp.), Gorse (*Ulex europaeus*) and Bramble (*Rubus fruticosus*). Interspersed within this are open, sandy areas that have been subject to recent disturbance, with wet hollows and sand heaps providing topographical variation. These open areas support a range of species such as Hawkweed Oxtongue (*Picris hieracioides*), Wood Sage (*Teucrium scorodonia*), Viper's-bugloss (*Echium vulgare*) and Blue Fleabane (*Erigeron acer*) and some indicating a calcareous influence, including the Essex Red List species Ploughman's Spikenard (*Inula conyzae*) and Carline Thistle (*Carlina vulgaris*). At the western end is a lagoon partially fringed with Common Reed (*Phragmites australis*) that supports breeding Coot and Little Grebe.

The southern section is poorly recorded but consists of secondary woodland to the north grading through dense and scattered scrub to more open grassland in the south, some of which is horse grazed. The two sections in combination support an invertebrate assemblage of at least regional significance, including a wide range of nationally rare and Priority species.

Site Selection Rationale

HC27 – The northern section demonstrates all of the criteria needed to qualify it as Priority habitat.

HC28 – The southern section consists of a mosaic of grassland, scrub and woodland habitats that combine to generate significant value, particularly in combination with the ecological features in the northern section.

SC19 – Survey records have demonstrated the presence of a significant invertebrate assemblage.

Priority Habitats

Open Mosaic Habitat on Previously Developed Land

Ownership and Access

The site is in private ownership with no public access but can be viewed from the public right of way along the north western boundary.

Condition Statement

Moderate, declining

Management Issues

There is no active management for nature conservation outcomes, and this is leading to succession of the more valuable open habitats to scrub and woodland. Only those sections that are subject to disturbance, operational or recreational, remain fully open. The invasive non-native Butterfly-bush (*Buddleja davidii*) is present and contributes the loss of open habitats.

Review Schedule

Site selected: 2006

Site Reviewed: 2016 (Unpubl.), southern section added; 2022, no change.

Site reference: Th47

Site name: Low Street Pit, East Tilbury

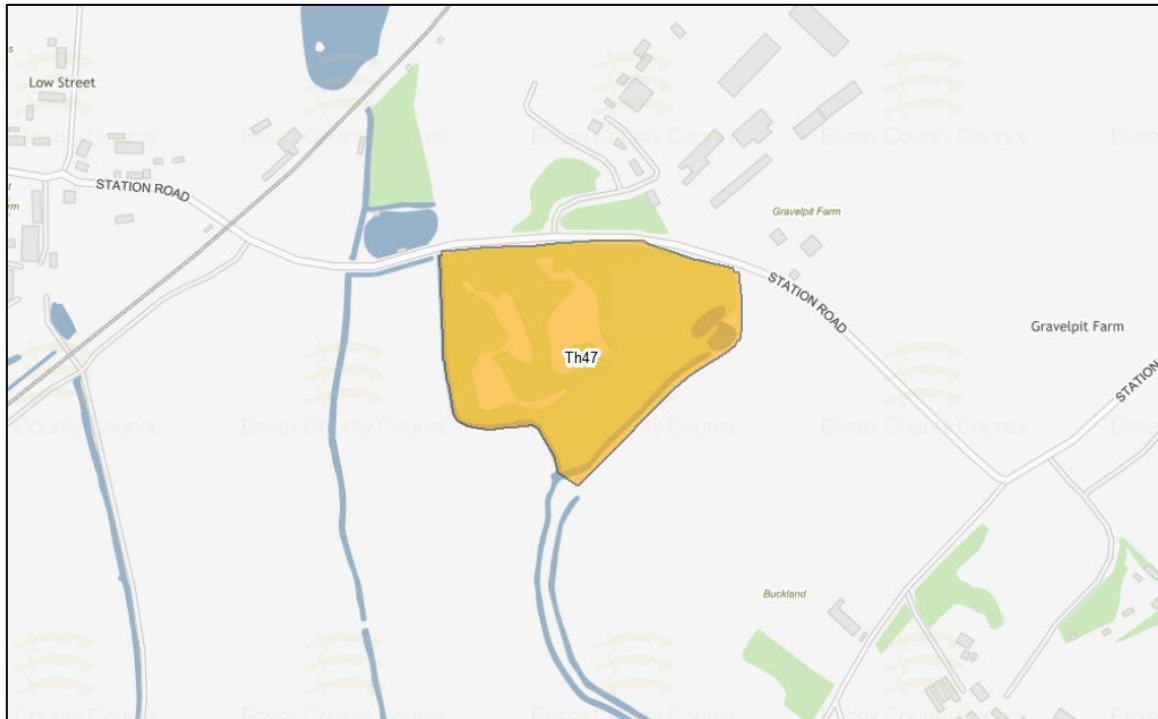
Grid ref. (approx. centre of site): TQ

Site area: 2ha

LoWS Selection Criteria:

- HC27 – Post-industrial Sites

Boundary Map



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Site Description

Part of this site was excavated for gravel towards the end of the 19th Century and the result is a habitat mosaic including old acidic grassland, scrub, and wetland habitats where springs emerges onto the adjacent coastal marsh

The site's Thames Terrace gravels support acidic grassland in the remaining open areas of the pit, and the part of the site that was not excavated. The sward is made up of Common Bent (*Agrostis capillaris*) and Smaller Cat's-tail (*Phleum bertolonii*) with herbaceous species including Lady's Bedstraw (*Galium verum*) the near Threatened Wild Clary (*Salvia verbenaca*) and the Nationally Scarce Subterranean Clover (*Trifolium subterraneum*).

The low-lying south-eastern part of the site is wet and dominated by Bulrush (*Typha latifolia*) with rushes (*Juncus* spp.), Sea Club-rush (*Bolboschoenus maritimus*) and Celery-leaved Buttercup (*Ranunculus sceleratus*), interspersed with willows (*Salix* spp.).

The site has been assessed as open mosaic habitat having high potential to support an important invertebrate assemblage, but survey information is lacking.

Site Selection Rationale

HC27 – The site contains the features necessary to consider it Priority open mosaic habitat.

Priority Habitats

Open Mosaic Habitat on Previously Developed Land

Ownership and Access

The site is in private ownership with no public access but can be viewed from the adjacent Station Road.

Condition Statement

Moderate, stable

Management Issues

There is no active management for nature conservation outcomes and in the long term, natural succession will lead to a reduction in diversity.

Review Schedule

Site selected: 2006

Site Reviewed: 2016 (Unpubl.), no change; 2022, no change.

Site reference: Th48
Site name: Horndon Meadow, Langdon Hills

Grid ref. (approx. centre of site): TQ672850
Site area: 0.6ha

LoWS Selection Criteria:

- HC9 – Lowland Meadows

Boundary Map



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Site Description

This small grassland site is the remaining half of an old, unimproved meadow partially lost in the mid-20th Century. It supports a species-rich grassland sward and is surrounded by mature hedgerows.

The meadow supports significant populations of three Essex Red List species: Green-winged Orchid (*Anacamptis morio*), Adder's-tongue (*Ophioglossum vulgatum*) and Yellow Rattle (*Rhinanthus minor*). Other species present include Common Knapweed (*Centaurea nigra*) and Musk Mallow (*Malva moschata*).

Site Selection Rationale

HC9 – The site supports a community of unimproved grassland that meets the Priority habitat description.

Priority Habitats

Lowland Meadows

Ownership and Access

The site is in owned and managed by Essex Wildlife Trust and is open to public visits.

Condition Statement

Good, stable

Management Issues

Continuity of good grassland management is essential to preserve the condition of the habitat.

Review Schedule

Site selected: 1992 (G9)

Site Reviewed: 2006, no change; 2016 (Unpubl.), boundary error corrected; 2022, no change.

Site reference: Th50

Site name: Buckingham Hill Pit, Linford

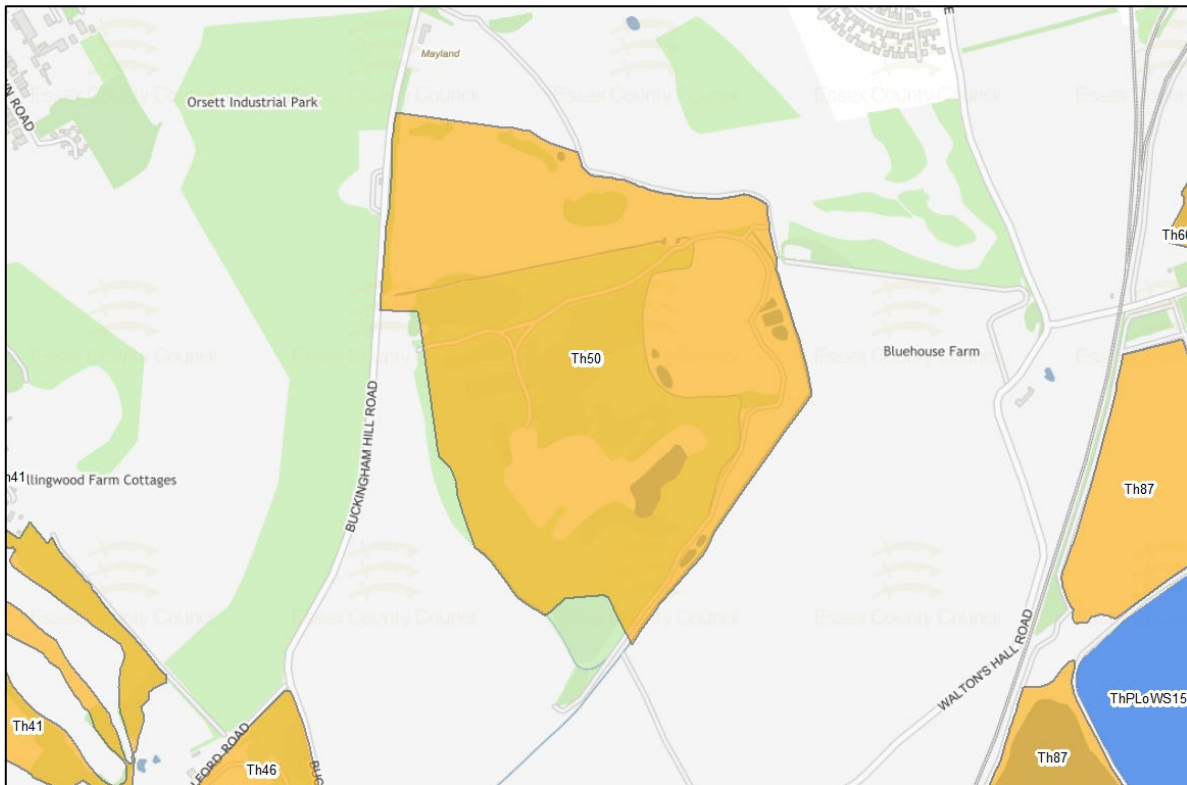
Grid ref. (approx. centre of site): TQ674809

Site area: 41.0ha

LoWS Selection Criteria:

- HC13 – Heathland and Acid Grassland
- HC27 – Post-industrial Sites
- HC28 – Small-component Mosaics

Boundary Map



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Site Description

This site comprises the non-operational part of Buckingham Hill pit together with an area of acid grassland on the land to its north, which was formerly a golf course, but now provides open space for new residential development.

The pit is cut into a southeast facing valley slope and now supports a mosaic of grassland, scrub and woodland with a high proportion of bare ground and a varied topography. The lowest level of the pit holds standing water throughout the year. The site includes some sections of more open, coarse grassland and the northern edge is somewhat scrubby.

The former golf course land to the north of the pit supports grassland with patchy scrub of predominantly Gorse (*Ulex europaeus*) and Broom (*Cytisus scoparius*). This area includes some ditch and bank features that appear to have been created to benefit invertebrates, with exposed sandy substrates that support patches of *Cladonia* lichen heath.

Some of the grassland is more open acid grassland dominated by Common Bent (*Agrostis capillaris*) and some unmanaged areas are dominated by coarser species such as Cock's-foot (*Dactylis glomerata*). Other grassland species include Sheep's Sorrel (*Rumex acetosella*), Hare's-foot Clover (*Trifolium arvense*), Wild Carrot (*Daucus carota*), Lady's Bedstraw (*Galium verum*), Common Knapweed (*Centaurea nigra*), Bur Chervil (*Anthriscus caucalis*), Tormentil (*Potentilla erecta*), Bird's-foot (*Ornithopus perpusillus*), the Essex Red List species Early Forget-me-not (*Myosotis ramosissima*) and Yellow Rattle (*Rhinanthus minor*), and the Nationally Scarce Clustered Clover (*Trifolium glomeratum*).

Site Selection Rationale

HC13 – The community present on the former golf course land is a clear match for acid grassland that qualifies as Priority habitat.

HC27 – The pit meets all of the criteria required to be considered priority open mosaic habitat.

HC28 – Although some of the habitats that are present would not qualify in their own right, including scrub and rough grassland, they form an important part of the biodiversity value of the site as a whole and so this criterion is used to define the extent of the site.

Priority Habitats

Lowland Dry Acid Grassland

Open Mosaic Habitat on Previously Developed Land

Ownership and Access

The pit is in private ownership with no public access but the grassland to the north has open public access.

Condition Statement

Moderate, stable

Management Issues

As with all habitats of this type, in the absence of any ongoing management, there are successional pressures leading to the loss of open habitats to scrub and then woodland. The pit is threatened with development pressure.

Review Schedule

Site selected: 2006

Site Reviewed: 2016 (Unpubl.), boundary revisions; 2022, additional habitat to north and east included.

Site reference: Th51

Site name: Linford Wood LNR Complex

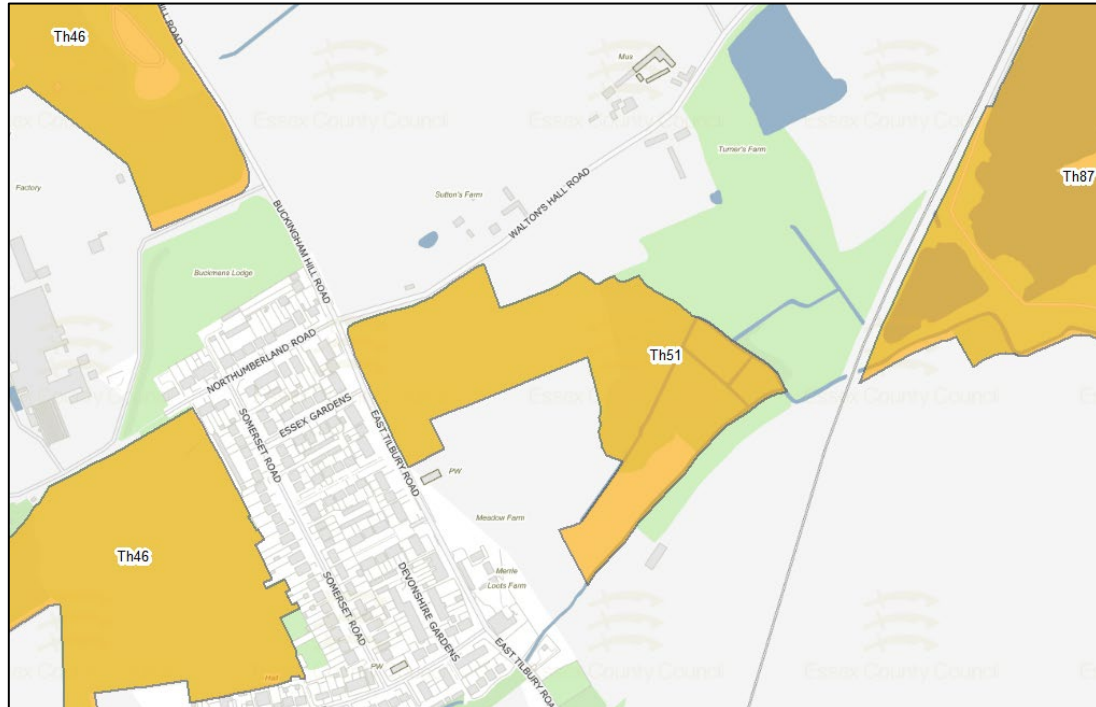
Grid ref. (approx. centre of site): TQ674797

Site area: 7.8ha

LoWS Selection Criteria:

- HC2 – Lowland Mixed Deciduous Woodland on Non-Ancient Sites
- HC28 – Small-component Mosaics

Boundary Map



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Site Description

This site includes the Linford Wood Local Nature Reserve together with some adjacent dry grassland and patchy scrub, which combine to form an important mosaic of habitats within a cluster of similar LoWS. The woodland has developed on a naturally wet area and may originally have been planted, but now has the appearance of a wet woodland.

The woodland is made up willows (*Salix* sp.), Ash (*Fraxinus excelsior*), Silver Birch (*Betula pendula*) and Wild Cherry (*Prunus avium*), with a few Pedunculate Oak (*Quercus robur*). The understorey includes elm (*Ulmus* sp.), Hawthorn (*Crataegus monogyna*), Hazel (*Corylus avellana*) and Goat Willow (*Salix caprea*). The ground flora includes Broad Buckler-fern (*Dryopteris dilatata*), Giant Horsetail (*Equisetum telmateia*), Wild Angelica (*Angelica sylvestris*), Ground-ivy (*Glechoma hederacea*), Wood Avens (*Geum urbanum*), Common Ivy (*Hedera helix*), Hedge Woundwort (*Stachys sylvatica*), Cow Parsley (*Anthriscus sylvestris*), Common Nettle (*Urtica dioica*) and, in drier areas, Bracken (*Pteridium aquilinum*).

The adjacent grassland appears to have been unmanaged since around the turn of the last century and is now a patchwork of open grass and dense scrub. The free draining grassland community includes Common Bent (*Agrostis capillaris*), Red Fescue (*Festuca rubra*) and Yorkshire-fog (*Holcus lanatus*) with Hawkweed Oxtongue (*Picris hieracioides*), Agrimony (*Agrimonia eupatoria*), Perforate St John's-wort (*Hypericum perforatum*), Red Bartsia (*Odontites vernus*), Common Centaury (*Centaureum erythraea*), Blue Fleabane (*Erigeron acer*) and the Essex Red List species Carline Thistle (*Carlina vulgaris*), typically associated with calcareous conditions.

Site Selection Rationale

HC2 – Although it has the appearance of wet woodland, the community of plants species does not meet the necessary description, but it can be considered as Priority habitat woodland

HC28 – The combination of scrub and grassland, alongside the woodland, provide a valuable mosaic of habitats that supports noteworthy plant species and so this criterion is used to define the site boundary.

Priority Habitats

Lowland Mixed Deciduous Woodland

Ownership and Access

The LNR is owned and managed by Thurrock Council as a public open space. The grassland is believed to be in private ownership but is crossed by a public right of way between Walton's Hall Road and East Tilbury Road.

Condition Statement

Moderate, stable

Management Issues

The balance of scrub and grassland adjacent to the LNR is shifting in favour of scrub, which will eventually lead to the loss of the more interesting plant species if no management takes place. The woodland shows some signs of nutrient enrichment and would benefit from limited management work.

Review Schedule

Site selected: 1992 (W16)

Site Reviewed: 2006, minor boundary change; 2016 (Unpubl.), inor boundary change; 2022, land to west added.

Site reference: Th52

Site name: Goldsmith's Meadow, Langdon Hills

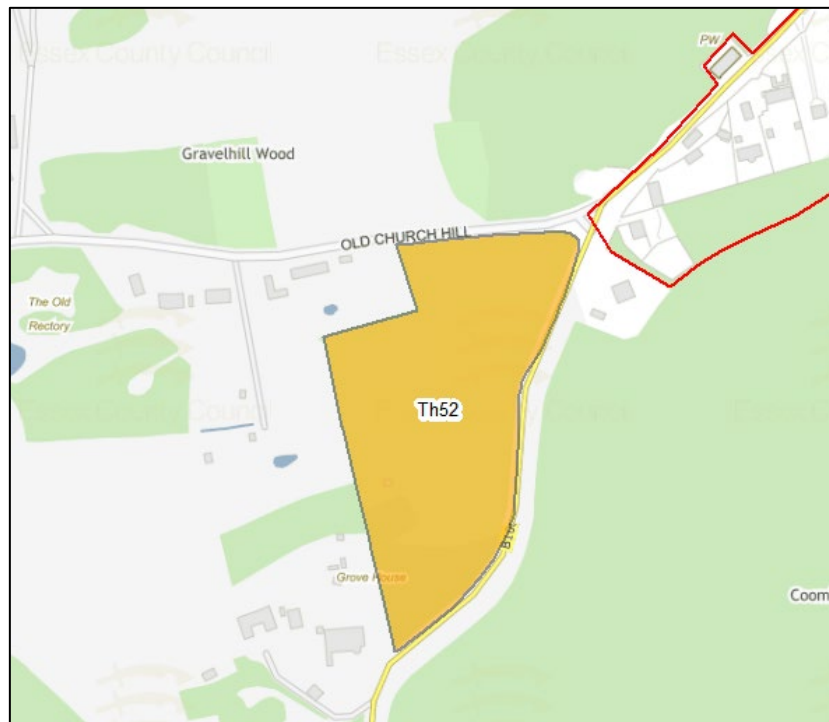
Grid ref. (approx. centre of site): TQ674797

Site area: 7.8ha

LoWS Selection Criteria:

- HC13 – Heathland and Acid Grassland

Boundary Map



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Site Description

This grassland site on a west facing hill slope has almost certainly never been agriculturally improved and now supports an acidic meadow community, with scattered scrub and trees.

The sward consists of Common Bent (*Agrostis capillaris*), Red Fescue (*Festuca rubra*), Sweet Vernal Grass (*Anthoxanthum odoratum*), Smaller Cat's-tail (*Phleum bertolonii*), Meadow Foxtail (*Alopecurus pratensis*), Tufted Hair-grass (*Deschampsia cespitosa*) and Yorkshire-fog (*Holcus lanatus*). Other species present include Sheep's Sorrel (*Rumex acetosella*), Hairy Sedge (*Carex hirta*), Common Sorrel (*Rumex acetosa*), Common Bird's-foot-trefoil (*Lotus corniculatus*) and Hoary Ragwort (*Jacobaea erucifolia*), Lesser Stitchwort (*Stellaria graminea*) and Meadow Buttercup (*Ranunculus acris*). The Essex Red List species Harebell (*Campanula rotundifolia*) has also been recorded.

Site Selection Rationale

HC13 – The species present indicate that this is acid grassland of a type that corresponds to the Priority habitat description rather than just an acidic neutral grassland.

Priority Habitats

Lowland Dry Acid Grassland

Ownership and Access

The site is in private ownership with no public access but there is a public right of way along its western edge.

Condition Statement

Poor, declining

Management Issues

There appears to have been no management of the meadow in recent years, apart from limited Rabbit grazing, and so scrub and coarse grasses are overtaking the original grassland community. However, regular management would soon improve its condition.

Review Schedule

Site selected: 2006

Site Reviewed: 2016 (Unpubl.), no change; 2022, no change.

Site reference: Th56

Site name: Fell-me-down Shaw, Langdon Hills

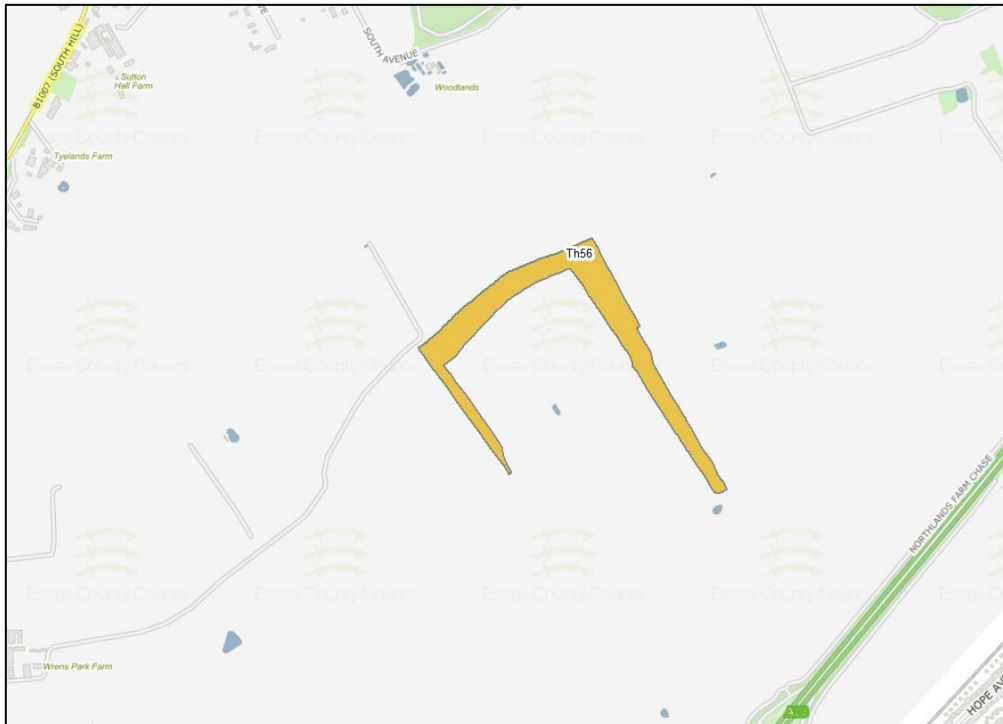
Grid ref. (approx. centre of site): TQ683848

Site area: 4.2ha

LoWS Selection Criteria:

- HC2 – Lowland Mixed Deciduous Woodland on Non-Ancient Sites

Boundary Map



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Site Description

This varied collection of linear woodlands was established by the mid-19th Century and may include Ancient elements, but no clear evidence of this status is available.

The canopy consists of Pedunculate Oak (*Quercus robur*) and Ash (*Fraxinus excelsior*) in varying proportions, with elm (*Ulmus* sp.) at the ends of both southern arms. The understorey includes Field Maple (*Acer campestre*), Hawthorn (*Crataegus monogyna*), Crab Apple (*Malus sylvestris*), Blackthorn (*Prunus spinosa*), Elder (*Sambucus nigra*) and Wild Privet (*Ligustrum vulgare*).

The ground flora includes Bluebell (*Hyacinthoides non-scripta*), Wood Avens (*Geum urbanum*), Greater Stitchwort (*Stellaria holostea*), Red Campion (*Silene dioica*), Wood Dock (*Rumex sanguineus*), Cow Parsley (*Anthriscus sylvestris*), Ground Ivy (*Glechoma hederacea*), Hedge Garlic (*Alliaria petiolata*), Hairy-brome (*Bromopsis ramosus*), False Brome (*Brachypodium sylvaticum*) and Remote Sedge (*Carex remota*). Early Purple Orchid (*Orchis mascula*) and Wood Millet (*Milium effusum*) have also been recorded.

Site Selection Rationale

HC2 – The site is lacking robust indicators of Ancient status, but it is a good match for Priority woodland habitat.

Priority Habitats

Lowland Mixed Deciduous Woodland

Ownership and Access

The site is in private ownership with no public access but it is crossed by a public right of way along the northern section.

Condition Statement

Moderate, stable

Management Issues

The woodland has been affected by its use for game management purposes and there is no evidence of any management for nature conservation purposes.

Review Schedule

Site selected: 2006

Site Reviewed: 2016 (Unpubl.), no change; 2022, no change.

Site reference: Th59

Site name: Grove House Wood and Marsh

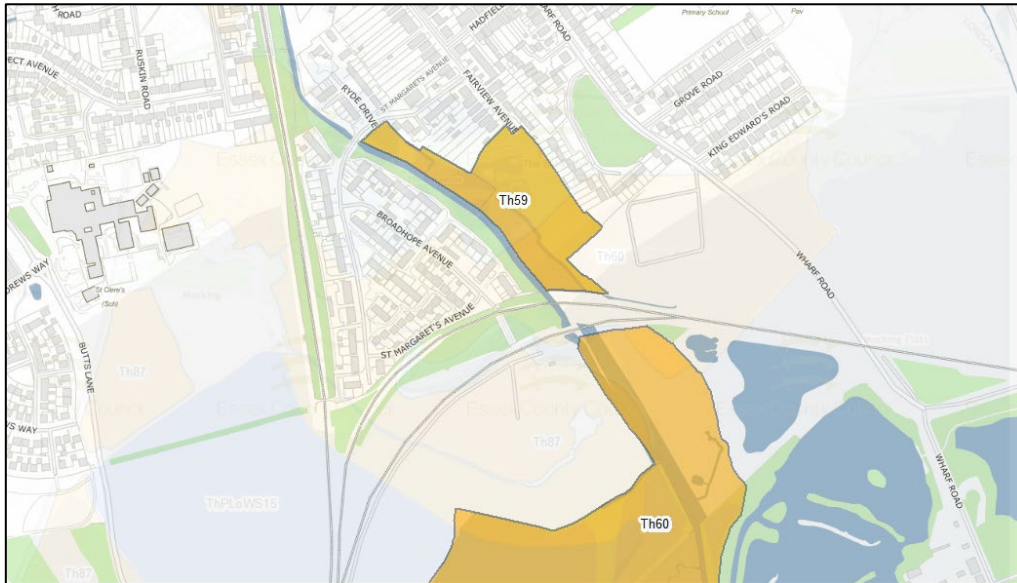
Grid ref. (approx. centre of site): TQ685818

Site area: 2.5ha

LoWS Selection Criteria:

- HC2 – Lowland Mixed Deciduous Woodland on Non-Ancient Sites
- HC3 – Other Priority Habitat Woodland Types on Non-Ancient Sites
- HC15 – Reedbeds

Boundary Map



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Site Description

This Local Nature Reserve consists of a small area of valley slope secondary woodland and an adjacent section of floodplain supporting reedbed and wet woodland.

The woodland is old, but the species present do not suggest that it is Ancient in origin. The canopy is formed from Pedunculate Oak (*Quercus robur*) and Ash (*Fraxinus excelsior*), with Holm Oak (*Quercus ilex*), Walnut (*Juglans regia*) and an understorey of elm (*Ulmus* sp.), Field Maple (*Acer campestre*), Hazel (*Corylus avellana*), Holly (*Ilex aquifolium*), Hawthorn (*Crataegus monogyna*), Bullace (*Prunus domestica*) and Elder (*Sambucus nigra*). The ground flora includes Bluebell (*Hyacinthoides non-scripta*), Cow Parsley (*Anthriscus sylvestris*), Common Ivy (*Hedera helix*), Lords and Ladies (*Arum maculatum*), Wood Avens (*Geum urbanum*), Wood Dock (*Rumex sanguineus*), Male Fern (*Dryopteris filix-mas*), False Brome (*Brachypodium sylvaticum*) and Bramble (*Rubus fruticosus* agg.).

Dense Common Reed (*Phragmites australis*) at the southern end of the floodplain section gives way to willow (*Salix* sp.) scrub and open, grassy woodland to the north. Species present include Rough Meadow-grass (*Poa trivialis*), Great Willowherb (*Epilobium hirsutum*), Creeping Buttercup (*Ranunculus repens*), Water Figwort (*Scrophularia aquatica*), Red Campion (*Silene dioica*), Alexanders (*Smyrnium olusatrum*), False Fox-sedge (*Carex otrubae*) and Remote Sedge (*Carex remota*).

Site Selection Rationale

- HC2 – The woodland habitat is sufficiently mature and of an appropriate composition to consider it as Priority habitat.
- HC3 – The characteristics of the willow scrub and woodland are appropriate for the application of this criterion.
- HC15 – Although small, the southern part of the site does support a stand of Common Reed.

Priority Habitats

- Lowland Mixed Deciduous Woodland
- Wet Woodland
- Reedbeds

Ownership and Access

The site is owned by Thurrock Council and is open to public access.

Condition Statement

Moderate, stable

Management Issues

The abundance of Common Nettle (*Urtica dioica*) indicates a degree of nutrient enrichment and the site's small size makes it vulnerable to successional pressures. The invasive non-native species Indian Balsam (*Impatiens glandulifera*) is present in small quantity.

Review Schedule

Site selected: 2006

Site Reviewed: 2016 (Unpubl.), added to Th60; 2022, split from Th60.

Site reference: Th60

Site name: Mucking Creek Complex, Stanford-le-Hope

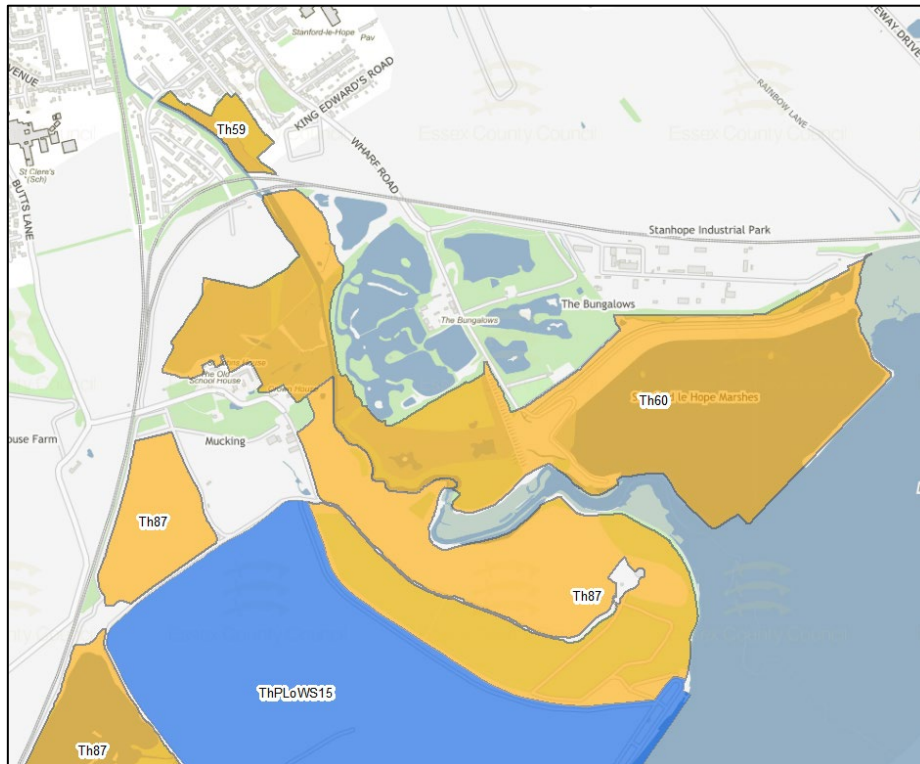
Grid ref. (approx. centre of site): TQ694811

Site area: 65.7ha

LoWS Selection Criteria:

- HC11 – Other Neutral Grasslands
- HC15 – Reedbeds
- HC23 – Saltmarsh and Mudflats
- HC28 – Small-component Mosaics
- SC19 – Important Invertebrate Assemblages

Boundary Map



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Site Description

This site takes in grassland and reedbed habitats associated with Mucking Creek together with the intertidal habitats of Stanford Wharf, created as compensation for the impacts of the nearby London Gateway port. The mosaic of habitats includes areas of scrub and throughout there are semi-natural transitions between habitat types.

At the northern end of the site is Essex Wildlife Trust's Stanford Warren nature reserve and adjacent areas of reedbed and wet grassland. This is one of the largest stands of Common Reed (*Phragmites australis*) in the old county of Essex and supports an assemblage of characteristic bird and invertebrate species, including many that are nationally rare or scarce. Although it is typically lacking in other species, there are stands of Great Willowherb (*Epilobium hirsutum*) and Bulrush (*Typha latifolia*), with Hop (*Humulus lupulus*) and Hemlock Water-dropwort (*Oenanthe crocata*) on the main channel. A small, sandy area at the eastern end of the main footpath has a diverse low sward including Sheep's Sorrel (*Rumex acetosella*), Common Stork's-bill (*Erodium cicutarium*), Bird's-foot (*Ornithopus perpusillus*), Parsley Piert (*Aphanes arvensis*), Knotted Clover (*Trifolium striatum*), Slender Trefoil (*Trifolium micranthum*), the Essex Red List species Changing Forget-me-not (*Myosotis discolor*), Early Forget-me-not (*Myosotis ramosissima*), Subterranean Clover (*Trifolium subterraneum*) and the Nationally Scarce Clustered Clover (*Trifolium glomeratum*).

To the west of the reedbed is a wet pasture consisting largely of abundant Compact Rush (*Juncus conglomeratus*) interspersed with Marsh Foxtail (*Alopecurus geniculatus*), Yorkshire-fog (*Holcus lanatus*), Red Fescue (*Festuca rubra*), Meadow Foxtail (*Alopecurus pratensis*) and False Fox-sedge (*Carex otrubae*). Other species include Creeping Buttercup (*Ranunculus repens*), Celery-leaved Buttercup (*Ranunculus*

sceleratus), Plicate Sweet-grass (*Glyceria plicata*), Common Spike-rush (*Eleocharis palustris*) and the Nationally Scarce Divided Sedge (*Carex divisa*).

The site includes the corner of the churchyard associated with the derelict St John the Baptist in Mucking, which supports a population of the Essex Red List species Common Meadow-rue (*Thalictrum flavum*) and Round-leaved Crane's-bill (*Geranium rotundifolium*), with Common Knapweed (*Centaurea nigra*), Lady's Bedstraw (*Galium verum*), Prickly Sedge (*Carex muricata* ssp. *pairae*), Cut-leaved Crane's-bill (*Geranium dissectum*) and Smooth Tare (*Ervum tetraspermum*).

The central part of the site is a mosaic of pools, swamp, rough grassland and scrub enhanced for biodiversity around the turn of the last century. The pools are fringed by Common Reed and Sea Club-rush and the scrub includes willow (*Salix* sp.), Pedunculate Oak (*Quercus robur*), Field Maple (*Acer campestre*), *Prunus* sp. and Bramble (*Rubus fruticosus* agg.). The grassland is largely dominated by coarse grasses such as False Oat-grass (*Arrhenatherum elatius*) and couch (*Elymus* sp.), but more open areas feature Creeping Bent and Hard Rush (*Juncus inflexus*), and in places there is a reasonable abundance of flowers. Typical species include Hoary Cress (*Lepidium draba*), Welled Thistle (*Carduus crispus*), Hawkweed Oxtongue (*Picris hieracioides*), Wild Carrot (*Daucus carota*), Fleabane (*Pulicaria dysenterica*), Hoary Ragwort (*Jacobaea erucifolia*), Creeping Cinquefoil (*Potentilla reptans*) and Common Bird's-foot-trefoil (*Lotus corniculatus*).

Stanford Wharf is a large expanse of mudflat with small patches of developing saltmarsh and was created in the early 20th Century as compensation for mudflats lost to the construction of the nearby London Gateway port. It supports large numbers of waterbirds associated with the adjacent Mucking Flats and Marshes SSSI, especially as the tide rises.

Site Selection Rationale

HC11 – The pasture to the west of Stanford Warren appears to be unimproved and supports a distinctive wet grassland community but does not conform to any Priority habitat.

HC15 – Stanford Warren is one of the most important reedbed sites in Greater Essex

HC23 – Although recently created, the small saltmarsh areas now support typical plant species, and the mudflats are proving an important extension to the adjacent SSSI, supporting species identified as features of interest.

HC28 – This criterion is used to define the extent of the site, taking in the habitats that would not satisfy any criterion in themselves, but that provide important diversity in the overall mosaic.

SC19 – Past survey work has demonstrated the significance of the invertebrate assemblage within the reedbed, but this is likely to be strengthened by the other habitats present.

Priority Habitats

Reedbeds

Intertidal Mudflats

Coastal Saltmarsh

Ownership and Access

The site is in various ownership and management, including Essex Wildlife Trust and RSPB and it contains a network of footpaths to allow public access.

Condition Statement

Good, stable

Management Issues

Some of the rough grassland and scrub habitats would benefit from greater management intervention to control their succession and retain a balance of open habitats. The Stanford Warren reedbed is showing signs of nutrient enrichment and drying, with Common Nettle (*Urtica dioica*) and Hedge Bindweed (*Calystegia sepium*) locally abundant.

Review Schedule

Site selected: 1992 (part, G10 and G11)

Site Reviewed: 2006, (Th58 retained, Th60 enlarged); 2016 (Unpubl.), Th58, Th59 and Th60 combined and extended to the south; 2022, Th59 Grove House Wood and Marsh split off, new intertidal habitat added.

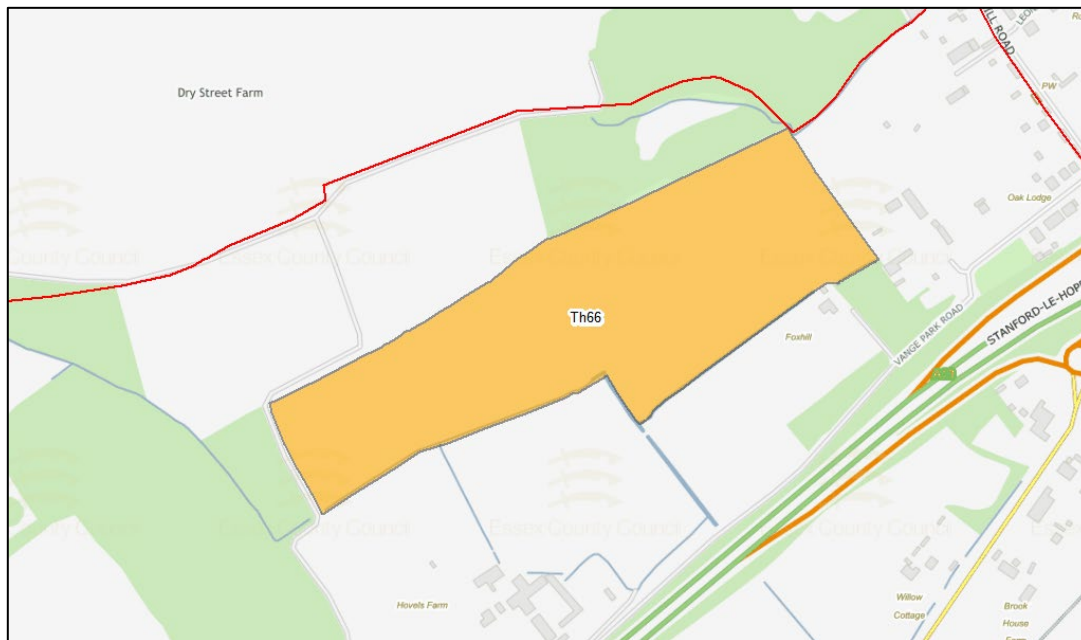
Site reference: Th66
Site name: Hawksbury Grasslands

Grid ref. (approx. centre of site): TQ703863
Site area: 9.0ha

LoWS Selection Criteria:

- HC9 – Lowland Meadows

Boundary Map



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Site Description

This site consists of two horse-grazed pastures on the steep, southern slope of the Langdon ridge, much of which is now a SSSI, including the meadows to the north of this site.

There is no evidence to suggest that these two pastures have ever been agriculturally improved and their composition accords with the Lowland Meadows Priority habitat. The grassland sward includes Crested Dog's-tail (*Cynosurus cristatus*), Red Fescue (*Festuca rubra*) and Common Bent (*Agrostis capillaris*), with Common Knapweed (*Centaurea nigra*), Agrimony (*Agrimonia eupatoria*), Wild Carrot (*Daucus carota*), Autumn Hawkbit (*Scorzoneroides autumnalis*), Common Cat's-ear (*Hypochaeris radicata*), Self-heal (*Prunella vulgaris*), Fleabane (*Pulicaria dysenterica*) and Corky-fruited Water-dropwort (*Oenanthe pimpinelloides*).

Site Selection Rationale

HC9 – The species present conform to an MG5 grassland community that qualifies the site as Priority habitat.

Priority Habitats

Lowland Meadows

Ownership and Access

The site is in private ownership with no public access but can be viewed from an adjacent public right of way beyond its western and northern boundaries.

Condition Statement

Moderate, stable

Management Issues

The fields are heavily grazed, which affects their floristic diversity and abundance, and due to a lack of recording, other noteworthy species are likely to remain as yet undetected. The southern edge of the eastern pasture is on flat ground and may not achieve the same diversity as the sloping section.

Review Schedule**Site selected:** 1992 (part of G14)**Site Reviewed:** 2006, unchanged; 2016 (Unpubl.), newly created SSSI removed, remainder demoted to PLoWS11; 2022, reinstated and western pasture added.

Site reference: Th69

Site name: Corringham and Fobbing Marshes

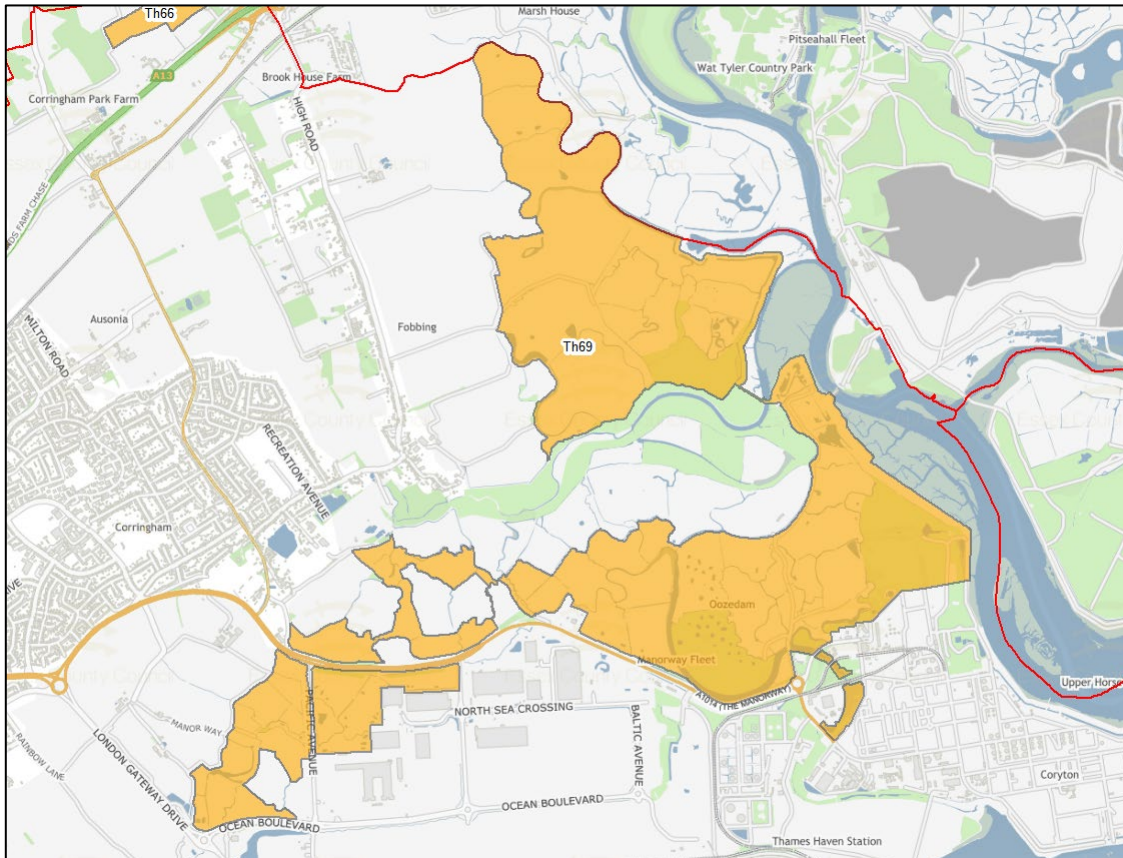
Grid ref. (approx. centre of site): TQ728838

Site area: 431.6ha

LoWS Selection Criteria:

- HC15 – Reedbeds
- HC21 – Coastal Grazing Marsh
- HC27 – Post-industrial Sites
- SC1 – Vascular Plants
- SC12 – Breeding Water Vole Colonies
- SC15 – Great Crested Newts

Boundary Map



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Site Description

This site, the largest in Thurrock, takes in the surviving parts of Corringham Marshes, Fobbing Level and Fobbing Marshes, to the north and south of the Vange and Fobbing Marshes SSSI. This area has been heavily influenced by a history of explosives manufacture at the end of the 19th Century, arable cultivation and oil refinery development in the 20th Century, and more recently the construction of the Thames Gateway container port. As a result, the habitats within the site are a mixture of old and restored coastal grassland with some post-industrial habitat.

Fobbing Marsh, to the north of the SSSI, includes the old grazing marsh on the Essex Wildlife Trust nature reserve of that name together with some sections of marsh recently restored to grassland for cattle grazing. Fobbing Level, between the SSSI and the Manorway includes old grazing marsh and a section of previously developed land at the eastern end of the site that now supports grassland with scattered scrub. Part of the grazing marsh has been modified to create ponds and ditches as mitigation for impacts to Great Crested Newts and Water Voles during the construction of the container port, and to receive animals translocated from there. The western parts of the site are the remaining grassland habitat of Corringham Marshes, the majority of which has been lost to development.

The grazing marsh grassland is variable in its character and diversity, but the site supports a range of noteworthy plant species including the Nationally Scarce Sea Clover (*Trifolium squamosum*) and Stiff

Saltmarsh-grass (*Puccinellia rupestris*), the nationally Vulnerable Strawberry Clover (*Trifolium fragiferum*) and the Nationally Scarce and Vulnerable Sea Barley (*Hordeum marinum*) and Slender Hare's-ear (*Bupleurum tenuissimum*). Of most significance is the strong population of the Nationally Rare and Endangered Least Lettuce (*Lactuca saligna*), only otherwise known from a handful of sites in Kent and Sussex. Other typical coastal grassland species in the more diverse areas include Meadow Barley (*Hordeum secalinum*), Crested Dog's-tail (*Cynosurus cristatus*), Hairy Buttercup (*Ranunculus sardous*), Knotted Hedge Barley (*Torilis nodosa*) and Corn Parsley (*Sison segetum*).

The ditches that separate the grazing marsh fields support emergent vegetation including Common Reed (*Phragmites australis*) and constitute a substantial reedbed resource taken as a whole.

The site supports known populations of Great Crested Newt and Water Vole, at higher than usual densities as a result of the compensatory habitats created within the site. Various parts of the site are also likely to be significant for reptiles, invertebrates, and breeding and overwintering birds, but recent records are not available.

Site Selection Rationale

HC15 – The site includes a substantial extent of reedbed, mostly in linear strips along ditches.

HC21 – As a whole, this is one of the most extensive remaining grazing marsh systems along the north Thames corridor, and due to the unique environmental conditions required for this habitat, all sites with the potential for full restoration are of value.

HC27 – The easternmost section of the site has an industrial past

SC1 – The population of Least Lettuce is of high national significance, and this is supported by the presence of other nationally scarce and threatened species.

SC12 – The translocated population of Water Voles is known to be present, but the ditch network is also likely to support this species.

SC15 – There is a known translocated population of Great Crested Newts.

Priority Habitats

Coastal and Freshwater Grazing Marsh

Reedbeds

Ownership and Access

The site is in varied ownership, largely private, but is crossed by a number of public rights of way.

Condition Statement

Moderate, stable

Management Issues

Parts of the site are managed for nature conservation outcomes, but other parts are not. Maintenance of a high water level across the grazing marsh is the most important factor in the condition of the habitat.

Review Schedule

Site selected: 1992 (G15, G17, G18)

Site Reviewed: 2006 (Th68 and Th69), significant increase; 2016 (Unpubl.), Th68 and Th69 combined; 2022, additional grazed marsh included.

Site reference: Th71

Site name: Rainham Gateway, Purfleet

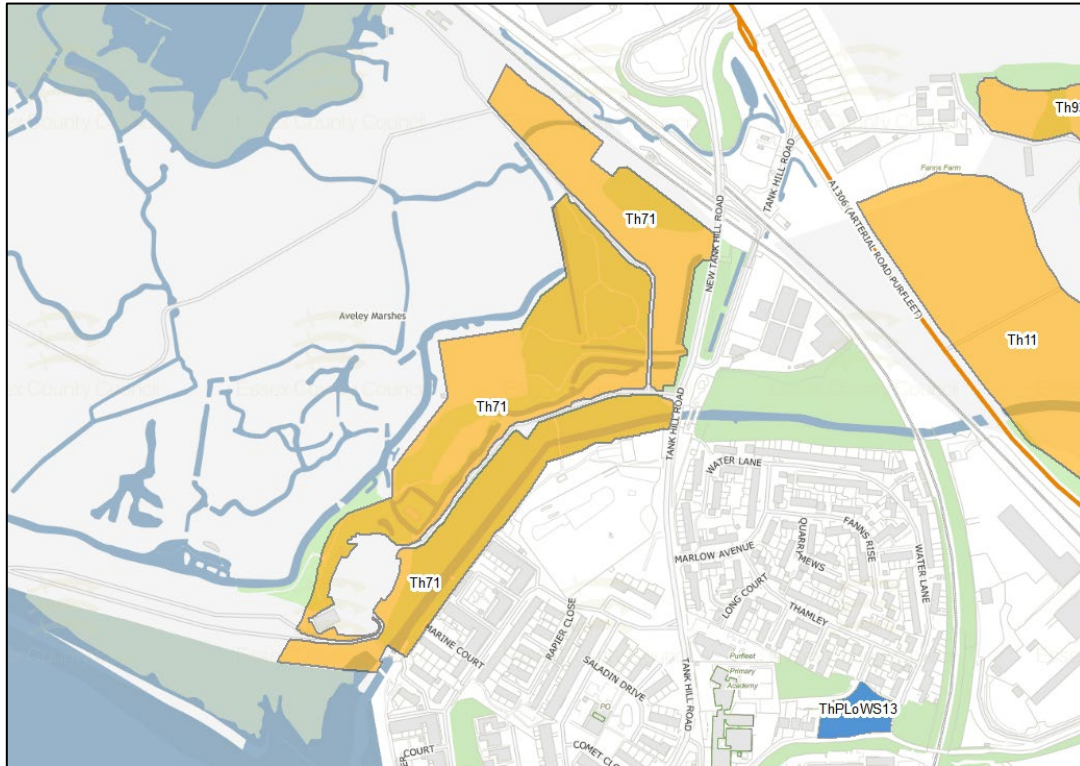
Grid ref. (approx. centre of site): TQ549790

Site area: 11.4ha

LoWS Selection Criteria:

- HC15 – Reedbeds
- HC28 – Small-component Mosaics

Boundary Map



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Site Description

This site consists of the parts of the RSPB Rainham Marshes nature reserve that lie outside of the Inner Thames Marshes SSSI boundary. It consists of a mixture of scrub, grassland and swamp habitats, including reedbeds. This area was an active military site during and after the second world war, with a number of operational structures still in place.

The southern part of the site, around the visitor centre, car park and access road, supports mostly dense scrub, including some that has been planted and scattered trees, including Pedunculate Oak (*Quercus robur*), Sycamore (*Acer pseudoplatanus*), Wild Cherry (*Prunus avium*), Ash (*Fraxinus excelsior*), Horse Chestnut (*Aesculus hippocastanum*) and poplars (*Populus* sp.). The scrub species include Hawthorn (*Crataegus monogyna*), Blackthorn (*Prunus spinosa*), Dogwood (*Cornus sanguinea*), Hazel (*Corylus avellana*), Field Maple (*Acer campestre*), Guelder-rose (*Viburnum opulus*), Elder (*Sambucus nigra*), privet (*Ligustrum* sp.) and Bramble (*Rubus fruticosus* agg.). Path edges and more open, grassy areas support Meadow Barley (*Hordeum secalinum*), Yorkshire-fog (*Holcus lanatus*) and False Oat-grass (*Arrhenatherum elatius*) with Hawkweed Oxtongue (*Picris hieracioides*), Creeping Cinquefoil (*Potentilla reptans*), Chicory (*Cichorium intybus*) and the Essex Red List species Vervain (*Verbena officinalis*) and Deadly Nightshade (*Atropa belladonna*).

The northern part is dominated by Common Reed (*Phragmites australis*), with stands of Bulrush (*Typha latifolia*) and Sea Club-rush (*Bolboschoenus maritimus*), grading into willow (*Salix* sp.) scrub. Great Willowherb (*Epilobium hirsutum*), Soft-rush (*Juncus effusus*) and Bittersweet (*Solanum dulcamara*) are also present.

Site Selection Rationale

HC15 – The stands of Common Reed are good examples of this Priority habitat.

HC28 – This criterion is used to define the extent of the site, which is of clear significance for biodiversity, taking in the habitats that do not meet any of the criteria in their own right. These habitats serve as an extension to the resources available to those species using the adjacent SSSI.

Priority Habitats

Reedbeds

Ownership and Access

The site is in owned and managed by RSPB and is accessible to those visiting the nature reserve via a network of paths.

Condition Statement

Moderate, stable

Management Issues

Some diversity in the structure of the scrub would improve its value to biodiversity and create additional open, flowery habitats.

Review Schedule

Site selected: 2016 (Unpubl.)

Site Reviewed: 2022, no change.

Site reference: Th72
Site name: Purfleet Thames-side, Purfleet

Grid ref. (approx. centre of site): TQ555778
Site area: 6.1ha

LoWS Selection Criteria:

- HC27 – Post-industrial Sites

Boundary Map



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Site Description

This former industrial site has been disused since the turn of the last century, although it has been subject to periodic disturbance since then. It consists of a mosaic of hardstanding, bare substrates, sparse vegetation, rough grass and scattered scrub within a varied topography including seasonally wet hollows.

The grassland component includes Common Bent (*Agrostis capillaris*), Soft-brome (*Bromus hordeaceus*), Yorkshire-fog (*Holcus lanatus*) and False Oat-grass (*Arrhenatherum elatius*) with Hard Rus (*Juncus inflexus*) and a wide diversity of herbaceous species such as Viper's-bugloss (*Echium vulgare*), Yellow-wort (*Blackstonia perfoliata*), Creeping Cinquefoil (*Potentilla reptans*), Black Medick (*Medicago arabica*), Narrow-leaved Bird's-foot-trefoil (*Lotus tenuis*), Fennel (*Foeniculum officinalis*), Hawkweed Oxtongue (*Picris hieracioides*), Smooth Tare (*Vicia tetrasperma*), Common Vetch (*Vicia sativa*), Red Bartsia (*Odontites vernus*), Wild Carrot (*Daucus carota*), Wild Clematis (*Clematis vitalba*), Mugwort (*Artemisia vulgaris*), Narrow-leaved Ragwort (*Senecio inaequidens*) and the Nationally Scarce Dittander (*Lepidium latifolium*).

Common Reed (*Phragmites australis*) reveals damper hollows and open sandy grounds support Squirrel-tail Fescue (*Vulpia bromoides*). Scrub species include Hawthorn (*Crataegus monogyna*), willows (*Salix* spp.), Dogwood (*Cornus sanguinea*) and rose (*Rosa* agg.).

Site Selection Rationale

HC27 – This site meets all the requirements to be considered Priority open mosaic habitat.

Priority Habitats

Open Mosaic Habitats on Previously Developed Land

Ownership and Access

The site is in private ownership with no public access but is crossed by a public right of way from London Road to the seawall.

Condition Statement

Moderate, stable

Management Issues

Poor soil conditions mean that succession will be a slow process here, but invasive non-native species such as Goat's-rue (*Galega officinalis*) and Butterfly-bush (*Buddleja davidii*), together with coarse grasses such as Cock's-foot (*Dactylis glomerata*) and Common Couch (*Elytrigia repens*) and Bramble scrub may dominate some areas to the detriment of diversity.

Review Schedule

Site selected: 2016 (Unpubl.)

Site Reviewed: 2022, no change.

Site reference: Th73

Site name: Belhus Woods Country Park

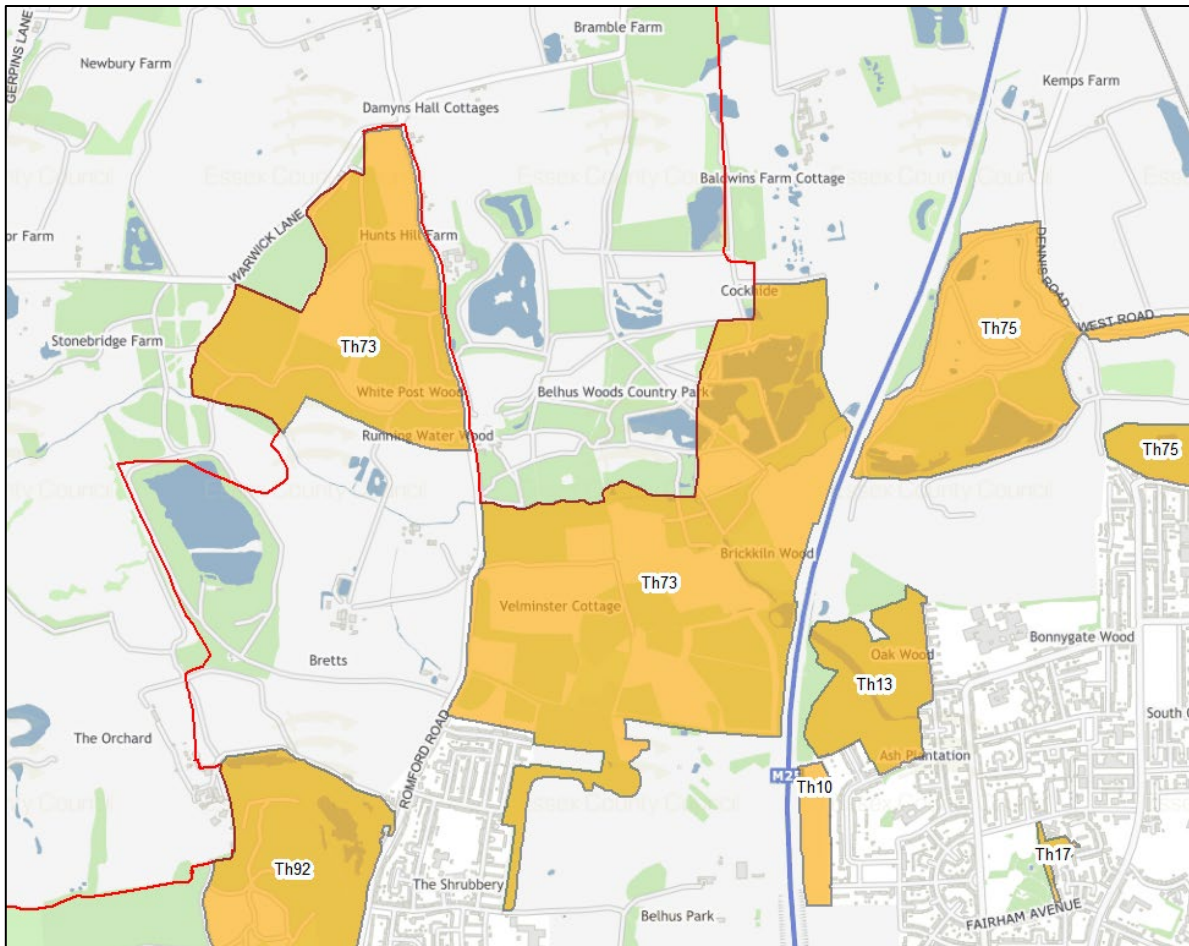
Grid ref. (approx. centre of site): TQ567823

Site area: 157.1ha

LoWS Selection Criteria:

- HC1 – Ancient Woodland Sites
- HC2 – Lowland Mixed Deciduous Woodland on Non-Ancient Sites
- HC3 – Other Priority Habitat Woodland Types on Non-Ancient Sites
- HC28 – Small-component Mosaics

Boundary Map



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Site Description

This site takes in the parts of Belhus Woods Country Park that are within Thurrock and to the west of the M25. It comprises three Ancient Woods – Warwick Wood, White Post Wood and Brickkiln Wood – with the more recently planted woodland of Belhus Chase (Woodland Trust) and Cely Woods (Forestry Commission) within a mosaic of grassland, scrub, hedgerows and gravel pit lakes. It also includes parts of the historic Belhus Park. Overall, it represents a highly significant extent of publicly accessible semi-natural habitat.

The canopy of Warwick Wood is made up of Pedunculate Oak (*Quercus robur*), Sweet Chestnut (*Castanea sativa*) and Ash (*Fraxinus excelsior*) with an understorey including Hazel (*Corylus avellana*), Elder (*Sambucus nigra*) and Hawthorn (*Crataegus monogyna*). The ground flora includes abundant Bluebell (*Hyacinthoides non-scripta*) with Wood Spurge (*Euphorbia amygdaloides*), Remote Sedge (*Carex remota*), Wood Millet (*Milium effusum*), Three-nerved Sandwort (*Moehringia trinervia*), Red Campion (*Silene dioica*) and Greater Stitchwort (*Stellaria holostea*).

Some invasive Sycamore (*Acer pseudoplatanus*) is found, in

White Post Wood has a canopy of Pedunculate Oak and Sweet Chestnut with some Ash, elm (*Ulmus* sp.), Wild Cherry (*Prunus avium*) and Silver Birch (*Betula pendula*) and an understorey of Hazel coppice and Goat Willow (*Salix caprea*). The ground flora includes abundant Bluebell, Greater Stitchwort, Red Campion, False Brome (*Brachypodium sylvaticum*) and Wood Millet.

Sycamore coppice with much regenerative growth is found throughout the wood.

Brickkiln Wood has a canopy of Ash, Pedunculate Oak, Field Maple (*Acer campestre*) and Hornbeam (*Carpinus betulus*), with an understorey of Hawthorn, Hazel, Holly (*Ilex aquifolium*) and Elder. The ground flora includes Bluebell, Lesser Celandine (*Ficaria verna*), Wood Millet, Remote Sedge, Three-nerved Sandwort, Wood-sedge (*Carex sylvatica*), Red Campion, Enchanter's Nightshade (*Circaea lutetiana*) and the Essex Red Data List species Soft Shield-fern (*Polystichum setiferum*). Sycamore is present, but only as a rare component.

The recently established woodlands of Cely Wood and Belhus Chase are interspersed rough grassland dominated by False Oat-grass (*Arrhenatherum elatius*) and Cock's-foot (*Dactylis glomerata*).

The gravel pit lakes in the northeast part of the site have fringing vegetation that includes Common Reed (*Phragmites australis*), Bulrush (*Typha latifolia*), Lesser Bulrush (*Typha angustifolia*), Fool's Watercress (*Apium nodiflorum*), Branched Bur-reed (*Sparganium erectum*), Lesser Pond-sedge (*Carex acutiformis*) and Water Mint (*Mentha aquatica*). The aquatic species known to be present include Spiked Water-milfoil (*Myriophyllum spicatum*), Fringed Water-lily (*Nymphoides peltata*) and White Water-lily (*Nymphaea alba*). Some linear strips of Alder (*Alnus glutinosa*) and willow (*Salix* sp.) wet woodland are also present, around the smaller lakes in particular.

Site Selection Rationale

HC1 – Warwick, Wite Post and Brickkiln Woods are all documented as Ancient, and included within the Ancient Woodland Inventory.

HC2 – Although demonstrably not Ancient, sections of woodland associated with Belhus Park date to the 19th Century and show a structure and composition that qualifies them as Priority habitat.

HC3 – Areas of Alder and willow woodland around the lakes are of a type that qualifies them as Priority wet woodland habitat.

HC28 – This criterion is used to define the boundaries of the site, taking in the peripheral habitats that would not satisfy any of the criteria listed above.

HC31 – The site is a significant resource for local communities enabling ready access to extensive semi-natural greenspace, including some high-quality habits.

Priority Habitats

Lowland Mixed Deciduous Woodland
Wet Woodland

Ownership and Access

The site is in various ownerships, but the whole is managed as a public open space as part of the Thames Chase Community Forest.

Condition Statement

Moderate, stable

Management Issues

The Ancient woods have been invaded by Sycamore (*Acer pseudoplatanus*) to varying extents, with low frequency in Warwick and Brickkiln Woods, but significant amounts in White Post Wood. Grassland management could be improved to encourage greater diversity and floristic abundance.

Review Schedule

Site selected: 1992 (W1, W2, W4, FW3,

Site Reviewed: 2006 (Th4, Th6, Th8, Th9); 2016 (Unpubl.), amalgamated and extended; 2022, further extension.

Site reference: Th74

Site name: Stifford Road Pit, South Ockendon

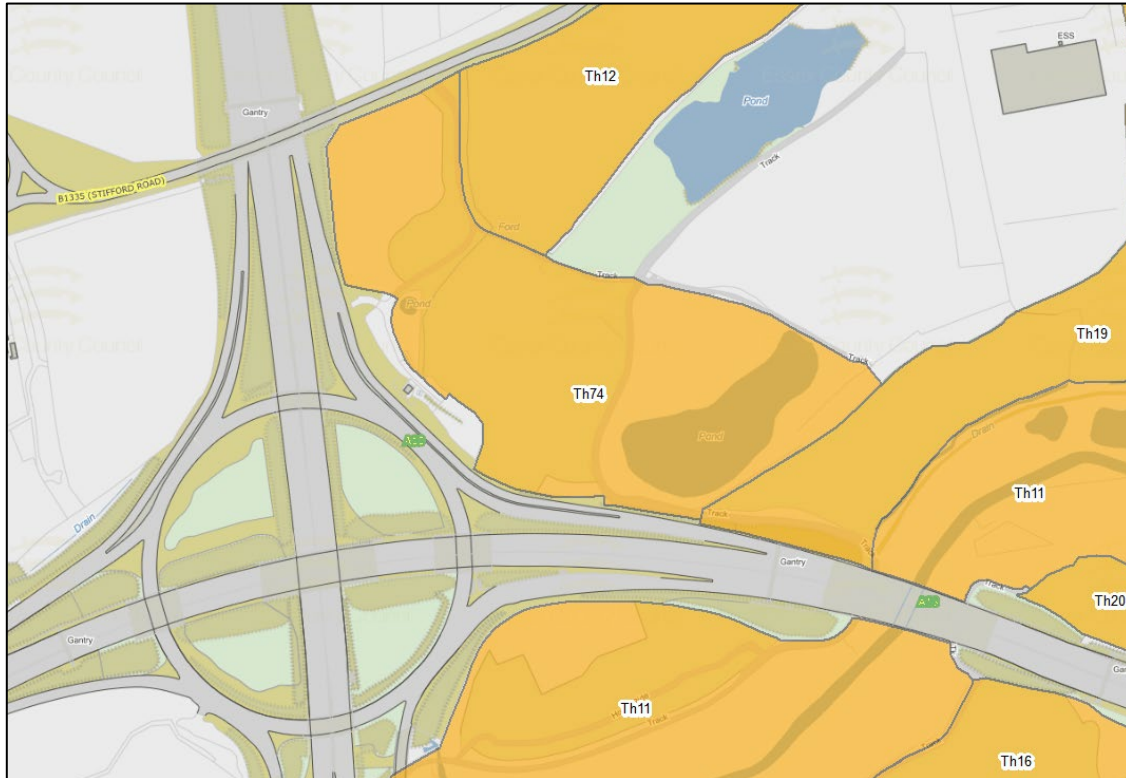
Grid ref. (approx. centre of site): TQ577802

Site area: 6.9ha

LoWS Selection Criteria:

- HC28 – Small-component Mosaics
- SC16 – Hotspots for Reptile Diversity

Boundary Map



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Site Description

This former sand pit now comprises a mixture of grassland, secondary woodland and open water and forms part of the extensive complex of LoWS associated with the valley of the Mar Dyke. There are known to be populations of Common Lizard, Slow-worm and Adder present on the site and the grassland is being managed for reptiles, with several hibernacula present.

The open grassland at the northern end is dominated by False Oat-grass (*Arrhenatherum elatius*) and Cock's-foot (*Dactylis glomerata*) with meadow-grass (*Poa* sp.), Common Bent (*Agrostis capillaris*), Smaller Cat's-tail (*Phleum bertolonii*), Red Fescue (*Festuca rubra*), Yorkshire-fog (*Holcus lanatus*) and Wood Small-reed (*Calamagrostis epigejos*). Other species present include Hard Rush (*Juncus inflexus*), Prickly Sedge (*Carex muricata* ssp. *pairae*), Common Vetch (*Vicia sativa*), Great Lettuce (*Lactuca virosa*), Yarrow (*Achillea millefolium*), Creeping Cinquefoil (*Potentilla reptans*) and Black Horehound (*Ballota nigra*).

The central area includes some secondary Pedunculate Oak (*Quercus robur*) woodland and a large area of Aspen (*Populus tremula*) scrub over a previously open, sandy area. At the southern end is a lake with a fringe of Common Reed (*Phragmites australis*) and to its north is an area of open vegetation where the lake has been partially filled in.

Site Selection Rationale

HC28 – The collection of habitats present is of clear value to biodiversity and the site both extends and connects adjacent LoWS to the north and south.

SC16 – Populations of three reptile species allows the application of this criterion.

Priority Habitats

None

Ownership and Access

The site is in private ownership with no public access but can be viewed from the adjacent public roads.

Condition Statement

Moderate, declining

Management Issues

There is no obvious management of the site for nature conservation outcomes, which is leading to a succession from open habitats to scrub and eventually woodland.

Review Schedule

Site selected: 2006 (PLoWS 5780/3)

Site Reviewed: 2016 (Unpubl.), promoted to LoWS; 2022, no change.

Site reference: Th75

Site name: Little Belhus Country Park, South Ockendon

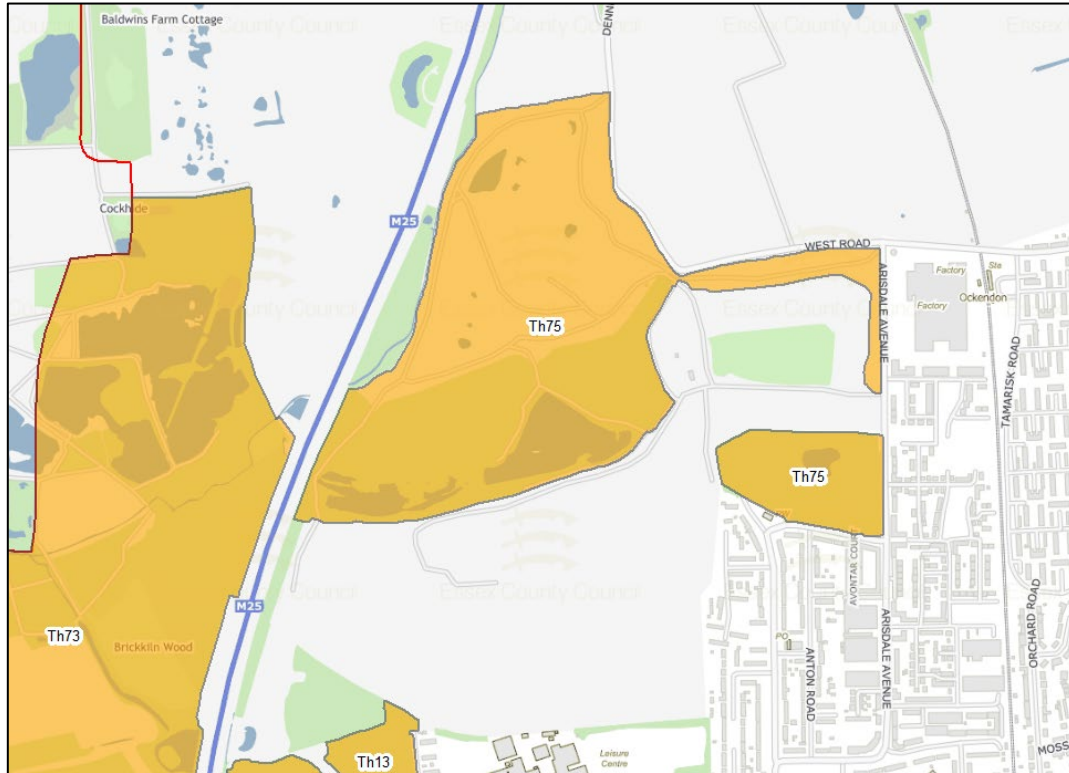
Grid ref. (approx. centre of site): TQ581827

Site area: 42.5ha

LoWS Selection Criteria:

- HC27 – Post-industrial Sites
- SC19 – Important Invertebrate Assemblages

Boundary Map



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Site Description

This old landfill site is in the process of being restored to a Country Park, with some areas now stabilising into a mosaic of grassland and open mosaic habitats. The southern section is a lake surrounded by scrub and developing woodland. Green hay was introduced into the meadows in 2014 to increase floristic diversity as part of the Coronation Meadow project marking the 60th anniversary of the Queen's coronation.

The restored open mosaic habitat includes sparse open swards in a varied topography with banks and seasonally wet hollows. A variety of substrates has been used and dead wood is included. Species present include Wild Carrot (*Daucus carota*), Hawkweed Oxtongue (*Picris hieracioides*) and in the seasonal ponds, Marsh Foxtail (*Alopecurus geniculatus*), Sea Club-rush (*Bolboschoenus maritimus*), Common Reed (*Phragmites australis*) and the Nationally Scarce Annual Beard-grass (*Polypogon monspeliensis*). Other species associated with these habitats that have been recorded include Viper's-bugloss (*Echium vulgare*), Knotted Clover (*Trifolium striatum*), and the Nationally Scarce species Clustered Clover (*Trifolium glomeratum*) and Dittander (*Lepidium latifolium*).

The restored meadows have a sward made up of Common Bent (*Agrostis capillaris*), Red Fescue (*Festuca rubra*), Sweet Vernal Grass (*Anthoxanthum odoratum*), Crested Dog's-tail (*Cynosurus cristatus*), Creeping Bent (*Agrostis stolonifera*), Tufted Hair-grass (*Deschampsia cespitosa*) and Yorkshire-fog (*Holcus lanatus*). Other species present include Red Clover (*Trifolium pratense*), Common Knapweed (*Centaurea nigra*), Lady's Bedstraw (*Galium verum*), Common Bird's-foot-trefoil (*Lotus corniculatus*) and Broad-leaved Everlasting-pea (*Lathyrus latifolius*).

Around the lake margins are willows (*Salix* spp.), Aspen (*Populus tremula*), Hawthorn (*Crataegus monogyna*), Blackthorn (*Prunus spinosa*), Pedunculate Oak (*Quercus robur*) and Sycamore (*Acer pseudoplatanus*).

Site Selection Rationale

HC27 – The site is post-industrial and its restoration is ensuring that the mosaic of open habitats is retained.
SC19 – Survey work has demonstrated the presence of a significant assemblage of invertebrates include those that are nationally or locally scarce.

Priority Habitats

Open Mosaic Habitats on Previously Developed Land

Ownership and Access

The site is owned by Rural Arisings and fully restored areas are accessible to the public via a network of footpaths.

Condition Statement

Good, stable

Management Issues

The invasive non-native species Goat's-rue (*Galega officinalis*), Butterfly-bush (*Buddleja davidii*) and White Poplar (*Populus alba*) all have the potential to have a negative impact on species diversity. The meadows contain higher levels of coarse grasses such as Cock's-foot (*Dactylis glomerata*) and False Oat-grass (*Arrhenatherum elatius*) than is ideal.

Review Schedule

Site selected: 2006 (part)

Site Reviewed: 2016 (Unpubl.), significant extension; 2022, active area removed, minor extension.

Site reference: Th76

Site name: Back Lane, North Stifford

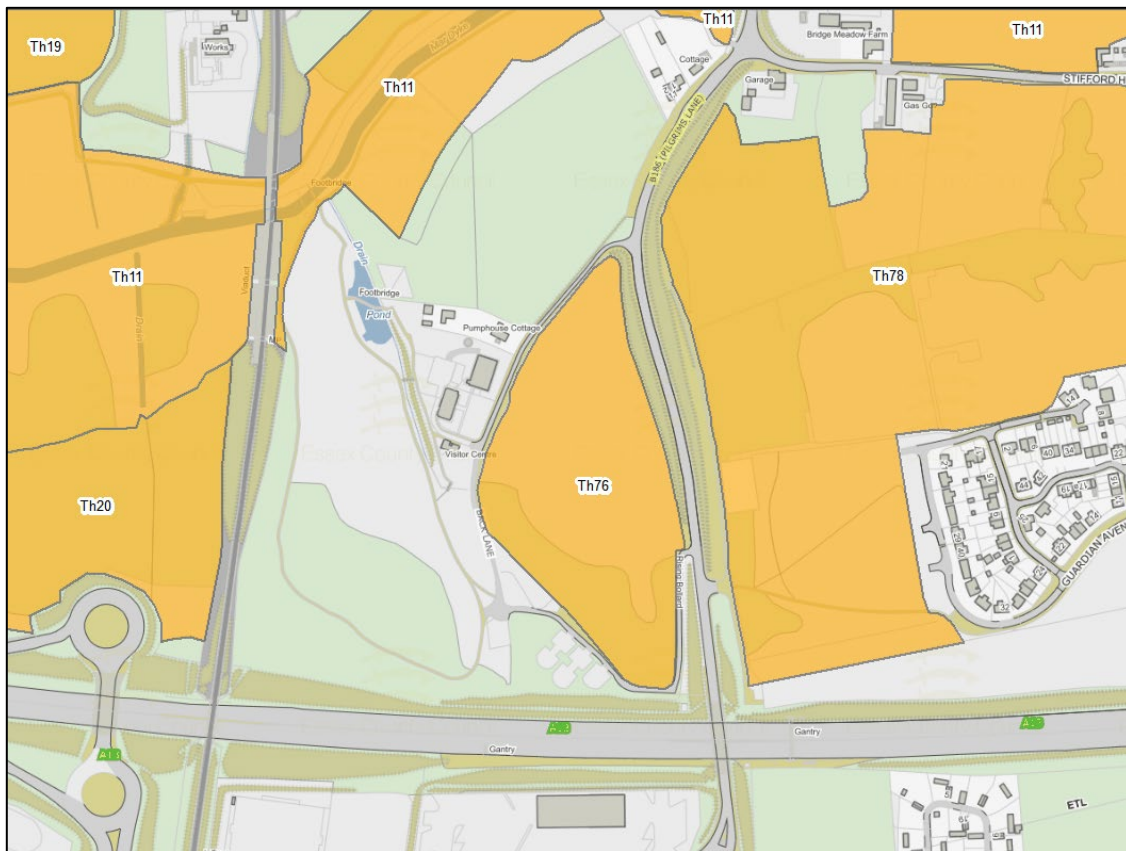
Grid ref. (approx. centre of site): TQ593799

Site area: 3.3ha

LoWS Selection Criteria:

- HC13 Heathland and Acid Grassland

Boundary Map



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Site Description

This land on the west facing slope of a Thames terrace sand and gravel outcrop was originally known as Davy Down, a name now applied to the Country Park to the west and shares its origins with the Th78 Stifford Hill Grasslands LoWS to the east. It comprises sparsely vegetated acid grassland, grading to scrub and young woodland on the lower slopes.

The open vegetation includes Red Fescue (*Festuca rubra*), Common Bird's-foot-trefoil (*Lotus corniculatus*), Common Stork's-bill (*Erodium cicutarium*), Lesser Hawkbit (*Leontodon saxatilis*), Autumn Hawkbit (*Scorzoneroides autumnalis*), Thyme-leaved Sandwort (*Arenaria serpyllifolia*), Sheep's Sorrel (*Rumex acetosella*), Squirrel-tailed Fescue (*Vulpia bromoides*), Common Centaury (*Centaureum erythraea*), Weld (*Reseda lutea*), Viper's-bugloss (*Echium vulgare*), Perforate St John's-wort (*Hypericum perforatum*), Hoary Mustard (*Hirschfeldia incana*), Creeping Cinquefoil (*Potentilla reptans*), Hoary Cress (*Lepidium draba*), Prickly Sedge (*Carex muricata* ssp *pairae*) and patches of *Cladonia* lichen heath. Grassier areas around the margins support Creeping Bent (*Agrostis stolonifera*), Yorkshire-fog (*Holcus lanatus*) and the taller herbs include Teasel (*Dipsacus fullonum*), Common Evening-primrose (*Oenothera biennis*), Hemlock (*Conium maculatum*) and Welled Thistle (*Carduus crispus*).

The scrubby woodland includes Ash (*Fraxinus excelsior*), elm (*Ulmus* sp.), Blackthorn (*Prunus spinosa*), rose (*Rosa* agg.) and Wild Clematis (*Clematis vitalba*).

Site Selection Rationale

HC13 – The main vegetation community on site is recognisable as acid grassland Priority habitat.

HC28 – This criterion is used to define the site's boundaries, taking in those habitats that enhance its overall biodiversity, but wouldn't meet any individual criterion in their own right.

Priority Habitats

Lowland Dry Acid Grassland

Ownership and Access

The site is in private ownership with no public access but can be viewed from the adjacent Back Lane and Pilgrims Lane.

Condition Statement

Moderate, stable

Management Issues

The site has received waste material along its eastern edge in the past and has been used recreationally by motor vehicles more recently. Such disturbance has maintained open conditions to some extent in the absence of any positive management for nature conservation, apart from some Rabbit grazing. The spread of scrub, including the non-native Butterfly-bush (*Buddleja davidii*), threatens the unusual character of the site.

Review Schedule

Site selected: 2006 (PLoWS 5980/2)

Site Reviewed: 2016 (Unpubl.), promoted to LoWS; 2022, no change.

Site reference: Th77

Site name: North Ockendon Pit, North Ockendon

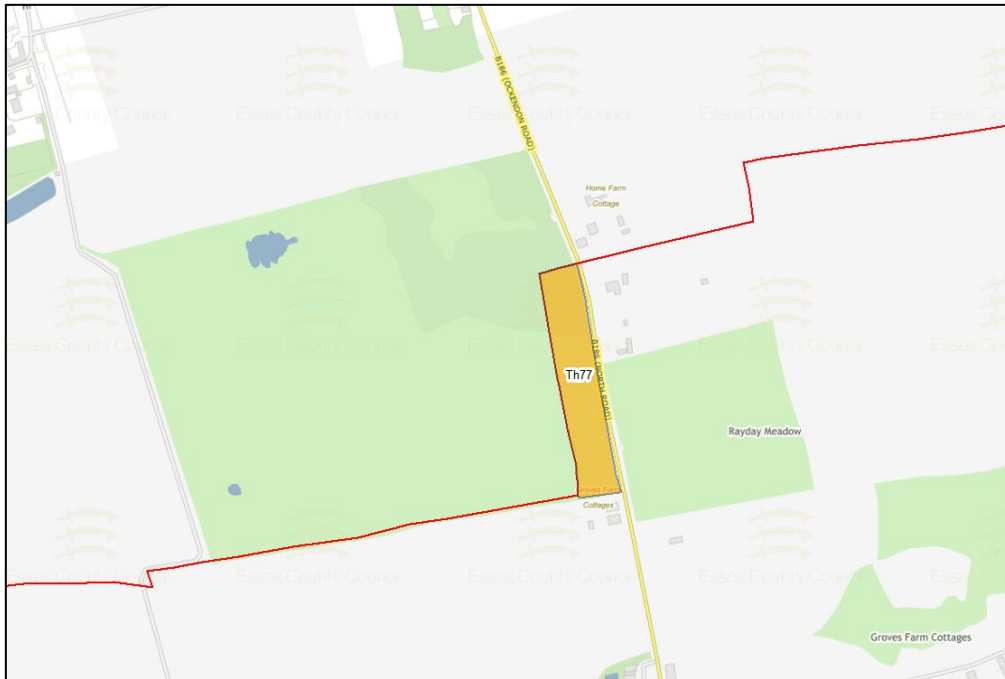
Grid ref. (approx. centre of site): TQ594844

Site area: 1.3ha

LoWS Selection Criteria:

- HC27 – Post-industrial Sites

Boundary Map



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Site Description

This site is a small section of a larger gravel pit site, partially filled with rubble and material dredged from the Thames, that is designated a Site of Metropolitan Importance in the neighbouring London Borough of Havering.

The wider site is a mosaic of short dry grassland, rough grassland, scrub and brackish pools, although the section in Thurrock is dominated by coarse grass species and scattered scrub. It has damp hollows that support Soft-rush (*Juncus effusus*), Hard Rush (*Juncus inflexus*) and Amphibious Bistort (*Polygonum amphibium*).

Site Selection Rationale

HC27 – Although the small section in Thurrock might not reach the threshold for selection, it is part of a wider habitat unit that has clear and substantive value for biodiversity and so it should be included here.

Priority Habitats

Open Mosaic Habitats on Previously Developed Land

Ownership and Access

The site is in private ownership with no public access but can be viewed from the adjacent highway and a public footpath along its southern edge.

Condition Statement

Moderate, stable

Management Issues

As part of a wider mosaic, the lack of recent management is of lesser concern on this site, with succession creating additional diversity of structure and habitat.

Review Schedule

Site selected: 2016 (Unpubl.)

Site Reviewed: 2022, no change.

Site reference: Th78

Site name: Stifford Hill Grasslands, North Stifford

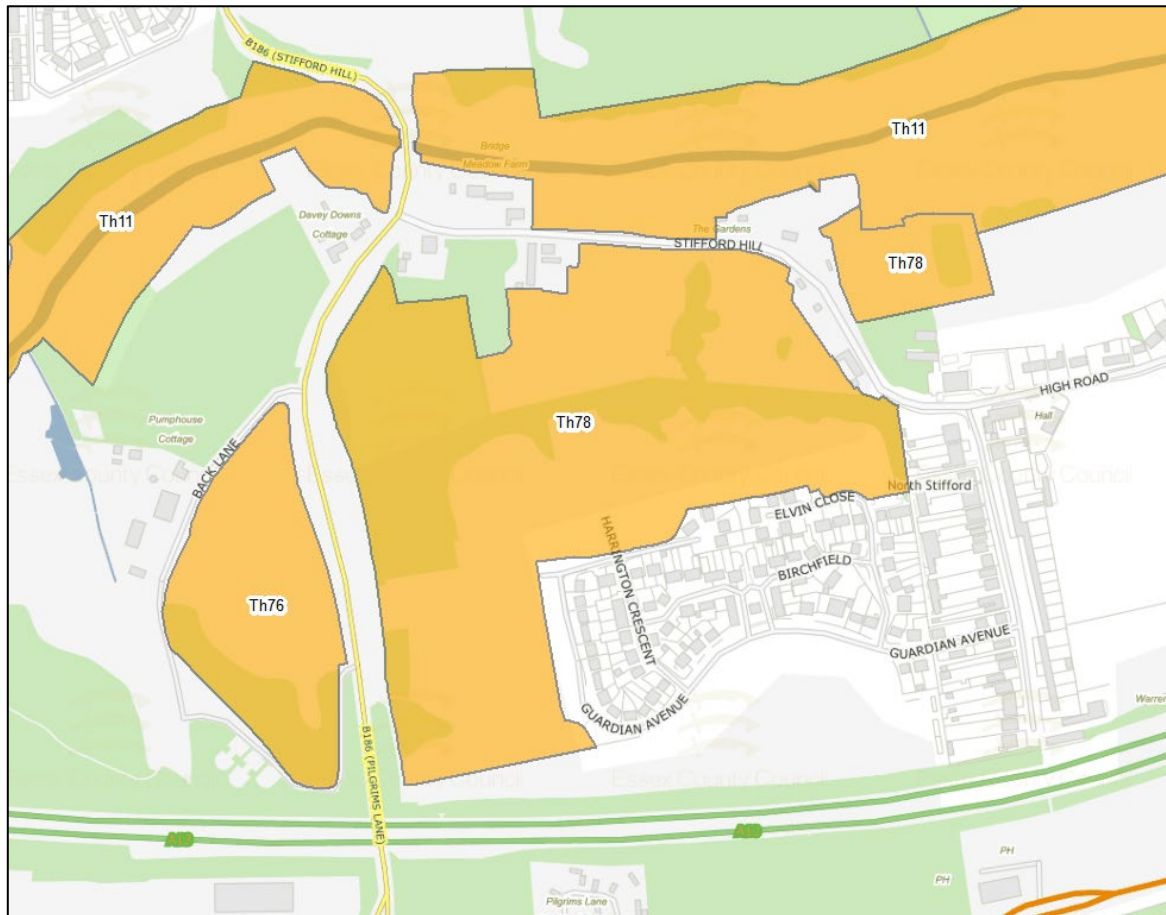
Grid ref. (approx. centre of site): TQ596801

Site area: 14.3ha

LoWS Selection Criteria:

- HC9 – Lowland Meadows
- HC13 – Heathland and Acid Grassland
- HC28 – Small-component Mosaics

Boundary Map



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Site Description

This collection of grasslands lies on the south slope of the Mar Dyke, on a ridge of Thames Terrace sands and gravels, creating free-draining conditions that are prone to droughting. The site is a combination of old, horse-grazed pastures and the grounds of the former Ardale School, now partially replaced by a housing estate. Both areas are likely to have avoided agriculture improvement.

The horse-grazed pastures to the south of Stifford Hill support a diverse acidic-neutral grassland community consisting of Crested Dog's-tail (*Cynosurus cristatus*), Meadow Barley (*Hordeum secalinum*), Sweet Vernal Grass (*Anthoxanthum odoratum*), Common Bent (*Agrostis capillaris*), Red Fescue (*Festuca rubra*) and Yorkshire-fog (*Holcus lanatus*). Other species present include Common Knapweed (*Centaurea nigra*), Agrimony (*Agrimonia eupatoria*), Lady's Bedstraw (*Galium verum*), Mouse-ear Hawkweed (*Pilosella officinarum*), Prickly Sedge (*Carex muricata* ssp. *pairae*), Common Bird's-foot-trefoil (*Lotus corniculatus*), Autumn Hawkbit (*Scorzoneroides autumnalis*), Self-heal (*Prunella vulgaris*), Common Centaury (*Centaureum erythraea*) and the Essex Red List species Fiddle Dock (*Rumex pulcher*).

The dryer grassland to the south consists of Common Bent, Smaller Cat's-tail (*Phleum bertolonii*), Red Fescue, Soft-brome (*Bromus hordeaceus*), meadow-grass (*Poa* sp.) and Squirrel-tail Fescue (*Vulpia bromoides*) with Viper's-bugloss (*Echium vulgare*), Musk Mallow (*Malva moschata*), Hawkweed Oxtongue (*Picris hieracioides*), Lady's Bedstraw, Creeping Cinquefoil (*Potentilla reptans*), Yarrow (*Achillea millefolium*), Autumn Hawkbit, Common Evening-primrose (*Oenothera biennis*). On the edges of the remaining concrete paths and hardstanding are patches of stonecrop (*Sedum* sp.) and Thyme-leaved Sandwort (*Arenaria*

serpyllifolia). Other species understood to be present include the Near Threatened Hoary Cinquefoil (*Potentilla argentea*) and Common Cudweed (*Filago germanica*), and the Essex Red List species Carlina Thistle (*Carlina vulgaris*), Meadow Saxifrage (*Saxifraga granulata*), Ploughman's Spikenard (*Inula conyzae*) and Little Mouse-ear (*Cerastium semidecandrum*).

The grassland to the east of Stifford Hill is similarly dry, and supports Hoary Cinquefoil, Fiddle Dock, Common Cudweed, Autumn Hawkbit and Lesser Stitchwort (*Stellaria graminea*) alongside Common Bent and Smaller Cat's-tail.

A small area of woodland and scrub around an old gravel pit along Pilgrims Lane and the bands of scrub that divide the two parts of the site include Pedunculate Oak (*Quercus robur*), Ash (*Fraxinus excelsior*), Hawthorn (*Crataegus monogyna*), Field Maple (*Acer campestre*), elm (*Ulmus* sp.), Spindle (*Euonymus europaeus*), Pear (*Pyrus communis*), Sycamore (*Acer pseudoplatanus*) and Holm Oak (*Quercus ilex*). It's ground flora includes Wood Avens (*Geum urbanum*), Lords and Ladies (*Arum maculatum*), Wild Clematis (*Clematis vitalba*) and Common Ivy (*Hedera helix*).

Site Selection Rationale

HC9 – Parts of the northern horse fields are best described as an MG5 circumneutral grassland at the acidic end of that spectrum, which qualifies them as Priority habitat.

HC13 – Most of the grassland is a form of U1 acidic grassland, meeting the Priority habitat description for Lowland Dry Acid Grassland

HC28 – This criterion is used to define the extent of the site, taking in the scrub and woodland habitats that do not satisfy the other criteria, but that add to the overall diversity and value of the site as a whole.

Priority Habitats

Lowland Dry Acid Grassland

Lowland Meadows

Ownership and Access

The site is in private ownership with no public access to the northern fields, which can be viewed from Stifford Hill. The southern grassland is widely used by local residents, but its official status as open space is unknown.

Condition Statement

Moderate, stable

Management Issues

No part of the site appears to be managed for nature conservation outcomes. The northern fields are horse-grazed, which preserves their character but is not ideal for maximising floristic abundance and diversity. Scattered Bramble (*Rubus fruticosus* agg.) and rose (*Rosa* agg.) scrub is establishing in the old school fields and will have a negative impact on their condition in the long term.

Review Schedule

Site selected: 2006 (PLoWS 5980/3 and 5980/4)

Site Reviewed: 2016 (Unpubl.), upgraded to LoWS; 2022, additional grassland to the east, scrub and woodland habitats added.

Site reference: Th79

Site name: St Mary's Churchyard, North Stifford

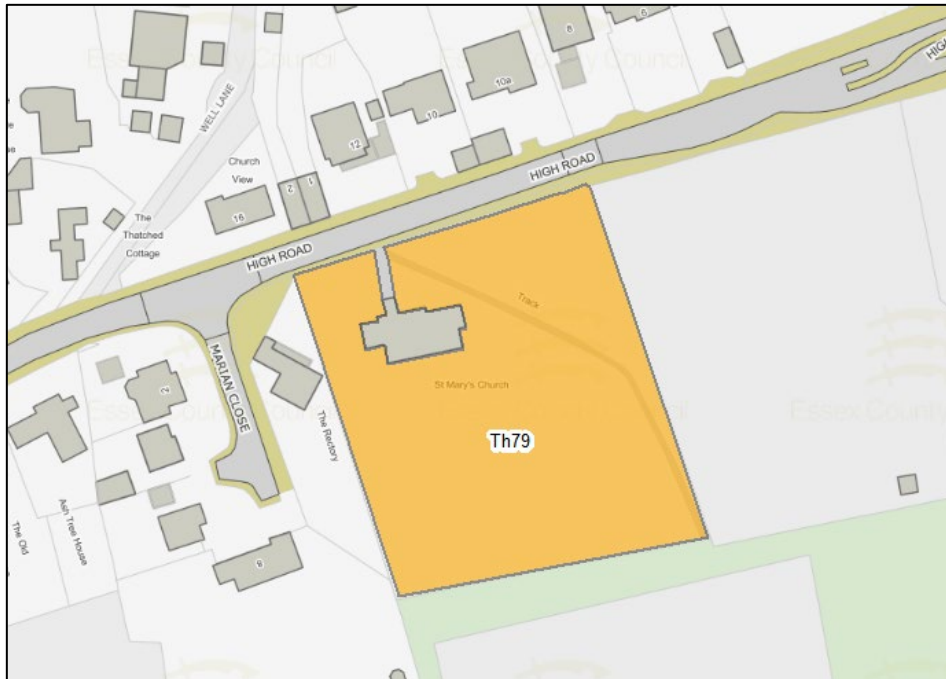
Grid ref. (approx. centre of site): TQ604802

Site area: 0.56ha

LoWS Selection Criteria:

- HC13 Heathland and Acid Grassland

Boundary Map



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Site Description

This churchyard site sits on the same Thames Terrace sands and gravel ridge as Th76 Back Lane and Th78 Stifford Hill Grasslands and supports a similar acidic grassland community that has never been agriculturally improved.

The grassland consists of Common Bent (*Agrostis capillaris*), Red Fescue (*Festuca rubra*), Smaller Cat's-tail (*Phleum bertolonii*), meadow-grass (*Poa* sp.) and Yellow Oat-grass (*Trisetum flavescens*) with Sheep's Sorrel (*Rumex acetosella*), Mouse-ear Hawkweed (*Pilosella officinarum*), Thyme-leaved Sandwort (*Arenaria serpyllifolia*), Lady's Bedstraw (*Galium verum*), Field Wood-rush (*Luzula campestris*), Common Cat's-ear (*Hypochaeris radicata*), Bulbous Buttercup (*Ranunculus bulbosus*), Burnet-saxifrage (*Pimpinella saxifraga*) and the Essex Red List species Meadow Saxifrage (*Saxifraga granulata*).

Site Selection Rationale

HC13 – The community present is a clear match for acid grassland Priority habitat.

Priority Habitats

Lowland Dry Acid Grassland

Ownership and Access

The churchyard is open for public access.

Condition Statement

Moderate, stable

Management Issues

The churchyard is mown periodically, which is not favourable for all of the species present, but does maintain the community.

Review Schedule

Site selected: 2006 (PLoWS 6080/2)

Site Reviewed: 2016 (Unpubl.), upgraded to LoWS; 2022, no change.

Site reference: Th80

Site name: Titan Works, Grays

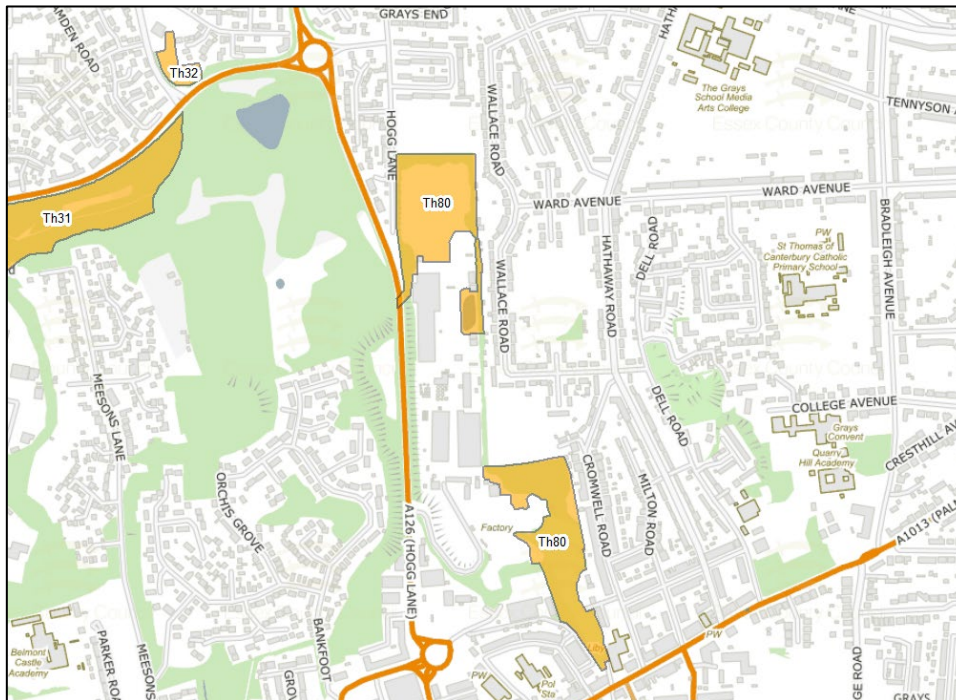
Grid ref. (approx. centre of site): TQ613786

Site area: 5.7ha

LoWS Selection Criteria:

- HC27 – Post-industrial Sites
- SC10 – Bat Hibernation Sites
- SC19 – Important Invertebrate Assemblages

Boundary Map



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Site Description

This former chalk quarry is an active industrial site, but sections to the north and southeast retain open mosaic habitats including exposed chalk, seasonally wet hollows, sparse vegetation, grassland, scrub and cliff faces.

The detail within the following description is largely taken from a publicly available ecological report submitted in relation to development proposals, due to access not being arranged during this review. The grassland habitat in the northern part of site consists of Creeping Bent (*Agrostis stolonifera*), Rough Meadow-grass (*Poa trivialis*), Yorkshire-fog (*Holcus lanatus*) and Timothy (*Phleum pratense*) and supports chalk grassland indicators such as Yellow-wort (*Blackstonia perfoliata*), Rough Hawkbit (*Leontodon hispidus*) and the Essex Red List species Marjoram (*Origanum vulgare*). Also present are Meadow Vetchling (*Lathyrus pratensis*), Red Bartsia (*Odontites vernus*), Wild Carrot (*Daucus carota*), Perforate St John's-wort (*Hypericum perforatum*), Common Centaury (*Centaureum erythraea*), Tufted Vetch (*Vicia cracca*) and the Essex Red List species Common Meadow-rue (*Thalictrum minus*). This community could be considered chalk grassland, given that it is located on an artificial outcrop of chalk, although the description in the report does not consider this possibility.

The grassland in the southern section is rougher but supports a variety of flowering species including Agrimony (*Agrimonia eupatoria*), Lady's Bedstraw (*Galium verum*), Rough Hawk's-beard (*Crepis biennis*), Meadow Vetchling, Wild Carrot, Marjoram and Red Clover (*Trifolium pratense*).

Invertebrate survey work has revealed the presence of a significant number of locally and nationally rare and scarce species, including Priority species, amounting to an assemblage of at least County value.

The site includes a tunnel beneath Hogg Lane connected to the Grays Thurrock Chalk Pit SSSI, which regularly supports roosting bats, with Daubenton's Bat in the summer and Daubenton's Bat, Natterer's Bat and occasional Brown Long-eared Bat in the hibernation period.

Site Selection Rationale

HC27 – The site meets all of the criteria for identifying open mosaic Priority habitat, as set out by Buglife and in Priority habitat descriptions.

SC10 – Monitoring data to support this criterion is available and covers a long period.

SC19 – Survey work has demonstrated the significance of the invertebrate assemblage.

Priority Habitats

Open Mosaic Habitats on Previously Developed Land

Ownership and Access

The site is in private ownership with no public access, but the northern section can be viewed from Hogg Lane.

Condition Statement

Moderate, stable

Management Issues

The site is not managed for nature conservation outcomes and so the grassland components are not in optimum condition. The site is threatened by development.

Review Schedule

Site selected: 2006 (PLoWS 6178/2)

Site Reviewed: 2016 (Unpubl.), upgraded to LoWS; 2022, re-mapped to reflect changes in operational area.

Site reference: Th81

Site name: Stifford Clays Copse, Orsett

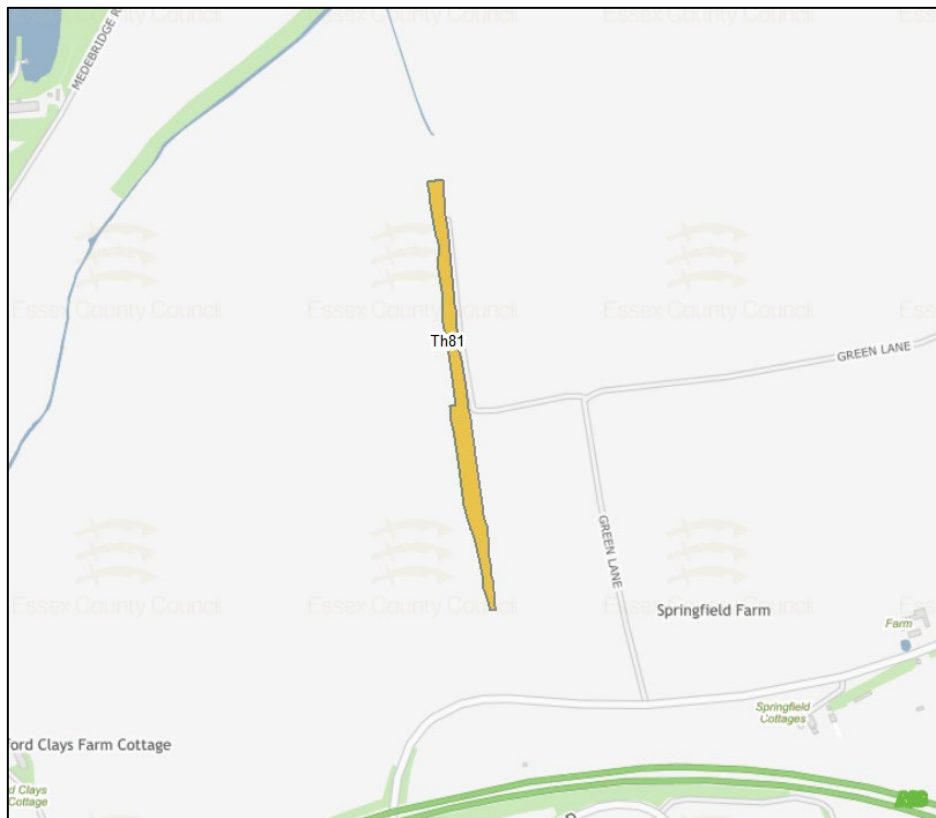
Grid ref. (approx. centre of site): TQ618816

Site area: 1.3ha

LoWS Selection Criteria:

- HC2 – Lowland Mixed Deciduous Woodland on Non-Ancient Sites

Boundary Map



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Site Description

This linear strip of woodland was established in its current form by the mid-19th Century but is not considered to be Ancient.

The canopy consists of Pedunculate Oak (*Quercus robur*), Ash (*Fraxinus excelsior*) with Field Maple (*Acer campestre*), Hazel (*Corylus avellana*), Hawthorn (*Crataegus monogyna*), Elder (*Sambucus nigra*) and Crab Apple (*Malus sylvestris*).

The ground flora includes Bluebell (*Hyacinthoides non-scripta*), Lesser Celandine (*Ficaria verna*), Greater Stitchwort (*Stellaria holostea*), Red Campion (*Silene dioica*) and Wood Avens (*Geum urbanum*).

Site Selection Rationale

HC2 – The woodland displays an appropriate composition and structure to be considered Priority habitat.

Priority Habitats

Lowland Mixed Deciduous Woodland

Ownership and Access

The site is in private ownership with no public access but can be viewed from the public right of way along Green Lane to the east.

Condition Statement

Moderate, stable

Management Issues

The site is not managed for nature conservation outcomes and shows signs of nutrient enrichment resulting from adjacent agricultural operations.

Review Schedule

Site selected: 2016 (Unpubl.)

Site Reviewed: 2022, no change.

Site reference: Th82

Site name: Lower Shaw, West Horndon

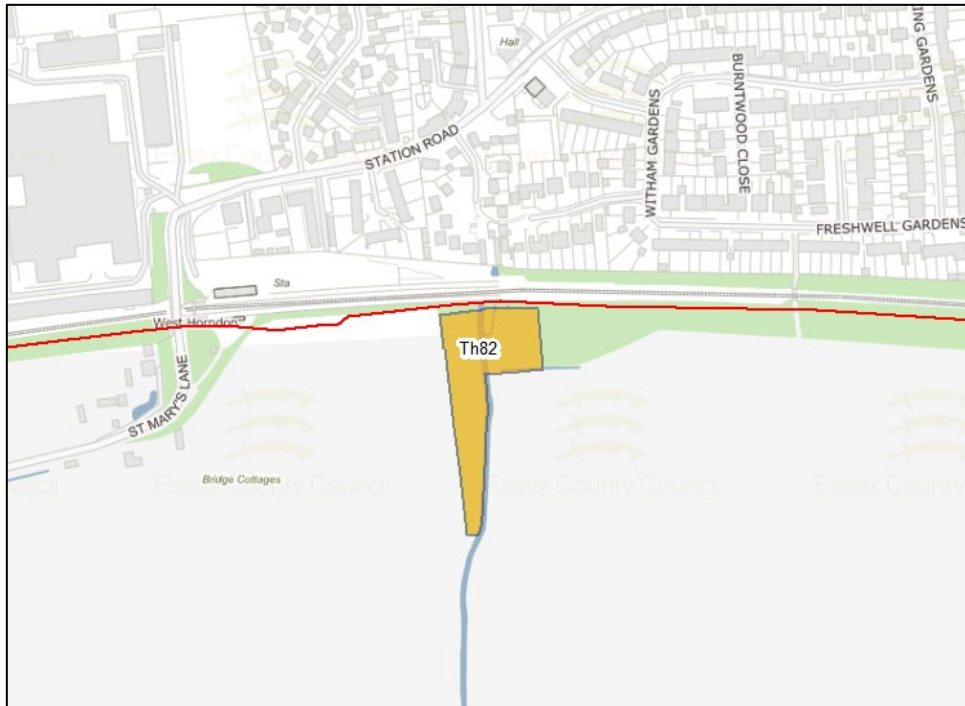
Grid ref. (approx. centre of site): TQ625879

Site area: 0.7ha

LoWS Selection Criteria:

- HC2 – Lowland Mixed Deciduous Woodland on Non-ancient Sites

Boundary Map



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Site Description

Its floral composition suggests that this small, linear woodland is unlikely to be Ancient, but it was established by the mid-19th Century and displays a mature structure. It lies on the northern edge of Thurrock adjacent to West Horndon railway station.

The canopy consists of Pedunculate Oak (*Quercus robur*) with an understorey of Ash (*Fraxinus excelsior*), Hawthorn (*Crataegus monogyna*), Blackthorn (*Prunus spinosa*), Elder (*Sambucus nigra*), Spindle (*Euonymus europaeus*) and occasional Field Maple (*Acer campestre*).

The ground flora includes Dog's Mercury (*Mercurialis perennis*), Wood Avens (*Geum urbanum*), Ground-ivy (*Glechoma hederacea*), Wood Dock (*Rumex sanguineus*), False Brome (*Brachypodium sylvaticum*), Red Campion (*Silene dioica*), Hedge Garlic (*Alliaria petiolata*) and Common Ivy (*Hedera helix*).

Site Selection Rationale

HC2 - The woodland displays an appropriate composition and structure to be considered Priority habitat.

Priority Habitats

Lowland Mixed Deciduous Woodland.

Ownership and Access

The site is in private ownership with no public access but can be viewed from the nearby Whitehouse Road.

Condition Statement

Moderate, stable

Management Issues

The site has already been damaged during the reconstruction of the adjacent platform. It is not managed for nature conservation outcomes and the understorey is dense in places.

Review Schedule**Site selected:** 2016 (Unpubl.)**Site Reviewed:** 2022, damaged northern edge removed, addition woodland to the east added.

Site reference: Th83

Site name: Little Thurrock Marshes, Little Thurrock

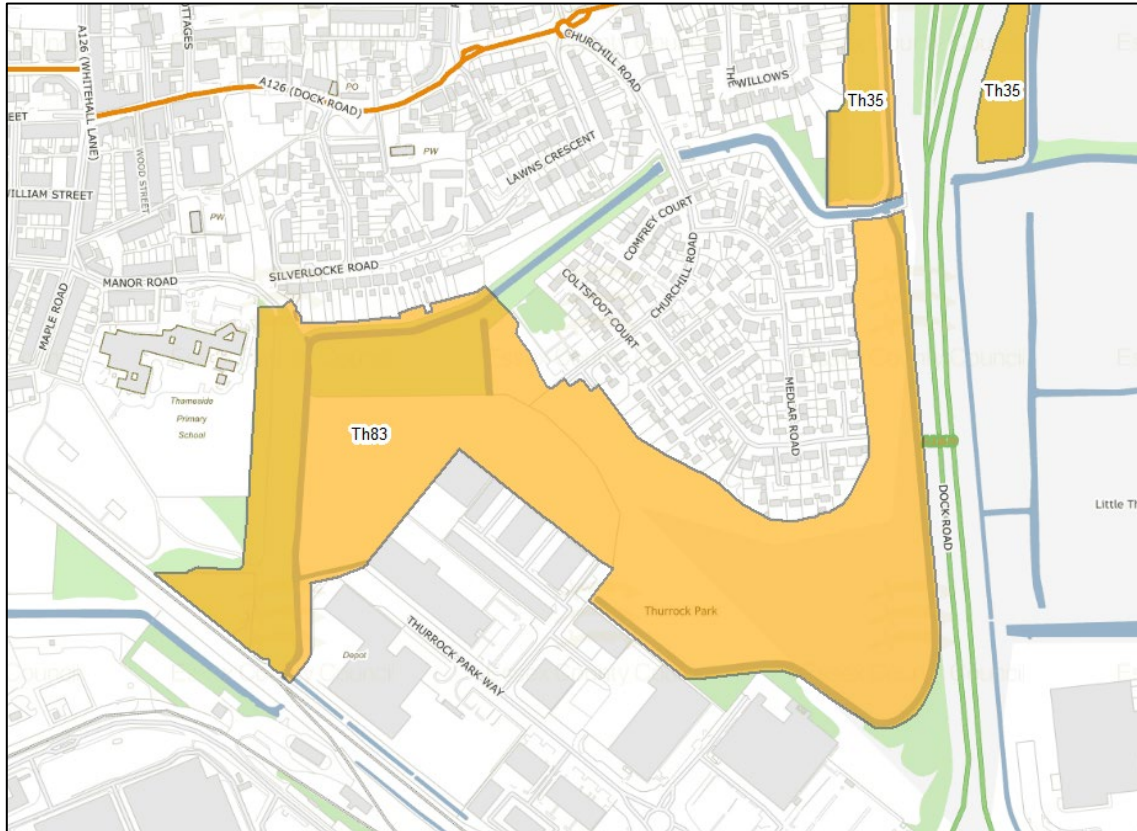
Grid ref. (approx. centre of site): TQ628774

Site area: 17.2ha

LoWS Selection Criteria:

- HC21 – Coastal Grazing Marsh
- HC27 Post-industrial Sites

Boundary Map



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Site Description

This site is the last remaining fragment of grazing marsh from the once extensive Little Thurrock Marsh, although part of it has been affected by development and is now included for its open mosaic habitat.

The grassland sward consists of Common Bent (*Agrostis capillaris*), Soft-brome (*Bromus hordeaceus*), Tall Fescue (*Schedonorus arundinacea*) and False Oat-grass (*Arrhenatherum elatius*) with Meadow Vetchling (*Lathyrus pratensis*), Common Vetch (*Vicia sativa*), Black Medick (*Medicago arabica*), Red Clover (*Trifolium pratense*), Hoary Ragwort (*Jacobaea erucifolia*), Creeping Cinquefoil (*Potentilla reptans*), Common Cat's-ear (*Hypochaeris radicata*) and Wild Onion (*Allium vineale*).

The main drain has a diverse aquatic and marginal vegetation that includes Water-cress (*Nasturtium officinale*), a water starwort (*Callitriche* sp.), Water-plantain (*Alisma plantago-aquatica*), Common Reed (*Phragmites australis*), Reed Sweet-grass (*Glyceria maxima*), Narrow-leaved Bulrush (*Typha angustifolia*), Water Figwort (*Scrophularia aquatica*), Yellow Iris (*Iris pseudacorus*), Great Willowherb (*Epilobium hirsutum*), Purple Loosestrife (*Lythrum salicaria*), Gipsywort (*Lycopus europaeus*), False Fox-sedge (*Carex otrubae*) and Celery-leaved Buttercup (*Ranunculus sceleratus*).

Horse-grazed grassland to the west of the Manor Way supports Black Horehound (*Ballota nigra*), Yarrow (*Achillea millefolium*), Weld (*Reseda lutea*), Hoary Cress (*Lepidium draba*), Teasel (*Dipsacus fullonum*) and Hop (*Humulus lupulus*). Scattered scrub throughout includes Hawthorn (*Crataegus monogyna*), Blackthorn (*Prunus spinosa*),

Site Selection Rationale

HC21 – The site undoubtedly has its origins as coastal grazing marsh and this habitat is so dependent on location and history that it is effectively irreplaceable, meaning that even areas in relatively poor condition have a high value.

HC27 – The recently disturbed areas have established an open mosaic habitat that is compatible with the remaining grazing marsh.

Priority Habitats

Coastal and Floodplain Grazing Marsh

Open Mosaic Habitat on Previously Developed Land

Ownership and Access

The site is in private ownership but is crossed by a public footpath along the Manor Way.

Condition Statement

Moderate, declining

Management Issues

The site is not managed for nature conservation outcomes and is generally in poor condition, with a lack of grazing in some areas and over-grazing in others. There has already been disturbance associated with development activity and further such threats are likely. The non-native invasive species Floating Pennywort (*Hydrocotyle ranunculoides*) is present in the main drain.

Review Schedule

Site selected: 2006 (PLoWS 6277/1)

Site Reviewed: 2016 (Unpubl.), upgraded to LoWS; 2022, no change.

Site reference: Th84

Site name: Baker Street Brownfield, Chadwell St Mary

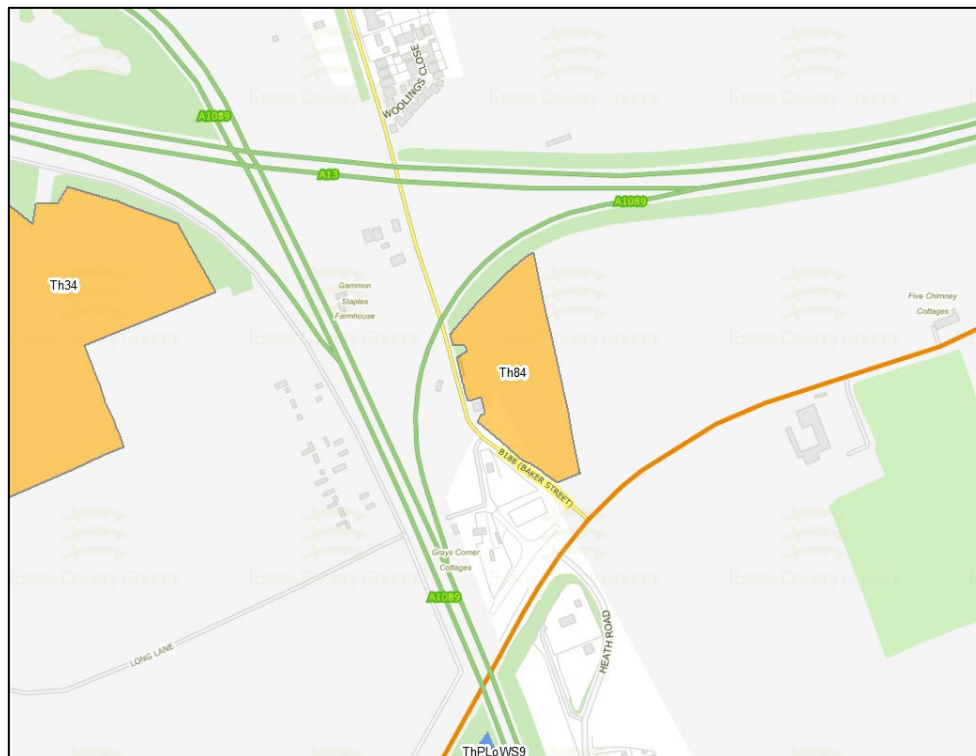
Grid ref. (approx. centre of site): TQ636805

Site area: 2.1ha

LoWS Selection Criteria:

- HC27 – Post-industrial Sites

Boundary Map



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Site Description

This is the site of Nevilles Farm, which has had a varied planning history and it was most recently disturbed by commercial use in the mid-2010s. It consists of a mosaic of hardstanding, spoil heaps, scrub, rough grassland and sparsely vegetated early successional communities.

The grassland component consists of Creeping Bent (*Agrostis stolonifera*), Red Fescue (*Festuca rubra*), meadow-grass (*Poa* sp.), Cock's-foot (*Dactylis glomerata*), Yorkshire-fog (*Holcus lanatus*) and False Oat-grass (*Arrhenatherum elatius*). Also present in a diverse and flowery community are Perforate St John's wort (*Hypericum perforatum*), Creeping Cinquefoil (*Potentilla reptans*), Spotted Medick (*Medicago arabica*), Cut-leaved Crane's-bill (*Geranium dissectum*), Oxeye Daisy (*Leucanthemum vulgare*), Common Vetch (*Vicia sativa*), Smooth Tare (*Vicia tetrasperma*), Fleabane (*Pulicaria dysenterica*), Hard Rush (*Juncus inflexus*) and the Essex Red List species Pyramidal Orchid (*Anacamptis pyramidalis*).

Tall ruderal species include Watted Thistle (*Carduus crispus*), Hemlock (*Conium maculatum*), Common Ragwort (*Jacobaea vulgaris*) and Teasel (*Dipsacus fullonum*).

Areas of sparser vegetation support Fern-grass (*Catapodium rigidum*), Squirreltail Fescue (*Vulpia bromoides*), Thyme-leaved Sandwort (*Arenaria serpyllifolia*), Parsley Piert (*Aphanes arvensis*), Weld (*Reseda lutea*), Yellow-wort (*Blackstonia perfoliata*) and the nationally Near Threatened Common Cudweed (*Filago germanica*). Knotted Hedge Parsley (*Torilis nodosa*), and the Essex Red List Species Changing Forget-me-not (*Myosotis discolor*) and Little Mouse-ear (*Cerastium semidecandrum*) have also been recorded.

Although survey information is lacking, the site has previously been identified as an area with high potential to support a significant invertebrate assemblage.

Site Selection Rationale

HC27 – The site meets all of the criteria to be identified as Priority open mosaic habitat.

Priority Habitats

Open Mosaic Habitats on Previously Developed Land

Ownership and Access

The site is in private ownership with no public access but can be viewed from the adjacent Baker Street, which is a public highway.

Condition Statement

Moderate, stable

Management Issues

As with all sites of this type, successional pressures will lead to a gradual decline in condition unless there is some management intervention or ground disturbance. The site is also likely to be under development pressure.

Review Schedule

Site selected: 2006 (PLoWS 6380/3)

Site Reviewed: 2016 (Unpubl.), upgraded to LoWS; 2022, no change.

Site reference: Th85

Site name: Hob Hill and Sandy Lane Pit, Chadwell St Mary

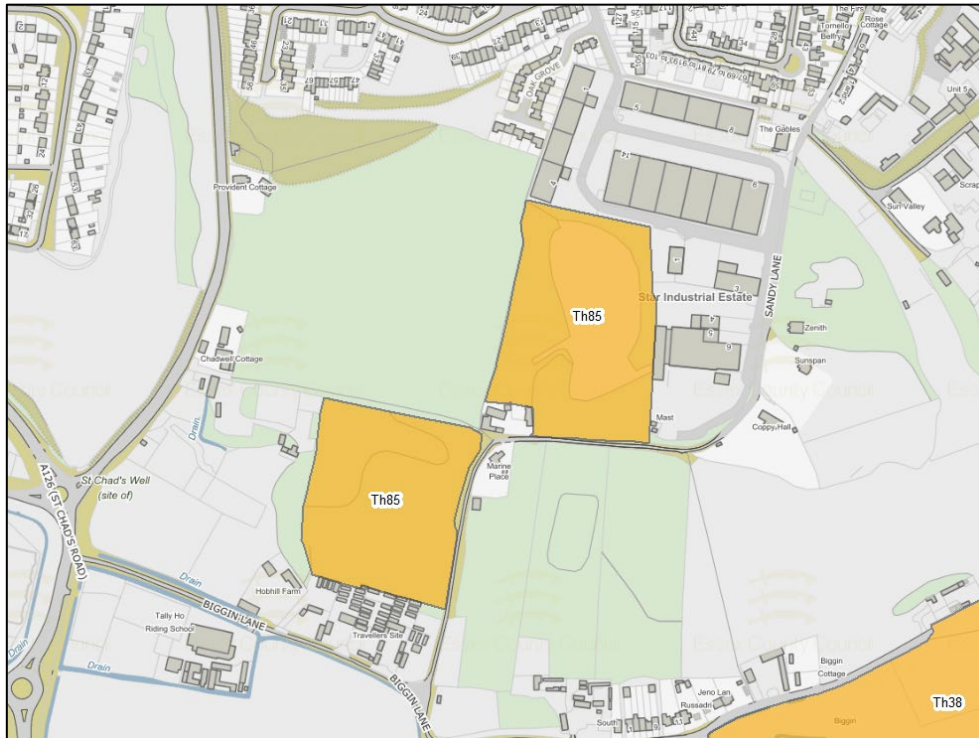
Grid ref. (approx. centre of site): TQ648780

Site area: 4.3ha

LoWS Selection Criteria:

- HC13 – Heathland and Acid Grassland
- HC27 – Open Mosaic Habitat on Previously Developed Land
- SC1 – Vascular Plants

Boundary Map



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Site Description

This site is in two parts with a common substrate and to some extent character. Hob Hill is a remnant of Thames Terrace grassland on a ridge of Thanet Sand, although the original landform has been modified by the creation and subsequent extension, in several stages, of the residential caravan site to the south, and other physical disturbance since the turn of the last century. Sandy Lane Pit is a 20th Century sand pit with a history of motorsport, which has recently become partially active again.

Hob Hill supports an acidic grassland sward including Common Bent (*Agrostis capillaris*), Sheep's Sorrel (*Rumex acetosella*), Rough Meadow-grass (*Poa trivialis*) and Yorkshire-fog (*Holcus lanatus*) with Common Vetch (*Vicia sativa*), Black Horehound (*Ballota nigra*), Common Cat's-ear (*Hypochaeris radicata*), Spotted Medick (*Medicago arabica*), Meadow Buttercup (*Ranunculus acris*), Bulbous Buttercup (*Ranunculus bulbosus*), Creeping Cinquefoil (*Potentilla reptans*) and Cut-leaved Crane's-bill (*Geranium dissectum*). Near the top of the hill, drought-prone conditions result in a more open sward that favours Common Stork's-bill (*Erodium cicutarium*), Parsley Piert (*Aphanes arvensis*), Bird's-foot (*Ornithopus perpusillus*), Hop Trefoil (*Trifolium campestre*), Knotted Clover (*Trifolium striatum*), Buck's-horn Plantain (*Plantago coronopus*), the Essex Red List species Changing Forget-me-not (*Myosotis discolor*), the Nationally Scarce Suffocated Clover (*Trifolium suffocatum*) and the Near Threatened Hoary Cinquefoil (*Potentilla argentea*).

Sandy Lane Pit has a less stable vegetation community set in patches of scrub, as it is prone to variable disturbance. Species present include Hare's-foot Clover (*Trifolium arvensis*), Common Bird's-foot-trefoil (*Lotus corniculatus*), Common Stork's-bill, Buck's-horn Plantain, Hop Trefoil, Sheep's Sorrel, Common Vetch, Meadow Buttercup, Common Cat's-ear, Spotted Medick, Narrow-leaved Ragwort (*Senecio inaequidens*), evening-primrose (*Oenothera* sp.), Bugloss (*Lycopsis arvensis*) and the Essex Red List species (*Myosotis discolor*).

Both parts of the site have features that suggest that they are likely to support a significant assemblage of invertebrates, although there is a lack of survey information. The pit supports a small colony of Sand Martins.

Site Selection Rationale

HC13 – Although Hob Hill may have been disturbed to such an extent that the original grassland community is not still present, it is still functionally acid grassland, as indicated by the mix of species present.

HC27 – Both parts of the site have been subject to development related disturbance, although Sandy Hill Pit is now more obviously post-industrial. The features necessary to consider the site as Priority habitat are all present.

SC1 – The populations of Suffocated Clover and Hoary Cinquefoil, both of national importance, are significant enough to apply this criterion.

Priority Habitats

Lowland Dry Acid Grassland

Open Mosaic Habitat on Previously Developed Land

Ownership and Access

The site is in private ownership with no public access, but a public right of way runs from Chadwell Hill beyond the northern boundary of Hob Hill and the western boundary of Sandy Lane Pit. The site can also be viewed from the public right of way along Sandy Lane and from other nearby public highways.

Condition Statement

Good, stable

Management Issues

The site is not managed for nature conservation outcomes and so it is vulnerable to land use changes, within and outside of the planning system. The current horse grazing of Hob Hill preserves the character of the grassland. Successional pressures apply across the site.

Review Schedule

Site selected: 2006 (PLoWS 6477/1 and 6478/1)

Site Reviewed: 2016 (Unpubl.), upgraded to LoWS; 2022, minor boundary change.

Site reference: Th87

Site name: Thurrock Thameside Nature Park, Mucking

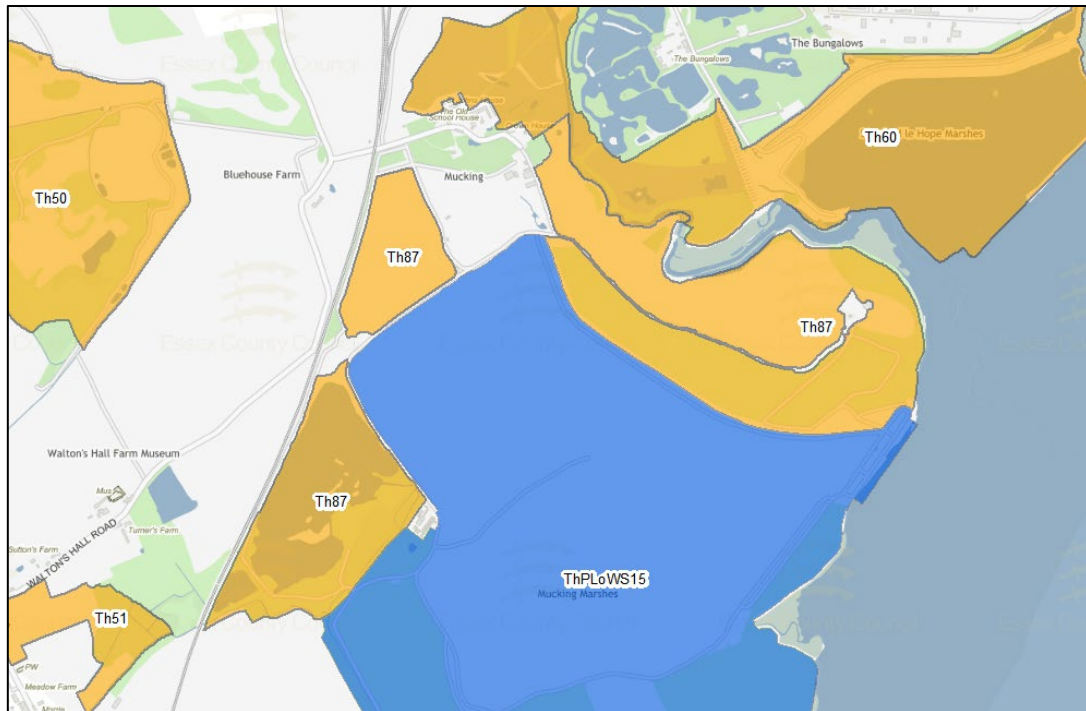
Grid ref. (approx. centre of site): TQ688804

Site area: 73.2ha

LoWS Selection Criteria:

- HC27 – Post-industrial Sites
- HC28 – Small-component Mosaics
- SC16 – Hotspots for Reptile Diversity
- SC19 – Important Invertebrate Assemblages

Boundary Map



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Site Description

This site comprises the current extent of the Thurrock Thameside Nature Park, located on the former Mucking landfill site, with a small section of Mucking Creek. The Mucking Flats and Marshes SSSI is adjacent to the Park, and the Th60 Mucking Creek LoWS is immediately to the north. The majority of the site consists of a combination of rough grassland and shorter, more open swards depending on the quality of the capping material used.

The rough grassland is dominated by False Oat-grass (*Arrhenatherum elatius*) and Common Couch (*Elytrigia repens*) with Hawkweed Ox-tongue (*Picris hieracioides*) and Teasel (*Dipsacus fullonum*). The shorter sward areas, including some that has been augmented with green hay, is more diverse with species such as Meadow Vetchling (*Lathyrus pratensis*), Common Knapweed (*Centaurea nigra*), Oxeye Daisy (*Leucanthemum vulgare*), Narrow-leaved Bird's-foot-trefoil (*Lotus tenuis*), Red Clover (*Trifolium pratense*), Cut-leaved Crane's-bill (*Geranium dissectum*), Black Medick (*Medicago lupulina*), Spotted Medick (*Medicago arabica*) and Hoary Cress (*Lepidium draba*). Bee Orchid (*Ophrys apifera*), Common Spotted Orchid (*Dactylorhiza fuchsii*), Pyramidal Orchid (*Anacamptis pyramidalis*) and the Essex Red List species Yellow Rattle (*Rhinanthus minor*) are also present.

The gravel pit lake, now known as Golden Gate Lake, has fringes of Bulrush (*Typha latifolia*) and Common Reed (*Phragmites australis*) with Common Spike-rush (*Eleocharis palustris*), Yellow Iris (*Iris pseudacorus*) and rushes (*Juncus* spp.) present on more open margins. Recent semi-natural woodland and scrub to the south and east of the lake includes willows (*Salix* spp.), Alder (*Alnus glutinosa*), Hawthorn (*Crataegus monogyna*), Blackthorn (*Prunus spinosa*), Sliver Birch (*Betula pendula*), Ash (*Fraxinus excelsior*) and Pedunculate Oak (*Quercus robur*).

The site supports significant populations of Adder, Common Lizard and Slow-worm, with Grass Snake also present. Survey information shows that the site supports an assemblage of invertebrates of at least regional

importance, include a number of nationally rare and scarce, and Priority species. The grassland habitat supports a substantial population of the Priority species Skylark.

Site Selection Rationale

HC27 – As a former landfill site, this criterion is applicable, with the features necessary for the identification of Priority open mosaic habitat present.

HC28 – This criterion is used to define the extent of the site, taking in those habitats that do not satisfy any individual habitat criteria, but that add to its overall diversity.

SC16 – Four species of reptile are present, with surveys indication good population numbers.

SC19 – Survey information suggests an assemblage of at least regional value.

Priority Habitats

Open Mosaic Habitat on Previously Developed Land

Ownership and Access

The site is owned and managed by Essex Wildlife Trust as a Nature Park.

Condition Statement

Good, stable

Management Issues

The site is under management for nature conservation, with action being aimed at identified habitat and species priorities. The impact of public access on such a popular site will need to be monitored.

Review Schedule

Site selected: 1992 (lake only as FW4)

Site Reviewed: 2006 (lake only as Th55); 2016 (Unpubl.), expanded to cover Nature Park; 2022, disturbed grassland removed.

Site reference: Th88

Site name: St Catherine's Churchyard, East Tilbury

Grid ref. (approx. centre of site): TQ689769

Site area: 0.37ha

LoWS Selection Criteria:

- HC11 – Other Neutral Grassland

Boundary Map



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Site Description

This small churchyard supports grassland that has not received any systematic agricultural improvement and supports some key plant species.

The grassland sward includes Red Fescue (*Festuca rubra*), Common Bent (*Agrostis capillaris*), meadow-grass (*Poa* sp.) and Cock's-foot (*Dactylis glomerata*). Other species present include Smooth Hawk's-beard (*Crepis capillaris*), Creeping Cinquefoil (*Potentilla reptans*), Barren Strawberry (*Potentilla sterilis*), Prickly Sedge (*Carex muricata* ssp. *pairae*) and Lady's Bedstraw (*Galium verum*). Populations of the nationally Near Threatened Wild Clary (*Salvia verbenaca*) and the Nationally Scarce and Great Britain Vulnerable Lesser Calamint (*Clinopodium calamintha*) are also present.

Site Selection Rationale

HC11 – The grassland community does not match any of the vegetation types that would qualify it as Priority habitat, but it is clearly of ecological value by virtue of the nationally significant species it supports.

Priority Habitats

None

Ownership and Access

The site is in private ownership with no public access but can be viewed from the nearby Whitehouse Road.

Condition Statement

Moderate, stable

Management Issues

The churchyard is managed for reasons other than nature conservation and so the cutting regime is not currently ideal to maximise diversity.

Review Schedule

Site selected: 2006 (PLoWS 6876/1)

Site Reviewed: 2016 (Unpubl.), upgraded to LoWS; 2022, minor change (church building removed).

Site reference: Th89

Site name: Tilbury Riverfront, East Tilbury

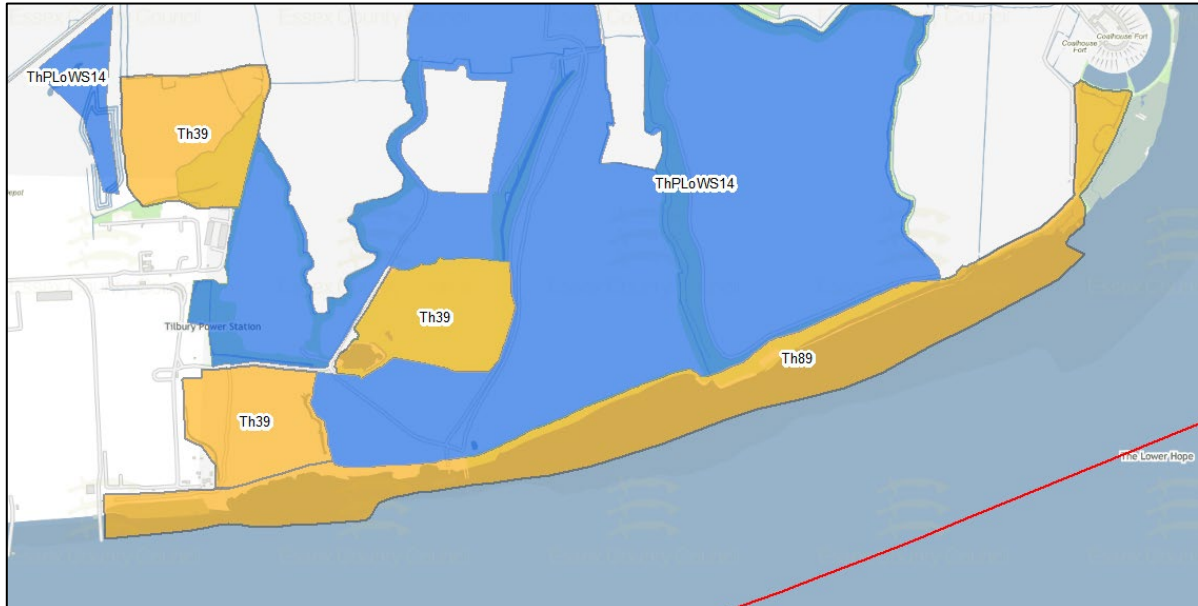
Grid ref. (approx. centre of site): TQ677757

Site area: 52.0ha

LoWS Selection Criteria:

- HC23 – Saltmarsh and Mudflats
- HC27 – Post-industrial Sites

Boundary Map



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Site Description

This site takes in the intertidal habitats between the site of the former Tilbury power station in the west and the Mucking Flats and Marshes SSSI to the east. It also includes the coastal strip, which consists of a mosaic of rough grassland, scrub and open mosaic habitats, all subject to a varying degree on the development history of the area.

At the eastern end, behind the seawall but subject to tidal flooding, is an upper saltmarsh community in transition to rough grassland. At the drier end, the grassland consists of Creeping Bent (*Agrostis stolonifera*), False Oat-grass (*Arrhenatherum elatius*), Sea Couch (*Elytrigia atherica*), Meadow Barley (*Hordeum secalinum*) and Red Fescue (*Festuca rubra*), with Creeping Cinquefoil (*Potentilla reptans*), Wild Carrot (*Daucus carota*), Common Vetch (*Vicia sativa*) and Hoary Ragwort (*Jacobaea erucifolia*). On the margin of the saltmarsh are Sea Beet (*Beta maritima*), Grass-leaved Orache (*Atriplex littoralis*) and Sea Rush (*Juncus maritimus*). Lower lying areas and the margins of drains support Annual Seablite (*Suaeda maritima*), Sea Aster (*Aster tripolium*), Saltmarsh Rush (*Juncus gerardii*), Sea Club-rush (*Bolboschoenus maritimus*) and glasswort (*Salicornia* sp.). The Nationally Scarce Divided Sedge (*Carex divisa*), Sea Barley (*Hordeum marinum*), Saltmarsh Goosefoot (*Chenopodium chenopodioides*) and Annual Beard-grass (*Polypogon monspeliensis*) are also present.

To the west is an area of saltmarsh outside of the seawall, containing Sea Couch, Sea-purslane (*Atriplex portulacoides*) and Common Saltmarsh-grass (*Puccinellia maritima*) with Sea Aster, Sea Arrowgrass (*Triglochin maritima*), Greater Sea-spurrey (*Spergularia media*), Sea Plantain (*Plantago maritima*), Annual Seablite, cord-grass (*Spartina* sp.), Saltmarsh Rush and the Nationally Scarce Golden-samphire (*Inula crithmoides*).

The coastal strip west to the power station site supports a varied vegetation, with areas of exposed substrate, including a low chalk cliff towards the western end. Plant species include Wormwood (*Artemisia absinthium*), Wild Carrot, Hawkweed Oxtongue (*Picris hieracioides*), Narrow-leaved Bird's-foot-trefoil (*Lotus tenuis*), Grass Vetchling (*Lathyrus nissolia*), Fennel (*Foeniculum vulgare*), and the Nationally Scarce Dittander (*Lepidium latifolium*). The Nationally Rare and Endangered Stinking Goosefoot (*Chenopodium vulvaria*), which is legally protected, is also known to be present.

Although records are lacking, the combination of habitats and features within this site suggest that it is likely to support a diverse invertebrate assemblage, especially given the known status of adjacent and nearby habitats.

Site Selection Rationale

HC23 – Intertidal habitats with semi-natural vegetation qualify as Priority habitat.

HC27 – Parts of the site demonstrate open mosaic habitat that meets the Priority habitat description, and there is a history of development, largely related to waste management.

Priority Habitats

Coastal Saltmarsh

Intertidal Mudflats

Open Mosaic Habitat on Previously Developed Land

Ownership and Access

Although parts are believed to be in private ownership, the eastern section is owned by Thurrock Council and the site is accessible via the England Coast Path.

Condition Statement

Moderate, stable

Management Issues

The terrestrial parts of the site are subject to successional pressures and are also vulnerable to further development activity.

Review Schedule

Site selected: 2016 (Unpubl.) (part)

Site Reviewed: 2022, significant extension.

Site reference: Th90

Site name: Lodge Hall Shaw, Langdon Hills

Grid ref. (approx. centre of site): TQ694852

Site area: 1.1ha

LoWS Selection Criteria:

- HC2 – Lowland Mixed Deciduous Woodland on Non-Ancient Sites

Boundary Map



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Site Description

This small, linear woodland has a canopy of Pedunculate Oak (*Quercus robur*) and Ash (*Fraxinus excelsior*) with an understorey of Field Maple (*Acer campestre*), Hawthorn (*Crataegus monogyna*), Blackthorn (*Prunus spinosa*), Crab Apple (*Malus sylvestris*), Holly (*Ilex aquifolium*), Wild Cherry (*Prunus avium*) and Elder (*Sambucus nigra*).

The ground flora includes Bluebell (*Hyacinthoides non-scripta*), Dog's Mercury (*Mercurialis perennis*), Bramble (*Rubus fruticosus* agg.), Greater Stitchwort (*Stellaria holostea*), Red Campion (*Silene dioica*), Cow Parsley (*Anthriscus sylvestris*), Wood Dock (*Rumex sanguineus*), Common Ivy (*Hedera helix*), Remote Sedge (*Carex remota*) and False Brome (*Brachypodium sylvaticum*). Primrose (*Primula vulgaris*) is also understood to be present.

Site Selection Rationale

HC2 – There is no evidence to suggest that this woodland is Ancient, although it may benefit from the proximity of Northlands Wood, now part of the Langdon Ridge SSSI, to the north. It does have an appropriate structure and composition to be considered Priority woodland habitat.

Priority Habitats

Lowland Mixed Deciduous Woodland

Ownership and Access

The site is in private ownership with no public access but can be viewed from the public right of way beyond its northern boundary.

Condition Statement

Moderate, stable

Management Issues

The woodland is not managed for nature conservation outcomes and so will decline over time without some intervention.

Review Schedule

Site selected: 2006 (PLoWS 6985/5)

Site Reviewed: 2016 (Unpubl.), upgraded to LoWS; 2022, no change.

Site reference: Th92

Site name: Kennington Park, Aveley

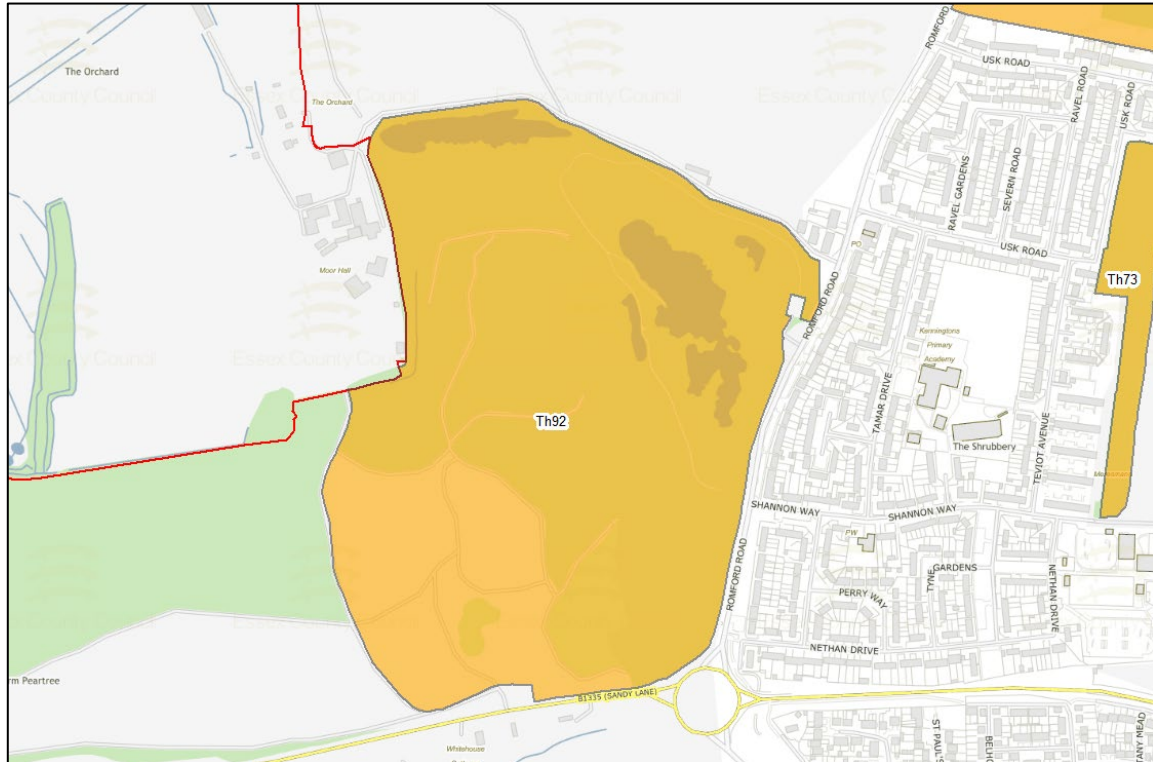
Grid ref. (approx. centre of site): TQ558811

Site area: 33.0ha

LoWS Selection Criteria:

- HC28 – Small-component Mosaics
- HC31 – Accessible Natural Greenspace

Boundary Map



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Site Description

This site is a former clay pit and landfill site, part of which has already been made into a public open space as part of Thames Chase Community Forest, with the remainder due to be added at a later date. The habitats present include lakes (used for fishing), ponds, secondary woodland, scrub and grassland, with some more mosaics in the more recently disturbed area.

The woodland component consists of Pedunculate Oak (*Quercus robur*), Silver Birch (*Betula pendula*), Wild Cherry (*Prunus avium*), Alder (*Alnus glutinosa*) and Rowan (*Sorbus aucuparia*) with Hawthorn (*Crataegus monogyna*), Blackthorn (*Prunus spinosa*), Hazel (*Corylus avellana*), rose (*Rosa* agg.) and Wayfaring-tree (*Viburnum lantana*) scrub. Woodland ground flora species include Wood Avens (*Geum urbanum*), False Brome (*Brachypodium sylvaticum*), Male Fern (*Dryopteris filix-mas*), Pendulous Sedge (*Carex pendula*) and Giant Horsetail (*Equisetum telmateia*) with Bramble (*Rubus fruticosus* agg.) and Common Ivy (*Hedera helix*).

The lakes support fringing Sallow (*Salix cinerea*) with Common Reed (*Phragmites australis*), Great Willowherb (*Epilobium hirsutum*), Water Dock (*Rumex hydrolapathum*) and Gipsywort (*Lycopus europaeus*), with Yellow Water-lily (*Nuphar lutea*) and White Water-lily (*Nymphaea alba*).

The grassland areas are variable, but include Crested Dog's-tail (*Cynosurus cristatus*), Common Bent (*Agrostis capillaris*), Red Fescue (*Festuca rubra*), Meadow Barley (*Hordeum secalinum*) and Yorkshire-fog (*Holcus lanatus*) with Lady's Bedstraw (*Galium verum*), Agrimony (*Agrimonia eupatoria*), Common Knapweed (*Centaurea nigra*), Common Bird's-foot-trefoil (*Lotus corniculatus*), Oxeye Daisy (*Leucanthemum vulgare*), Common Fleabane (*Pulicaria dysenterica*), Wild Carrot (*Daucus carota*), Hoary Ragwort (*Jacobaea erucifolia*), Hawkweed Oxtongue (*Picris hieracioides*), Smooth Tare (*Vicia tetrasperma*), Common Vetch (*Vicia sativa*), Meadow Vetchling (*Lathyrus pratensis*), Hard Rush (*Juncus inflexus*) and the Near Threatened Field Scabious (*Knautia arvensis*). A population of the nationally Scarce Dittander (*Lepidium latifolium*) is also present.

Site Selection Rationale

HC28 – Most of the habitats present are young and so do not meet the appropriate standard against their individual criteria. However, as a whole, there is substantial nature conservation benefit in an otherwise built-up landscape.

HC31 – Access to semi-natural public open space, especially those with a more diverse and natural composition, is important to local communities, and this is a good example of public open space.

Priority Habitats

None

Ownership and Access

Part of the site is open to public access as a country park, but the remainder – fenced off – is still in private ownership with no public access.

Condition Statement

Moderate, stable

Management Issues

Much of the grassland habitat within the open space part of the park is not receiving sufficient management pressure to maintain a diverse sward, with coarser species such as False Oat-grass (*Arrhenatherum elatius*) and Tall Fescue (*Schedonorus arundinacea*) becoming locally dominant. The spread of scrub, especially Blackthorn and rose, is another threat to the maintenance of open grassland within the site's habitat mosaic. Fishing is not a beneficial land use for nature conservation.

Review Schedule

Site selected: 2016 (Unpubl.) (ThPLoWS2)

Site Reviewed: 2022, promoted to LoWS.

Site reference: Th93

Site name: Fanns Farm, Purfleet

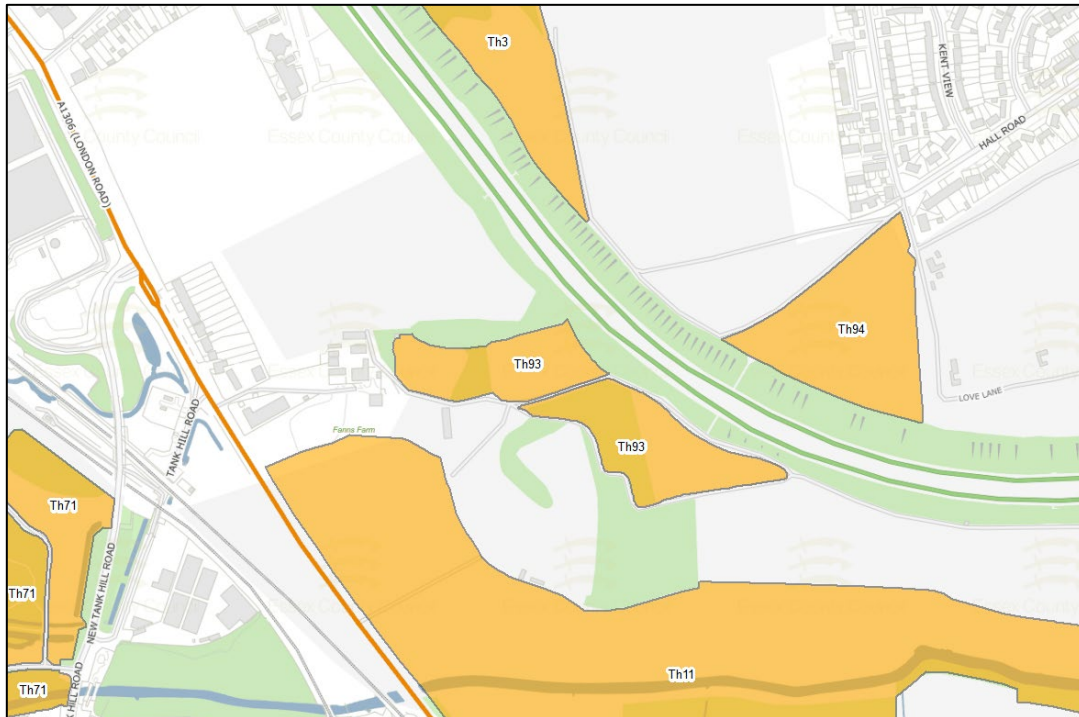
Grid ref. (approx. centre of site): TQ557793

Site area: 3.3ha

LoWS Selection Criteria:

- HC13 Heathland and Acid Grassland

Boundary Map



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Site Description

This site comprises old acid grassland habitat on the northern slope of the Mardyke Valley that appears to have largely escaped agricultural improvement.

The sward includes Common Bent (*Agrostis capillaris*), Red Fescue (*Festuca rubra*) and Smaller Cat's-tail (*Phleum bertolonii*) with Sheep's Sorrel (*Rumex acetosella*), Common Knapweed (*Centaurea nigra*), Buck's-horn Plantain (*Plantago coronopus*), Lady's Bedstraw (*Galium verum*), Agrimony (*Agrimonia eupatoria*), Red Bartsia (*Odontites vernus*), Hop Trefoil (*Trifolium campestre*), Thyme-leaved Sandwort (*Arenaria serpyllifolia*), Common Stork's-bill (*Erodium cicutarium*), Hawkweed Oxtongue (*Picris hieracioides*), Perforate St John's-wort (*Hypericum perforatum*) Viper's-bugloss (*Echium vulgare*), and the Near Threatened Common Cudweed (*Filago germanica*).

Site Selection Rationale

HC13 – The plant community present corresponds to an acid grassland community that qualifies it as Priority habitat.

Priority Habitats

Lowland Dry Acid Grassland

Ownership and Access

The site is in private ownership with no public access but can be viewed from a public right of way through the middle of the site.

Condition Statement

Moderate, stable

Management Issues

The site is not managed for nature conservation outcomes, but the horse grazing that it receives is sufficient to retain its character and diversity.

Review Schedule**Site selected:** 2006 (as part of Th3)**Site Reviewed:** 2022, separated from Th3.

Site reference: Th94

Site name: Love Lane Pasture, Aveley

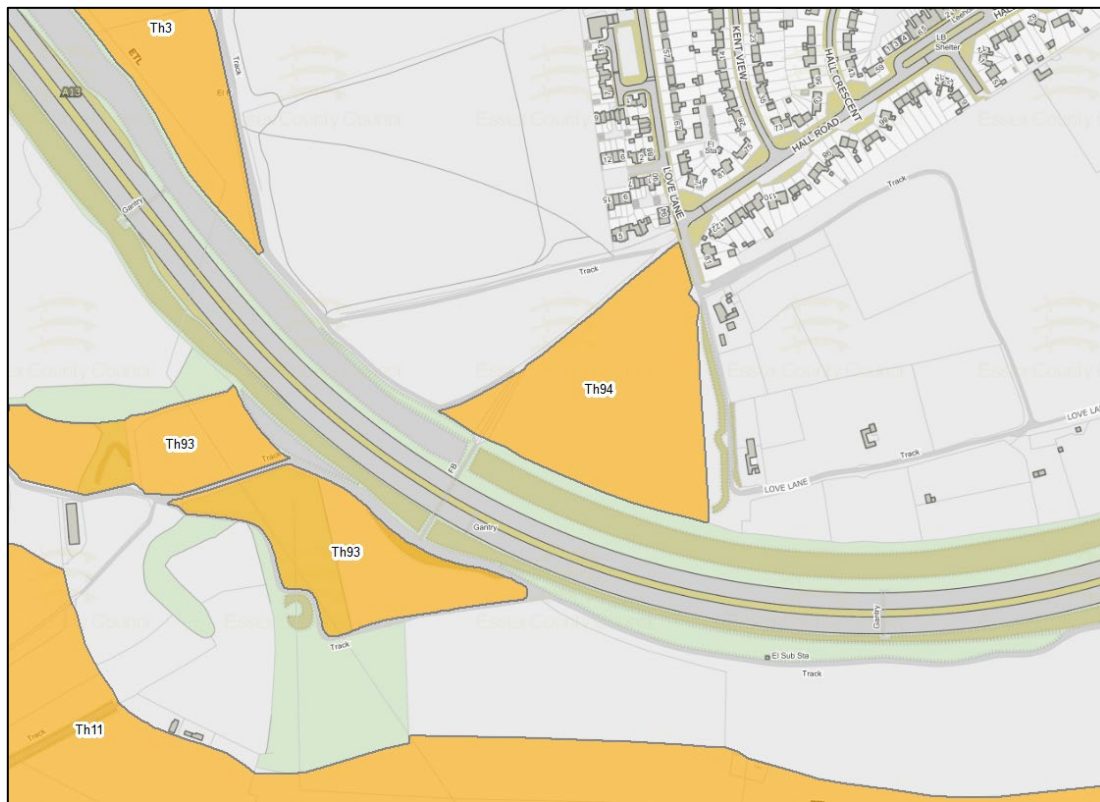
Grid ref. (approx. centre of site): TQ560794

Site area: 2.8ha

LoWS Selection Criteria:

- HC13 – Heathland and Acid Grassland

Boundary Map



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Site Description

There is no evidence to suggest that this pasture, on a plateau overlooking the Mar Dyke valley, has ever been agriculturally improved to any great extent and its free draining soils help to maintain an acid grassland community.

The very short, open sward consists of Common Bent (*Agrostis capillaris*) and Smaller Cat's-tail (*Phleum bertolonii*) with Sheep's Sorrel (*Rumex acetosella*), Hare's-foot Clover (*Trifolium arvense*), Autumn Hawkbit (*Scorzoneroides autumnalis*), Squirreltail Fescue (*Vulpia bromoides*) and the Near Threatened Common Cudweed (*Filago germanica*).

The site includes a small paddock to the west of the public footpath that has the same floral composition and in which the Near Threatened Hoary Cinquefoil (*Potentilla argentea*) has been recorded.

Site Selection Rationale

HC13 – The plant community present is a clear match for Priority habitat acid grassland.

Priority Habitats

Lowland Dry Acid Grassland

Ownership and Access

The site is in private ownership with no public access but can be viewed from the adjacent public right of way.

Condition Statement

Poor, stable

Management Issues

The site is very heavily horse-grazed, which inhibits the floristic diversity and abundance of the grassland community, but it is a land use that maintains the community's character.

Review Schedule

Site selected: 2022, promoted from ThPLoWS3

Site Reviewed: n/a

Site reference: Th95

Site name: East Tilbury Pit, East Tilbury

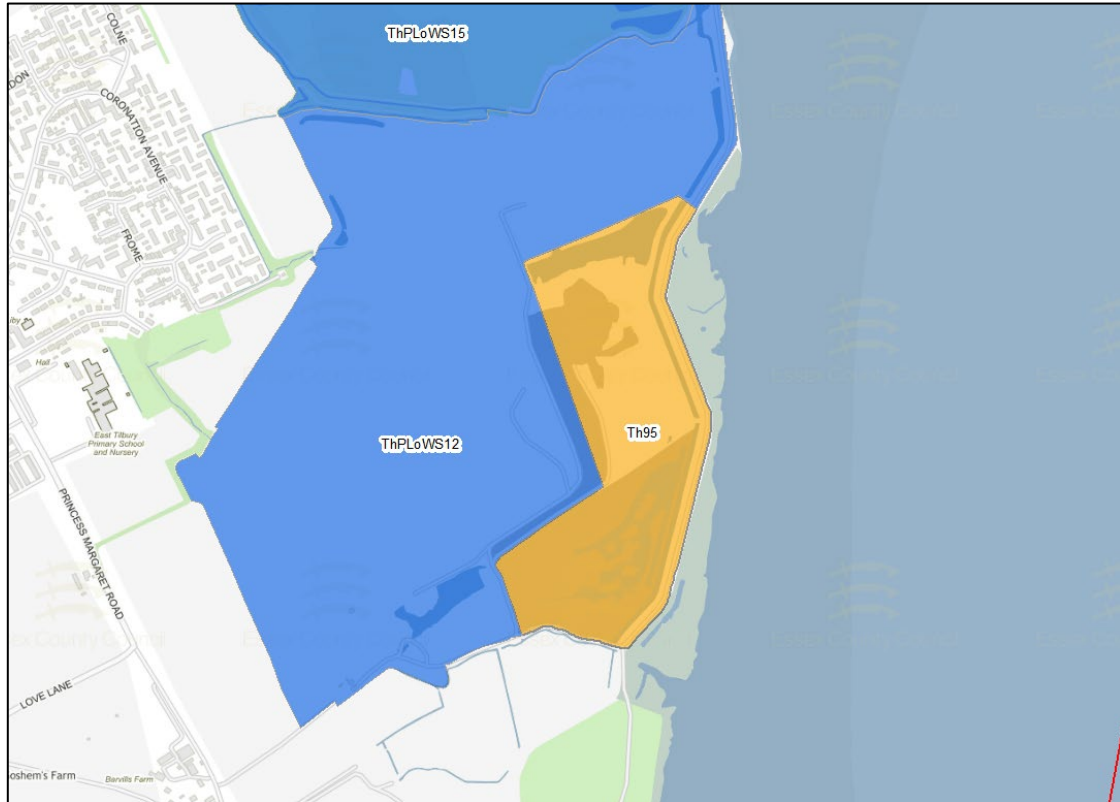
Grid ref. (approx. centre of site): TQ692782

Site area: 23.8ha

LoWS Selection Criteria:

- HC27 Post-industrial Sites
- SC5 – Notable Bird Species

Boundary Map



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Site Description

This site takes in a section of the former gravel pit and landfill site that now has an apparently stable, grassland vegetation together with a recently created scrape that is already serving as an extension to the adjacent Mucking Flats and Marshes SSSI by supporting wildfowl and waders during the autumn and winter. Also included is a section of seawall with a characteristically diverse flora and one of the flooded gravel workings.

The seawall sward includes Meadow Barley (*Hordeum secalinum*), Common Bent (*Agrostis capillaris*), Smaller Cat's-tail (*Phleum bertolonii*), Crested Dog's-tail (*Cynosurus cristatus*), Red Fescue (*Festuca rubra*), Soft-brome (*Bromus hordeaceus*) and meadow-grass (*Poa* sp.) with Grass Vetchling (*Lathyrus nissolia*), Meadow Vetchling (*Lathyrus pratensis*), Narrow-leaved Bird's-foot-trefoil (*Lotus tenuis*), Smooth Tare (*Vicia tetrasperma*), Red Clover (*Trifolium pratense*), Common Vetch (*Vicia sativa*), Meadow Buttercup (*Ranunculus acris*), Hoary Ragwort (*Jacobaea erucifolia*), Hawkweed Oxtongue (*Picris hieracioides*) and Hoary Cress (*Lepidium draba*).

In addition to migratory species, the scrape supports breeding Oystercatcher and Pochard have bred on the flooded pit. Populations of the Priority butterfly species Wall Brown and Small Heath are present along the seawall.

Site Selection Rationale

HC27 – The site has an industrial history and shows the features that qualify it as Priority open mosaic habitat.
SC5 – Although very new (having been created since 2020), the scrape is already in use by some of the species associated with the adjacent SSSI, providing fresh bathing and safe roosting opportunities.

Priority Habitats

Open Mosaic Habitats on Previously Developed Land

Ownership and Access

The site is in private ownership with no public access, but it can be viewed from the public right of way along the footpath.

Condition Statement

Moderate, stable

Management Issues

The strategy for the management of the site is unknown, but an appropriate regime will be needed to maintain its value for biodiversity.

Review Schedule

Site selected: 2006 (PLoWS 6978/3)

Site Reviewed: 2016 (Unpubl.), retained and expanded as ThPLoWS12; 2022, part promoted to LoWS.

Site reference: Th96

Site name: Stifford Road Paddocks, South Ockendon

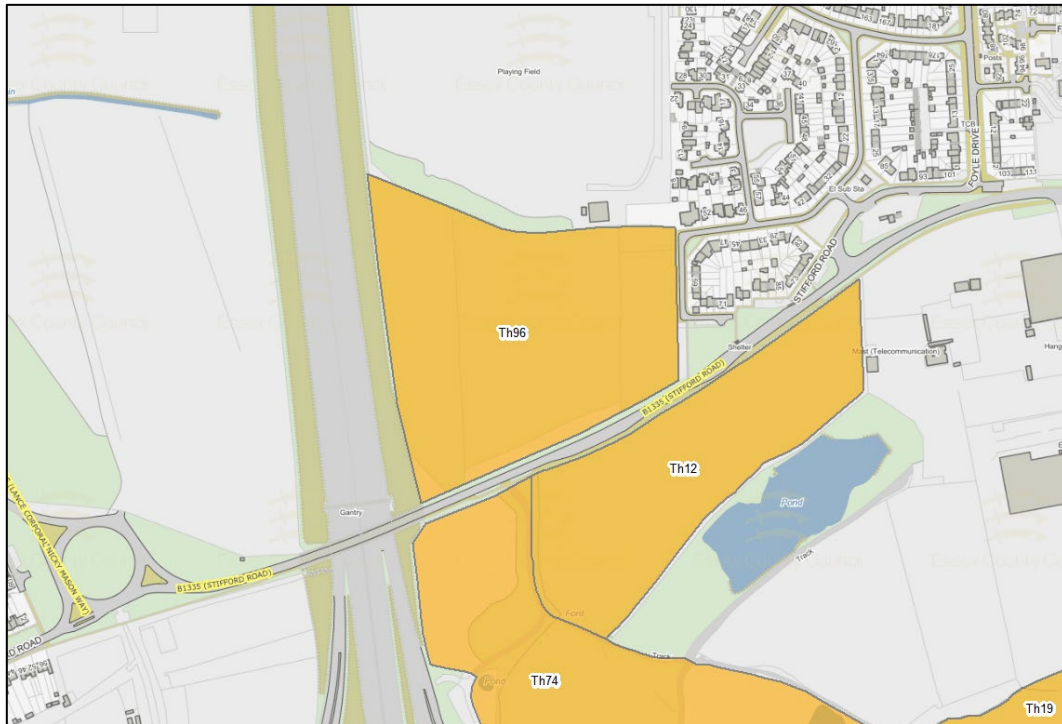
Grid ref. (approx. centre of site): TQ576806

Site area: 5.5ha

LoWS Selection Criteria:

- SC19 - Important Invertebrate Assemblages

Boundary Map



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Site Description

This is an old, poorly capped landfill site that is now divided into paddocks and used for grazing horses resulting in a close sward with limited floristic abundance and diversity. The site has some open mosaic features, but not sufficient for it to qualify as Priority Habitat.

The grassland habitats are unremarkable with typical species including Rough Meadow-grass (*Poa trivialis*), Meadow Barley (*Hordeum secalinum*), False Oat-grass (*Arrhenatherum elatius*), Common Nettle (*Urtica dioica*), Mallow (*Malva sylvestris*), Weld (*Reseda lutea*) and Greater Plantain (*Plantago major*). Scrub is established on the boundaries and thinly scattered within the grassland, and there are two mature Pedunculate Oak (*Quercus robur*) on the northern boundary.

Invertebrate surveys have demonstrated the presence of a significant assemblage, particularly associated with short sward, bare ground and scrub edge. A Pantheon analysis of species records gives a favourable condition for the 'rich flower resource' Species Assemblage Type and some of the species of raised conservation status show some association with calcareous grassland.

The species recorded in three Priority species: Hornet Robberfly (*Asilus crabroniformis*), Brown-banded Carder-bee (*Bombus humilis*) and the Phoenix Fly (*Dorycera graminum*). In addition, surveys have revealed the presence of more than 20 species with higher conservation statuses, including spiders, true bugs, beetles, bees, wasps and ants.

Site Selection Rationale

SC19 – Survey records demonstrate that the site supports a significant assemblage of invertebrates, including those with raised conservation status.

Priority Habitats

None

Ownership and Access

The site is in private ownership with no public access, but it can be viewed from Stifford Road to the south.

Condition Statement

Moderate, stable

Management Issues

The site is not managed for nature conservation and has planning consent for it to be re-capped and restored as a public open space. Although part of the site will be planted as woodland, the restoration plan includes some open mosaic features to mitigate for the impacts to invertebrates.

Review Schedule

Site selected: 2006 (PLoWS 5780/4)

Site Reviewed: 2016 (Unpubl.), retained as ThPLoWS5; 2022, promoted to full LoWS

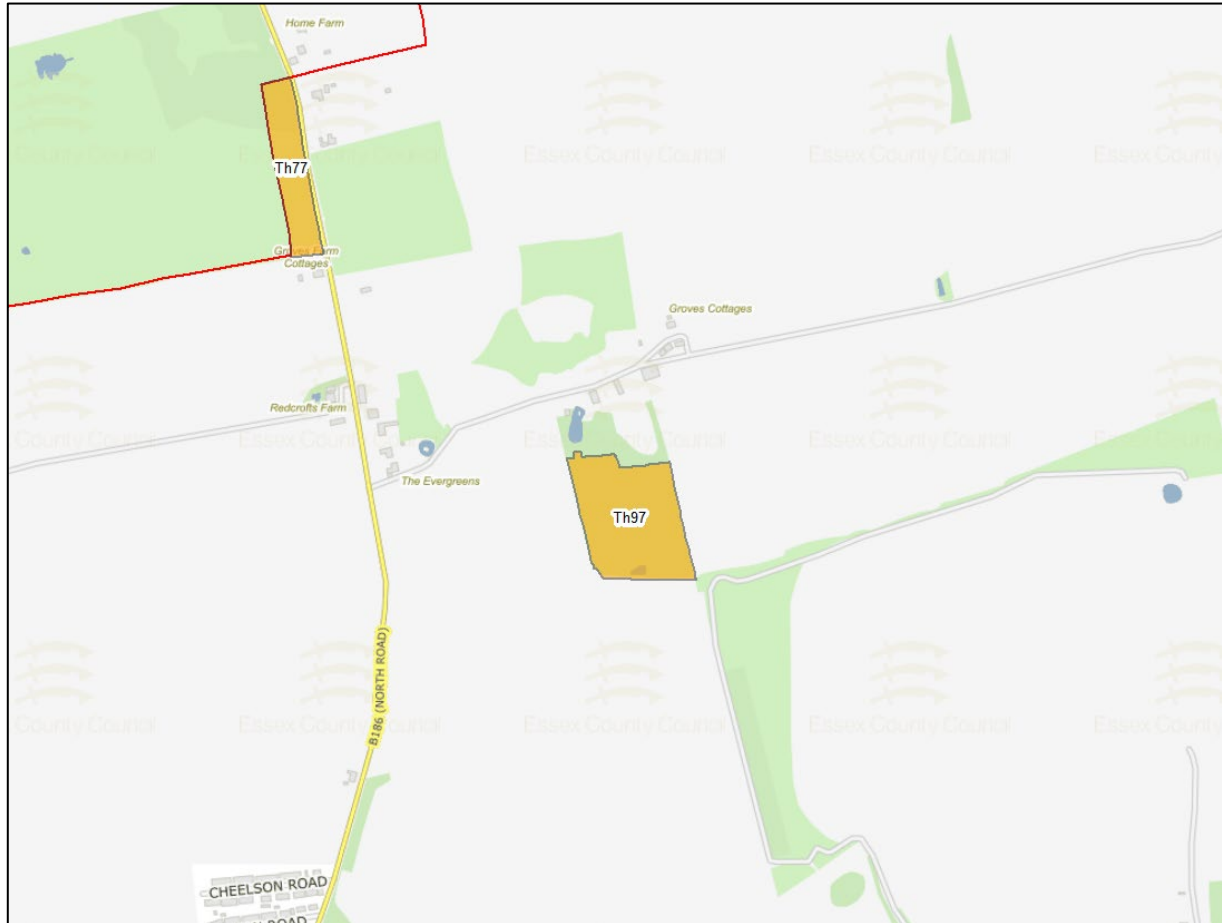
Site reference: Th97
Site name: The Wilderness

Grid ref. (approx. centre of site): TQ599839
Site area: 2.8ha

LoWS Selection Criteria:

- HC1 – Ancient Woodland Sites
- HC2 – Lowland Mixed Deciduous Woodland on Non-Ancient Sites

Boundary Map



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Site Description

This woodland site includes a strip of woodland along the southern edge that is considered to be Ancient Woodland together with a larger block of old woodland that is known not to be Ancient.

The woodland canopy includes Pedunculate Oak (*Quercus robur*), Ash (*Fraxinus excelsior*), and elm (*Ulmus* sp.). The ground flora includes abundant Bluebell (*Hyacinthoides non-scripta*), Cow Parsley (*Anthriscus sylvestris*), Red Campion (*Silene dioica*) and Solomon's-seal (*Polygonatum multiflorum*), which may or may not be native in this location.

Invertebrate surveys carried out in 2018 concluded that the site is of county importance for its invertebrate assemblage. Important habitat features noted in the survey report include dead wood, decay features in standing trees and wetland features associated with the manmade pond and associated watercourse. In total, sixteen invertebrate species of raised conservation status were recorded including spiders, beetles, true bugs and flies. The Priority butterfly species White-letter Hairstreak is present, utilising elm.

Site Selection Rationale

HC1 – a strip along the southern edge has been added to the Ancient Woodland Inventory recently based largely upon historic map evidence.

HC2 – The majority of the wood is known to have been established more recently but has developed a mature structure that meets the description of the Lowland Mixed Deciduous Woodland Priority habitat.

Priority Habitats

Lowland Mixed Deciduous Woodland

Ownership and Access

The site is in private ownership with no public access, but can viewed at a distance from North Road to the west.

Condition Statement

Moderate, stable

Management Issues

The site is used for Forest School activities, but little information is known about its recent management history or the presence of any negative indicators.

Review Schedule

Site selected: 2022

Site Reviewed: n/a

Thurrock Potential Local Wildlife Sites 2022

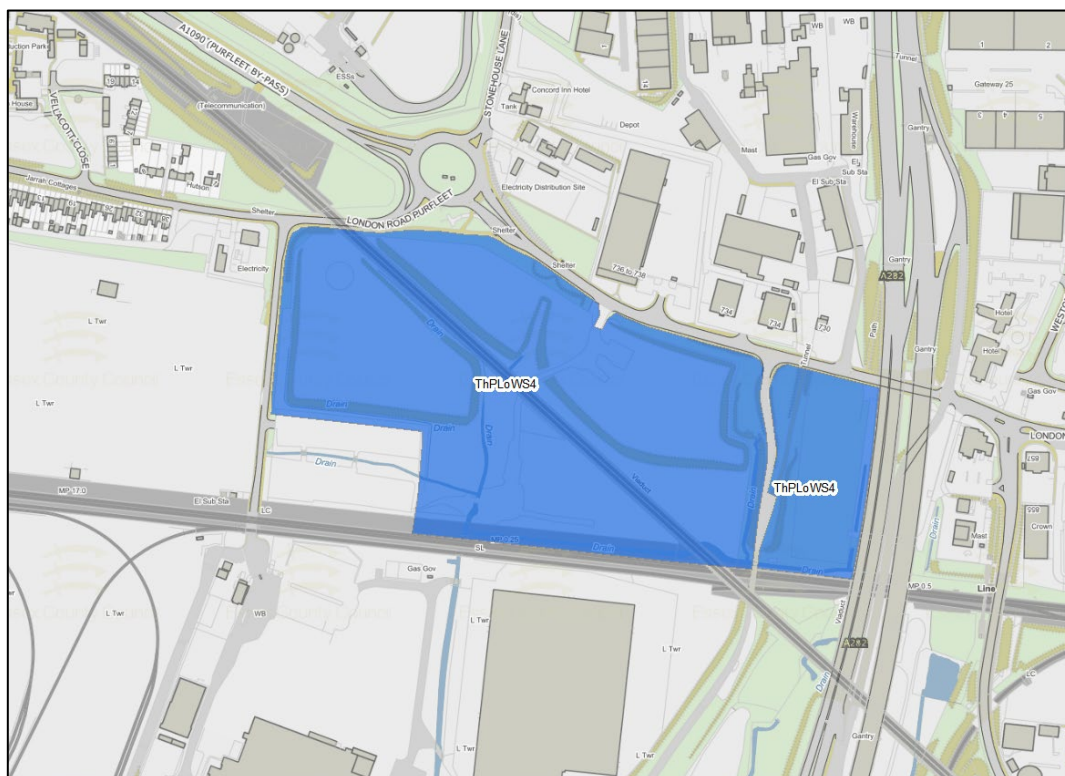
Site reference: ThPLoWS4

Site name: Purfleet Farm

Grid ref. (approx. centre of site): TQ571777

Site area: 11.7ha

Boundary Map



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Site Description

Purfleet Farm was the last remaining fragment of the original costal grazing marsh habitat in the Purfleet area but was heavily modified in the early 2000s during the construction of the HS1 railway viaduct that crosses it. The resulting grassland, wetland and open mosaic habitats were shown to support a diverse plant community, populations of reptiles and some invertebrates of conservation significance. The habitats in this site have been significantly impacted by permitted development again in recent years, which is ongoing, but the physical disturbance may result in surviving sections of habitat that could continue to provide biodiversity value. Once development work has been concluded, the site should be reassessed.

Ownership and Access

The site is in private ownership with no public access, but it can be viewed from London Road to the north.

Review Schedule

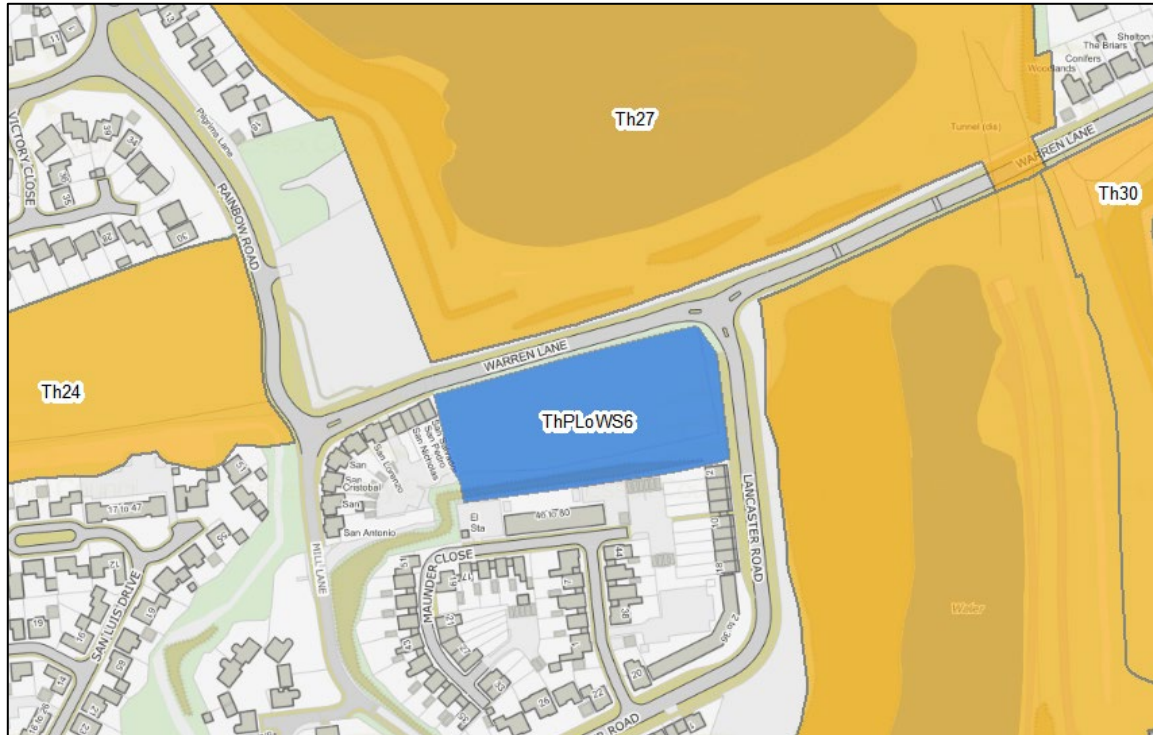
Site selected: 2006 (5777/1, 5777/2, 5777/4)

Site Reviewed: 2016 (as PLoWS4); 2022, southern developed section removed.

Site reference: ThPLoWS6
Site name: Warren Lane South

Grid ref. (approx. centre of site): TQ597787
Site area: 0.8ha

Boundary Map



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Site Description

This previously developed site supported flowery, rough grassland with some areas of acid grassland when it was selected as a LoWS in 2006 and was shown to support a range of invertebrates including some that were nationally or locally scarce. Since then, it has been unmanaged and has been taken over by scrub of low biodiversity value. The site would be suitable for restoration to open grassland with a program of scrub removal and regular management.

Ownership and Access

The site is in private ownership with no public access, but it can be viewed from Warren Lane.

Review Schedule

Site selected: 2006 (Th26)

Site Reviewed: 2016 (Unpubl.), demoted to ThPLoWS6; 2022, no change.

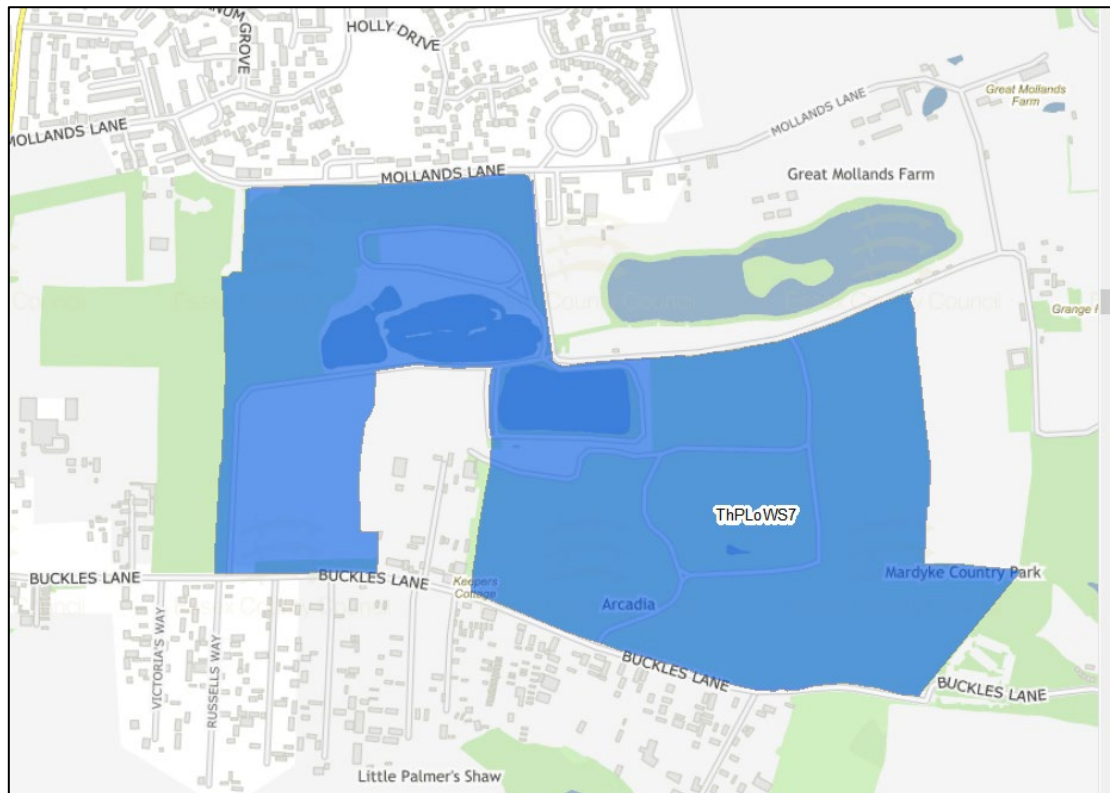
Site reference: ThPLoWS7

Site name: Buckles Lane, South Ockendon

Grid ref. (approx. centre of site): TQ600817

Site area: 47.2ha

Boundary Map



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Site Description

This is an extensive area of rough grassland and gravel pits, mostly within a former aggregates extraction site. The habitats present do not meet any of the selection criteria, but the site might support significant invertebrate or reptile assemblages. With appropriate management, habitats could be enhanced to meet the necessary grassland and open mosaic selection criteria thresholds.

The site is currently threatened by development for leisure activities.

Ownership and Access

The site is in private ownership with no public access, but it can be viewed from Mollands Lane and Buckles Lane.

Review Schedule

Site selected: 2006 (PLoWS 5981/1)

Site Reviewed: 2016 (Unpubl.), retained and extended as ThPLoWS7; 2022, no change.

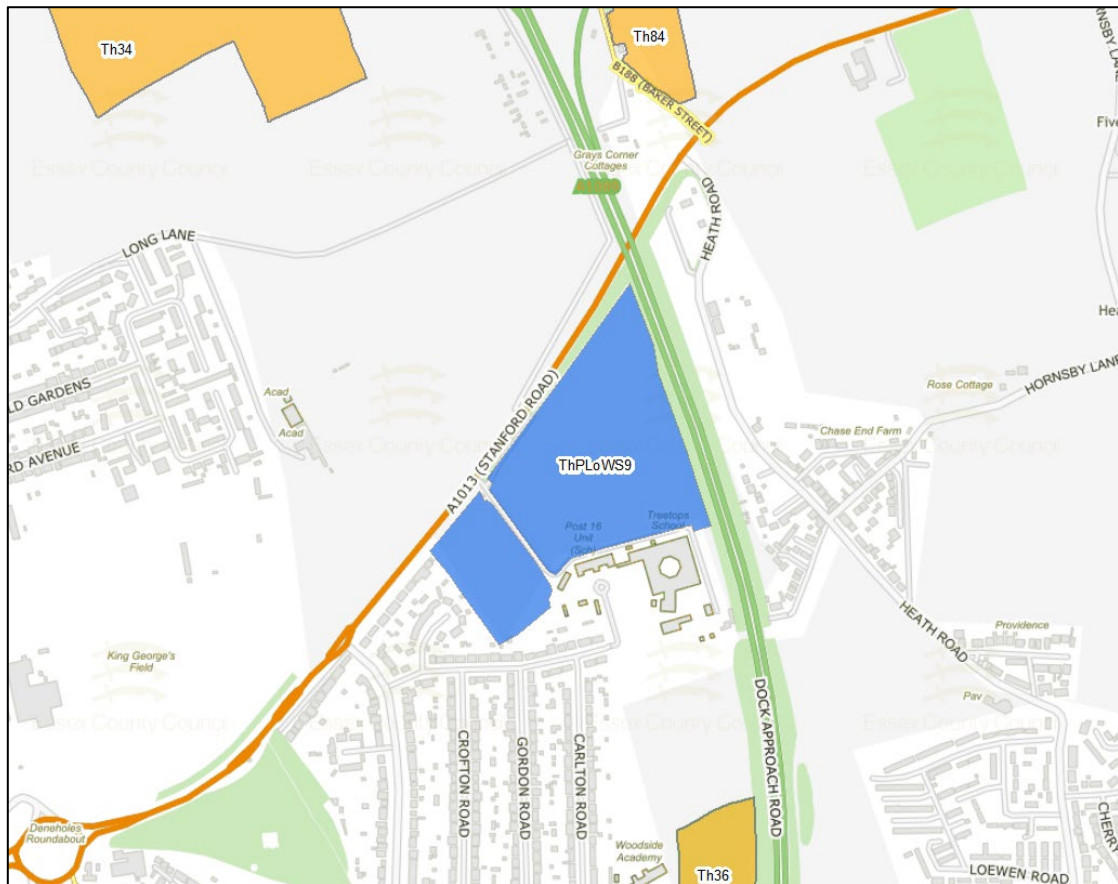
Site reference: ThPLoWS9

Site name: Treetops Paddocks, Little Thurrock

Grid ref. (approx. centre of site): TQ635798

Site area: 10.6ha

Boundary Map



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Site Description

This site consists of horse-grazed grassland with a mixed history that includes old, small-scale gravel extraction and arable cultivation. With limited available survey information, the grassland does not meet any of the habitat selection criteria, but it is located on Thames Terrace sands and gravels and so could support a significant invertebrate assemblage, including the Priority species Hornet Robberfly (*Asilus crabroniformis*). The soils could be suitable for a range of locally and nationally rare plants species and the grassland could be enhanced to improve its diversity with more appropriate management.

Ownership and Access

The site is in private ownership with no public access, but it can be viewed from Stamford Road.

Review Schedule

Site selected: 2016 (Unpubl.)

Site Reviewed: 2022, no change.

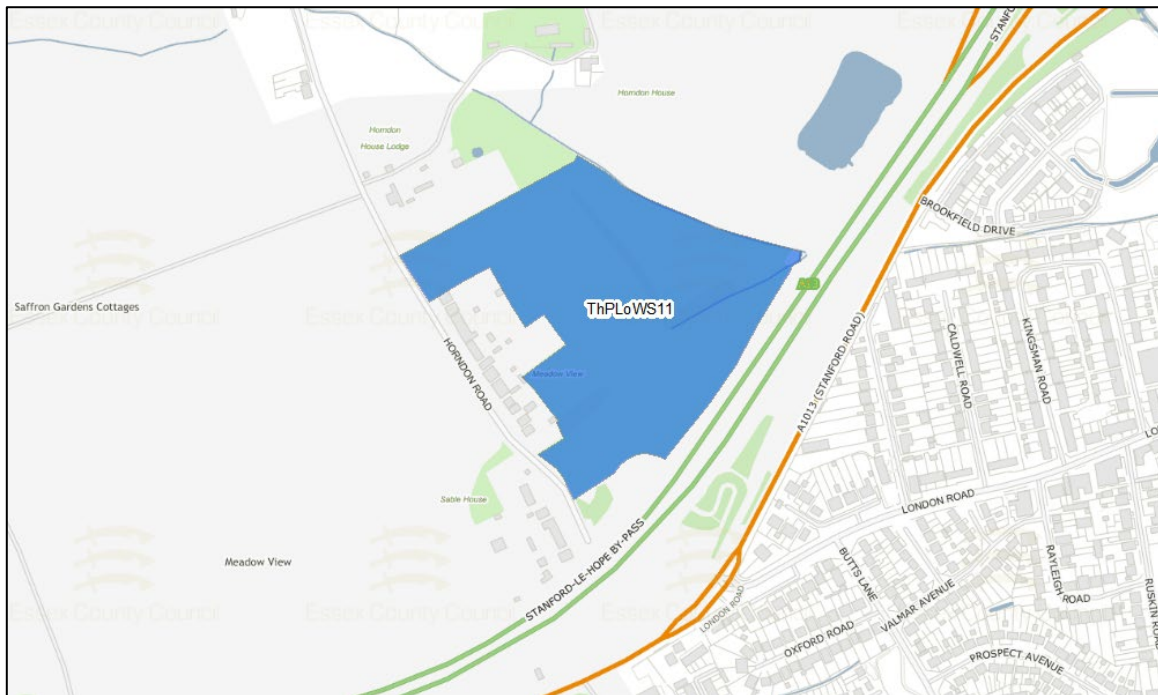
Site reference: ThPLoWS11

Site name: Horndon Road Grasslands

Grid ref. (approx. centre of site): TQ674823

Site area: 7.7ha

Boundary Map



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Site Description

This area of scrubby grassland has developed on land allowed to fall fallow. Although it doesn't meet any habitat criterion in its current condition, and there is a lack of survey information, it could have value to invertebrate populations and could be enhanced to provide more floristic diversity and abundance.

Ownership and Access

The site is in private ownership with no public access, but parts can be viewed from Horndon Road.

Review Schedule

Site selected: 2016 (Unpubl.)

Site Reviewed: 2022, no change.

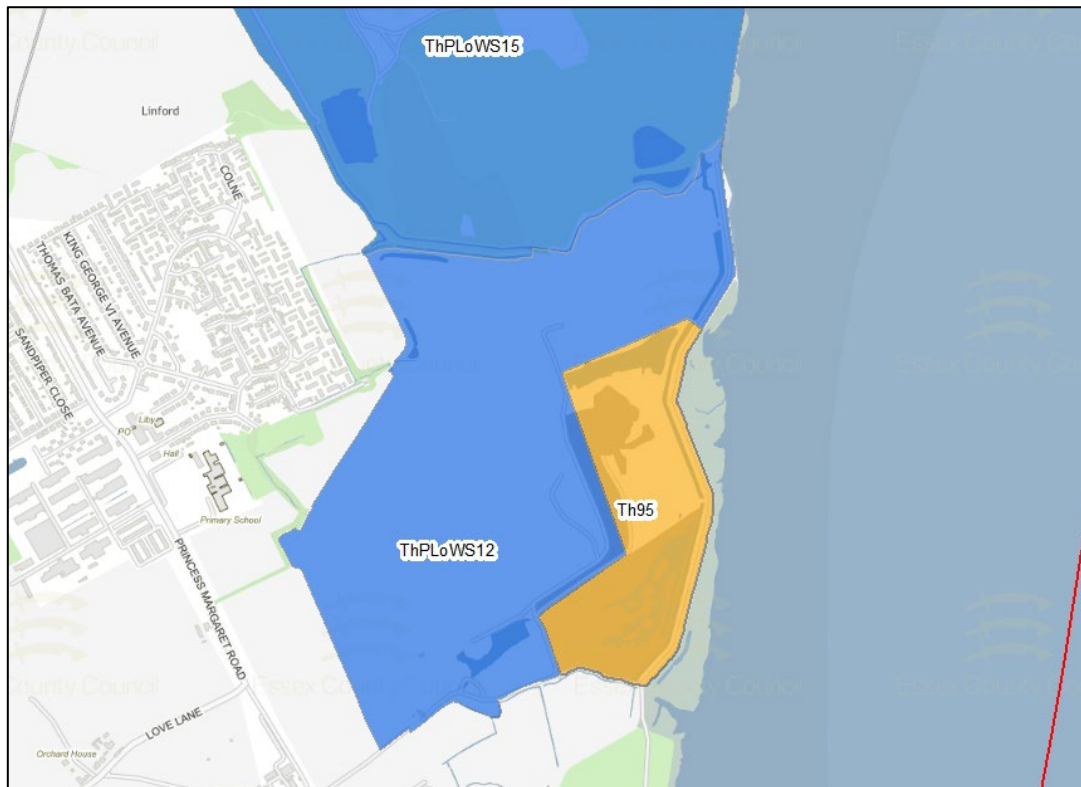
Site reference: ThPLoWS12

Site name: East Tilbury Landfill, East Tilbury

Grid ref. (approx. centre of site): TQ688784

Site area: 81.2ha

Boundary Map



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Site Description

This recently closed landfill site could be managed to create and maintain early successional conditions and grassland that would be of high biodiversity value, including for invertebrates, especially considering its place within the landscape. Restoration plans are not currently known.

Ownership and Access

The site is in private ownership with no public access, but it can be viewed from the public right of way along the seawall to the east.

Review Schedule

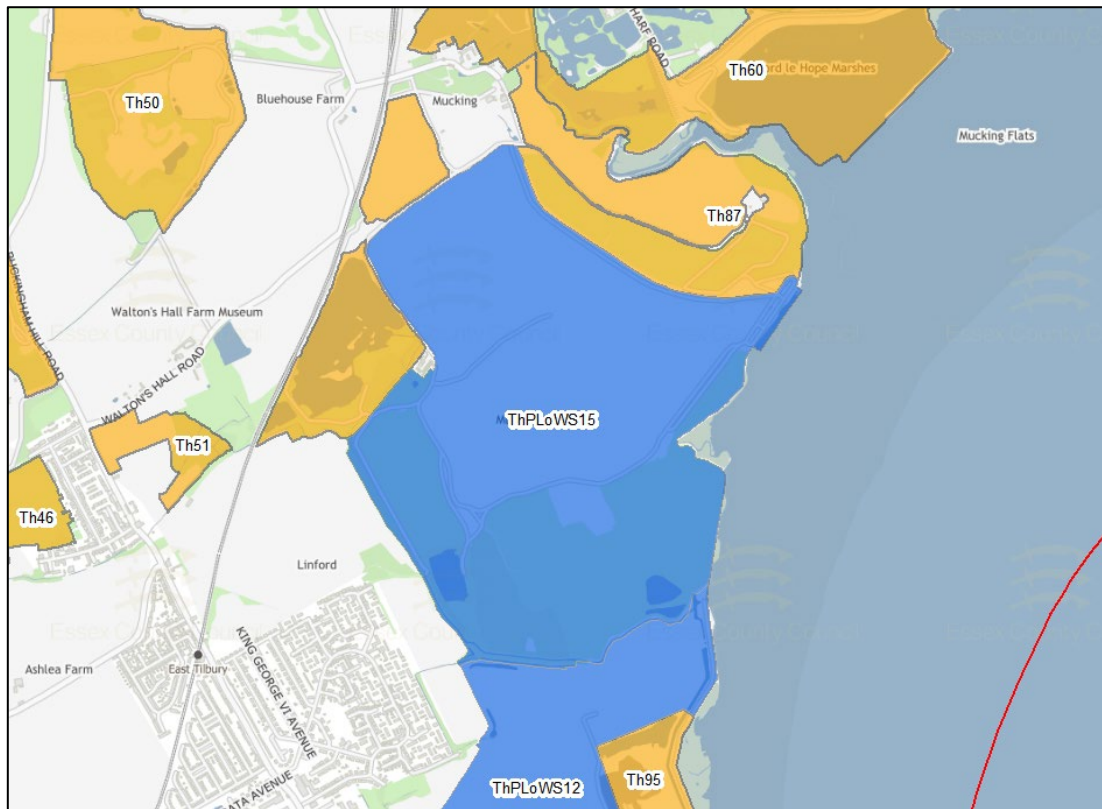
Site selected: 2006 (Part as PLoWS 6978/2)

Site Reviewed: 2016 (Unpubl.), retained as ThPLoWS12; 2022, boundary changes.

Site reference: ThPLoWS15
Site name: Mucking Landfill, Mucking

Grid ref. (approx. centre of site): TQ688798
Site area: 183.7ha

Boundary Map



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Site Description

This part of the landfill site is still operational and is being capped with a variety of materials that will result in a diversity of communities once restoration is complete. The resulting grassland habitats will extend those present in the adjacent Th87 Thurrock Thameside Nature Park, of which it is expected to become a part.

Ownership and Access

The site is in private ownership with no public access, but it can be viewed from Thurrock Thameside Nature Park.

Review Schedule

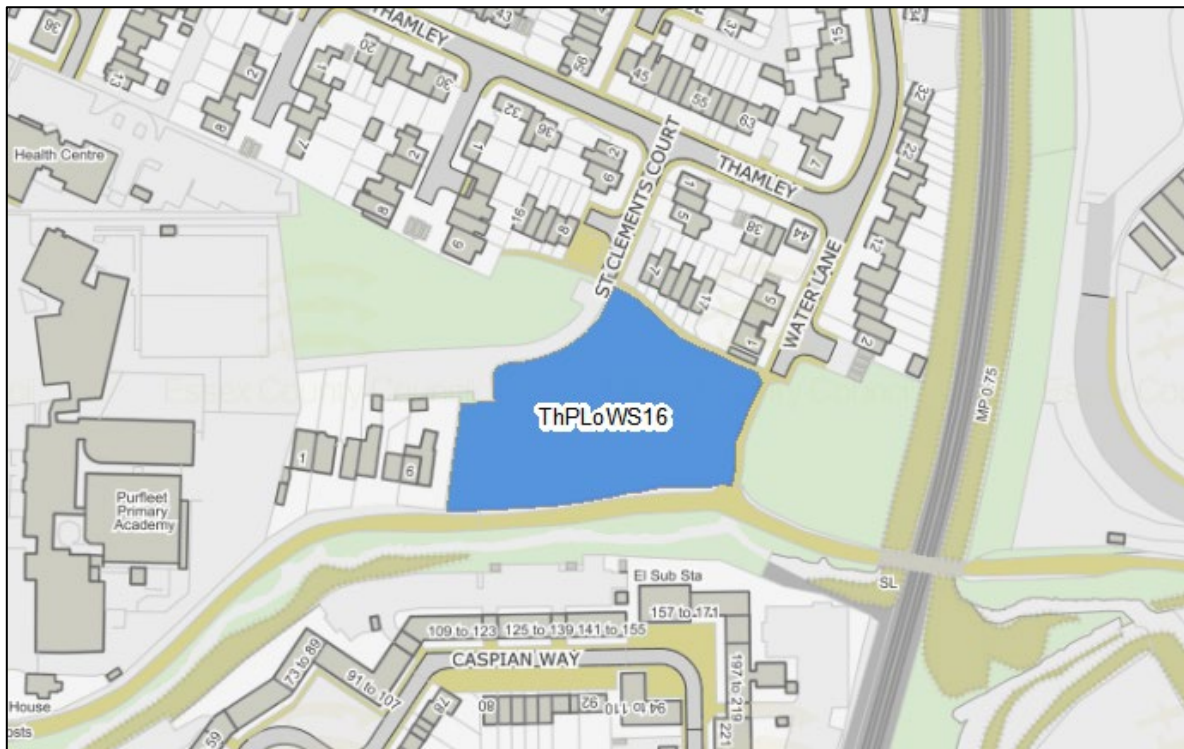
Site selected: 2022

Site Reviewed: -

Site reference: ThPLoWS16
Site name: Tank Lane, Purfleet

Grid ref. (approx. centre of site): TQ553786
Site area: 0.4ha

Boundary Map



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Site Description

This site supports a remnant of unimproved grassland on a chalk substrate that has now been invaded by scrub to such an extent that little open habitat remains, and the more noteworthy plant species are no longer present. Survey work had shown an important assemblage of invertebrates, but the conditions are no longer suitable.

However, with appropriate management, such as the clearance of scrub and a regular mowing regime, this decline could be reversed.

Ownership and Access

The site is in private ownership with no public access, but it can be viewed from adjacent footpaths.

Review Schedule

Site selected: 2006 (Th1)

Site Reviewed: 2016 (Unpubl.), woodland and scrub removed; 2022, demoted to PLoWS