APPENDIX B

GLOSSARY OF HLC TYPES

Here follows the complete list of HLC types used within the Essex HLC, arranged by Broad Group. The table below shows how the glossary is structured. The entries follow the format of the template below. For more detailed information on each HLC type and Broad Group please see Section 6 of the main report.

Report Group	HLC Broad Group Name	Broad Code	HLC Type codes
Enclosed Land	Pre-18th century enclosure 18th to 19th century enclosure 20th century agriculture Inland managed wetlands Miscellaneous Marginal	AEF LEF TEF IMW MIS MAR	ca, cf, df, ds, if, rf, sf le, pe, ps, bl, br, te mp, mw, wm mo rp
Open Land	Commons, Wastes, Heaths	CWH	cb, cm, gn, ht
Woodland	Woodlands	WDS	aw, wp
Parks and Gardens	Parks and gardens	PGR	ip, tl
Coastal	Coastal drained enclosure Coastal managed wetlands	CDF CMW	dc, dr mm, sa, ui
Settlements	Built-up areas - historic Built-up areas - modern	BUH BUM	ri, bh ba, hs, pl
Industrial	Mineral Industry	MIN IND	de, me, rl di, in
Horticulture	Horticulture	HOR	ag, at, ng
Military	Military	MIL	dm, ma, pm
Land use	Historic Water features Communications Miscellaneous Inland managed wetlands Coastal managed wetlands	EAR WAT COM MIS IMW CMW	he wr ap, mr, ww dd, rw, st wb ob

Report Group – Broad Group				
HLC type (Broad Group and type codes)				GIS Legend
Total Area:	Total area of HLC type in ha	% of total area of Essex mapped	**Relict Area:**	Total relict area of HLC type in ha	**Av. Polygon:**	Average size in ha
Polygons:	Number of GIS polygons	% of total polygons	**Relict Polygons:**	Number of GIS polygons	**Occurrence:**	Very rare (<1%) Rare (1-5%) Occasional (5-10%) Common (10-25%) Abundant (25-50%) Dominant (>50%)

Enclosed land – Pre-18th century enclosure

Pre-18th Century Unenclosed Common Arable (AEF-ca)

GIS Legend

Total Area:	289.61 ha	0.08%	**Relict Area:**	11650.71 ha	**Av. Polygon:** 11.58 ha
Polygons:	25	0.06%	**Relict Polygons:**	461	**Occurrence:** **Very rare**

Description:
These are former areas of arable which were held in common, traditionally farmed in strips with multi-ownership or tenancy, on a rotational system. They are usually associated with nucleated settlement, i.e. the classic Midland Field System. These fields are probably early medieval in origin, and remained in use until the 19th century. They are sometimes marked on the OS 1st Edition with pecked strips, or annotated on earlier maps as Common Fields, or named.

Pre-18th Century 'Co-axial' Enclosure (AEF-cf)

GIS Legend

Total Area:	2575.03 ha	0.7%	**Relict Area:**	6072.77 ha	**Av. Polygon:** 7.78 ha
Polygons:	331	0.78%	**Relict Polygons:**	260	**Occurrence:** **Very rare**

Description:
These form a distinctive boundary pattern of fields with roughly parallel boundaries, sinuous in form with irregular subdivisions, forming an irregular brick-like sequence. These cover large areas, often running up from a watercourse and across valleys. They are not dependent or reflective of topography. Woodlands may be a significant feature within the field pattern. It is thought these fields were predominantly grazing areas, hence their greater survival than arable fields. It is suggested that these fields date from the Anglo-Saxon or early medieval periods.

Dual-Axis Rectilinear 'Co-axial' Fields (AEF-df)

GIS Legend

Total Area:	19294.69 ha	5.22%	**Relict Area:**	24392.77 ha	**Av. Polygon:** 8.2 ha
Polygons:	2352	5.54%	**Relict Polygons:**	1337	**Occurrence:** **Occasional**

Description:
Dual-axis or 'Dengie-form' fields are similar to co-axial fields but exhibit dual axes, meaning their field boundaries run in two directions, roughly at right angles to each other. The fields are small & irregular in form, with corners being slightly offset, sinuous rather than geometrically regular. They usually run parallel with or across the contours of the land, despite the land being relatively flat. This type of field merges into co-axial or sinuous fields at the margins. Their period of origin is recognised as being old, but they are not of a single period. Some may be Roman or older in date, however, Rippon (1991) has argued that the particular concentrations in the Southend and Dengie peninsulas may have their origin in the middle to late Saxon period.

Dual-Axis Sinuous 'Co-axial' Fields (AEF-ds)

GIS Legend

Total Area:	1710.66 ha	0.46%	**Relict Area:**	2459.37 ha	**Av. Polygon:** 8.47 ha
Polygons:	202	0.48%	**Relict Polygons:**	156	**Occurrence:** **Very rare**

Description:
These fields are similar to co-axial fields but exhibit dual axes, meaning their field boundaries run in two directions, roughly at right angles to each other. The fields are small & irregular in form, with corners being slightly offset, sinuous in form in both directions. They usually run parallel with or across the contours of the land, despite the land being relatively flat. They are not as uniform in shape as dual-axis rectilinear (AEF-df) or co-axial (AEF-cf) types. Their period of origin is recognised as being old, but they are not of a single period. Some may be Roman or older in date, however, some may have their origin in the middle to late Saxon period (Rippon 1991).

Enclosed land – Pre-18th century enclosure

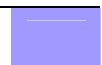## Pre-18th Century 'Irregular' Enclosure (AEF-if)

GIS Legend

Total Area:	65337.99 ha	17.69%	**Relict Area:**	73626.09 ha	**Av. Polygon:** 7.63 ha
Polygons:	8558	20.17%	**Relict Polygons:**	5286	**Occurrence:** Common

Description:

Irregular enclosures vary considerably in size and shape, forming both arable and pasture, and are widespread though more common to the north and west of the county. They are probably the result of piecemeal enclosure and may originate from the medieval period or earlier. Morphologically they tend to have sinuous edges and offset corners.

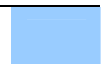## Rectilinear Enclosure (AEF-rf)

GIS Legend

Total Area:	20.04 ha	0.01%	**Relict Area:**	30.35 ha	**Av. Polygon:** 6.68 ha
Polygons:	3	0.01%	**Relict Polygons:**	3	**Occurrence:** Very rare

Description:

Small fields exhibiting a brick-like pattern, usually occurring in small pockets.

Pre-18th Century 'Irregular Sinuous' Enclosure (AEF-sf)

GIS Legend

Total Area:	10105.19 ha	2.74%	**Relict Area:**	7906.54 ha	**Av. Polygon:** 8.73 ha
Polygons:	1158	2.73%	**Relict Polygons:**	500	**Occurrence:** Rare

Description:

These fields have parallel edges which are sinuous, being in a similar orientation, but moving towards and away from each other, with short boundaries cutting across. They appear similar to co-axial fields, but without the parallel sides. Some are thought to be a variant form of co-axial field system, but may bear more relation to topography. Others may relate to former furlongs or common arable fields which also have a sinuous character.

Unimproved Rough Pasture (MAR-rp)

GIS Legend

Total Area:	33.34 ha	0.01%	**Relict Area:**	3.41 ha	**Av. Polygon:** 2.22 ha
Polygons:	15	0.04%	**Relict Polygons:**	2	**Occurrence:** Very rare

Description:

Rough ground as symbolised on First Edition or Modern OS maps, showing no visible signs of improvement. There are varying degrees of enclosure.

Enclosed land – 18th-19th century enclosure

## Piecemeal enclosure by agreement (LEF-le)

GIS Legend

Total Area:	33151.8 ha	8.97%	**Relict Area:**	24473.47 ha	**Av. Polygon:**	8.25 ha
Polygons:	4018	9.47%	**Relict Polygons:**	1282	**Occurrence:**	**Occasional**

Description:
These fields were created, by informal agreement, to subdivide a pre-existing earlier field system. They are characterised by straighter boundaries. This is a difficult form to consistently identify, as it may also comprise the enclosure of former waste, common, common arable or subdivision of various earlier enclosure patterns. Dating of origin is difficult but they usually predate the introduction of the later formal Parliamentary Enclosure Acts, and thus may relate in certain parishes to the earlier acts of enclosure.

Formal style Parliamentary Enclosure (LEF-pe)

GIS Legend
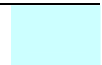
Total Area:	3616.4 ha	0.98%	**Relict Area:**	2032.30 ha	**Av. Polygon:**	10.8 ha
Polygons:	335	0.79%	**Relict Polygons:**	116	**Occurrence:**	**Very rare**

Description:
Formal style Parliamentary Enclosure is a rigorous rectilinear field system that has overwritten any prior landscape enclosure pattern, usually either prior common arable field, or former heathlands, or wastes, associated with the later Parliamentary Enclosure Acts.

Piecemeal style Parliamentary Enclosure (LEF-ps)

GIS Legend

Total Area:	5237.13 ha	1.42%	**Relict Area:**	1652.28 ha	**Av. Polygon:**	30.81 ha
Polygons:	170	0.45%	**Relict Polygons:**	57	**Occurrence:**	**Rare**

Description:
Piecemeal style Parliamentary Enclosure can include further subdivision of existing Formal style, or earlier enclosure of former common land. These types are characterised by regular, rectangular fields, often with contemporary roads and trackways.

Enclosed land – 20th century agriculture

Boundary loss (TEF-bl)

GIS Legend

Total Area:	79251.68 ha	21.45%	**Relict Area:**	356.14 ha	**Av. Polygon:**	23.19 ha
Polygons:	3418	8.06%	**Relict Polygons:**	224	**Occurrence:**	**Common**

Description:
These represent field boundary loss since the 1950's due to mechanisation and changes in agricultural practices. This may range from the loss of a single boundary merging two fields into one, or many field boundaries being removed to form a single field (over 36 fields merged into one have been recorded). The resultant field is a hybrid and palimpsest, with edges that may have several periods of origin. The surviving edges of these fields are of historic importance.

Boundary loss – with relict elements (TEF-br)

GIS Legend

Total Area:	7664.11 ha	2.07%	**Relict Area:**	354.52 ha	**Av. Polygon:**	27.67 ha
Polygons:	277	0.65%	**Relict Polygons:**	21	**Occurrence:**	**Rare**

Description:
These represent field boundary loss since the 1950's due to mechanisation and changes in agricultural practices. Boundary loss with relict elements has elements of former boundaries within the field e.g. a field edge that does not connect to form a fully enclosed field enclosure.

20th century enclosure (TEF-te)

GIS Legend

Total Area:	10157.45 ha	2.75%	**Relict Area:**	59.48 ha	**Av. Polygon:**	3.22 ha
Polygons:	3151	7.43%	**Relict Polygons:**	10	**Occurrence:**	**Rare**

Description:
Modern, small, field enclosures, which can be either nested within a pre-existing field system or be a totally new field system that has over-written the prior landscape. These occur either at random across the landscape, or may be focused around the fringes of urban settlement, being part of the peri-urban fringe: or along new infrastructure such as motorways. They are usually identified as having straight edges or are rectilinear fields where corners meet, and occur only on the more recent maps.

Mixed origin (MIS-mo)

GIS Legend

Total Area:	2839.05 ha	0.77%	**Relict Area:**	16881.42 ha	**Av. Polygon:**	7.41 ha
Polygons:	383	0.90%	**Relict Polygons:**	693	**Occurrence:**	**Very rare**

Description:
Modern land parcels for which its landscape antecedents are a mixture of landscape types e.g. woodlands, fields, parkland, so the area in question cannot be mapped & ascribed to different prior types, as those boundaries are no longer visible in the current landscape. This usually, but not necessarily, refers to an area that has been cleared of field boundaries since 1950's. However the surviving edge may be of various periods of origin.

Enclosure – Inland managed wetlands

Enclosed Meadow (IMW-mp)

GIS Legend

Total Area:	6228.57 ha	1.69%	**Relict Area:**	3610.9 ha	**Av. Polygon:**	3.89 ha
Polygons:	1603	3.78%	**Relict Polygons:**	320	**Occurrence:**	**Rare**

Description:
These are sinuous fields that border rivers, often forming part of the flood plain/regime of the river, where the river floods naturally. They may be marked as areas of rough pasture. The traditional use from medieval times up to the 1950's was to produce a hay crop for winter fodder and for grazing. Some have been subsequently wooded or alternate with wooded areas along the river's course. See Water Meadows (IMW-wm) for managed flooding of meadows.

Water Meadow (IMW-wm)

GIS Legend

Total Area:	318.31ha	0.09%	**Relict Area:**	160.87ha	**Av. Polygon:**	16.75ha
Polygons:	19	0.04%	**Relict Polygons:**	12	**Occurrence:**	**Very Rare**

Description:
This is an area of grassland next to a river which is managed by artificially flooding the meadow at certain times of the year, utilising a distinctive, regular network of ridges and water channels to enable extended pasturage for livestock and a later hay crop. They came into use during the 17th and 18th centuries, but fell out of use in the 19th centuries as labour costs made them uneconomical to maintain. Some have survived as earthworks.

Open Land

Commons with a built margin (CWH-cb)

GIS Legend

Total Area:	276.5 ha	0.07%	**Relict Area:**	226 ha	**Av. Polygon:** 4.46 ha
Polygons:	62	0.15%	**Relict Polygons:**	42	**Occurrence:** Very Rare

Description:

These are open areas, marked on the First Edition as 'common' or 'green'. They were traditionally used for pasturage of livestock. Commons with a built margin have a fringe of settlement around the margin, with clusters of houses and farms at road or track entrances. Some commons and greens have survived as amenity areas within or beside villages. Others have been developed for housing or formal recreational use. Most have been enclosed as part of agricultural improvement. These grazing commons are generally regarded as being early in origin.

Commons with an open margin (CWH-cm)

GIS Legend

Total Area:	634.73 ha	0.17%	**Relict Area:**	3168.72 ha	**Av. Polygon:** 10.41 ha
Polygons:	61	0.14%	**Relict Polygons:**	334	**Occurrence:** Very Rare

Description:

These are open areas, marked on the First Edition as 'common' or 'green'. They were traditionally used for pasturage of livestock. Commons with an open margin may have a few houses or farms sited at road or track entrances. Some commons and greens have survived as amenity areas within or beside villages. Others have been developed for housing or formal recreational use. Most have been enclosed as part of agricultural improvement. These grazing commons are generally regarded as being early in origin.

Heath (CWH-ht)

GIS Legend

Total Area:	28.57 ha	0.01%	**Relict Area:**	1111.22 ha	**Av. Polygon:** 4.76 ha
Polygons:	6	0.01%	**Relict Polygons:**	107	**Occurrence:** Very Rare

Description:

These are open areas, marked on the First Edition as 'heath'. Originally termed 'waste' in medieval times, they comprise areas of natural or semi-natural vegetation (particularly grass and heather) on dry, acidic soils. Historically these were too dry and impoverished for arable cultivation and were managed mainly as areas for pasturage of livestock, with management for woodland products. Some areas of heathland have experienced intermittent arable cultivation or small scale quarrying. This can leave earthworks of archaeological interest. Lack of grazing in the 20th century has resulted in the growth of scrub and bracken on many heaths.

Woodland

Ancient Woodland (WDS-aw)

GIS Legend

Total Area:	9401 ha	2.54%	**Relict Area:**	626.67 ha	**Av. Polygon:**	6.89 ha
Polygons:	1365	3.22%	**Relict Polygons:**	240	**Occurrence:**	**Rare**

Description:

Ancient woodland is defined by Natural England as 'land that has had a continuous woodland cover since at least 1600 AD and may be ancient semi-natural woodland, which retains a native tree and shrub cover that has not been planted, although it may have been managed by coppicing or felling and allowed to regenerate naturally…' The predominant species are deciduous, broad-leaf trees and shrubs. In the Essex HLC, this category also includes traditional wood-pasture, such as seen at Hatfield Forest, where single or small groups of pollarded trees occur in pasture alongside small coppice-with-standards managed woodlands.

Ancient woodland can preserve features which are natural such as an uneven land surface, or which predate the woodland such as prehistoric earthworks or medieval cultivation ridges where woodland has regenerated, or which relate to the woodland itself such as coppiced trees and wood banks.

18th - 20th century Woodland Plantation (WDS-wp)

GIS Legend

Total Area:	6130.1 ha	1.66%	**Relict Area:**	574.16 ha	**Av. Polygon:**	2.35 ha
Polygons:	2609	6.15%	**Relict Polygons:**	118	**Occurrence:**	**Rare**

Description:

This includes all managed and planted woodland which post-date Ancient Woodland. These may be planted as commercial concerns or as ornamental woodland in association with informal parkland. These woodlands can be replanting of cleared woodland, inter-planting within existing woodland, or new planting within former fields. Some plantations may have been planted and felled between the OS 1st Edition mapping and modern mapping. Many plantations are comprised of a single or couple of species of deciduous or coniferous tree, though some may have been designed with a mixed composition to imitate traditional woodland, such as plantations encouraged as part of Thames Chase or under Agri-environmental schemes.

Parks and Gardens

Informal parkland (PGR-ip)

GIS Legend

Total Area:	5650.1 ha	1.53%	**Relict Area:**	2280.11 ha	**Av. Polygon:**	32.85 ha
Polygons:	172	0.41%	**Relict Polygons:**	223	**Occurrence:**	**Rare**

Description:
Designed ornamental landscapes laid out around the 'great' or 'grand' house in the post medieval period, many by designers of national repute, such as Lancelot 'Capability' Brown at Audley End and Thorndon, Brentwood; and Humphry Repton at Hylands Park, Chelmsford and Gosfield Place, Halstead. The parks may include a formal garden, lakes, woodland, avenues, rides, vistas, and architectural features such as a ha-ha, terrace, folly or grotto. There may be remains of greenhouses and ice-houses.

Leisure/recreation (PGR-tl)

GIS Legend

Total Area:	7737.66 ha	2.09%	**Relict Area:**	0 ha	**Av. Polygon:**	14.02 ha
Polygons:	552	1.30%	**Relict Polygons:**	0	**Occurrence:**	**Rare**

Description:
This type includes country parks, golf courses, caravan parks, camping grounds, playing fields and other areas of land used for recreation and leisure. This type may have completely reworked and destroyed previous elements of the landscape, or may retain elements of its previous use, such as former parkland (see PGR-if), or of the surrounding character of the landscape, such as field boundaries, trees, and woodland. Golf initially became popular in the 19th century. The main development of this type is from the 20th century and is continuing.

Coastal Land – drained enclosure

Pre-18th century curvilinear drained reclamation (CDF-dc)

GIS Legend

Total Area:	4458.35 ha	1.21%	Relict Area:	8094.4 ha	Av. Polygon:	5.61 ha
Polygons:	795	1.87%	Relict Polygons:	725	Occurrence:	**Rare**

Description:

This type is a coastal land drainage pattern of a sinuous or serpentine form, draining low coastal lands to estuaries or the sea. The drains form the field boundaries which can be supplemented by later straighter boundaries to divide up the larger areas. All examples pre-date the earliest map sources and may originate from the medieval or post medieval period.

19th - 20th century rectilinear drained enclosure (CDF-dr)

GIS Legend

Total Area:	6578.35 ha	1.78%	Relict Area:	4343.85 ha	Av. Polygon:	7.61 ha
Polygons:	865	2.04%	Relict Polygons:	337	Occurrence:	**Rare**

Description:

This type is a rectilinear form of field drainage along the coast. These may be nested within an area of earlier sinuous drainage, or have overwritten the prior drainage patterns, or be a new area of drained reclaimed land. Some rectilinear drained enclosures are seen on the 1st edition OS maps and it is assumed that this style of drainage ditch dates from just before the first maps through to the present day.

Coastal Land – managed wetland

Unimproved marine marsh or brackish fen (CMW-mm)

GIS Legend

Total Area:	134.02 ha	0.04%	**Relict Area:**	218.02 ha	**Av. Polygon:**	26.9 ha
Polygons:	5	0.01%	**Relict Polygons:**	10	**Occurrence:**	**Very rare**

Description:
Unimproved marine marsh covers areas of coastal marsh that exhibit no discernable forms of enclosure or improvement. Brackish fen was areas of marsh where tidal water extended inland. These areas are poorly drained. Little remains as these marshes were mostly reclaimed and enclosed in the 18th century or later. These areas may preserve remains from prehistoric peoples at a time when sea levels were lower and these areas were inland.

Saltings (CMW-sa)

GIS Legend

Total Area:	715.06 ha	0.19%	**Relict Area:**	80.41 ha	**Av. Polygon:**	20.43 ha
Polygons:	35	0.08%	**Relict Polygons:**	8	**Occurrence:**	**Very rare**

Description:
Saltings are an estuarine and coastal type of inter-tidal mudflat. These areas have been exploited since prehistory for salt production and oyster beds. Saltings were dynamic, eroding as sea levels rose at estuary mouths with new areas forming behind as the estuary morphology 'rolled-over'. Their current distribution has been fixed by the presence of sea walls protecting the reclaimed land behind. These areas may have their origins at any period from prehistory to the current time.

Sea defences (CMW-sd)

GIS Legend

Total Area:	1290 ha	0.35%	**Relict Area:**	0 ha	**Av. Polygon:**	9.28 ha
Polygons:	139	0.33%	**Relict Polygons:**	0	**Occurrence:**	**Very rare**

Description:
Sea defences consist of solid walls and/or earthworks which were constructed to prevent marine inundation of low lying land. The documented sea defences were constructed from post-medieval times onwards. On Canvey Island, Dutch engineers were brought in during the 17th century to construct sea defences. In some places around the coast, several lines of sea defence can be traced, reflecting successive phases of construction as more of the marshland was reclaimed for agriculture.

Unimproved intertidal (CMW-ui)

GIS Legend

Total Area:	4390.29 ha	1.19%	**Relict Area:**	835.54 ha	**Av. Polygon:**	10.23 ha
Polygons:	429	1.01%	**Relict Polygons:**	52	**Occurrence:**	**Rare**

Description:
This type comprises the inter-tidal zone of the Essex coast, excluding any areas of marsh or saltings. This consists of inter-tidal mud, which in places has been shown to overlie prehistoric peat deposits which have preserved the mesolithic land surface. Their current distribution has been fixed by the presence of sea walls protecting the reclaimed land behind. These areas may have their origins at any period from prehistory to the current time.

Settlement

Religious Institution (BUH-ri)

GIS Legend

Total Area:	76.31 ha	0.02%	**Relict Area:**	3.18 ha	**Av. Polygon:**	5.09 ha
Polygons:	15	0.04%	**Relict Polygons:**	2	**Occurrence:**	**Very Rare**

Description:
This type was intended to show areas of land such as monastries and retreats, which could date from medieval through to modern. Only two such (Thremhall and Latton Priories) have been recorded on the HLC. Others have not been recognised or were considered too small during the mapping process. The figures for relict polygons therefore should not be seen as accurate, and the degree of change can not be calculated. This HLC type has also been used for some cemeteries and graveyards around churches as shown on the 1st edition OS maps, though not consistently.

Built-up areas - Historic (BUH-bh)

GIS Legend

Total Area:	0 ha	0.00%	**Relict Area:**	39,295.27 ha	**Av. Polygon:**	9.09 ha
Polygons:	0	0.00%	**Relict Polygons:**	4322	**Occurrence:**	

Description:
This type has been applied to the relict layers of modern built up or urban areas which have an historic core, and ranges from cities, towns, villages, and hamlets to large farms. All examples pre-date the 1st edition OS maps. These areas were not mapped as the urban area was not part of this project. This and further information is available in the Essex Historic Settlement survey reports.

Built-up areas – Urban development (BUM-ba)

GIS Legend

Total Area:	54,616.68 ha	14.79%	**Relict Area:**	0 ha	**Av. Polygon:**	7.85 ha
Polygons:	6955	16.40%	**Relict Polygons:**	0	**Occurrence:**	**Common**

Description:
This type has been applied to modern and historic built up or urban areas, and ranges from cities, towns, villages, and hamlets to large farms.

Built-up areas – Hospitals, Schools, Universities (BUM-hs)

GIS Legend

Total Area:	208.13 ha	0.06%	**Relict Area:**	0 ha	**Av. Polygon:**	9.91 ha
Polygons:	21	0.05%	**Relict Polygons:**	0	**Occurrence:**	**Very Rare**

Description:
This type comprises institutional buildings and their grounds where these are distinct on a landscape scale. Many were built in the 20th century but may have their origins in 19th century schools or workhouses, or reuse older country houses.

Plotland (BUM-pl)

GIS Legend

Total Area:	240.8 ha	0.07%	**Relict Area:**	120.25 ha	**Av. Polygon:**	7.77 ha
Polygons:	31	0.07%	**Relict Polygons:**	15	**Occurrence:**	**Very Rare**

Description:
A distinctive form of settlement pattern of a dwelling within an allotment of land, the settlement being set out in regular rectilinear patterns. Often the dwellings are arranged along the road with long land strips, set off from the road, forming the allotment. These specifically date to the 1920 to 1930's and reflect the social and economic climate of the inter-war years. Some of the plots had been set out but were not taken up and built upon so they have remained undeveloped. Others have been absorbed into new development.

Horticulture

Allotments (HOR-ag)

GIS Legend

Total Area: 217.53 ha   0.06%   **Relict Area:** 156.61 ha   **Av. Polygon:** 1.58 ha
Polygons: 138   0.33%   **Relict Polygons:** 63   **Occurrence:** **Very Rare**

Description:
This HLC type covers parcels of land rented or leased to individuals to grow vegetable and soft fruit crops. This is a land use type, and may fill or be part of an earlier enclosure type. They are usually located within or around the fringes of built-up areas. Allotments as we know them today originated in the mid 19th century, peaked in the mid-20th century but then steadily declined. There is a current surge in interest and allotments continue in use today.

Orchard (HOR-at)

GIS Legend

Total Area: 1392.19 ha   0.38%   **Relict Area:** 318.44 ha   **Av. Polygon:** 7.73 ha
Polygons: 180   0.42%   **Relict Polygons:** 96   **Occurrence:** **Very Rare**

Description:
This HLC type covers orchards, either large commercial concerns, or small orchards attached to larger homes or estates. Private orchards may occupy a field where the edge remains consistent through time, but use within can vary between orchard or cleared as a paddock. The earlier commercial orchards are defined by the pre-existing field systems in which they are planted. Later commercial orchards often remove prior boundaries and redefine field edges with new boundaries. Commercial orchards date from the late 19th century onwards, but may be planted within earlier pre-existing field boundaries. Private orchards may predate the earliest map sources.

Nursery with glass house (HOR-ng)

GIS Legend

Total Area: 837.38 ha   0.23%   **Relict Area:** 9.58 ha   **Av. Polygon:** 5.62 ha
Polygons: 149   0.35%   **Relict Polygons:** 2   **Occurrence:** **Very Rare**

Description:
This HLC type covers nurseries and greenhouses for market gardening. The main distribution of this type is in the Lea Valley in the west of the county. Greenhouses used to be constructed of glass but have mostly been replaced with other materials or polytunnels. They may sit within an earlier field boundary pattern, or may have replaced it. These date from the late 19th/early 20th centuries.

Military

Disused post-medieval military (MIL-dm)

GIS Legend

Total Area:	178.25 ha	0.56%	**Relict Area:**	65.23 ha	**Av. Polygon:**	178.25 ha
Polygons:	1	0.00%	**Relict Polygons:**	3	**Occurrence:**	**Very Rare**

Description:

This HLC types covers disued defence sites, with the exception of airfields (see MIL-ma below). These generally consist of Napoleonic sites or sites of the First and Second World Wars, such as firing ranges, military camps, research establishments, and other military establishments.

Military airfield (MIL-ma)

GIS Legend

Total Area:	252.57 ha	0.07%	**Relict Area:**	3169.71 ha	**Av. Polygon:**	121.91 ha
Polygons:	1	0.00%	**Relict Polygons:**	25	**Occurrence:**	**Very Rare**

Description:

This HLC type covers former military airfields. The first airfields were from the First World War. There were 27 landing grounds in Essex. Most were grass fields which reverted to agriculture after the war and do not appear on the HLC. The buildings at Stow Maries have survived almost undisturbed to this day. North Weald Bassett continued in use through the Second World War and it has now been partly redeveloped, houses an airfield museum, and is used by private aircraft and glider clubs. Southend Airport also started life in the First World War, becoming RAF Rochford in the Second World War, then was handed back to Southend in 1946. Wormingford returned to agriculture, but became RAF Wormingford in the Second World War before being returned to agriculture again. There were 16 Second World War airfields in Essex, of which RAF Stansted became a civil (now international) airport, and RAF Wethersfield continued in use as a military airfield until 1996, when it transferred to the Ministry of Defence Police and Guarding Agency.

Post-medieval military (MIL-pm)

GIS Legend

Total Area:	459.41 ha	0.12%	**Relict Area:**	0 ha	**Av. Polygon:**	65.63 ha
Polygons:	7	0.02%	**Relict Polygons:**	0	**Occurrence:**	**Very Rare**

Description:

This HLC types covers defence sites, with the exception of airfields (see MIL-ma below). These generally consist of Napoleonic sites or sites of the First and Second World Wars, such as firing ranges, military camps, research establishments, and other military establishments. Some of these, including Colchester Garrison and Harwich Redoubt, occur within urban areas and are therefore not included within the HLC. Others, such as the Royal Gunpowder Works at Waltham Abbey are included in Industrial (see IND-in), and Tilbury and Coalhouse Forts are included in Historic earthworks (see EAR-he under Miscellaneous Landuse).

Land Use - Communications

Airfield - civilian (COM-ap)

GIS Legend

Total Area:	1380.02 ha	0.37%	**Relict Area:**	1847.34 ha	**Av. Polygon:**	98.57 ha
Polygons:	14	0.03%	**Relict Polygons:**	27	**Occurrence:**	**Very Rare**

Description:
This HLC type covers modern civilian airports and airfields, and includes farm grass landing strips where recognised. Formal airfields comprise runways and associated hangers & buildings, but can lack a distinct margin, as the runways and areas around were cleared from prior field systems or parkland. These airfields may have had military or civilian origins. These date from the 20th century.

Motorway and Railway (COM-mr)

GIS Legend

Total Area:	3310.76 ha	0.90%	**Relict Area:**	186.29 ha	**Av. Polygon:**	11.74 ha
Polygons:	282	0.66%	**Relict Polygons:**	26	**Occurrence:**	**Very Rare**

Description:
This HLC type covers major roads and railways lines, road interchanges, and railway sidings, which have had a significant impact on the landscape. Although roads have a long history, this type is concerned with the modern infrastructure of the 20th/21st centuries. The railway network developed in 19th century but suffered cuts in the mid 20th century.

Waterways (COM-ww)

GIS Legend

Total Area:	Not yet available	**Relict Area:**	Not available	**Av. Polygon:**	
Polygons:	Not yet available	**Relict Polygons:**	Not available	**Occurrence:**	

Description:
This HLC type covers navigable waterways. As yet these haven't been defined within the Essex HLC. Tidal navigations date back to Late Iron Age and Roman times. The main impetus to extend the navigable range of rivers in Essex was from the 18th century.

Land Use – Land-based

Historic Earthwork (EAR-he)

GIS Legend

Total Area:	148.62 ha	0.04%	**Relict Area:**	20.27 ha	**Av. Polygon:**	4.50 ha
Polygons:	33	0.08%	**Relict Polygons:**	2	**Occurrence:**	**Very Rare**

Description:
This type covers large scale historic monuments which are definable on a landscape scale. They date from any archaeological or historic period. They may be designated as Scheduled monuments, and managed to preserve them for the future.

Rabbit Warren (MIS-rw)

GIS Legend

Total Area:	1.08 ha	**Relict Area:**	8.90 ha	**Av. Polygon:**	
Polygons:	1	**Relict Polygons:**	1	**Occurrence:**	**Very Rare**

Description:
Rabbit warrens are systems of man-made earthworks constructed to accommodate rabbits as a source of food. They were constructed in medieval times and some have survived as a relict feature to the present day.

20th century Stud Farm (MIS-st)

GIS Legend

Total Area:	389.80 ha	0.11%	**Relict Area:**	20.27 ha	**Av. Polygon:**	4.50 ha
Polygons:	36	0.08%	**Relict Polygons:**	2	**Occurrence:**	**Very Rare**

Description:
This type covers post 1950's landscape type of modern stud farms. These are often distinguished by a new enclosure pattern with distinctive horse training arenas, trotting tracks, stable blocks, and tree shelterbelts.

Land Use – Water- based

Oyster beds (CMW-ob)

GIS Legend

Total Area:	61.68 ha	0.02%	**Relict Area:**	51.80 ha	**Av. Polygon:**	5.61 ha
Polygons:	11	0.03%	**Relict Polygons:**	7	**Occurrence:**	**Very Rare**

Description:
Oyster beds have a very characteristic morphology, consisting of small rectangular pits, usually in serried rows, along coastal shores in the inter-tidal zone. They are the result of commercial farming of oysters in the 18th and 19th centuries.

Watercress beds (IMW-wb)

GIS Legend

Total Area:	5.30 ha	0.00%	**Relict Area:**		**Av. Polygon:**	1.33 ha
Polygons:	4	0.01%	**Relict Polygons:**		**Occurrence:**	**Very Rare**

Description:
Watercress beds occur in association with springs, streams and small rivers. Shallow, gravel based, depressions were constructed for the watercress which was grown in clean flowing water. This has been a small localised industry in Essex, originating in the 19th century.

Reservoir (WAT-wr)

GIS Legend

Total Area:	2414.02 ha	0.65%	**Relict Area:**	510.91 ha	**Av. Polygon:**	3.40 ha
Polygons:	711	1.68%	**Relict Polygons:**	4	**Occurrence:**	**Rare**

Description:
This HLC type covers a wide range of water bodies, including public water supply reservoirs, flooded mineral extraction pits, and farm reservoirs and ponds for irrigation and livestock use. Most were created in the 20th century, but farm ponds may go back, predating the earliest map sources.